# <u>City of Keene</u> New Hampshire

# AD HOC LOWER WINCHESTER STREET STEERING COMMITTEE MEETING MINUTES

Tuesday, February 28, 2022

6:00 PM

Council Chambers, City Hall

**Members Present:** 

Sarah Bollinger, Vice Chair Jim Lamp Douglas Fish Chris McCauley **Staff Present:** 

Don Lussier, City Engineer Brett Rusnock, Civil Engineer

### **Members Not Present:**

Douglas Hamshaw, Chair Trevor Bonnette Jimmy Tempesta

# 1) Call to Order/Chairman's Remarks

Vice Chair Bollinger called the meeting to order at 5:02 PM.

#### 2) Roll Call

Roll call ensued.

## 3) Approval of Meeting Minutes from October 18, 2022

A motion by Mr. Lamp to approve the minutes of the October 18, 2022 meeting was duly seconded by Mr. McCauley. The motion carried unanimously.

## 4) Overview of October 18 & 25, 2022 Listening Sessions

## a. Problems & Challenges

Project consultant, Gene McCarthy of McFarland Johnson, recalled that there were two public listening sessions on October 18, 2022 in Swanzey and October 25, 2022 in Keene. He said that the lists of problems and challenges, and opportunities, allowed the consultants to create a draft project purpose and needs statement, for which he would seek the Committee's feedback. He reviewed the rest of the agenda.

Mr. McCarthy recalled that during the public listening sessions, there were two group discussions on (1) problems and challenges in the corridor and (2) opportunities. He showed a list of the most prevalent problems and challenges listed by community members during those sessions:

- Left Turns from Route 10
- Left Turns from Driveways
- Safety
- No Pedestrian Crossings
- No Sidewalks
- No Bike Accommodations

- Congestion
- Speed
- Bridge width
- Sight distance at Matthews Road intersection
- Truck traffic

Mr. McCarthy noted that these were not all of the problems and challenges listed by the public, but these were the ones mentioned the most. He noted that a lot of time during the listening sessions was spent on the left turn issues when people try to exit businesses onto Winchester Street. He said that it was interesting that congestion was raised as an issue in some parts of the corridor, while in other places speed is a concern such as southbound between Matthews Road and Market Basket. Mr. McCarthy and Mr. Lussier agreed that none of these problems and challenges were surprising, besides a comment about an issue for snowmobilers. It was clear that Market Basket is a draw for many, including pedestrians coming from the other side of RT-101. The Committee had no proposed changes to this list.

## **b.** Opportunities

Mr. McCarthy continued displaying a high-level list of opportunities mentioned by the public during the listening sessions:

- Improve Safety
- Improve intersections
- Widen bridge
- Slow traffic/calming
- Crosswalks at signals
- Add sidewalks and bike lanes
- Roundabouts
- Aesthetics

- Turn lanes (3 lanes)
- Left turn pockets
- Signage/improvements for rail trail and snowmobile trail
- No Roundabouts
- Crosswalks
- Utility concealment

Mr. McCarthy said this list was longer and more diverse than the list of problems. He noted that there were some contradictions in the community's responses. For example, some people wanted roundabouts and others did not; Mr. Lussier said that for this reason, not everyone would be happy with the ultimate project design. He said that intersection safety aligned with the concerns about left turns. During this discussion about opportunities, Mr. McCarthy said it was common for people to start listing solutions, which would be a later part of this process.

Vice Chair Bollinger remembered people at the listening sessions discussing the possibility of creating a U-turn opportunity at the Market Basket traffic lights. Many people mentioned that the

Market Basket parking lot is used by many as a turnaround opportunity; they travel the whole length of the corridor, enter the Market Basket parking lot via the slip lane, drive through the parking lot to the signal, and turning back around. Mr. McCarthy recalled that there was mention of using right turns onto Kit Street and Bradco Street to reverse direction and go north on Winchester Street, which he said seemed like a long way to drive to just reverse direction. Mr. McCarthy confirmed that this was just a high-level list and the whole lists of challenges and opportunities listed in the meeting minutes were not forgotten.

