

"A community that provides a variety of complementary transportation choices, that are fiscally constrained, for people and goods."

TECHNICAL ADVISORY COMMITTEE MEETING
WEDNESDAY, JANUARY 8TH, 2020 – 1:30 P.M.
EAST GRAND FORKS CITY HALL TRAINING ROOM

MEMBERS

- | | | |
|-------------------------|--------------------------|--------------------|
| Kadrmass/Peterson _____ | Hopkins/Laesch _____ | West _____ |
| Ellis _____ | Zacher/Johnson _____ | Magnuson _____ |
| Bail/Emery _____ | Kuharenko/Williams _____ | Sanders _____ |
| Gengler/Halford _____ | Bergman/Rood _____ | Christianson _____ |
| Riesinger/Audette _____ | | |

1. CALL TO ORDER
2. CALL OF ROLL
3. DETERMINATION OF A QUORUM
4. MATTER OF APPROVAL OF THE DECEMBER 11TH, 2019, MINUTES OF THE TECHNICAL ADVISORY COMMITTEE
5. MATTER OF PROPOSED T.I.P. AMENDMENT..... HAUGEN
 - a. Public Hearing
 - b. Committee Action
6. MATTER OF CANDIDATE PROJECTS FOR 2021-2024 T.I.P..... HAUGEN
 - a. Minnesota Side
 - b. North Dakota side
7. OTHER BUSINESS
 - a. 2019 Annual Work Program Project Update
8. ADJOURNMENT

ANY INDIVIDUAL REQUIRING A SPECIAL ACCOMMODATION TO ALLOW ACCESS OR PARTICIPATION AT THIS MEETING IS ASKED TO NOTIFY EARL HAUGEN, MPO EXECUTIVE DIRECTOR AT (701) 746-2660 OF HIS/HER NEEDS FIVE (5) DAYS PRIOR TO THE MEETING. ALSO, MATERIALS CAN BE PROVIDED IN ALTERNATIVE FORMATS: LARGE PRINT, BRAILLE, CASSETTE TAPE, OR ON COMPUTER DISK FOR PEOPLE WITH ISABILITIES OR WITH LIMITED ENGLISH PROFICIENCY (LEP) BY CONTACTING THE MPO EXECUTIVE DIRECTOR (701) 746-2667 FIVE (5) DAYS PRIOR TO THE MEETING.

**PROCEEDINGS OF THE
TECHNICAL ADVISORY COMMITTEE
Wednesday, December 11th, 2019
East Grand Forks City Hall Training Conference Room**

CALL TO ORDER

Earl Haugen, Chairman, called the December 11th, 2019, meeting of the MPO Technical Advisory Committee to order at 1:32 p.m.

CALL OF ROLL

On a Call of Roll the following members were present: David Kuharenko, Grand Forks Engineering; Jane Williams, Grand Forks Engineering; Ali Rood, Cities Area Transit; Patrick Hopkins, MnDOT Planning Engineer; Ryan Riesinger, Airport Authority; Nick West, Grand Forks County; Stephanie Halford, Grand Forks Planning; Steve Emery, East Grand Forks Engineer; Michael Johnson, NDDOT-Local Government; and Wayne Zacher, NDDOT-Local Government.

Absent: Brad Bail, Jesse Kadrmas, Richard Audette, Darren Laesch, Dustin Lang, Ryan Brooks, Brad Gengler, Nancy Ellis, Jason Peterson, Dale Bergman, Paul Konickson, Lane Magnuson, Mike Yavarow, Lars Christianson, and Rich Sanders.

Guest(s) present: Al Grasser, Grand Forks Engineering.

Staff: Earl Haugen, GF/EGF Executive Director; Teri Kouba, GF/EGF MPO Senior Planner; and Peggy McNelis, GF/EGF Office Manager.

DETERMINATION OF A QUORUM

Haugen declared a quorum was present.

INTRODUCTIONS

Mike Johnson introduced Wayne Zacher and explained that he just joined the Local Government Division and he is our new MPO Coordinator so they will be transitioning all MPO duties over to him and he will be attending the MPO meetings and will be involved in Steering Committees and all other MPO activities. He stated that he will still be involved in the background to help with anything that needs a little more attention, but Mr. Zacher is their new person who has been on the job for a week and a half. He said that he will come to this meeting one more time and then he will officially turn it all over to Mr. Zacher.

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Williams asked if Mr. Zacher has Mr. Johnson's old phone number or does he have a new phone number. Johnson responded that he has all new contact information – 701-328-4828 is his phone number.

Haugen asked that everyone please state their name and the organization they represent as well.

**MATTER OF APPROVAL OF THE NOVEMBER 13TH, 2019, MINUTES OF THE
TECHNICAL ADVISORY COMMITTEE**

***MOVED BY KUHARNEKO, SECONDED BY RIESINGER, TO APPROVE THE
NOVEMBER 13TH, 2019, MINUTES OF THE TECHNICAL ADVISORY COMMITTEE,
AS PRESENTED***

MOTION CARRIED UNANIMOUSLY.

**MATTER OF APPROVAL OF GRAND FORKS DOWNTOWN PARKING STUDY
REPORT**

Haugen reported that this has been a study that has been in the works for about a year from start to finish. He said that there was a subcommittee of the Grand Forks Downtown Action Plan Steering Committee assisting us, along with Grand Forks staff. He added that they hired the firm KLJ to assist.

Haugen commented that several months ago the actual document itself was reviewed and recommended by the Steering Committee, but it sat until the Downtown Action Plan was completed and then both documents were presented to the Grand Forks City Council a week ago or so and so it has been through the Grand Forks approval process and is now being finalized through the MPO process as well.

Haugen stated that a full report was identified in your staff report; and we did review the full report. He added that included in the packet were the recommendations that came out of the review, and they are divided into short-term, mid-term, and long-term.

Haugen said that staff is seeking approval of the report document.

Halford asked if it is normal. This is a clarifying question, is it normal since it went to City Council which is more of a receive and file thing, is it normal for it to then go to the MPO and then seek approval and not since it did not get approval through the council. Haugen responded that it is. He explained that it is an MPO document.

Kuharenko said that he has a general comment on the long-term section where it ends up identifying that it looks at parking meters and he knows that currently with the North Dakota Century Code there is language in there that prohibits parking meters, so just a general note.

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Haugen responded that he thinks it talks about when that legislation is changed, not to say that they are going to do it however.

Williams asked, when it says availability on the second page, the little map, does that mean parking spaces in general or, using City Hall as an example where all of them are assigned parking spaces so they aren't available to the general public, so is it general public parking or all parking. Haugen responded that it is a synonym for occupancy, whether it is occupied or not occupied, it is available or it's not available by being occupied. Halford stated, then, that what you are saying is that it is all of the above, all sorts of parking including reserved and non-reserved. Haugen responded that that is correct and reiterated that it is a synonym for whether it was occupied or not occupied; and instead of using one term throughout the whole document they intermittently switched in available as a term.

Halford commented that they have gotten a question a couple of times where people were wondering how much is available to the public, so you would get rid of all the reserved ones, do we know that number. Haugen responded that roughly 50% are between the private and the public sector there are 3,600 stalls, so roughly 1,800 have no restrictions on them and that combines the private and the public spaces together. He added that there is a table in the beginning of the document that identifies each lot, what type of restrictions are on what number of stalls; including the two-hour limit, twenty-four hour reserved, disabled parking, loading and unloading; there is a table in the front of the document that details each parking lot with the total number of stalls that are somehow restricted, and that is for all three levels: on-street, private options, and public options.

Halford stated that overall she thinks this is a good study; and for a long time we have heard people say there is nowhere to park downtown, so it is nice to see that it is more of a perception, and the ones that we do have control over as a City, we're not using those spaces to their full potential as we could be. Kuharenko commented that he thinks it also speaks a lot to just the culture that we have here, where there is the desire to park in front of their destination, and not necessarily a block or two away.

Haugen said that on the first short-term, and he thinks we have already started on it, and it is marketing information and changing the perception issues.

MOVED BY HALFORD, SECONDED BY KUHARENKO, TO APPROVE FORWARDING A RECOMMENDATION TO THE MPO EXECUTIVE POLICY BOARD THAT THEY APPROVE THE DOWNTOWN PARKING STUDY REPORT, AS PRESENTED.

Voting Aye: Riesinger, Rood, Johnson, Kuharenko, Emery, Halford, Hopkins, and West.

Voting Nay: None.

Abstain: None.

Absent: Kadrmas, Bergman, Bail, Ellis, Gengler, Brooks, Audette, Hanson, Laesch, Magnuson, Sanders, Peterson, and Christianson.

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**MATTER OF APPROVAL AND PRIORITIZATION OF NORTH DAKOTA SIDE T.I.P.
CANDIDATE PROJECTS**

Haugen said that before we get to these he would like to remind everyone that December 20th is the due date for the remaining North Dakota solicitations, with the exception of Recreational Trails, and he believes that Recreational Trails may not be due until January. He added that on the Minnesota side all of the programs except for the TAP and HSIP which are due on December 27th.

Kuharenko commented that to follow up on a couple of those he thinks they already submitted the Regional and the Urban Roads and are waiting for a signature from the Mayor's office for the Urban Grant Program and that should be sent over shortly.

a. H.S.I.P.

Haugen reported that one project was submitted from the City of Grand Forks. He stated that the project is located at the intersection of S. 20th Street and 32nd Avenue. He said that the application is to install right turn lanes, and the total funding amount is \$578,000, and there is a 90/10 split so the federal share is just over \$520,000. He added that this project is consistent with the standard of our Transportation Plan, although he noted that neither the Strategic Highway Safety Plan nor our Local Road Safety Program identifies the strategies of the high priority ones which doesn't make it ineligible, it just states that it is not part of the list of high priorities. He stated that staff is saying that it is consistent and is a high priority project for our H.S.I.P.

Kuharenko commented that this is pretty straight forward and it is mostly addressing the number of rear end crashes that we have at this intersection. He said that he believes it is identifying that once the left turn lane realignment project is completed rear end crashes he believes are the second most number of crashes that occur at this location.

Johnson referred to the H.S.I.P. application and said that he has one comment; in the bottom box where it describes the proposed safety improvements he is wondering where you got the project number STM-SUU-986(088)092 because that is a stimulus project number so he isn't sure where you got it from but he has the right one if you want to change it; it is HEU-6-081(094940). Kuharenko stated that he would get that corrected and sent back to the MPO.

MOVED BY KUHARENKO, SECONDED BY ROOD, TO APPROVE FORWARDING A RECOMMENDATION TO THE MPO EXECUTIVE POLICY BOARD THAT THEY APPROVE THE H.S.I.P. CANDIDATE PROJECTS FOR THE FY2021-2024 T.I.P. AS BEING CONSISTENT WITH THE METROPOLITAN TRANSPORTATION PLAN AND GIVE PRIORITY RANKING.

