

Exit 16 DDI Project – Colchester HES NH 5600(14)

DATE	Thursday, January 12, 2023
VENUE	Colchester Meeting House and Zoom
MEETING	Exit 16 DDI Construction Public Meeting
TIME	6:30 PM – 8:30 PM
PROJECT TEAM ATTENDEES	Michael LaCroix (VTrans), Ben Tietze (VTrans), Chris Lavalette (VTrans), Annabelle Dally (WSP), Megan Savage (WSP, Virtual), Kurt Hutchins (SDI), Matt Wheeler (SDI), Joseph Happy (MDB), Pat Paquette (MDB)
VIRTUAL ATTENDEES (Names appear as noted in the Zoom post meeting attendee report)	TM, Kyle Wentzel, Lisa Barron, Matthew LeFluer, Ken Kasz, Shirleyls, Davens, Stephen Madden (VTrans Geotech), Eleni Churchill, Chris Russell, Amy Turner, Fran Taylor, Connor, Ted Seissen, Jim Howard, AB, Christine Forde (CCRPC), Barney Beard, Janice Campbell, Roland Rontaine, PEJ, Joe Lemaire, Wayne Racine, Jason Ayotte, phelps47, Alan Corrieveau, Stephen McMahon, Ted Hanbridge, Jim Cross, James Campbell, Tom B, Representative Seth Chase, Brittany, Francis Montbriand, Frank M, Jason, Stewart Ledbetter, Laurie Pelcher, Sue-Rae, Anne McGuire, Tim Barritt, Evan, Skip Rodgers, Brian Kelly, JT, Caitlin Gross, John, Danielle Parent, Tricia, Todd Burgess, Richard Backer, Josh, Henry Bonges, Pat McGarry, Mike Provost, Marshall Distel (CCRPC), Jessica, Jenny Ronis (NRB), Tom Lasher, cathy, stu, Nathan Howells, Lawrence Keyes, Bill G. (Vermont), Ben Burnor, Doug LeBlanc, Brenda Hunt, Shawn M, VT, Dave Turner (Abc22-Fox44), Meg Clark, Peter Tampas, Cam, John Pike, Chris, Bruce D., Martha, MP, Jon Pizzagalli, Joe, Jonathan, JR, gretzkylca, Pat Bradley (WAMC), Michael Connolly, Bridget Ahrens, Kelsey, GMiller, Scott McClure, 1 guest
IN-PERSON ATTENDEES	Dan Verditti, Tim Wear, John Villere, Bryan Mitofsky, Cheryl Achilles, AJ LaRosa (MSK Attorneys), Nancy Lamothe, Chuck Wilter (CCRPC), Bridget Higdon (Colchester Sun), Jacki Murphy (Colchester Selectboard), Saf Bludevich, Jeanette Berry, Gabriel Nelsen, Alek Fleury (Colchester Sun), additional attendees in the room that did not sign in approximately 30-35 total

Meeting Minutes

At the start of the meeting, Mike LaCroix welcomed everyone and introduced the project team, which includes:

- Mike LaCroix, the Project Manager with VTrans
- Annabelle Dally, the Public Information Consultant with WSP, who will handle communications between the public and the project
- Ben Tietze, the Design Engineer with VTrans' traffic design section
- Chris Lavalette, Resident Engineer with VTrans, who will work directly with the contractor
- Matt Wheeler, SDI Project Manager, and Kurt Hutchins, SDI Assistant Project Manager, who will represent S.D. Ireland (SDI), the contractor

- Joseph Happy and Pat Paquette, who will represent Maine Drilling and Blasting (MDB), the blasting subcontractor.
- Maine Drilling and Blasting (MDB), the blasting subcontractor, represented by Joseph Happy and Pat Paquette

Mike LaCroix reviewed the agenda for the presentation that evening which included the project's scope, status and schedule, and information on construction. A copy of the presentation can be found on the [project website](#) and is linked [here](#).

Mike LaCroix gave an overview of the project scope, which involves improvements to a section of US Route 2/7 (Roosevelt Highway) in the Town of Colchester. The project area spans from the Winooski town line to Sunderland Woods Road, covering a 1.5-mile stretch north towards Colchester Village. Within this area, seven intersections will also be improved. The project aims to upgrade the stormwater treatment system through the installation of three stormwater retention ponds and eight grass channels. Additionally, the roadway will be reconstructed, with new signs and pavement markings installed. The traffic signals, roadway drainage, and interchange will also be upgraded. The interchange will be reconfigured into a diverging diamond interchange (DDI).