#### 5) Development of Project Purpose & Need

Ultimately, Mr. McCarthy said these high-level lists were used to draft the project's purpose and needs statements. He shared a draft **purpose statement**, for which he sought Committee input:

The purpose of the project is to provide a Complete Street that addresses daily congestion and side street queueing that occurs along the Lower Winchester Street corridor from the Route 101 Roundabout in Keene to the Market Basket driveway in Swanzey. Improving aesthetics, access and safety for all users are essential goals of the project. The project will address deficiencies on the bridge that carries Winchester Street over Ash Swamp Brook.

Mr. McCarthy also shared a draft list of project needs:

- The high volume of turning traffic at the intersections and driveways along Winchester
- Street causes excessive queues and delay.
- Delays accessing Winchester Street lead to unsafe behavior with near miss collisions.
- Pedestrian and Bicycle facilities do not exist along the corridor.
- Poor Aesthetics with no green space along the corridor.
- Excessive speed for those travelling to and from West Swanzey Road.
- The trail/snowmobile crossing is unsafe for its users due to poor signage.
- The Ash Swamp Brook Bridge is on the State's "Red-list", is too narrow, and has substandard bridge and approach railings.

Vice Chair Bollinger wondered whether water and sewer would be updated as a part of this project. Mr. Lussier said that some would be, but it would not be a wholesale replacement, noting that the utilities in this corridor are not that old. Mr. McCarthy added that as some of these changes to the corridor occur, some drainage and other issues could arise.

Mr. Lussier added that this purpose and needs statement is a requirement for the federal funding of this project. The goal is to arrive at a solution that is the least environmentally impactful and addresses this purpose and needs statement. This statement helps to define the problem and scope of work that the federal funds will pay for. Mr. McCarthy added that whatever alternative design is chosen, it would be measured by its ability to address this purpose and need statement. He said this is why he avoids discussing solutions, which should not be considered until the true purpose of the project is understood. Mr. McCarthy said this statement was crafted based on

what the consultants heard at the public listening sessions. There was meant to be Committee consensus on this statement.

Mr. Lamp asked if there were any air quality components to this, such as reducing idling. Mr. McCarthy said that is something the consultants must deal with in the environmental document. Mr. McCarthy said this was not a huge concern in this corridor and he does not expect that an analysis would be required. The funding would not be contingent on an air quality analysis. Mr. Lussier said the only air quality exceedance Keene experiences is particulates due to wood burning stoves. Still, air quality would be evaluated as a part of the environmental process.

Where the statement mentions "addressing daily congestion," Mr. Lussier wondered if there was value in stating "adding capacity." Mr. McCarthy said that was a solution, which would be discussed in later parts of the process.

A member of the public, Sly Karasinski, a Swanzey Selectman and Superintendent of North Swanzey Water & Fire Precinct, asked whether there would be added drainage capacity as a part of this project; he cited the 2004–2005 floods when traffic was rerouted down Base Hill Road through Swanzey when lower Main Street and RT-10 were closed. Mr. McCarthy said the bridge over Ash Swamp Brook is a serious issue and would be replaced. Mr. Lussier said that essentially this whole project area is in the floodplain. The hydraulic capacity of the bridge would be enhanced but would not exceed capacity for, and would still flood during, 100-year storm events. Mr. Lussier wondered whether the purpose and needs statement should say more about the bridge beyond "address deficiencies." Mr. McCarthy thought that could be added to the last "needs" bullet listed, which mentioned that the bridge is too narrow, with substandard bridge and approaching railings. Mr. Lussier agreed that "and inadequate hydraulic capacity" could be added to that last bullet.