***Voting Aye: Riesinger, Rood, Johnson, Kuharenko, Emery, Halford, Hopkins, and West.
Voting Nay: None.
Abstain: None.***

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Absent: Kadrmas, Bergman, Bail, Ellis, Gengler, Brooks, Audette, Hanson, Laesch, Magnuson, Sanders, Peterson, and Christianson.

b. Transportation Alternatives

Haugen reported that again only one project was submitted by the City of Grand Forks. He said that the project involves converting an existing gravel path that exists along 32nd Avenue just west of the on and off ramps of the interstate, and it connects to a gravel path that heads north and connects with the Business and Industrial Parks. He stated that the total estimated cost is \$302,000 and with an 80/20 split the federal share is \$241,600.

Haugen commented that reviewing this in our Metropolitan Transportation Plan Bike/Ped section, there was no real specific mention of converting this from gravel to pavement, nor is it listed specifically in the table that shows projects individually by timeframe, so they are finding sections of the standards and objectives sections that support this project, but it is not found in the data base specifically, but we think that was perhaps just an oversight of gravel trails, and so there might even be a follow-up because there are a couple other gravel paths and we want to make sure that we are identifying future growth status, so staff finds this project consistent with our Metropolitan Transportation Plan.

MOVED BY HALFORD, SECONDED BY KUHARENKO, TO APPROVE FORWARDING A RECOMMENDATION TO THE MPO EXECUTIVE POLICY BOARD THAT THEY APPROVE THE TRANSPORTATION ALTERNATIVE PROJECTS FOR THEFY2021-2024 T.I.P. AS BEING CONSISTENT WITH THE METROPOLITAN TRANSPORTATION PLAN AND GIVE PRIORITY RANKING.

Voting Aye: Riesinger, Rood, Johnson, Kuharenko, Emery, Halford, Hopkins, and West.

Voting Nay: None.

Abstain: None.

Absent: Kadrmas, Bergman, Bail, Ellis, Gengler, Brooks, Audette, Hanson, Laesch, Magnuson, Sanders, Peterson, and Christianson.

MATTER OF APPROVAL OF AMENDMENT #1 TO WORK PROGRAM

Haugen reported that as we transition from year one to the second year of the work program we find it necessary to make an amendment to the work program. He said that, ironically, this will be the first amendment to a two-year work program, which is almost a first for us.

Haugen stated that the main focus of this amendment was something that we identified mid-year of 2019, and that was to follow-up on a future river crossing. He said that at that time it was doing both a water hydraulic study and a traffic impact study, but since then it was determined that the water hydraulic study is not an eligible MPO activity so an RFQ was sent out by both Cities to participate in financing that portion of the study, so the work program is being amended to do the follow-up traffic impact analysis on a river crossing.

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Haugen explained that, as we identified six months ago, there are some items in our work program that could be switched over to finance this:

- 1) Bus Route Study – It was determined that once the CAT/UND Shuttle Service Merger was approved it should operate for a couple of semesters and then once they learn the ropes we would then follow up with a route study but the merger physically won't happen until next fall so the route study was pushed out.
- 2) School Safety Study – this was eliminated as a separate line item but the MPO Executive Policy Board wanted to place emphasis on school safety with the future bridge study so it was rolled into that.
- 3) Traffic Count Program – we have eight intersections that are waiting for the actual hardware to be installed so those are already under contract and will carry over into 2020 and there will be no new intersections done in 2020.
- 4) Equipment – we have zeroed out our equipment line item. As the City of Grand Forks has purchased the Herald Building and are remodeling it and are looking to see if the MPO is interested in renting space there, and there is interest in this by the MPO but we still have to work out details and that will take most of 2020 to work out and the space won't be available until 2021 so we zeroed out our equipment budget to let things shake out before purchasing and new equipment.

Haugen commented that the document itself, he just attached things that were changed, with the exception of the timelines for the 2050 MTP Update, just to remind everybody that this work program is progressing us towards our 2050 Metropolitan Transportation Plan.

Haugen stated that another thing that has happened is that both Cities have decided that they would like to postpone starting their Land Use Plan Updates until the second half of the year. He explained that the primary reason for that is that they want to make sure that the 2020 Census results are a part of the update process at the appropriate time, so they felt that by delaying the start of the update they won't get too far into the process before the results are available, and it still fits in with the timeline that we currently have identified so there was no need to change that. He added that the counting program you will notice we identify that our current addendum will carry over. He stated that on the Land Use Plans we have it in there that we are now waiting until the second half of the year and so we've split the consultant costs in half and carry them into January of the following year, and the new item is the Traffic Impact at a bridge corridor, although it could be more than one corridor depending on the water hydraulics study.

Haugen reported that one other change involves a document we used to provide called the Monitoring and Surveillance Report, but it was changed to Performance Reports, so we have identified that.

Haugen stated that some minor changes to some of the language and some dates for the GIS.

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Haugen commented that for the financial side of the report, unfortunately our revenue stream is not growing so we maintained the same budget amounts and funding sources; and then the detail table shows how the individual cost components are identified, how much is remaining for the consultant costs, etc.

Haugen said that the only other major study that is carrying over into 2020 is the Downtown Transportation Study.

Haugen stated that these are the proposed amendments and once approved by our MPO Executive Policy Board we will send them to our State and Federal Partners.

Williams referred to the Activity Page that has all of the costs and said that Mr. Haugen said that the hydrology part is being removed from the MPO funding; does this number reflect that removal. Haugen responded that it does, adding that the hydraulic study is not being reflected in the MPO budget at all.

Kuharenko referred to Page 22 of the report, under completion dates, and pointed out that 300.52 shows a completed date as December 31, 2017/18. Haugen responded that that will be removed. Kuharenko referred to Page 21 of the report and pointed out that there is a spelling error, Shroeder Middle School is misspelled.

MOVED BY KUHARENKO, SECONDED BY HALFORD, TO APPROVE FORWARDING A RECOMMENDATION TO THE MPO EXECUTIVE POLICY BOARD THAT THEY APPROVE AMENDMENT #1 TO THE 2020 WORK PROGRAM SUBJECT TO REVISIONS AS DISCUSSED.

Voting Aye: Riesinger, Rood, Johnson, Kuharenko, Emery, Halford, Hopkins, and West.

Voting Nay: None.

Abstain: None.

Absent: Kadrmas, Bergman, Bail, Ellis, Gengler, Brooks, Audette, Hanson, Laesch, Magnuson, Sanders, Peterson, and Christianson.

MATTER OF UPDATE ON US2/US81 SKEWED INTERSECTION STUDY

Kouba reported that the Steering Committee received the final draft document to review and provide input.

Kouba stated that, just as a refresher, we are looking at traffic flow operations and things like that in that very small tight corridor, so there are a lot of challenges. She said that they are also looking at increases in traffic volumes out to 2045, and in 2045 we are looking at higher delays, more blockages mostly due to unit trains, which are longer and will block traffic all the way through that corridor at one point in time as it runs through.

Kouba commented that some of the other challenges are that there are a lot of driveways and access points; and she knows that the City's Planning and Engineering Departments has been

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working with businesses as much as possible to close some, or share some of them, but it makes things difficult and makes things feel unsafe when looking at it from a pedestrian viewpoint.

Kouba stated that they evaluated signal warrants on all of the traffic signals in the corridor and also for stop signs as well. She said that as things stand today and into the future the signal at 20th and Gateway is not really warranted, and it is kind of a high location for crashes. She added that the signal in front of Wilder at 3rd and Gateway is not technically warranted but there are a few other things that should be considered when we look at that signal. She said that there is an underpass for pedestrians, but it isn't always available during certain situations such as snow, flooding, etc., so those situations should be taken into consideration before deciding to remove that signal.

Kouba said that there are also signals that don't have any kind of pedestrian control, so it makes it difficult and unsafe for pedestrians trying to cross at those various intersections.

Grasser referred to the slide discussing signal warrants and commented that there is a pretty impressive list of crash reductions and such; and if he is understanding it right those numbers are based on removing both of those signals, the ones circled in red. Kouba responded that that is correctly, generally, especially at the one on 20th, but in general overall what it statistically states is that that is what happens when you remove unwarranted signals. Grasser said then, that it is more of a statistical typical analysis, because he was wondering because those numbers, if he understands the conversation, even though you show the signal at 3rd in red, it would probably be more difficult to remove it so what would the resulting anticipated reduction of crashes be then if that one was left but the one at 20th is removed, would it be half the numbers shown or some other percentage. Kouba responded that she doesn't know if they have looked at the exact numbers that could happen if both or one was removed, but overall in an average statistic that is the number they would use.

Kouba commented that one thing to note about the signal at 3rd and Gateway is that it tends to become warranted in 2045, or close to being warranted, so do we want to remove it and then have to put it back in then, plus there is the issue of crossing from that neighborhood to the school. Grasser agreed that his sense is that that would be a difficult one to take out.

Williams commented that the signal at 20th and Gateway, the study did not look to see where that traffic would be diverted to if you are coming north and want to make a left turn onto Gateway, and if you can't do it with not enough gaps, it didn't look to see where that traffic would go to try to find a way out. West said that the next light west would be Columbia. Williams agreed, adding though that that would mean they would have to go through the neighborhood. Haugen asked, though, that it is assuming there is enough gap, or if there is no warrant for the signal because there is sufficient gap for movements. Williams responded that the problem is that the signals are too far apart to do that because once you get more than a quarter of a mile people start to spread out and you have other intervening intersections and that sort of thing so it makes it much more difficult to try to create a gap for vehicles to make left turns.

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Johnson reported that, just to add to this discussion, NDDOT has been having problems with signal warrants in a lot of their projects, especially as part of the new Urban Grant Program Project, where they are redoing downtowns and looking at existing traffic signals that have been there for thirty or forty years or more because they were always there, but none of them are warranted; very few of them are still warranted and they are going through a process where they are removing signals across the State and the warrants are pretty black and white, there is no leniency given, the direction was given from their federal oversight that if it is an unwarranted signal it either needs to come out or the other option for the local jurisdiction is to just leave it as is and zero improvements can be made to it, you can change light bulbs and all red light confirmation, but no painting, no rewiring or anything like that can be done to it, so that is something you need to keep in mind when you look at this type of stuff that the eventual control of that intersection may change regardless of maybe what you want to do so looking at other options, for example at 3rd, is that it might be a location for a hawk or a pedestrian activated beacon instead.