Mike LaCroix reviewed the existing geometry at Exit 16, a traditional tight diamond interchange, and pointed out the wear marks on the road due to heavy traffic volumes. He also discussed the new interchange design, the Diverging Diamond Interchange (DDI), which will replace the existing one. Other options were considered at the interchange such as widening the road or constructing roundabouts, but they chose the DDI as it offers the most benefits. The DDI design will allow the interstate bridges to be maintained, increase safety and capacity, and has been successfully built and operated in the United States for over 15 years, reducing crashes and increasing vehicle capacity.

Question: *Does the corridor or interchange experience a high number of crashes?*

Answer (Mike LaCroix): *The corridor is considered a high crash location and has been for quite a while. This stems from the high levels of congestion, especially during peak hours.*

Mike LaCroix explained the concept of DDIs and how they function. The primary goal of a DDI is to increase the efficiency of intersections by eliminating the need for signalized left-turn movements that can cause congestion and reduce capacity. Motorists waiting to make left turns onto or off the interstate no longer have to wait for a signal or gap in traffic. DDIs are becoming increasingly popular across the United States with over 117 currently in operation, 37 under construction, and another 157 planned for the future.

Mike LaCroix showed and narrated an animation to illustrate and explain how traffic navigates through a DDI. The animation is available on the [project website's document library tab](#) under driving animations (Aerial view of the operating diverging diamond interchange at I-89).

At the start of the animation, you can see the south portion of the interchange. **First**, the traffic signals at the interchange are red for northbound vehicles which can be seen stopped at both signals. The traffic signals are green for southbound vehicles which can be seen traveling through the interchange.

You can also see vehicles in both directions making the unsignalized movement onto the I-89 southbound onramp. **Next**, the traffic signals at the interchange change. The traffic signals are red for southbound vehicles which can be seen stopping at both signals and the signals are green for northbound vehicles which can be seen crossing over the left side of the roadway. As the animation pans to the north, you can see the northbound vehicles continue through the interchange. At the next light you can see vehicles make a free left turn onto the I-89 northbound onramp or cross back over to the right side of the road to continue northbound. You can see that the I-89 southbound offramp also has a green light for vehicles continuing southbound. **Then**, the traffic signals at the interchange change and the traffic signals are red for northbound vehicles which can be seen stopping at both signals and the signals are green for southbound vehicles which can be seen crossing over the left side of the roadway and continuing through the interchange to the next light where you can see vehicles making a free left turn onto the I-89 southbound onramp or crossing back over the right side of the roadway to continue southbound. You can see vehicles that the I-89 northbound offramp also has a green light for vehicles to continue northbound. **Finally**, you see the cycle repeat. The traffic signals at the interchange are red for southbound vehicles which can be seen stopping at both signals and the signals green for northbound vehicles which can be seen traveling through the interchange.

Question: *How many traffic lights are in the DDI?*

Answer (Mike LaCroix): *There will be two traffic signals just like there are today. They will be located at the two traffic crossovers and be oriented a bit differently than they are today.*

Mike LaCroix pointed out that the current interchange has no provisions for pedestrians or bicyclists, even though there is a significant amount of pedestrian and bicycle traffic, especially from Winooski residents who need to access places such as CVS, Shaws, and Costco. To address this issue, the DDI will include sidewalks and shared-use paths on both sides of Route 7. There will be designated crossing locations that will either be signalized or have Rectangular Rapid Flash Beacons (RRFB) to improve safety. Cyclists will have the option to transition to the shared-use paths using bike ramps or stay on the roadway.

Mike LaCroix reviewed the winter maintenance plan. VTrans worked with several snowy states that have operational DDIs to discuss winter maintenance plans and lessons learned. These states have not experienced any issues with winter maintenance or operational use of the DDI during winter. The DDI will have robust pavement markings and signage packages. The pavement markings will be recessed into the pavement to help prevent plow damage and traffic signage and signals will guide motorists through the interchange during winter storm events.

Mike LaCroix discussed the plan for winter maintenance. VTrans collaborated with several snowy states that already have DDIs in operation discuss winter maintenance plans and lessons learned. These states have not encountered any issues with winter maintenance or the use of DDIs during winter. The DDI will have robust pavement markings and clear signage. The pavement markings will be recessed into the pavement to reduce damage from plows and signage and signals to guide drivers during winter weather events.

Mike LaCroix compared the Winooski Circulator with the DDI and highlighted their differences. Unlike the Circulator, which has many decision points and obstacles, the DDI has traffic signals that allow for controlled vehicular movements. It also provides a focused line of sight with no changes in elevation, predictable locations for pedestrians and bicyclists to cross, and does not have any additional obstacles like parking or side streets.