Mr. Lamp asked whether the new bridge would have capacity for a greater than 100-year flood. Mr. Lussier clarified that the Ash Swamp Brook does not have capacity for a 100-year flood. Mr. Karasinski asked if that changed at all after removal of the Homestead Dam (sometime between 2007–2010) in Swanzey that lowered the overall height of the Ashuelot River upstream. Mr. Lussier said it was a great question and he was unsure that the Federal Emergency Management Agency (FEMA) flood maps had been updated. Mr. Lussier added that Keene had not seen any serious flooding since that Homestead Dam was removed. Mr. McCauley mentioned that his parking lot had been seriously flooded sometime in the last two years; Mr. Lussier thought that flooding was in July 2021 when there were a few big storm events. Mr. McCarthy said there was no plan to change the grade of the roadway but that there would likely be more drainage than exists today but more substantial flooding issues would not be addressed with this project. Mr. McCarthy pointed out a few streams on a physical map and Mr. Lussier said those were actually "tax ditches," which are different because they are manmade; the City is allowed to maintain them without a permit unlike a natural stream.

Mr. Lamp suggested adding the word "multimodal" before the word "users" in the following statement: "access and safety for all users." This addition would prioritize all users from vehicles, to pedestrians, to snowmobiles. Mr. McCarthy thought that "multimodal" could be redundant with "all users" prioritized in a complete street.

Mr. McCarthy said that these statements are a living document that can be changed later to ensure they align with the community's desires. Mr. Lussier added that the proposed solutions for this project will be judged against the purpose and needs statement.

The Committee proposed no other changes to the purpose and needs statement.

# 6) Background Information

# a. Project Mapping

Mr. McCarthy discussed some things the consultants were doing behind the scenes. Surveyors from the sub-consultant group GM2 had been working in the corridor collecting data on the hardscape, the right-of-way, utilities, drainage, and all other elements. Most of this fieldwork was completed before winter so there is a good basis for moving the project forward.

#### **b.** Environmental Resources

From the environmental perspective, Mr. McCarthy said there had also been a lot of fieldwork and the existing data was collected. Most of the project area is a part of the floodplain. There is also a "floodway", which is a regulatory definition. Work within a floodway is more strictly controlled. Everything north of Matthews Road is in the floodplain. Mr. McCarthy demonstrated the project limits on a map. Any undeveloped land in the project area is being considered as an opportunity for stormwater management and treatment. If any such land needs to be acquired, it is important to identify those areas for discussion during public hearings. Mr. McCarthy continued demonstrating where the wetland delineations were on the map. Wetlands are not a big concern in this project area that is already predominantly built.

#### c. Traffic Data Collection/Analysis

Mr. McCarthy reviewed the extensive traffic data collection in October 2022. He showed maps to demonstrate how intense the data collection was. The analysis included peak hour (3 hours in the morning, evening, and on Saturday) counts at 12 intersections, where all movement—cars, trucks, bikes, and pedestrians—was counted: left turns, right turns, U-turns, and through movements. This data was collected by cameras at the sites. Mr. McCarthy showed where there were 24-hour counts for a few days. There were other counts at Base Hill Road so the data would be available should there be a need to detour traffic for the bridge replacement. Mr. McCarthy recalled that this data was being collected during the first public information session on October 18<sup>TH</sup>, when there was some construction occurring on Lower Winchester Street. Fortunately, all

the necessary data was still collected. Mr. McCarthy still intends to review the film data to assess where people are using right turns as U-turns throughout the corridor.

Mr. McCarthy continued explaining that although the traffic data was collected in October 2022, the base year of this project would be 2023. Regardless of when the traffic is counted, the traffic can be factored based on when it occurred and certain other industry-standard factors. Thus, 2023 would be the base year and everything else would be projected beyond that. The opening year is 2025 and 20 years beyond that is projected as the design year. Most of the traffic data the consultants would share would be based on the peak periods in the 2045 design year.