Halford said that as you get rid of more traffic signals, for someone to cross Gateway as a pedestrian, it will be much harder because there will be longer spans of lights and be able to do that because there is no way that, you might get lucky and there will be a gap in traffic for you to cross, but if you are able to add Hawks, but then when you are talking about downtown though that is such a walkable bikeable, that is what we want our downtowns to be, but if you take away traffic signals it seems like it is just going to speed up traffic and make it so you can't cross the street. She said that people are crossing in so many different places that it is going to make it very difficult for that to happen. Johnson agreed, adding that thought that that is why you look at interjecting different elements of traffic calming like bulb outs, but the City didn't want bulb outs. He said that as a perfect example, US 52, 1st Avenue or 1st Street through Jamestown, there are five signals there now but only one is warranted, so they are working on a project right now where they are probably going to lose four signals in their downtown, but they are looking at putting in bulb outs, and it is really interesting listening to the public and their reaction, where they almost sound like DOT employees sitting out there, this is a truck route, this is a US Highway, we have to get trucks through here, what are you doing, what are you doing; so it is something that they are battling across the State, it is kind of a newer nuance to this new program that they hadn't really experienced in the past, most of their projects are on the fringe where there is growing and signals are warranted, they didn't do a lot of internal projects prior to that program. Halford asked if Downtown Grand Forks being looked at. Johnson responded that DeMers is done so those signals meet warrants.

Discussion on signals that have been removed or will be removed throughout Grand Forks and the State ensued.

Williams suggested that may this warrants further discussion with a different focus group that, in essence what the Feds have done is they've taken away engineering judgement by saying this, and then the other thing is is that to truly, if you are only going to use one day out of the year, who picks the day. She said that they have a signal, such at 11th and 42nd, that on a day to day basis may not seem warranted but tell you what, we wouldn't be able to operate an event at the Alerus without it, so that is another problem, where some of these may be, like the signal at 3rd,

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if the underpass isn't available and you have all the kids crossing you are going to meet school warrants every single day, so that is another problem as to when the counts are done, so maybe that is something that we need to internally look at as far as how we determine when we are going to do this. Johnson agreed that he thinks that is a good point but he would argue that, and he isn't an expert on this, but good engineering practice is to do it on a normal day, it isn't to do it when the Alerus Center has an event or right as school is getting out, because you are designing the roadway and the infrastructure for a normal day so you have to be careful doing that as well because that falsifies some of the information they are trying to get done for the infrastructure and the money we are spending. Williams said that she is going to tack on the Ms. Halford's comment though that on some of that, when you look at pedestrian and bicyclists trying to cross a street on an unaverage day doesn't help you if the signal has been removed, so it warrants maybe a lot more discussion as far the parameters. Johnson stated that he completely agrees but we just don't have the pedestrian traffic in this State to warrant, there is pedestrian warrants as part of the signals, but it is an enormous number, we don't even come close. Williams said thought that the school warrant isn't, the school warrant for pedestrians is fairly low; and that is for further discussion.

Kuharenko said that one question he is going to have is that since we've got projects in the S.T.I.P. for our traffic signal rehabilitation program, he is assuming that they are going to have to look at traffic signal warrants at every single one of those. Johnson responded that if you have the time and capabilities to do some of that now it might be something you might want to do so you can get ahead of it. Williams asked what year this project is scheduled for. Kuharenko responded that he thinks it is pending 2022 for Urban and 2023 for the Regional, otherwise it would be 2023 and 2024 respectively.

Kouba continued by saying that in looking at the rest of the network they are looking at the ADA crossing issues that are on the corridor. She said that the bicycle network is not as robust along the exact corridor, but there is a trail to the north, but there aren't many good places to cross, especially on Washington.

Kouba stated that through the plan, after they presented all of the alternatives they asked for feedback from the Steering Committee and also from the public, which was done through public meetings, as they were trying to get back as much information as possible. She said that they also attended the Near Northside Neighborhood meetings; and one highlight they got from that is that people are very interested the ability to cross the streets and the closeness of all the driveways and running into traffic from a pedestrian point of view.

Kouba commented that most of the feedback they received supported a realignment of the railroad; we can't remove it all just because of the need for the railroad to serve other areas, but the idea that all the trains can come in from the north and have less interaction with traffic, as well as to some extent pedestrians wanting to cross the tracks as well. She stated that this would be considered a long-term improvement, which they know. She added that they did get rid of some alternatives that weren't very viable, and eliminating the skew is not going to be something that is really feasible, so the suggestions and alternatives remaining show ways to improve safety for pedestrians and to ensure there are fewer crashes along the corridor. She stated that they also

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eliminated some of the more expensive at grade alignments and non-grade alignments as they would also highly impact a lot of the area businesses.

Kouba referred to a map and pointed out that it shows a footprint where they would improve the sidewalks to allow for bicycle traffic to use it so they can cross properly at the lights; right-in and right-out additions so that we can make it safer. She stated that this is further south so we wouldn't have the railroad as an issue, but we would still have to have a crossing, but we wouldn't need it all the way through if we are going to bring things from the north, but we would probably still need it because they would have to back trains and things like that in order to serve the various businesses in the area. She said that it would move all those trains to 42nd and Gateway, but that location has had an overpass plan on the books for quite a while that is a desired thing, so overall between that and the reduction of conflicts there would be a little bit freer flow of traffic, not blocked by trains.

Kouba stated referred to a slide showing the cost of realignment and stated that this the total cost including the other elements of safety that don't include the rerouting of the rails, so those could be implemented sooner rather than later.

Grasser asked if these costs capture property acquisition and engineering. Kouba responded that it does to a certain extent. She said that they included it in with some of the pre-engineering, but you can only guesstimate so much of the planning of it. Grasser said that the struggle sometimes on these things is having the ability to implement a particular plan; some of those things can be an operational issue, such as with the Mill, or a part of the property that sometimes almost not a deal card, and he isn't sure he is able to understand where that type of, call it a deal card, comes into play. Kouba responded that that is kind of the reason why we understand where it comes into be a deal card is that whole realignment section, which will cost the most out of the whole total cost, but we have put in what it would take to just put in the safety improvements. Grasser said, then, that this slide reflects one that probably doesn't have it implemented. Kouba stated it doesn't include the realignment part which would be working with the railroad; that is how we got the \$5.6 million dollar estimate of the total was reached. Grasser asked if we have the BNSF railroad, then, on board. Kouba responded that there would need to be negotiations held with BNSF as well as with them now because if they are additional. Grasser agreed it would be for both sites. Kouba added that the needs of the various businesses rely on that rail.

Kouba commented that the one that sparked the most interest is the one that, there are implementable parts and there are parts that are understood will take a lot more time to implement, but if you have intersection consolidation when you have rail but its elimination that, it doesn't help to have it if it doesn't do anything to improve any of the traffic issues and pedestrian safety issues, so they eliminated a lot of those types of things.

Kouba stated that for the short-term there are things such as ITS or ways of letting people know that there is a train blocking at various intersections in order to allow them to turn off and go a different route.

**PROCEEDINGS OF THE
TECHNICAL ADVISORY COMMITTEE
Wednesday, December 11th, 2019**

Kouba said that at the MPO level our next steps are us working with Engineering to update the City Council, especially because Mr. Weber was at one of our public meetings and he would like an update, so we will do that. She stated that Mr. Johnson had also said that there might be a need to have some upper management involvement as well. Johnson responded that he hasn't had the opportunity to follow up with them, but he is confident that he can just provide any information provided here and just brief them on the study findings.

Kouba commented that the final step will be final approval of the study.

Grasser said, maybe you've done this, but he can't pick it out of the information but it seems like one of our key stakeholders would be BNSF, has anybody given them a sketch of what all that might look like and see what their reaction is to it, it would be interesting to know if they are favorable or unfavorable or where they might be with that. Kouba responded that they were part of the Steering Committee up to the point where we started doing alternatives, and at that point they said that they can't take part in those decisions one way or the other, and they pretty much stopped coming. Zacher added that BNSF does that on pretty much every project; they will be involved up to a certain point and then they back away and wait for the permitting process. Johnson said, though, that they continually stress that early coordination is the best key.

Haugen commented that the documents are available for review, and the Steering Committee has had the documents for a while and will give their recommendation so next month we anticipate that we will ask the Technical Advisory Committee and the MPO Executive Policy Board to complete the study.

Kuharenko asked if a copy of the draft final or final report available on the MPO Website. Kouba responded that it is available on the Website.

Information only.

OTHER BUSINESS

a. 2019 Annual Work Program Project Update

Haugen reported that attached is his first attempt at doing the monthly update to the work activities.

Haugen commented that three weeks ago A.T.A.C. distributed out their ITS Diagrams and are asking for feedback on them. He said that there will be some additional information on this before the end of the Holidays and they are asking for feedback so they can finalize the ITS Regional Architecture document.

Williams asked that Mr. Haugen forward the email with that information to her.

Information only.

**PROCEEDINGS OF THE
TECHNICAL ADVISORY COMMITTEE
Wednesday, December 11th, 2019**

b. Continuing Resolution Update

Haugen stated that we are on a continuing resolution for funding, so hopefully Congress will keep federal funding funded through the holidays at least, and beyond.

Johnson commented that one thing to note on the latest resolution that congress passed they removed the rescission clause of the FAST-ACT; other than just kicking the can down the road they removed that. He said that they don't know for sure exactly what that will mean yet though.

c. ND Federal Highway Announcement

Haugen reported that North Dakota Federal Highway has announced that they have filled their Planner position and the new person will start right before Christmas.

ADJOURNMENT

***MOVED BY ROOD, SECONDED BY WEST, TO ADJOURN THE DECEMBER 11TH, 2019
TECHNICAL ADVISORY COMMITTEE MEETING AT 2:29 P.M.***

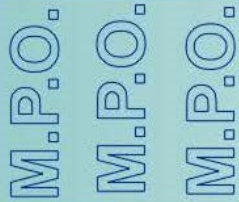
MOTION CARRIED UNANIMOUSLY.

Respectfully submitted by,

Peggy McNelis,
Office Manager

Overcoming Barriers

Strengthening Connections



**Grand Forks - East Grand Forks
Metropolitan Planning Organization**

Ensuring Opportunities

Planning One Community

*“A community that provides a variety of complementary transportation choices, that are fiscally constrained,
for people and goods.”*

MPO Staff Report

Technical Advisory Committee: January 8, 2020

MPO Executive Board: January 15, 2020

RECOMMENDED ACTION: Recommend the approval of FY2020 TIP amendment to the MPO Executive Board.

Matter of the Public Hearing on FY2021 TIP Amendment.

Background: After the MPO adopts a four year TIP, amendments may need to be process when a project cost estimate changes significantly or the scope of the project changes or federal programs have announced funding awards.