Mike LaCroix gave an update on the project's timeline and progress. The project was initiated in 2012/2013 and will commence the first phase of construction at the end of January 2023. The first phase will be completed in the upcoming construction season by late fall 2023. The second phase will start in the following year, 2024.

The main part of the surface infrastructure work, like roadway reconstruction, traffic signal upgrades, and sidewalk and shared-use path installations, signs and lines, will be done during the second phase of construction. Most of this work will take place at night.

During the first phase of construction, the retaining wall work and utility relocations will be done during both daytime and nighttime hours. Work that is predominantly outside of the roadway, such as the retaining wall work, will happen during the daytime. Some tasks, such as blasting, cannot be done at night due to contract restrictions and will be carried out during the daytime hours. Work that takes place within the roadway, like utility relocations, will occur at night when traffic volumes are at their lowest.

Kurt Hutchins from S.D. Ireland Brothers Corp. (SDI), the selected contractor for the project, discussed the details of the first phase of construction. The first step is to build the retaining walls on both sides of Route 7 under the interstate bridges. The excavation on the east side can be done with excavators and other equipment, while the excavation on the west side will require blasting due to excess ledge that cannot be removed mechanically. After building the retaining walls, the utility relocation work will begin. The first utilities to be moved are electric and telecommunication duct bank, followed by waterline work. Blasting is required to remove the ledge and relocate utilities as they need to be buried more than 12 feet below the surface, and the ledge is as shallow as 4 feet below the surface. Blasting will occur between the I-89 ramps and Mountain View Drive, and possibly between South Park Drive and the I-89 ramps. SDI has contracted Maine Drilling and Blasting, a company with over 50 years of experience, to do the blasting work.

Kurt Hutchins also discussed the procedures for blasting operations, which will consist of a series of small underground blasts that will be contained using blasting mats. The blasting will not cause visible explosions, fireballs, or major dust clouds, but some rumblings and vibrations in the ground may be felt nearby. Pre-blast surveys will be done to document the conditions of all structures within a 500-foot radius. Seismographs will record vibrations to allow for the monitoring of vibration limits so as not to exceed certain limits. Before blasting, vehicular, pedestrian, and bicycle traffic will be temporarily restricted and audible signals will be used to notify anyone in the area of an upcoming blasting event. The audible signals include three whistles to indicate a five-minute warning, two whistles to indicate a one-minute warning, and one whistle to indicate the all-clear which will be followed by the blasting event. After each blasting event, a blasting specialist will clear the area before allowing vehicular,

pedestrian, and bicycle traffic to reenter. These blasting events will be restricted to weekdays, Monday through Friday (excluding holidays), between the hours of 9:00 AM and 3:00 PM.

Mike LaCroix discussed the public outreach activities for the project. VTrans hired WSP to provide public outreach services, and Annabelle Dally and Megan Savage will be the main points of contact for the public. They will answer questions and address concerns via the project hotline (802-595-4399) or email (info@Exit16DDI.vtransprojects.vermont.gov). Before construction, WSP conducted an educational campaign by creating a project website (<http://www.exit16ddi.vtransprojects.vermont.gov/>), fact sheet, brochure, educational video, and attending events with the Exit 16 DDI driving simulator. During construction, WSP will work with the Resident Engineer to provide weekly email Construction Updates and Traffic Alerts. The project website is available in English and 10 other languages spoken in the area.

The project team then opened the meeting to comments and questions.

Comments and Questions:

Question:

Which other states have been early adopters, where do you see most of them, and do they have any data on accidents seen just after construction versus after users get used to it?

Answer (Mike LaCroix): *The first several DDIs constructed in the United States were in Missouri, followed by several in Utah before they began proliferating all over the Midwest. North Carolina constructed seven in one year. Those were the early adopters of the DDI. I have worked with folks in each of those states and I have been told that the learning curve was very short and very minor. A lot of this has to do with how the DDI crossovers are designed and angled. In the larger ones I have traveled through in Atlanta and Georgia, I didn't even realize I was traveling through a DDI. As a driver, you are very focused on the signal and following the lane that you often don't even notice you are on the left side of the roadway. I have heard that from many folks who have traveled through them. That is not to say that will be everyone's experience. All drivers are different and there might be more of a learning curve for some drivers. We expect there to be a learning curve just like with roundabouts. Users are always a bit apprehensive at first, but typically they pick it up fairly quickly within days or weeks. Many people have adjusted their stance on roundabouts, and I have a feeling this will be similar, especially for those who use it daily to travel to work or to shop. It might be a bit more of a learning curve for users that don't travel through the area often, but I have a lot of faith in Vermont drivers that they can and will be able to navigate it.*