Mr. McCarthy said that the evening hours seem to be the most active peak hours and that data is driving most of the design. The evening peak hours southbound on Winchester Street are much higher than the morning peak hours northbound. Mr. Lussier said the activity in the morning peak hours seems to be more spread out, with higher traffic for more time, versus the evening peak when everyone seems to move at the same time. The Committee agreed that it does seem harder to get in and out of the corridor in the evening.

Mr. McCarthy showed the volumes at the 12 intersections in the evening. He used the example of Bradco Street intersection and demonstrated that southbound in the evening had 947 vehicles compared to 806 in the morning. It was expected that those figures would be more closely matched but the difference seems to be that the morning activity is more spread out. The total count for the Bradco Street intersection during the evening peak is over 1,000, which explains why there is a lot friction in the corridor during that peak.

Mr. McCarthy said a challenge is projecting traffic into the future and deciding what should be assumed in the projections. He sought this Committee's feedback on how the consultants should look at traffic growth. The Consultants made a first attempt using what the NH Department of Transportation (DOT) typically has projects use to project traffic. Mr. McCarthy called it a rule of thumb to ensure that if the City is investing in improving this corridor, that it would serve the users in the long term. Using the NH DOT figures, the consultants began by assuming a 1% background growth, which means that the volume of traffic on RT-10 would grow 1% per year. When that figure is compounded by 20 years it reaches 30% and those 1,000 vehicles today would then be up to 1,500 depending on many factors, and this would put real stress on the corridor. Mr. McCarthy said there are certain parts of the corridor where the consultants do not expect to trips during peak hours to grow that much because there would likey not be growth on some side streets.

Mr. McCarthy did want to point out Krif Road. He said there is a lot of undeveloped land along Krif Road and if that land were developed, the trips coming off the side street would increase. While this land is in the floodplain, Mr. Lussier said it could still be developed because it is not in the floodway. Mr. Lussier said that to develop this land, there would have to be compensatory storage added onsite or elsewhere. For example, the hotel that was just completed on Key Road met its compensatory storage requirement by including storage under the parking lot. While it is

difficult to develop in the floodplain, it is possible. Mr. Lamp said that with these sites entirely in the floodplain there would be no land above it to supply mitigation onsite and these properties would be very hard to develop. Mr. Lussier said that when Emile Legere developed this property they included some compensatory storage in this corridor, which Mr. Karasinski said was off Matthews Road. Mr. Lamp mentioned that the land might be undevelopable so that the consultants did not project a significant increase in trips from Krif Road in the future. Mr. Lussier and Mr. Rusnock said they would speak with the City's Floodplain Administrator, John Rogers, to determine the likelihood of those properties begin developed. Mr. McCarthy said the consultants did use the developable metrics to ensure they were not under-reporting.

Mr. McCarthy continued stating that it was important to avoid under-reporting because once this corridor reaches high levels of 1,200–1,300 trips during peak hours, then single lanes of traffic would no longer function well. He said the from a traffic perspective, the corridor would start to reach max capacity. Thus, the consultants performed sensitivity analyses to determine if the 1% projection is accurate. Mr. McCarthy said that 1% growth might not sound like a lot, but there was little historical data on the corridor for comparison. He asked members of the Committee, who use the corridor daily, what they thought the demand would be on this corridor moving forward. Vice Chair Bollinger said that was a complicated question; the consultants were speaking about a snapshot in time, when there are so many different initiatives being considered right now—from multi-family housing developments, micro-transit that is on pause, or improvements to the Rail Trail network that is trying to encourage active transit versus vehicles. Thus, from a planning perspective, the Vice Chair did not know how to advise the consultants. Mr. Lussier agreed that it really is a best educated guess and noted that the population of Keene has not changed substantially in the last couple of decades, while Swanzey is growing. Mr. Lamp asked whether the consultants had looked at any past studies from the last 15 years; he mentioned a Market Basket study and data that TEC would have. Mr. McCarthy said yes, they have looked at studies including regional plans, which showed a range of possible growth from 0.5–3%. Discussion ensued about potential impacts on traffic in the corridor as residences increase in Swanzey or if working from home becomes the norm in 20 years, for example.