MnDOT is requesting that the MPO amend their 2020-2023 TIP to reflect the following change. SP 6001-61 (US 2 WB Concrete Crack and overlay) will be funded in FY 2022 (previously in FY 2021). The project will be an ELLA (Early Let Late Award) so it will still be let and constructed in FY 2021. The project intends to implement Alternative 3B Modified R-CUT from the US2/USB2 Study; see attached concept. The attached proposed project listing shows the amended project. Also attached is the public hearing notice (being held at the TAC meeting) that was published concerning this proposed amendment.

Findings and Analysis:

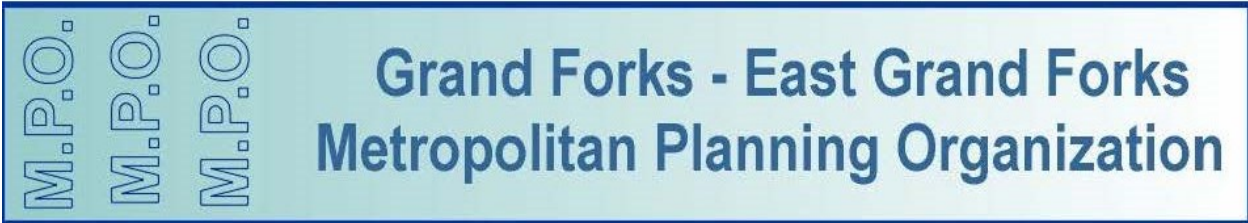
- Project modification have been identified.
- The proposed project is consistent with the MPO Metropolitan Transportation Plan.
- A Public Hearing is scheduled for January 8th at the TAC meeting; written comments are being accepted until 11:00 am, January 8th.
- These amended project does not impact funds in the TIP so fiscal constraint is maintained.

Support Materials:

- Copy of Public Hearing Notice.
- Copy of Amendment

Overcoming Barriers

Strengthening Connections



Ensuring Opportunities

Planning One Community

PUBLIC NOTICE

The Grand Forks - East Grand Forks Metropolitan Planning Organization (MPO) will hold a public hearing on the proposed amendment to the MPO 2020 to 2023 Transportation Improvement Program (TIP). The TIP also incorporates the local transit operators' Program of Projects (POP). The hearing will be held in the Training Room of East Grand Forks City Hall, 600 DeMers Ave., East Grand Forks, Minnesota. The hearing will start at 1:30 PM on January 8th. The public, particularly special and private sector transportation providers, are encouraged to attend.

The TIP potential amendment involves reprogramming a project's financial plan. The funding will come from Federal Fiscal Year 2022 instead of 2021. The project will still be constructed in 2021. A copy of the proposed amendment to the TIP is available for review and comment weekdays between 8 AM and 5 PM at the MPO Offices in Grand Forks City Hall and East Grand Forks City Hall. Comments on the draft TIP can be submitted to either MPO Office until noon on January 8th.

For further information, contact Mr. Earl Haugen at 701/746/2660. The GF-EGFMPO will make every reasonable accommodation to provide an accessible meeting facility for all persons. Appropriate provisions for the hearing and visually challenged or persons with limited English Proficiency (LEP) will be made if the meeting conductors are notified 5 days prior to the meeting date, if possible. To request language interpretation, an auxiliary aid or service (i.e., sign language interpreter, accessible parking, or materials in alternative format) contact Earl Haugen of GF-EGFMPO at 701-746-2660. TTY users may use Relay North Dakota 711 or 1-800-366-6888.

Materials can be provided in alternative formats: large print, Braille, cassette tape, or on computer disk for people with disabilities or with LEP by Earl Haugen of GF-EGFMPO at 701-746-2660. TTY users may use Relay North Dakota 711 or 1-800-366-6888.

GRAND FORKS - EAST GRAND FORKS METROPOLITAN PLANNING ORGANIZATION

TRANSPORTATION IMPROVEMENT PROGRAM

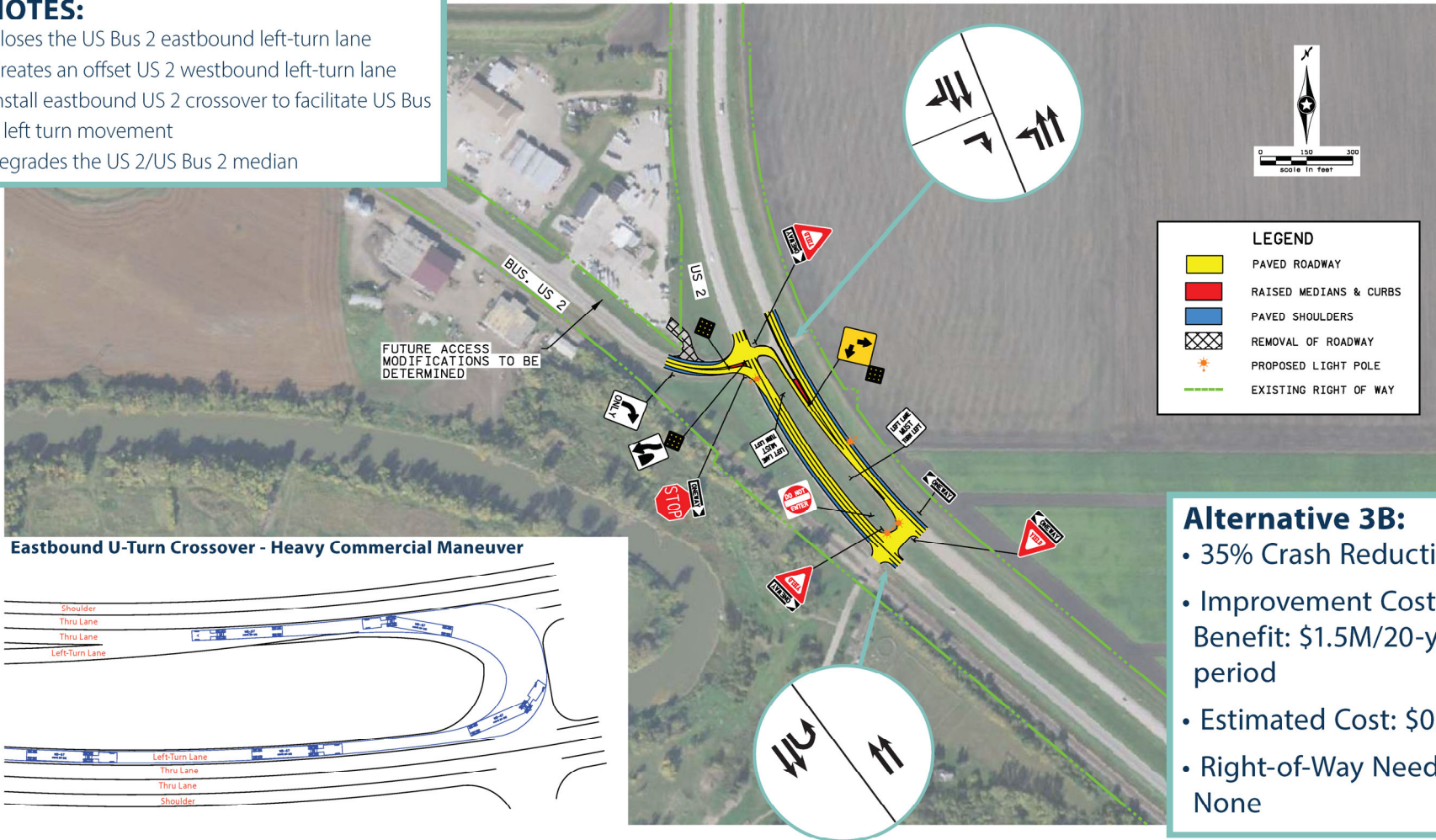
FISCAL YEARS 2019-2022

URBAN AREA	PROJECT LOCATION	FACILITY	PROJECT DESCRIPTION	ESTIMATED COST (THOUSANDS) AND SOURCE OF FUNDING					STAGING	ANNUAL	FUTURE					
	RESPONSIBLE AGENCY	CLASSIFICATION								ELEMENT	EXPENDITURES					
PROJECT NUMBER	PROJECT TYPE	FUNDING STATUS	PROJECT DESCRIPTION	TOTAL	FEDERAL	STATE	OTHER	LOCAL	Operations	2020	2021	2022	2023			
										CONSTR.						
FUNDING SOURCE									TOTAL							
East Grand Forks #7	East Grand Forks	US 2	WBL - FROM 5TH AVE NW (EAST GRAND FORKS) TO 0.3 MI E OF POLK CSAH 15 (FISHER), RESURFACING Project # 6001-61	REMARKS: Likely can include alternative concepts currently being considered in US 2 Study Amended January 2020					Operations							
	MnDOT	Principal Arterial								Capital						
	Rehabilitation	Discretionary									P.E.					
												R.O.W.				
													CONSTR.			
TOTAL																
District Managed Program									TOTAL							
East Grand Forks #8	East Grand Forks	19th Ave SE	construct a safe routes to school sidewalk 20th Ave SE starting at 10th St SE and 13th St SE and along 13th St SE to connect to school Project # 119-591-006	REMARKS:					Operations							
	East Grand Forks	Local								Capital						
	Construction	Discretionary									P.E.					
												R.O.W.				
													CONSTR.			
TOTAL																
NWATP TA funds									TOTAL							
East Grand Forks #9	East Grand Forks	NA	Safe Routes to School educational and encouragement funding for a three year period Project # 119-591-007	REMARKS: Agreement between East Grand Forks and SafeKids GF					Operations							
	East Grand Forks	NA								Capital						
	Safety	Discretionary									P.E.					
												R.O.W.				
													CONSTR.			
TOTAL																
NWATP TA funds									TOTAL							

US 2 AT US BUS 2 ALTERNATIVE 3B

NOTES:

- Closes the US Bus 2 eastbound left-turn lane
- Creates an offset US 2 westbound left-turn lane
- Install eastbound US 2 crossover to facilitate US Bus 2 left turn movement
- Regrades the US 2/US Bus 2 median



- Alternative 3B:**
- 35% Crash Reduction
 - Improvement Cost Benefit: \$1.5M/20-year period
 - Estimated Cost: \$0.7M
 - Right-of-Way Need: None

GRAND FORKS-EAST GRAND FORKS MPO – US 2 and US Bus 2 Study





MPO Staff Report
Technical Advisory Committee: January 8, 2020
MPO Executive Board: January 15, 2020

RECOMMENDED ACTION: Candidate Projects for TIP 2021-2024 – Minnesota Side.

Matter of Candidate Projects for TIP 2021-24 Minnesota Side.