Question: *If someone is stopped during blasting to allow for a blast to take place, how long can they expect to wait before traffic can resume again?*

Answer (Matt Wheeler): *Five minutes maximum. We used a similar protocol on the Shelburne Street Roundabout project in Burlington. In the beginning, we started with 5-minute stoppages. Over time, we were able to condense these stoppages. With the roundabout project, we blasted for approximately 4 months sequentially and drivers figured out ways to travel around the area during the blasting hours of 9 am to 3 pm.*

Comment: *This is a bit different since there is no way real way around the project.*

Response (Matt Wheeler): *Correct, if you are traveling through there is no real alternative and the estimated wait for blasting would be a 5-minute maximum. However, if you are traveling to another destination like Burlington for example you could use an alternate route.*

Question: *Traffic in this area is already failing, how are you going to keep traffic flowing if you are cutting down traffic to one lane?*

Answer (Mike LaCroix): *I might have misspoken. During the daytime hours, the contractor is only allowed to close one lane in each direction. There are currently three lanes in each direction between Burger King and CVS, and the contractor is only allowed to close one of those three lanes. At night when traffic volumes are reduced, the contractor will be allowed to close additional lanes to complete the work.*

Question: *There are drainage issues on South Park Drive. Is the project going to handle some of that?*

Answer (Mike LaCroix): *Generally, no, most of the roadway drainage is going to be modified at the roadway itself and it all is going to be discharging north or away because that is where the low point is. Any drainage issues south of the interchange are on private property outside of the project limits so the project won't be impacting that at all.*

Question: *The pavement is horrendous along Main Street between Tigan Street and the Winooski circulator. Is there a plan to address that?*

Answer (Mike LaCroix): *There is a project called the Main Street Revitalization Project that is going to bid, I believe this year, that will cover that section of Main Street. We will be coordinating with the Winooski Department of Public Works as that project is directly adjacent to ours and is anticipated to be constructed simultaneously.*

Question: *Are there going to be lane improvements at some of the other intersections north of the interchange particularly Lower Mountain View Drive?*

Answer (Mike LaCroix): *Yes, I didn't talk about that tonight in great detail because I was focusing on the first contract, however, as part of the second contract the Mountain View Drive intersection is going to be expanded quite a bit. There will be three lanes coming out of Lower Mountain View Drive (two left-turn lanes and a shared thru-right) and two right lanes coming out of Water Tower Hill. The signal will be upgraded and phased such that those two movements will not go at the same time like they do today. That is a good question because it is a big issue. There are a lot of motorists that come out of Lower Mountain View Drive to take a left to try to get onto the interstate, but there is not enough capacity. The other issue is that motorists coming out of Water Tower Hill either do not realize or do not care that they do not have the right-of-way to turn left. This will all be addressed by re-signalizing and re-phasing that intersection during the second contract.*

Question: *Will the signals on Route 7 be timed such that one direction will go all the way through and then it will switch to the other direction?*

Answer (Mike LaCroix): *Yes.*

Question: *Will the signals be timed such that there is an equal amount of time or will they be activated according to traffic?*

Answer (Mike LaCroix): *Believe it or not, right now the signals are all coordinated. That is part of the problem, the signal timings are maxed out and we can't make any more adjustments to the signal times based on traffic because there is just too much traffic out there. Right now, the signals talk to each other and adjust to try to give some sort of progression through the corridor along Route 7, but it fails. After contract two, the signals will continue to be coordinated and timed to try to get as many people through as many signals as they can in one shot. It is tough because of the proximity of South Park Drive to the southbound on and off ramps which is only approximately 250 feet and then the proximity of Lower Mountain View Drive/Mountain View Drive to the northbound on and off ramps which is only approximately 400 feet. From a traffic engineering standpoint that is not enough distance so we are going to do the best we can to squeeze as much time as we can out of those signals. The beautiful thing about the DDI is that because we are getting rid of the left turn signal phases more time can be dedicated to the through movements. We are hoping to get more efficiency from that as well.*