Mr. Lussier thought that he and Mr. McCarthy would be less concerned with projecting this growth if this corridor were not at the tipping point of capacity. If growth is not projected successfully and that tipping point were reached, Mr. Lussier said another travel lane or something else dramatic would be needed. Mr. McCarthy said that in considering solutions and different intersection configurations because of the clear issue of making left turns into and out of this corridor because of the volume passing through it. Mr. McCauley said that the large roundabout at RT-101 improved this corridor dramatically because it was always gridlocked before it. Mr. McCauley thought that with some of the improvements being considered for this corridor, the flow through the corridor should only improve. He was unsure that increasing or adding lanes was a necessary evil. Mr. Lussier said there did not need to be a decision at this meeting because he and the consultants would still have discussions with NH DOT.

Mr. Lamp said he heard that there would not be more than two lanes—that he considered two driving lanes and a turn lane—through the corridor. He said that this presentation indicated that traffic southbound during the peak evening hours was the problem. Mr. Lamp asked if there was a way to provide a multimodal option on both sides, which would allow for eliminating one of the multimodal lanes in the future for expansion to two southbound lanes.

Mr. McCarthy returned to the topic of the large RT-101 roundabout improving traffic through this lower Winchester Street corridor. Mr. McCauley agreed that when there was a signal at RT-101, traffic would back up far past his business. While at times it is challenging because there is a lot of traffic, he even thought the roundabout was better for left turns into and out of his business because the traffic stays moving. At the public listening session, Mr. McCauley heard people mention adding a signal/another roundabout further down lower Winchester Street—between RT-101 and Market Basket—to create an additional break in traffic.

# 7) Alternatives Development

Mr. McCarthy shifted focus to some corridor alternatives. He said that projected growth in the corridor complicates the ability to remain with only two lanes of traffic, which is why he introduced the concept of a dual use turn lane. This center turn lane does exist already at the northern end of the corridor. He said this dual use lane alternative would also include shoulders/bike lanes to accommodate all users on both sides of the roadway, in addition to a sidewalk proposed only on the west side of the roadway. For another portion of the corridor, a median divided two lane section was proposed, where left turns would be prohibited by a center median, and users would have to travel through the corridor to designated U-turn areas.

Mr. Fish said he has lived here his whole life and he does not need a study to tell him what is occurring in the area. Ultimately, he said everyone was chasing a dollar. He recalled when this area was agricultural during WWII and when it shifted to industry.

Mr. Lussier asked the Committee what they thought about a raised median down Winchester Street. Mr. McCauley said the idea made him cringe and that it would negatively impact his livelihood. Mr. Lussier and the consultant knew this idea would be controversial. One of the main topics of the public listening sessions was the inability to make left turns into the side streets and businesses, and vice versa. Mr. Lussier said that one way to solve this issue is to prohibit left turns and provide a way for people to turn around at a designated U-turn or roundabout. Mr. McCauley said that if people have options to make left turns, then the turns do not need to be prohibited. He explained that if there were an additional roundabout, people would have the choice of sitting and waiting in a dual use turn lane or traveling a little further to reverse direction at a roundabout. Additionally, Mr. McCauley said the addition of a roundabout would create more breaks in the traffic flow for left turns. Mr. Lamp and Mr. McCauley agreed that the majority of the time, and particularly during the daytime, there are ample breaks in traffic for left turns. Mr. McCauley said these turns are possible 80% of the time at his business.

Mr. McCarthy and Mr. McCauley agreed that those left turns are possible because his business is located where there is currently a dual use turn lane.