Background: The MPO and MnDOT formally solicited candidate projects for the 2021-24 TIP/STIP. In order for the MPO to give both the local agencies as much time as possible yet still allow MPO staff to “vet” the candidate projects, the project submittal deadline to the MPO was December 27th.

One application was submitted by MnDOT. For 2024, the candidate project is to replace traffic signals at the Intersections of DeMers Ave and 2nd St and DeMers and 4th St. in East Grand Forks. The total estimated cost is \$1.12 Million, with a federal request of \$0 in federal funds. The proposed funding is State and the construction cost estimate is \$900,000.

It is consistent with MPO’s 2045 Metropolitan Transportation Plan. It is slightly different in the respect that originally the project was to replace three traffic signals. However, due to project delivery concerns with possible right of way, the intersection of 4th St and 2nd Ave was dropped.

The MPO, together with its local partners, are studying the transportation of both downtowns. Discussions have been held that recommendations from this Study will be incorporated into the project.

Separate staff report is released for the ND side candidate projects.

Findings and Analysis:

- The MPO must annually prepare a Transportation Improvement Program
- TIP eligible projects with the MPO Area must be submitted to the MPO for its consideration
- The projects submitted are being considered as being consistent with the Metropolitan Transportation Plan
- One project should be given high priority ranking.

Support Materials:

- Application



TRANSPORTATION PROJECT CHARTER

PRIME S.P. 6001-68 (ROUTE: 2B)

Project Manager Name: Matt Upgren		
Complexity and Risk Scale: Low	Proposed FY Letting: TBD	T# T2C230

Location & Approximate Termini	TH 2B in East Grand Forks, Signal Improvements Reference Points: 0+00.00 to 0+00.681 Carto Mile: 0.126, 0.272, 0.681 Length: N/A
Need (i.e., Problem) Statement & Supporting Data	The traffic signals at 2 nd Street, 4 th Street and 2nd Ave NE were installed in 1990 and upgraded with APS in 2013 and are in need of replacement
Purpose (i.e., Project Goals) Statement	The purpose of the project is to upgrade existing traffic signals.
Preliminary Project Scope	The project would consist of replacing the traffic signals at 2 nd Street, 4 th Street and 2nd Ave NE .
Possible Risks & Other Issues	Sidewalks and APS were upgraded in 2013. It appears possible to replace the signal system without impacting the sidewalk.
Preliminary Construction Cost Estimate Range	3x \$300K (signal replacement) = \$900,000
Project Manager Responsibilities	<p>Project manager's responsibilities include:</p> <ul style="list-style-type: none"> • Being the primary contact for the project and working with stakeholders; • Preparing project management plans (i.e. scope, schedule, budget, etc.) and obtaining management's approval of those plans; • Directing and managing the project team to deliver the project within scope, on time, within budget, and to a high degree of quality; • Monitoring project performance and taking corrective actions when necessary; and • Periodically reporting project status to stakeholders and management. <p>Project manager has the authority to:</p> <ul style="list-style-type: none"> • Make scope, schedule, and budget decisions within the approved baselines; • Elevate issues requiring higher authority resolution and specifying reasonable deadlines for decisions.

I approve this project for continued development and authorize the use of Department resources to develop a scope and a plan for project delivery.

Jim Curran, Assistant District Engineer _____
Date

**GF-EGF MPO
PROJECT NOMINATION FORM**

PROJECT IDENTIFICATION

Proj/Rdwy Name and/or No. US 2B Signal Replacement & ADA Improvements

Project No. 6001-68

Federal Project No. _____

Proposer(s) MNDOT & EGF/GF MPO

Time Frame (color/bold) SFY 2021 SFY 2022 SFY 2023 **SFY 2024**

Project Ready Date: Spring 2023

Project letting Date: August 2023

Township: _____
City Name/Population: East Grand Forks
County: Polk
MPO: E Grand Fork/Grand Forks

Location

RDC Region: _____
Mn/DOT Dist: 2
Legis Dist: _____
Congress Dist: _____

Instructions: Fill in all information. Attach 8 1/2" x 11" Location

CONTACT PERSON

Name: Matt Upgren Title: MnDOT/D2 Project Manager
Address: 3920 US2 West, Bemidji, MN 56601
Phone No.: 218-407-0703

Instructions: Also include phone number and address of contact person if different.

INTENT OF PROJECT Preservation & Safety Improvements

(Select)

Reconstruction/New Const.

Add Bike way

Preservation/Repair/Rehabilitation

Improve Air Quality

Roadway Strengthening (10 Ton)

Intermodal Improvement

Safety Improvement (Roadway or Rail)

Economic Development

Capacity Improvement

Enhancement

Transit Capital (New, Replacement or Service)

Instructions: Select the primary intent of the project from the list and write it in the space provided.

PROJECT JUSTIFICATION

US 2B in East Grand Forks, Signal & ADA Improvements

Reference Points: 0+00.12; 0+00.29

Carto Mile: 0.126; 0.272,

The traffic signals at the intersections of US 2B and 2nd & 4th Streets in East Grand Forks were installed in 1990 and are nearing the end of its 30 year service life, and need replacement. There are also ADA Improvements that are required at these intersections.

(See Attached MnDOT Project Charter)

Note: 2nd Ave was originally included in this project but was not included in the final scope.

Supporting Data

	Existing	Proposed		Existing	Proposed
AADT:			Surf. Type:		
HCADT:			Spring Load:		
Lane Width:			PQI:		
Shldr. Width:			Roadway Suff. Rating:		
Shldr. Type:			Bridge Suff. Rating:		

Instructions: Describe why this project is justified. Include major deficiencies to be corrected. Indicate age, mileage, and estimated service life of transit vehicles being replaced. Use additional pages or maps if needed. If using accident data to support purpose of the project, include number of accidents and the reduction that the proposed improvement is anticipated to prevent.

PROJECT COSTS					
	FEDERAL FUNDS	STATE FUNDS	STATE AID FUNDS	LOCAL FUNDS	TOTAL
CONSTRUCTION COSTS		600,000		300,000	900,000
PRELIMINARY ENGINEERING		150,000			
RIGHT-OF-WAY		20,000			
OTHER NON-CONSTRUCTION COSTS		50,000			
TOTAL PROJECT COST		820,000			1,120,000
TYPE OF FEDERAL FUNDS:					
SOURCE OF MATCHING FUNDS:					

BENEFITS (PLEASE DESCRIBE):
Improved Pedestrian and Traffic Safety

CATEGORY / TYPE OF WORK

Category of Work: Preservation (Select One)

Safety Preservation Bridge Replacement Major Investment	Non-Roadway Enhancements Transit Rail Crossing
--	---

Type of Work: Traffic Signals & Pedestrian Trail

Examples:

Grading Resurfacing Paving Shoulders Bridge Rehabilitation Rest Areas Turn Lanes Conc. Pavement Rehab. Pedestrian Trail	Guard Rail Signing Bikeway Improvement Rail Improvement Transit Capital Improvement Transit Vehicle Replacement Historic Preservation Landscaping	Surfacing Widen Shoulders New Bridge Bridge Replacement Culvert Replacement Traffic Signals Lighting Waysides
--	--	--

Instructions: Fill in the blank for Category of Work with one of the seven possible categories, Indicate the work type that best describes the project.

TIP SCORING SHEETS

TELUS ASSISTED SCORING MPO SCORING SHEET FOR EACH PROJECT

0=No 1=Yes

Project Number 6001-68

Project Name US 28 Signal Replacement

Category 1 Economic Vitality

<i>Support the economic vitality of the metropolitan area especially by enabling global competitiveness, productivity, and efficiency.</i>		Assign score 0 or 1
A	Consistent with local, regional or state economic development plans	1
B	Work located on identified truck route or identified in Freight Study	1
C	Provides new access to jobs and opportunities	0
D	Improves connection to terminal (sea, air, multimodal) on the last mile or two ac	0

Category 2 Security

<i>Increase security of the transportation system for motorized and nonmotorized uses.</i>		Assign score 0 or 1
A	Install equipment that monitors the security of the transportation infrastructure	0
B	Consistent with regional emergency/security/hazardous materials movement.	1
C	Coordinates/improves Bridge Closure Management Plan	1
D	Coordinates/improves Special Events Management Plans	1

Category 3 Accessibility and Mobility

<i>Increase the accessibility and mobility options to people and freight.</i>		Assign score 0 or 1
A	Provides acceptable LOS for facility as recommended in LRTP	1
B	Consistent with access control regulations	1
C	Enhances accessibility and mobility for all modes	1
D	Address LOS deficiency not resolved by another planned project	0
E	Enhances the range of freight service options available to area businesses	0

Category 4 Environmental/Energy/QOL

<i>Protect and enhance the environment, promote energy conservation, and improve quality of life.</i>		Assign score 0 or 1
A	Demonstrates core context sensitive solutions principles	1
B	Addresses EJ analysis process	1
C	Decreases fuel consumption which reduces greenhouse gas	1
D	Avoids or minimize impacts to wetlands or other natural habitats	1
E	Incorporates innovative stormwater management techniques	0
F	Promotes nonmotorized travel	1

TIP SCORING SHEETS

TELUS ASSISTED SCORING MPO SCORING SHEET FOR EACH PROJECT

0=No
1=Yes

Project Number

6001-68

Project Name

US 2B Signal Replacement

Category 5 Integration and Connectivity		
<i>Enhance the integration and connectivity of the transportation system across and between modes for people and freight.</i>		Assign score 0 or 1
A	Reduces excessive travel delays	1
B	Improves direct travel trips between states	1
C	Address last segment/link of corridor	0
D	Improves the integration/connectivity of whole transportation system	1
E	On Regional Primary Road	1
④		
Category 6 Efficient System Management		
<i>Promote efficient system management and operation.</i>		Assign score 0 or 1
A	Incorporates elements from ITS Strategic Plan	1
B	Improving operations without adding through capacity	1
C	Enhances interoperability among modal equipment/technologies	1
D	Contributes to better collecting traffic data	1
④		
Category 7 System Preservation		
<i>Emphasize the preservation of the existing transportation system.</i>		Assign score 0 or 1
A	Utilize pavement management system results	1
B	Emphasizes system rehabilitation rather than expansion	1
C	Incorporates technologies new to the MPO area	1
D	Maximizes existing capacity	1
e	Contributes to better system maintenance	1
⑤		
Category 8 Safety		
<i>Increase safety of the transportation system for motorized and nonmotorized uses.</i>		Assign score 0 or 1
A	Address locations identified as high crash locations in LRTP, corridor studies, hi	1
B	Enhances safe route to school route	0
C	Consistent with Strategic Highway Safety Plan	1
D	Improves points of conflict	1
E	Enhances the public safety of nonmotorized users	1
④		

TIP SCORING SHEETS

TELUS ASSISTED SCORING MPO SCORING SHEET FOR EACH PROJECT

0=No
1=Yes

Project
Number

6001-68

Project
Name

US2B Signal
Replacement

Category 9 Local/Regional Factors

Factors of local or regional importance

Assign score
0 or 1

A	Conformance with regional or state plan	1
B	Demonstrates analysis of project risk in implementation	1
C	Provides benefit for multiple transportation agencies	1
D	Advances smart growth objectives	1

4



MPO Staff Report
Technical Advisory Committee: January 8, 2020
MPO Executive Board: January 15, 2020

RECOMMENDED ACTION: Candidate Projects for TIP 2021-2024 – North Dakota Side.