Comment/Question: *I have been in a variety of places where they have had these and they work well in some areas. I don't necessarily think it will be good here and I think you are spreading it out too far. We are not talking about the same type of distance to the roadway as you are in Atlanta or New York or Pennsylvania or Utah or Missouri. Then you have all these "S"es coming in and people who don't know how to drive. I can understand why you separate the road. I don't understand what all this "S" stuff is that is just going to make mass confusion. People struggle already that don't know how to manipulate multiple traffic patterns and now all of a sudden you are going to have people stopped in the middle of the road and stuck halfway through. You aren't going to retrain people and I find that area to be a hazard already. I understand you need to have that widening for the businesses in a given area, but I am not quite understanding why we block it by having these islands. If you have to widen it then widen it. Or is this a benefit for Winooski? As part of their Revitalization? I mean I don't know. I am just asking. You guys weren't here at the last meeting. This is the meeting that you missed last time with no notification from anyone.*

Answer (Attendees) *It was in the newspaper and notifications were emailed.*

Comment/Question (Continued): *I am just trying to get caught up to speed here. I don't necessarily really agree with this thing. What I would like to know is, is this a done deal?*

Answer (Attendees) *Yes! (Michael LaCroix) Yes, this is a done deal.*

Comment/Question (Continued): *I am just asking because your team that treats people the way they do with the lack of notification. So, if you want to drive around and what about striping? Are you going to do anything other than white striping and how often will it be done? GFC reflects the narrative but does not reflect the barriers.*

Question: *Are there going to be any additional signals than those that are already existing?*

Answer (Mike LaCroix): *No, the signal locations are not going to change nor will the number of signals. The existing signals will just be upgraded, modernized and coordinated. That includes the Tigan Street intersection which will be coordinated with these signals as well. It is supposed to be coordinated now,*

but I think the coordination at that signal is not functioning. The intent is that all 7 signals are coordinated and that is the plan after the signals are upgraded.

Question: *How do you see this DDI Transportation System working around Vermont's existing intersections and highways throughout the state and how will it benefit everyone statewide in terms of safety and accessibility?*

Answer (Mike LaCroix): *The DDI is not something that you would just put anywhere and you likely won't see DDIs being constructed at many of Vermont's interchanges. I think we might be looking at one other DDI at one other location, but if it came to fruition, it would be a long time in the future. This was the preferred alternative at this location because of all the different things I spoke to earlier, but also because it allowed us to make use of the existing infrastructure we had (the interstate bridges). We are not in a position financially or environmentally to be constructing new interchanges everywhere. We are focused on improving what we already have and the DDI fits that mold very well in this location. It would be a big waste of taxpayer dollars and energy to redo the interstate bridges. The DDI prevents this and allows us to squeak a few more decades out of the existing infrastructure. The corridor project, as a whole, is going to improve accessibility for all users. There are no existing accommodations for anyone that isn't driving a car. This project will be a huge improvement for other users from an accessibility standpoint.*

Question: *Will folks that exit I-89 by mistake and want to double back onto the interstate in the same direction have to detour and circle back?*

Answer (Mike LaCroix): *Yes, if someone exits the interstate accidentally and wants to get back on going the same direction they would have to go to the next street and find a suitable place to turn around. If they were trying to change directions on the interstate, it would be as easy as making two unsignalized left turns. This is one of the benefits that our plow drivers brought up because they won't have to make difficult u-turns. One thing I do want to note, this interchange is notorious for wrong-way drivers entering the interstate which has something to do with the tight diamond interchange geometry. The DDI geometry will prevent this from happening because drivers will have to be on the left side of the road and islands will be installed to prevent those wrong-way movements from happening.*

Question: *Will this project satisfy the permit required for Costco to sell gas during normal business hours?*

Answer (Mike LaCroix): *I believe that is something that their lawyers and Act 250 need to hammer out. I know right now Costco gas is operational part-time and is looking to open full-time. That decision is going to be up to the district's environmental commission to make that assessment.*

Question: *What are the expected impacts on businesses on Water Tower Hill? My main concern is about the loss of power and telecommunication lines as some businesses there require 24-7 service.*

Answer (Mike LaCroix): *As part of contract 1 we are not anticipating any electrical power disruption. That is not to say there will not be any unplanned service disruptions while we are digging and blasting. Green Mountain Power (GMP) is scheduled to relocate some utility poles as part of the second contract at which point there would be some power disruptions. That would be between GPM and its customers.*

We will do our best on our side to notify folks of any upcoming disruptions that are related to construction directly. If GMP opts to relocate some of its poles before then, that is between GMP and its customers.