Mr. McCarthy noted a challenge with left turns at Kit Street, which is very close to the current roundabout. He said that people are not making predominantly left turns there. He suspected that many make the right turn and use the dual use turn lane near Mr. McCauley's business to make a U-turn. Mr. McCauley said that when there was still a signal at RT-101, many people used his parking lot to bypass the traffic. Mr. McCauley said he had not seen anyone coming from Kit Street and making a U-turn in the dual use traffic lane. Mr. McCarthy suggested a possibility to use a center median to prevent left turns from Kit Street and force those users to go right and reverse direction at a designated intersection. Mr. McCarthy asked whether Krif Road was too far down Winchester Street to divert traffic from Kit Street. Mr. McCauley and Mr. Lamp did not think it was too far.

Mr. Fish mentioned that this is an issue across the nation and Mr. Lussier agreed, adding that the solutions must be unique to each location. This issue of traffic generators and speed is the unique problem for Keene to solve. Mr. Fish said the solution would not make everyone happy. He added that the economy in Keene is not the same as it once was.

Mr. McCauley said that the open land along Krif Road would allow a roundabout there more easily. He added that a roundabout there would make access easier for UPS and other companies. Mr. McCauley agreed that traffic at his business during peak hours is not as bad due to the short section of dual use turn lane. A member of the public, John Holstader of Lucinda Terrace, said that a traffic signal would work at Krif Road. He cited what a difference the traffic light at Market Basket made for the residents of Lucinda Terrace to be able to enter and exit Winchester Street. Mr. McCauley thought a traffic signal would not work at Kit Street, and Mr. Lussier and Mr. McCarthy agreed that NH DOT would not allow it so close to the RT-101 roundabout. Mr. McCauley thought the corridor would function better with a roundabout versus a signal at Krif Road. Mr. McCarthy said it was a matter of balancing the demand on the corridor with controls like signals or roundabouts at intersections to create access. Creating that access comes at a detriment to the traffic flow through the corridor. Using a signal creates a stop in the traffic and queues/delays. Trying to solve those competing interests is the challenge in a narrow corridor like this. Mr. McCauley thought that having the third dual use turn lane through the whole corridor would not be a perfect solution but would be an improvement.

Mr. McCarthy showed the Committee some other early design alternatives for discussion, with the caveat that there are limitations to providing the capacity that the projected 1% growth requires, and there could be some pushback to some of these possibilities such as wider roadways and medians that restrict access. Thus, he wanted to discuss some higher-level options to demonstrate that there will not be one alternative that makes all stakeholders happy.

Mr. McCarthy began by showing some possibilities for Krif Road. He showed Krif Road with an extended center turn lane and traffic signal, in addition to some floodplain storage off Krif Road

due to development. He said that this was a possibility but that in the future, it would cause queues on Winchester Street. Mr. Lussier asked whether the consultants had built the traffic models for the whole corridor yet. Mr. McCarthy said they were built but not vetted, so there would be more at the next meeting. Mr. McCauley said that the possible queues with a signal at Krif Road would reach the RT-101 roundabout. Mr. Lussier said that NH DOT would never allow that to happen.

Mr. Holstader said there are three traffic signals on West Street and it functions. Mr. Lussier noted that West Street is two lanes in each direction and Vice Chair Bollinger said the overall traffic volumes are lower there. Mr. McCarthy shared that as projected in 2045, the southbound queue length with a signal at Krif Road would be almost 400 feet during peak evening hours.

Next, Mr. McCarthy discussed the possibility of a roundabout at Krif Road. He said this would be a less impactful option. He called this a hybrid roundabout because a single-lane roundabout would not handle the volume on Winchester Street today. With a two-lane roundabout, projections still showed a long southbound evening queue of 60 feet, which could be reduced as the models are refined. Mr. Lussier added that the ultimate design would ideally account for that worst case peak hour. Mr. McCauley asked if the bridge would be wider with a signal. Mr. McCarthy said not necessarily. With this projection, the roadway would return to three lanes before the bridge. Discussion ensued about potential access management for businesses along Winchester Street.