Matter of Candidate Projects for TIP 2021-24 North Dakota Side.

Background: The MPO and NDDOT formally solicited candidate projects for the 2021-24 TIP/STIP. In order for the MPO to give both the local agencies as much time as possible yet still allow MPO staff to “vet” the candidate projects, the project submittal deadline to the MPO was December 27th.

URBAN Grant

One application was submitted by the City of Grand Forks. For 2022, the candidate project is to reconstruct N. 4th St between DeMers Ave and 1st Ave N. The total estimated cost is \$2.3 Million, with a federal request of \$1.63 Million in federal funds.

It is consistent with MPO’s 2045 Metropolitan Transportation Plan. The proposed project will incorporate bulb outs, ornamental street lights, decorative sidewalks, and additional streetscape amenities. The MPO, together with its local partners, are studying the transportation of both downtowns. The project description does not include any specific amenities for transit nor for bike facilities beyond 2 bike racks. The ongoing Study could provide some recommendations that could be incorporated into the project.

URBAN ROADS – Local Grant (Purpose and Need Statement missing)

One application was submitted by the City of Grand Forks. For 2024, the candidate project is rehab work on the Columbia Road Overpass. This is the same project submitted for consideration last year; it was not awarded funding. The rehabilitation work on the Columbia Rd Overpass will likely include replacement of the pot bearings at the north abutment, replace pier bearings, as well as sand blasting and painting of the bridge girders. They hired Houston Engineering to assist in identifying the items of the structure that need work and assist in identifying the timing or priority of the found issues. Pages from the final report are included. The cost estimate is \$8.43M (updated to reflect 2024) with a federal request of \$6.74M. This cost estimate is 45% higher than the cost estimate in the MTP.

It is consistent with MPO’s 2045 Metropolitan Transportation Plan. If awarded funding, there will need a follow-up conversation about how the financial plan needs to be reconsidered.

URBAN ROADS – Regional Grant (Purpose and Need Statement missing; Detailed Cost Estimate missing)

Worksheets for several projects already in the TIP were submitted. That information is omitted from this Staff Report due to not relevant to the solicitation of new candidate projects. The Projects include the mill/overlay of US2 between N. 55th and N. 69th, the work on US B2 between US2 and DeMers (including chip seal), the NEPA document for congestion of 32nd Ave S and subsequent possible improvement of new interchange. These last two projects are being processed as separate involvement between the City and NDDOT.

FY2024 - One application was submitted by the City of Grand Forks and NDDOT GF District. The candidate project is to reconstruct Bus US81 (S. Washington St) between Hammerling Ave and 8th Ave S. The total estimated cost is \$5.7 Million, with a federal request of \$4.56 in federal funds.

It is consistent with MPO's 2045 Metropolitan Transportation Plan. A corridor study was completed on this stretch of road; the application makes no direct reference to it yet does identify, among other things, access management. Transit facilities, among others, were recommendations in the Study. Also, it is not identifying how this project integrates the 2020 ADA project.

TIP +1 – Possible candidate projects are requested for the year just outside the standard 4 year TIP. These projects are not officially being submitted for this TIP consideration; rather, as a “heads-up” on what the current thoughts is for projects that may be submitted for 2025.

Two possible projects have been preliminarily identified. One is to continue the reconstruction of Bus US81 (S. Washington St). The termini identified are 8th Ave S to DeMers. Ave. The total estimated cost is \$5.92 Million, with a federal request of \$4.74 in federal funds.

It is consistent with MPO's 2045 Metropolitan Transportation Plan. A corridor study was completed on this stretch of road; the application makes no direct reference to it yet does identify, among other things, access management. Transit facilities, among others, were recommendations in the Study. The intersection of DeMers Ave had a major improvement identified in the Study. Also, it is not identifying how this project integrates the 2020 ADA project.

The second project is proposed concrete panel repair and grinding of US2 (Gateway Dr) between N. Columbia Rd and Kennedy Bridge. The total estimated cost is \$1.56 Million, with a federal request of \$1.25 in federal funds.

It is consistent with MPO's 2045 Metropolitan Transportation Plan. A corridor study was completed on this stretch of road; the application makes direct reference to it. The Study does have, at least, a two phased high ranking alternative. The first phased is a lesser cost improvement that could possibly be incorporated into this project. The second phase is a much larger railroad re-alignment (and more costlier) improvement. The Regional Traffic Signal Rehab project will also involve some of the traffic signals within this segment.

Separate staff report is released for the MN side candidate projects.

Findings and Analysis:

- The MPO must annually prepare a Transportation Improvement Program
- TIP eligible projects with the MPO Area must be submitted to the MPO for its consideration
- The projects submitted are being considered as being consistent with the Metropolitan Transportation Plan
- Each project in each specific program should be given high priority ranking.

Support Materials:

- Applications

Urban Grant Program Application

Coversheet

LPA

City of Grand Forks

Contact Person

Allen Grasser

Title

City Engineer

Address

255 N 4th St P.O. Box 5200 Grand Forks, ND 58206

Telephone

701-746-2640

Email

agrasser@grandforksgov.com

Project Name

North 4th Street Reconstruction (Demers Ave to 1st Ave N)

LPA Applicant Signature (Highest Elected Official)

NDDOT District Engineer Signature if project is located on/impacts a State Highway**Date Submitted****Application Attachment Checklist (check all that have been attached)**

- Relevant excerpts from adopted plans Map(s) depicting project location Cross Section of Roadway/facility
 Pictures, Graphics, and/or other visual aids Relevant supporting data
 Other Attachments (describe)

Information in this Box is for NDDOT to Complete

Date Received _____

Is this Project Title 23 Code of Federal Regulation Eligible including location on a federal aid route?

Yes No

General Project Information

Project Description (including location and scope of work for which funding is requested)

Project Location: North 4th Street (Demers Ave to 1st Ave N)

Project Scope: Reconstruct North 4th Street to incorporate bulb outs, ornamental street lights, decorative sidewalks, and additional streetscape amenities to achieve goals of the Mayor's Downtown Vibrancy Report and the Grand Forks Downtown Action Plan. See Exhibit A for a map of the proposed project location.

Total Project Cost

\$2,305,000

Amount of Grant Funds Requested (cannot exceed 80% of total project cost)

\$1,631,200

Competitive Criteria

- 1. Community Need for Project:** Explain why the project is needed including appropriate detail. Include any 100% locally funded components of the project that are part of the overall project or other planned projects that may compliment this project. Documentation of information to support the need such as relevant data, existing and if appropriate projected conditions, and any related analysis through studies or reports would be appropriate to identify in this section. Attachments such as but not limited to: maps, pictures, other graphics; and supporting data demonstrating the need for the project is encouraged.

North 4th Street from Demers Ave to 1st Ave N passes through the core of downtown Grand Forks. The continued vibrancy and future growth of the downtown is a fundamental goal of the community, as shown by the creation of the Mayor's Vibrancy Initiative in early 2015. The Downtown Vibrancy Group was assembled with the goal of charting a path to the future of Downtown Grand Forks. Their efforts resulted in the release of the Downtown Vibrancy Report in 2016. The proposed reconstruction of North 4th Street follows the general goals of the report and will allow the implementation of features identified in the report, such as bump outs and focused streetscape improvements to activate street life downtown.

The City of Grand Forks has hired RDG Planning and Design to complete a Downtown Action Plan for Grand Forks. This proposed project for North 4th Street is intended to be a continuation of the action plan and a strategic opportunity to strengthen our community's downtown core. As part of the downtown action plan, streetscape elements have been selected. Some of these elements from the streetscape concept are shown in Exhibit F. The implementation of these elements into this proposed project will be based on the action plan and designed to match similar elements to be installed on Demers Avenue and North 3rd Street.

The reconstruction of Demers Avenue and North 3rd Street are additional projects geared towards the vibrancy and continued strengthening of the downtown core. The Demers project is currently wrapping up construction. Coordination between the Downtown Action Plan, reconstruction of Demers Avenue, the reconstruction of North 3rd Street and the proposed reconstruction of North 4th Street present a unique opportunity for growth and investment in downtown Grand Forks.

2. **Community Impact of Project:** Describe how the project will offer significant long term value to the community specifically in addressing the following program objectives (a-f):
- a) **Preserve existing transportation assets**
The proposed project will reconstruct a deteriorating roadway, minimizing costly maintenance activities in the downtown corridor and strengthening the current multi-modal network so that it can continue to serve the community far into the future. The project will also strengthen walkability of the corridor and promote pedestrian safety.
 - b) **Ensure safety of all users of the transportation system**
The proposed project will improve the safety of the system for all users. Bump outs will be used to discourage high speeds through intersections for vehicular traffic. This is a safety benefit for both pedestrians and drivers. Pedestrians will see additional safety benefits from the bump outs through shortened crossing distances and street crossing times. Additionally, new street lighting will provide visibility for pedestrian traffic.
 - c) **Improve multi-modal transportation options such as walking, bicycling, and public transportation**
The proposed project is intended to maintain and strengthen the existing sidewalk network while improving pedestrian safety. Sidewalks will be updated to meet all ADA requirements and bump outs installed to promote safer street crossings. Additional streetscape amenities to match the Demers Ave project and North 3rd Street, such as benches, would be installed to strengthen the walkability of the corridor.
 - d) **Enhance the economic vitality of the area by providing transportation assets that support: revitalization efforts; development of vacant or underutilized parcels within existing urban areas; and/or redevelopment of established portions of communities**
As stated in the Downtown Vibrancy Report “The downtown experience reflects our personality and vitality for residents, visitors, and business. This makes downtown a key part of any community’s economic future and talent development equation.” The proposed investment in downtown Grand Forks through this project would provide longevity for existing transportation assets and support future revitalization and development of the area. The proposed project is also within the Grand Forks Renaissance Zone, in the Heart of Downtown as shown in the attached map (Exhibit G). The goals of the statewide Renaissance Zone Program focus on renewal, investment, and redevelopment. The proposed project would provide transportation assets to support those goals.
 - e) **Support economically sustainable growth, lessening the need for outward expansion of community transportation infrastructure and associated services**
By strengthening the walkability and vibrancy of North 4th Street, more individuals will likely be encouraged to walk, bike, and visit the downtown corridor. This follows the Downtown Vibrancy Report’s goals for the downtown’s future. The investment and updated transportation system this project would bring would encourage additional redevelopment and revitalization of downtown properties.
3. **Consistency with an LPA Associated Plan:** Document linkage between the proposed project and a publicly accepted/adopted plan(s) and/or public involvement process. Clear linkage should be demonstrated between the proposed project and the associated public acceptance/support which would include documenting the reference(s) in the plan and/or public involvement process. Relevant excerpts from such documents are encouraged to attach with the application. Examples of publicly accepted/adopted plans might include but are not limited to: Community Comprehensive Plan; Downtown Master Plan; Neighborhood/Subarea/Corridor Plan; Bicycle/Pedestrian Plan; Housing Plan; Long Range Transportation Plan; Transit Development Plan; and/or Renaissance Zone Plan. A stand-alone public involvement process which demonstrates community support for

the specific project is also acceptable and should be documented in the application.