Question: *Sunderland Woods has 99 homeowners and two entrance and exit choices from the neighborhood via Rathe Road and Sunderland Woods Road. How will those two be impacted as part of the project?*

Answer (Mike LaCroix): *Under contract two, Sunderland Woods Road will be minorly impacted as we install thin layers of new pavement at that intersection and line striping. There is some minor work on Rathe Road as well, I believe up to the first driveway. There shouldn't be any major impacts.*

Question: *Will blasting be at the same time every day on a planned schedule?*

Answer (Matt Wheeler): *No. (Mike LaCroix) It is going to be dependent on what the contract requires when we dig and what can be removed mechanically. As you've heard me say earlier, they are going to try to use mechanical removal where they can. Only where they can't will they resort to blasting. We will try to get folks as much notice as we possibly can.*

Question: *Will the new traffic lights include an Opticom preemption system for emergency vehicles?*

Answer (Mike LaCroix): *This must be a fire or EMS question as it is very technical. Yes, they will. They are talking about preemption which is when an emergency vehicle goes up to a signalized intersection you might see the like turn green at the same time or you might see a strobe flashing to let folks know a vehicle is coming. That technology exists here today, but it will be updated as part of this project under the second contract.*

Question: *Will the driving simulator be available online?*

Answer (Annabelle Dally): *Unfortunately, no. The simulator is similar to a video game, so you have to use the simulator's pedals and steering wheel to navigate it. We do have animations on the project website now that simulate travel through the DDI and are similar to the driving simulator. We will be touring the simulator around again as we get closer to the start of construction phase two. We will post those events on the project website so please come visit us when we start touring again.*

Question: *Will the blasting be similar to what was done on Briggs Street in Burlington as part of the Champlain Parkway Project in front of City Market with multiple drill holes and rubber blasting mats?*

Answer (Mike LaCroix): *Yes.*

Question: *In the event of a power failure, will drivers be able to navigate the DDI?*

Answer (Mike LaCroix): *Good question. Yes, we are going to install natural gas power generators for the traffic signals at the DDI and Mountain View Drive. For some reason, those signals are very prone to lightning strikes, and it doesn't take much to knock them out. We are going to have backup generators to keep those powered and they will be natural gas so there will be a constant stream of fuel for the generator. That will be a big improvement to those signals as well.*

Question: *Will the intersection of South Park Drive have a left turn lane that way people who turn there will not always have to yield to oncoming traffic?*

Answer (Mike LaCroix): *I assume they are referring to taking a left into Burger King or McDonald's. Yes, there will be a left-turn lane. I believe there is one there today as well. The difference will be that it is not currently signalized for a dedicated left turn. You have to yield to oncoming traffic on the green, but in the final condition, there will be a yellow flashing arrow.*

Question: *What is the speed limit in the diverging diamond section? Are pedestrians to expect the vehicles to yield when they approach the crossing? They are not yielding in the video.*

Answer (Mike LaCroix): *I probably should have prefaced that before I played the video. The pedestrians and bicyclists in the video are to provide a sense of scale they are not necessarily behaving properly. This animation is intended to show how traffic flows. To answer your question, yes, pedestrians will always have the right of way at the crossings in the DDI. We hope that cars and trucks will yield per the state law. The speed limit is 30 mph, but realistically motorists won't be able to go 30 mph because of the crossover. It is similar to a roundabout. We install roundabouts on a 40 or 50-mph roadway and traffic is forced to slow down at the roundabout because you can't maneuver the roundabout geometry at that high of a speed. It will be similar within the DDI. This is not to say that an inebriated driver won't be able to do it, but unfortunately, there is nothing design-wise we can do to prevent that from happening.*

Question: *What is the plan for the timing of the traffic lights? Will they be 30 seconds, 60 seconds, or more? Will the signals be triggered by traffic or run at a set interval?*

Answer (Mike LaCroix): *The traffic signals are going to have radar detectors. You have probably seen these on a lot of the new traffic signals throughout Vermont. You can tell a traffic signal in Vermont is newer by the black poles and arms. Most of those signals have radar detectors that pick up on vehicles that are waiting for the green light or are approaching the green or red light at a high rate of speed. These signals will have those as well. The timings are going to change depending on the time of day. At busy times of day, it will be 30 or 40 seconds in each direction. We will have to nail down the final timings on those. In lighter periods of time, those times could be extended. The upgraded controllers can adjust the timings up and down based on traffic flow. But at the busiest times, it will be approximately 30 to 40 seconds each way, so pretty quick moving.*

Question: *Is the phase two contract timeline that was shared earlier pretty solid or does it have the potential to slip further into the future, passed 2024-2026?*