Mr. McCarthy returned to the issue of Kit Street. If there were a center median there preventing the ability to turn left, those users would reverse direction at the potential Krif Road roundabout. Mr. McCarthy said that there had been enough analysis at this point to show that the delay trying to make a left off Kit Street will just continue getting longer with time. Users would get to RT-101 faster if they make a right off Kit Street and turn around, despite driving further.

Vice Chair Bollinger asked, with a roundabout at Krif Road, whether the consultants were proposing a raised median or dual use lane between Krif Road and RT-101. Mr. McCarthy said that was not yet determined and it could really be either option. At present, the consultants had modeled it with a median for that entire length because it ultimately was the most conservative way to build the roundabout. The Vice Chair was reminded of the roundabout at Lake Street and Monadnock Highway in Swnazey. She said it is a very effective roundabout but there is no traffic control north or south of it, and there are businesses just north of it. She said that fortunately, there is a shoulder there to pass the left turning traffic. The Vice Chair wondered how a "problem area" was defined. She asked if the area of Kit Street was causing accidents. She did not think so but said it did not feel completely safe. Mr. McCarthy said he had worked on projects with roundabouts, solid medians, and no left turns; this would be the case for the other side of Winchester Street. Mr. McCarthy continued stating that if the three lane section—with the dual use turn lane—remained for the current section on lower Winchester Street, it could encourage some to not proceed to the roundabout but to use the dual turn lane to make a U-turn. Mr. McCarthy strongly discouraged using the dual lanes for U-turns so he would not want to design for that. Thus, the assumption is that it would be much better for everyone to reverse

direction at the roundabout. Mr. McCauley said he did not see people actively using that turn lane to make a U-turn, which Mr. McCarthy said was interesting. There was agreement that the roadway was not wide enough to allow such a U-turn; someone would have to use Mr. McCauley's or another business' driveway to make the U-turn.

Vice Chair Bollinger noted that the visual Mr. McCarthy displayed of a roundabout at Krif Road modeled two lanes of traffic entering the roundabout. Mr. McCarthy agreed. Vice Chair Bollinger asked whether north of the proposed roundabout it would return to one lane in each direction. Mr. McCarthy said it depended on how long everyone wants this to last. He continued that by 2045, the section of Winchester Street between Krif Road and RT-101 would become more stressed with three lanes (one lane each direction and a dual use turn lane) than the City would want it to be. Also, volume from Kit Street that would typically turn left would be diverted southbound, putting even more stress on the corridor. Additionally, development on Krif Road would add to northbound volume. Mr. McCauley recalled that development on Krif Road would be challenging. Vice Chair Bollinger agreed that development on Krif Road would be challenging but said that developers are getting really creative now to put things where they should not be. Mr. McCarthy said that any likely development there would have happened by 2045. He said the consultants were taking the careful approach to Krif Road and anticipating some remaining development there. Vice Chair Bollinger asked whether there would also be two lanes of traffic in each direction northbound from the roundabout. If there were development on Krif Road, Mr. McCarthy said that the second lane in each direction would be needed to and from the roundabout at Krif Road.

Vice Chair Bollinger asked how wide the Right-of-Way is between Krif Road and RT-101. Mr. McCarthy said it varies a lot with some wide areas and other tight areas. Mr. Lussier agreed. Mr. McCarthy said this right-of-way is old and there are places where it is clear that something was expanded but there are no records. There is still one spot left off the plans until more is known.

Mr. McCarthy said that this corridor will get more stressed with 1% growth until 2045, and that assumes there is not higher growth, which is possible. With a roundabout at Krif Road, Mr. McCauley asked whether it was possible to provide a second option for people to divert down Krif Road, extending it to a new roundabout on RT-101. Mr. Lussier said that a similar bypass was constructed in Jaffrey, NH. Mr. McCarthy said that Krif Road being a dead end is a challenge because all of its traffic must exit onto Winchester Street. He said there was another suggestion to extend Kit Street as a bypass onto RT-10/12, which is not possible because it would be a private entrance; it would be easier if it were a public street. Mr. Lussier added that RT-101 is a limited access highway and NH DOT does not want to add many connections to it. Mr. Lamp asked whether it made more sense for Krif Road to extend to Monadnock Highway, which is the next intersection to the east. Discussion ensued. Mr. Lussier mentioned that the original intention for the RT-9/10/12 T-intersection to be a cross intersection, connecting to RT-10 in Swanzey; NH DOT owns the strip of land through the swamp. Further discussion ensued about the possibility to extend Krif Road. Ultimately, Mr. McCarthy said he did not imagine NH