The Fourth Street corridor was identified in the Downtown Vibrancy Report as “the best first opportunity to activate street life using focused streetscape improvement.” This proposed project will strive to achieve this goal by implementing streetscape amenities as shown in the Downtown Action Plan, and by matching streetscape elements installed with the Demers Avenue reconstruction. Additionally reconstruction of North 4th Street was identified in the draft Grand Forks-East Grand Forks MPO 2045 Street/Highway Plan as a potential “Main Street” program investment. See attached excerpts from the Downtown Vibrancy Report (Exhibit B) and 2045 Street/Highway Plan (Exhibit C).

- 4. Project Support of Urban Core/Central Business District:** Projects which directly support the urban core/central business district (CBD) will be given preferential consideration. Identify the project location and how it will support the urban core/CBD. (Attach 8.5” x 11” or 11” x 17” color map depicting project location in relation to urban core/CBD if applicable to the project type)

This proposed project is within the urban core and program focus area as identified on the attached Urban Roads System map for Grand Forks (Exhibit D).

- 5. Projects that Maximize the Return on Investment from Public Funds:** Projects which can demonstrate a positive private return on investment of public funds will be given preferential consideration. Examples of this may include but not be limited to increased retail sales, new jobs, and/or new dwelling units anticipated as a direct result of the proposed project.

The increased walkability and pedestrian improvements included in this project are anticipated to positively impact businesses adjacent to North 4th Street. Reconstruction of the roadway is anticipated to encourage visiting and shopping downtown. Further, the updated pedestrian facilities and streetscape amenities are expected to encourage redevelopment of properties adjacent to the project, strengthening the core of Grand Fork’s downtown.

Existing Conditions

(information requested in this section may not be appropriate for all project types)

Functional Classification of Roadway

Minor Arterial

Current AADT (including source)

2,250 2018

Forecasted AADT (including source)

1,864 2045 MPO 2045 LRTP

Posted or Statutory Speed Limit

25 mph

Cross Section of Roadway (attach graphics depicting current dimensions and key roadway elements)

See Exhibit E, Roadway is 51’ Wide

Pavement rating or condition

PCI 57, IRI 377, 2015 GRIT data

Year of Last Federal Investment at this Location

1999 Project SER-6-986(050)053 Mill and Overlay

When was the current section built?

Original Construction 1936

Asphalt Mill and Overlay in 1978

Asphalt Mill and Overlay 1999

Year last surfaced or received maintenance?

Asphalt Mill and Overlay in 1999

Lighting

Ornamental Street Lighting which is proposed to be removed and replaced with a style similar to what was installed on Demers Ave

Crash Rate or Number of Crashes?

1 crash in the previous 3 years

Other Known Safety Concerns?

Grand Forks Central High School is located west of the intersection of N 4th St and 1st Ave N

Intersections (how many, type, control, etc.)

N 4th St and 1st Ave N is a 4 way stop

Is parking allowed and what type?

Yes parallel parking on both sides

Are there any bridges, box culverts, etc. within the project corridor?

no

What is the condition of the existing sanitary sewer, storm sewer, and water lines?

The storm sewer was installed in 1976 and should be considered for removal and replacement due to its configuration and condition

The 12" VCP sanitary sewer was installed in 1998

The 20" water main was installed in in 1998

Are there any Access points to adjoining property that present a special concern?

None are known at this time

Bicycle/Pedestrian, and Public Transportation Accommodations (Sidewalk, shared use paths, bicycle lanes)?

There are wide sidewalks on either side of the street and marked crosswalks at the intersection of N 4th St and 1st Ave N

Is there an existing transit or other public transportation facility located within the project limits?

No

Do any school buses, transit buses, other multi-modal vehicles, etc. use this route?

Central High School is located immediately west of the intersection of N 4th St and 1st Ave N. City Area Transit (CAT) operates two transit routes along this street Route 1/2 and Route 5.

Does a RRX or RR facility exist within the project limits?

No

Other existing conditions that are not listed identified above?

Demers Ave was recently reconstructed to include design elements that were included in the recent plans. N 3rd St is scheduled for reconstruction using Urban Grant Program funding in 2021 following the same design guidelines.

Proposed Improvements

(information requested in this section may not be appropriate for all project types)

What are the proposed Improvements (specific scope of work)?

Reconstruct North 4th Street from Demers Avenue to 1st Ave N in order to improve pedestrian safety, corridor aesthetics, and animate street life downtown. The improvements proposed include modifying curbs to create bump-outs, installing decorative concrete sidewalk, replacing existing street lights to improve walkability downtown, installing streetscapes amenities to match the Downtown Action Plan recommendations, and replace storm sewer.

Proposed Length

380'

Proposed Cross Section (attach graphics depicting current dimensions and key roadway elements)

Reconstruct the 51' roadway, bumpout cross section is proposed to be 35'

Proposed Surfacing Type

Concrete pavement roadway, with paver sidewalks to match Demers Ave

Proposed Lighting, if applicable

New street lights to match those installed in Demers Ave reconstruction project and Downtown Action Plan streetscape concept, see preliminary streetscape concept for potential street lights (Exhibit F).

Proposed Traffic Control changes

Encourage reduced speeds and pedestrian safety by reducing crossing distances and travel lanes using bump outs. Bump outs also provide locations where stop signs may be relocated for better visibility.

Proposed Safety Improvements

Pedestrian bump outs provide greater safety for non-motorized traffic by reducing crossing distances and encouraging utilization of the crosswalk. Additionally bump outs provide a visual delineation allowing vehicles on the roadway to better determine where non-motorized traffic will likely be crossing the road, and are anticipated to discourage motorized traffic from exceeding statutory speed limits. Crosswalks are anticipated to be replaced with a pigmented imprinted concrete or stripped for high visibility to provide additional indication to drivers of the potential presence of pedestrians.

Proposed Intersection Improvements

Encourage reduced speeds and pedestrian safety by reducing crossing distances and travel lanes using bump outs. See attachment for potential intersection layouts (Exhibit A).

Proposed Traffic Calming Measures

Encourage reduced speeds and pedestrian safety by reducing crossings distances and travel lanes using bump outs. See attachment for potential intersections layouts at cross walks (Exhibit A).

Will parking be allowed and type?

Yes, parallel parking will be allowed on both sides of N 4th St to match the existing parking layout and encourage the public to visit downtown.

Will any bridges, box culverts, etc. be built/replaced within the project corridor and how will they be modified?

No

Will any private utilities, water lines, sanitary sewer, and/or storm sewer lines need to be replaced or

worked on with this project or potentially in the recent future (identify year)? Have private utilities been coordinated with?

Storm sewer should be considered for replacement. Private utilities have not been coordinated with at this time.

Are there any access points along the project corridor that need to be addressed for mobility or safety concerns?

No

Will a Sidewalk or shared use path be installed or replaced?

Yes, the existing sidewalk will be replaced to meet ADA requirements, improve aesthetics, and match sidewalk installed in Demers Ave reconstruction project and Downtown Action Plan streetscape.

What ADA improvements will need to be made on this project?

Curb ramps at intersections will be reconstructed to fully comply with ADA requirements.

Do any special accommodations need to be made for school buses, public transportation, other multi-modal vehicles, etc. on this route?

Detour routes for transit vehicles and school buses during construction

Proposed Railroad Crossing Work

None

Other Proposed Improvements

None

Environmental/Cultural Issues on the proposed Projects

Identify *Yes*, *No*, or *Unknown* for each environmental/cultural issue. If *Yes*, provide a brief description of the issue in the *Comments* box.

Agricultural, Archeological sites, and/or Historical sites

Yes. The project is located in the Downtown Historic District.

The project is also adjacent to the following historic properties:

322 Demers Ave First National Bank Site Number 32GF01484

24 N 4th St Telephone Co. Building Site Number 32GF00786

102 N 4th St U.S. Post Office & Courthouse Site Number 32GF00018

115 N 4th St Central High School Site Number 32GF00402

Lakes, waterways, floodplains Wetland

No

Stormwater management

Unknown

Hazardous materials sites

Unknown

Hazardous materials on existing structure

Unknown

Upland habitat

No

Endangered/threatened/migratory species

No

Section 4(f) (Refers to the use of publicly owned park and recreational lands, wildlife and waterfowl refuges, and significant historical or archeological sites in transportation project development.)

No

Section 6(f) (Refers to Land and Water Conservation Fund (LWCF) Act - the conversion to other use of lands or facilities acquired with LWCF Act funds and requires replacement of used land with lands of equal value and use.)

No

Through/adjacent to tribal land

No

Additional comments on Environmental/Cultural Issues section

No

Miscellaneous Issues of Proposed Improvements

Construction Restrictions (*migratory bird, local events, etc.*)

No

Right-of-Way Required (parcels, owners, relocations, etc.) (NOTE: It is recommended that local funds be used to acquire right-of-way on the LPA system.)

Temporary Construction Easements may be required for sidewalks.