Answer (Mike LaCroix): *Anything is possible, but right now we have all our ducks in a row to get the contract started in 2024. Some of this depends on what happens out there this summer. For the most part, we have the plans for contract 2 together, so it is just a matter of getting it out to bid and awarding it to a contractor. We would like to do this over the winter when there is a natural break, but it might extend into later in 2024. I will say the overall timeline for contract 2 is expected to be more than a single construction season and likely a better part of 2, but probably not two full construction seasons. We may have to come back in the spring to clean up and do some landscaping work. 2026 is the worst-case scenario, we are hopeful we can finish it sooner than that. We also have other projects in the area that*

are being constructed concurrently that we have to coordinate with such as Exit 17 and the Main Street Revitalization projects, so we want to keep these projects on schedule and moving forward.

Question: *Will you be tweeting major changes that are going to happen at the construction site that will affect traffic flow?*

Answer (Annabelle Dally): *Unfortunately, no we will not be using Twitter as one of our main sources of information. Construction updates and traffic alerts will be distributed through email. That is the best way to receive project information or by regularly checking the project website. We do share major updates with the media and while we can't force them to share or post them, we do ask that they do, so you can also check your local news outlets as well.*

Question: *Will you be posting updates on Front Porch Forum?*

Answer (Annabelle Dally): *We share all our Construction Updates and Traffic Alerts with the municipalities and the CCRPC to post on Front Porch Forum on our behalf. Unfortunately, the way Front Porch Forum is set up we do not have access to your specific neighborhood forums, so we rely heavily on towns, cities, and regional planning commissions to post on Front Porch Forum for us. (Mike LaCroix) The Agency doesn't have a policy regarding using Front Porch Forum as a means of communication.*

Question: *The Agency doesn't want to make sure that we are receiving information?*

Answer (Mike LaCroix): *The Agency has other social media feeds that we use. (Annabelle Dally) We have, in conjunction with the Agency, looked into getting access to Front Porch Forum to share project information. Unfortunately, the Forum itself would only allow us to post once a month, so we would only be able to provide you information on that forum on a monthly basis throughout construction which wouldn't ultimately be that helpful.*

Question: *Regarding new utilities underground, specifically fiber optic lines, what is the plan to cut over those new lines and how long will users experience outages?*

Answer (Mike LaCroix): *I don't have good information on that as it is going to be up to the provider. We are going to construct the duct bank for them, but it is ultimately up to them to decide when and how long it will take them to cut over to the new infrastructure. Once the new duct bank gets completed, we will notify the utility and then it will be on the provider to make those decisions.*

Question: *Where will the field office be located?*

Answer (Mike LaCroix): *The field trailer will be at the Whitcomb Quarry.*

Question: *The intersection at Tigan Street going southbound on Main Street (Route 7) is very dangerous. The right lane is right lane must turn right, but there is only one sign indicating that well before the intersection, and it is obscured by a tree half of the year. There is no indication at the intersection that the right lane must turn right so people that are not familiar will often go straight. I've witnessed this and been party to this multiple times. I have shared my concerns with the City of Winooski and they showed plans to revise this intersection years ago, but nothing has happened. Will this project finally address the safety concerns at that intersection?*

Answer (Mike LaCroix): *The Main Street Revitalization Project is going to handle all those details. They are well aware of that issue and their plans will address that.*

Question: *Will this project have impacts on driving to and from Costco?*

Answer (Mike LaCroix): *There will be no impacts to Costco specifically, but our hope is that this project will help you get to where you need to be in a safe and efficient manner, so if Costco is your destination, then yes, absolutely.*

Question: *Will there be any plans to work over the weekend?*

Answer (Mike LaCroix): *Right now, there is not. I do not believe we are allowing Saturday work unless something comes up that is an emergency. For instance, if something happens on a Friday night and we need Saturday to remedy it. Later in the season, we might need to work on a Saturday to perform activities such as paving which has such a short window in the fall. Generally speaking, work will be confined to Monday through Friday.*

Question: *Do you know when the biking/pedestrian lane will be available for use? I heard that the retaining walls will be constructed as part of phase one. I was just wondering when this access will be available as it is very dangerous for bikes/peds now.*

Answer (Mike LaCroix): *Yes, as I said earlier the construction of the retaining walls is going to provide the space for getting folks from one intersection to another without having to walk or ride in the roadway. The final product won't be constructed until contract 2. Until those are completed, SDI will have traffic control officers out there to help folks navigate/escort folks through the work zone if they so choose. We can only build one piece at a time so we are trying to build what we can up front to give us as much space as we can to get folks out of the way of vehicles and the construction crews.*