DOT would want to add another roundabout so close to the current one at RT-101 and Winchester Street.

Before concluding, Mr. McCarthy wanted to mention Matthews Road and Bradco Street. Currently, left turns from Bradco Street onto Winchester Street are challenging. Also, the sight distances are a problem at Matthews Road. There are general capacity issues in this area and challenges with the intersections being so close. Mr. McCarthy said the consultants considered whether there could be a traffic signal here, but because the two streets are so close, they would have to be interconnected to work as one, which he did not think was feasible. So, Mr. McCarthy said there was a possibility of a roundabout there, where a center median would force traffic from Bradco Street to exit to the right and use the roundabout to turn and go northbound on Winchester Street. The roundabout would likely require two lanes in the southbound direction and a single lane in the northbound direction. Discussion ensued about the possibility of connecting Bradco/Magnolia/Matthews Streets to the roundabout directly. Ultimately, there was consensus that this would involve taking the veterinary facility at the corner of Bradco and Winchester Streets.

For the next meeting, Mr. Lussier listed some tasks for the consultants:

- Evaluate a hybrid of roundabouts with dual use turn lanes where possible.
- Look at the model as a system versus individual intersections.
- Consider the potential to connect Matthews Road and Bradco Street as one intersection.

Mr. Lamp asked whether it would be necessary to expand the survey limits to include any of these possibilities. Mr. McCarthy said he would look into it and that there could be a possible need for more surveying if trying to create a combined roundabout at Matthews Road/Bradco Street.

Mr. McCarthy briefly showed the West Swanzey Road area in front of Market Basket and noted that trying to accommodate many things in that area would be challenging. For example, keeping the old growth trees in this area would limit the ability to have a three-lane roadway (with the dual use turn lane). Mr. Lussier said he was not convinced three lanes are needed there. Mr. McCarthy said that some residents noted the difficulty turning left in this area. He said this part of the corridor is almost like its own subset of a project with many transitions. Mr. Lussier thought the only reason to have a left turn lane there was to accommodate Winchester Woods. Mr. McCarthy said he would look into that some more given that residents mentioned it. He added that the proposal for this area between Market Basket and Lucinda Terrace was the only part of the corridor with sidewalks proposed on both the west and east sides, including a crosswalk at the traffic signal. Discussion ensued about connecting the sidewalk into the Market Basket site. Mr. Lussier said that would depend on Mr. Lamp's client extending the walkway at the north end of the parking lot up to the traffic signal. Mr. Lamp said he would need to know whether this option would save landscaping in front of the store or serve another purpose. Mr. Lussier said it would provide a service to Market Basket's customers because they would not have to walk through the parking lot. Further discussion ensued. Mr. Lussier did mention that

Vice Chair Bollinger could discuss with the Swanzey Selectmen whether there would be future desire to extend sidewalks further south. Vice Chair Bollinger said that area further south is almost all Yale Forest land, and she did not envision a land swap. She would bring it up with the Selectmen but she envisioned a response that extending sidewalks south of Market Basket poses a safety risk to pedestrians.

## 8) Project Schedule

Mr. Lussier would email the Committee members with the next meeting date that would be sometime in late March or early April.

# 9) Adjournment

There being no further business, Vice Chair Bollinger adjourned the meeting at 6:55 PM.

Respectfully submitted by, Katie Kibler, Minute Taker March 6, 2023

Edits submitted by, Donald R. Lussier, City Engineer