Question: *Can you speak to the environmental impacts associated with blasting that need to be considered here?*

Answer (Matt Wheeler): *I would say maybe groundwater would be something that we may have to look into if we get to a certain point near groundwater while we are drilling and blasting. We will have to dewater our excavation before blasting. Blasting doesn't work well with water. Dust shouldn't be an issue because the blasting area will be covered with blasting mats that contain most materials. I can't think of any other environmental issues that could come up.*

Question: *When would contract 1 have started if the State hadn't used SDI for the emergency culvert replacement project in Richmond?*

Answer (Mike LaCroix): *That is hard to say. We would have liked to have started in October or November, but it didn't work out. We are starting as early as we possibly can.*

Question: *Will the intersection at South Park Drive have left turn signals? That way people who turn there will always have to yield to oncoming traffic.*

Answer (Mike LaCroix): *We already answered this one, but yes, there will be left turn lanes with flashing yellow arrows. I am sure folks in Chittenden County have seen them. We have been replacing five section*

left-hand green and yellow signal heads with the flashing yellow arrow. That will be the case here as well as on Hercules Drive and Rathe Road. **(Ben Tietze)** The flashing yellow arrow is a four-section signal head, so it also has the capacity to be used as a green arrow for a protected left turn phase. There is the ability to be protected with the green arrow and permitted with the yellow flashing arrow.

Question: There were some general concerns about the Shelburne Street Roundabout Project and about the islands that were going in. This project also has a bunch of islands going in. The question is, will there be sufficient signage to assist motorists through that might be confused, specifically those that only seem to follow paint lines?

Answer (Mike LaCroix): In general, the islands that you see here are going to be identical to the ones you would see at a roundabout approach. They will be mountable. If someone were to hit an island head-on, it wouldn't damage their vehicle entirely. The islands will be navigable for trucks that need to track them for clearance to make some of the corners. There will be signage out there as you would normally see for a median island and then pavement markings as well.

Question: Why is the left lane not for left turns only? As soon as two vehicles accumulate at the red light, traffic that is turning left onto the interstate will be stuck there behind thru-traffic. Doesn't that negate the idea of left-bound traffic only having to wait for a single light?

Answer (Mike LaCroix): It just comes down to not needing a third lane for the capacity we have at the intersection. The DDI is efficient enough that it can handle all the traffic as designed. Because the onramps, for instance, are unsignalized it is free flowing left turns should be able to sneak by. There will probably be some waiting for some of those left turns while the signal is red, but the signals will be changing faster than it does today, every 30 to 40 seconds, so left turners that get trapped at the light won't have to wait very long.

Question: Will traffic on the interstate have to be stopped during blasting?

Answer (Mike LaCroix): Yes, depending on where the blast occurs. We wouldn't stop traffic on the interstate, we rarely do that, but we would do what is called a rolling roadblock where we have police officers stationed several miles upstream of the blasting location. They slowly get traffic to back up behind those blue lights and it's timed such that by the time traffic reaches the work area the area is cleared of any blasting activity.

Question: How does the DDI address the left turn from Cumberland Farms toward Winooski?

Answer (Mike LaCroix): If you are referring to Champlain Farms, those driveways are going to be pretty much identical. The northernmost driveway will shift inward a little bit, but folks will have full access in and out of both driveways.

Question: What is the plan for pedestrians walking through once construction starts in phase 1?

Answer (Mike LaCroix): As I mentioned before, because we aren't going to construct the sidewalks during the first season of work during working hours there will be an escort. It is a tough situation because there is nothing out there now that can be used to accommodate these users so we are trying to build what we can to allow us to accommodate these users as soon as we can.



Question: *Traffic from Mountain View Drive and Lower Mountain View Drive often have a right-of-way conflict where left-turn vehicles sometimes do and sometimes don't yield to vehicles turning right from Mountain View Drive. Will the timing and design of this project be adjusted to provide clearer traffic flow patterns?*

Answer (Mike LaCroix): *Yes, I believe I answered this earlier. The signals will be upgraded at that location to allow separate phases for those conflicting movements, so those conflicts will no longer be the case.*

Question: *Will the project field office be open to the public?*

Answer (Mike LaCroix): *Yes, when the office is open and VTrans staff is present it is open to the public.*

Mike LaCroix asked if there were any additional questions in the room or online. Hearing none, Mike LaCroix concluded the meeting by thanking everyone for attending and reminding everyone to check out the project website for all additional information.