Proposed Traffic Control during Construction

Road Closure

Ineligible Project Items

None

Additional comments on Miscellaneous Issues section

None

Cost Estimate

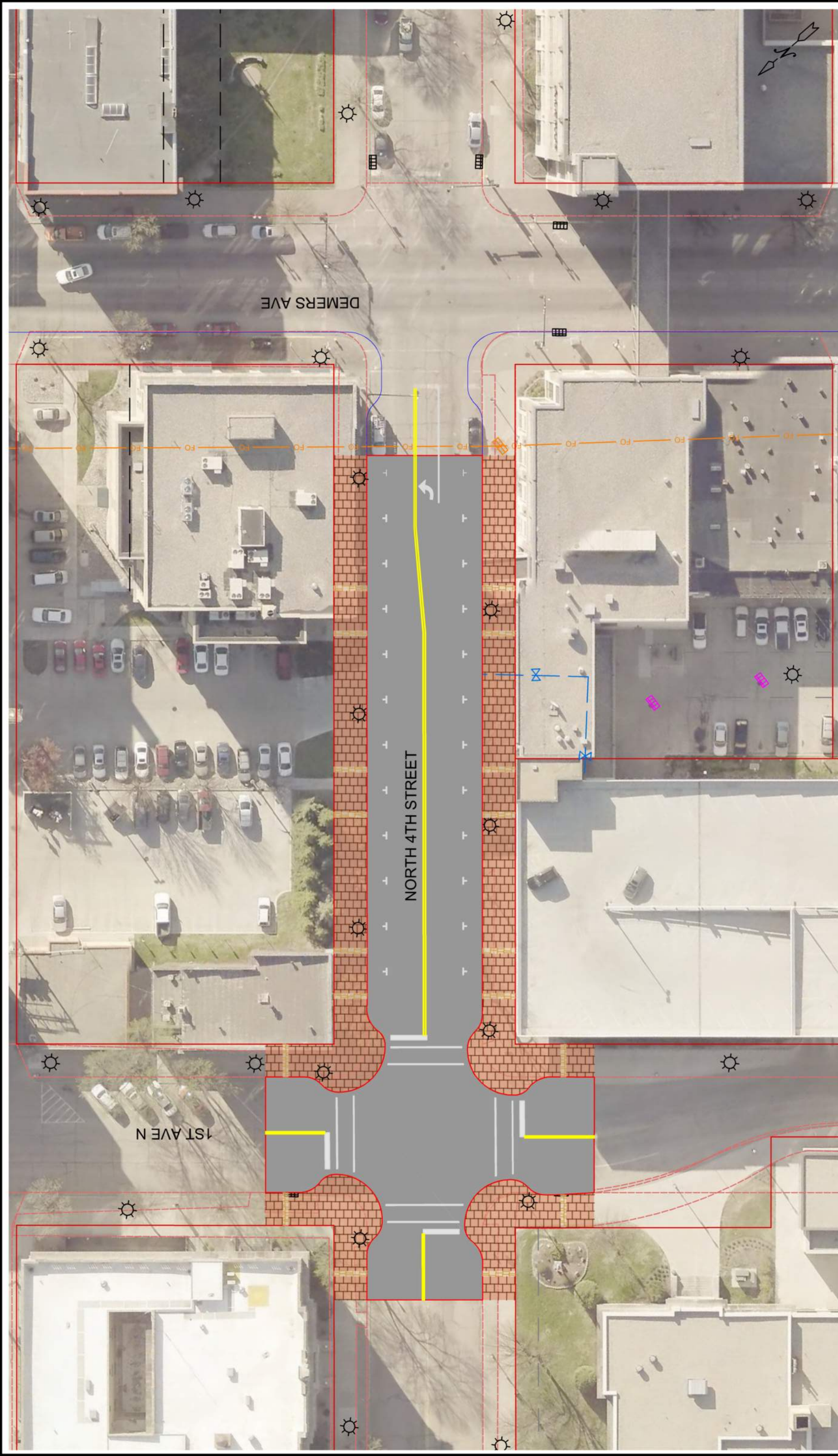
Itemized Project Cost Estimate (For roadway projects this might include things like preliminary engineering, right-of-way, utilities, construction, construction engineering, bridges, and miscellaneous. For other types of projects include relevant items. Rows can be added as to the following table as necessary).

Item	Total	Federal	State	Local
Contract Bond	\$12,000	\$9,600		\$2,400
Removals and Utility Coordination	\$195,240	\$156,192		\$39,048
Storm Sewer	\$234,080	\$187,264		\$46,816
Mobilization	\$115,000	\$92,000		\$23,000
Traffic Control	\$35,000	\$28,000		\$7,000
Paving and Misc	\$578,580	\$462,864		\$115,716
Striping	\$12,706	\$10,165		\$2,541
Electrical	\$54,600	\$43,680		\$10,920
Amenities and Trees	\$75,750	\$60,600		\$15,150
20% Contingencies	\$263,044	\$210,435		\$52,609
Subtotal Inflated to 2022 (4% Int)	\$1,773,000	\$1,418,400		\$354,600
15% Design Engineering	\$266,000	\$0		\$266,000
15% Construction Engineering	\$266,000	\$212,800		\$53,200
Totals	\$2,305,000	\$1,631,200		\$673,800

***Please See Exhibit H For the Detailed Cost Estimate**

What is the source of the local funds?

Fund 4815 Street/Infrastructure



DATE	CITY PROJECT
11/26/2019	8103
SCALE	PAGE
1"=40'	1 of 1

URBAN GRANT PROGRAM
 NORTH 4TH STREET RECONSTRUCTION
 (DEMERS AVENUE TO 1ST AVENUE NORTH)

CITY OF
 GRAND FORKS
 ENGINEERING
 DEPARTMENT



DOWNTOWN'S FUTURE

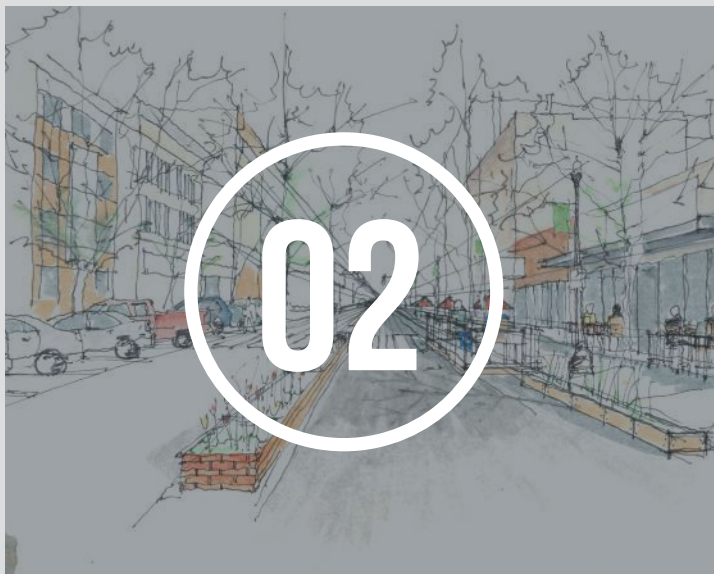
Here are several guidelines to shape future development in downtown Grand Forks (outlined further on pg 13):

- *Continue to place a high priority on places to live downtown.* Residential development is the foundation of development downtown because more residents will mean more businesses and amenities downtown.
- *New developments should be mixed use buildings with "retail ready" commercial space on the first floor.*
- *Support existing and create new community open streets events downtown.*
- *Protect the architectural history of existing buildings but allow for style evolution in new structures.*
- *Consider surface parking lots and other open spaces to be transitional land uses.*
- *Embrace winter with new community events and implementing winter design and planning practices.*

It's time to take the next step. There are several concrete actions we can take to help us make downtown Grand Forks the best it can be. A great downtown makes for a great Grand Forks. Here are **five big ideas** to form the foundation of the future of downtown Grand Forks.

Create bold public spaces.

Public gathering space and art is critical to downtown. Town Square should be improved to become a hub for events, daily civic life, and public art downtown. Town Square could become a highly-trafficked public sculpture garden, a daily hang out space, and a place for major community events all with a better integration with the Greenway. The area of town surrounding the Sorlie Bridge over the Red River offers perhaps the best opportunity to be a hub of local public life in Grand Forks. This unique confluence of assets should be the starting point for a future long-term technical plan for open space downtown.



Animate street life downtown.

Design matters. Downtown is unique in that it offers many different activities and amenities for all ages at different times of day. This makes it our manifestation of the "18-hour city," an active neighborhood for 18 hours each day. Because of its momentum, the Third Street corridor offers the best opportunity to activate street life using streetscape improvement efforts. Grand Forks should begin by making small aesthetic and streetscape investments and moving forward with a technical streetscape improvement plan.



Improve access to and around downtown.

Every form of transportation in Grand Forks has a role downtown. Downtown can be reached by car from nearly everywhere in the city in less than ten minutes. It is perhaps the most walkable area of town, it offers bike infrastructure, and it is home to the city's transit hub. Downtown could benefit from a bike share and rapid transit partnership with UND, improved transit, and streetscape improvements for walkers. There are 4,000 parking spaces downtown. In the final analysis, parking is a solvable issue in downtown Grand Forks improved by creating awareness and partnerships.

Spur development in key emerging areas downtown.

The former water treatment plant site could provide an anchor site with river views and a connection to Minnesota in future years. Several city-owned and private lots in the core area surrounding Demers on 3rd and 4th Streets present key opportunities for infill development while preserving displaced art. The Demers Avenue corridor from 5th Street towards the warehouse area near the overpass could present the next key corridor. Redevelopment at the corner of North 5th and University Avenue could provide the anchor for a resurgence along University Avenue in both directions.



Mobilize the right community policies, partners & resources to improve downtown.

We should forge the partnerships needed to invest existing economic development funds in space and infrastructure downtown to create a new type of industrial park catering to the knowledge-based companies we need. Downtown development is economic development; it supports the entire community. These multi-agency, multi-stakeholder partnerships will create the capacity we need to sustain the future of Grand Forks.

Exhibit B

PARKING AND DRIVING

Grand Forks is an extremely drivable city. Virtually any part of the city can be reached by car in a short drive, including downtown. The entire city – save the farthest southern developments south of 47th Avenue – can be reached from the corner of 5th St. and Demers Ave. in less than 10 minutes. The 10 minute drive time is an aggressive standard, considering that the average commute time in the two-county metropolitan area is roughly 12 minutes. This is the shortest commute time of all the nation's 381 metropolitan areas. This easy accessibility by car makes downtown a prime location for specialty retail, homes, restaurants, arts organizations, and other amenities.

There are 4,000 parking spaces downtown. Downtown is home to three large parking structures in addition to its many surface lots.

These parking ramps are centrally located, providing access on either side of Demers Avenue. The parking ramp for the county office building provides excess capacity for community events in Town Square or on the Greenway.

Like many communities, complaints about the lack of parking are common in downtown Grand Forks; however recent parking studies have found there are enough physical spaces to fill the demand for parking at various points in a day. City staff and downtown stakeholders should continue to work together to best utilize the parking spaces already present downtown. For instance, there are businesses and institutions whose most intense parking needs occur at different times of the day, allowing these organizations to share parking spaces.

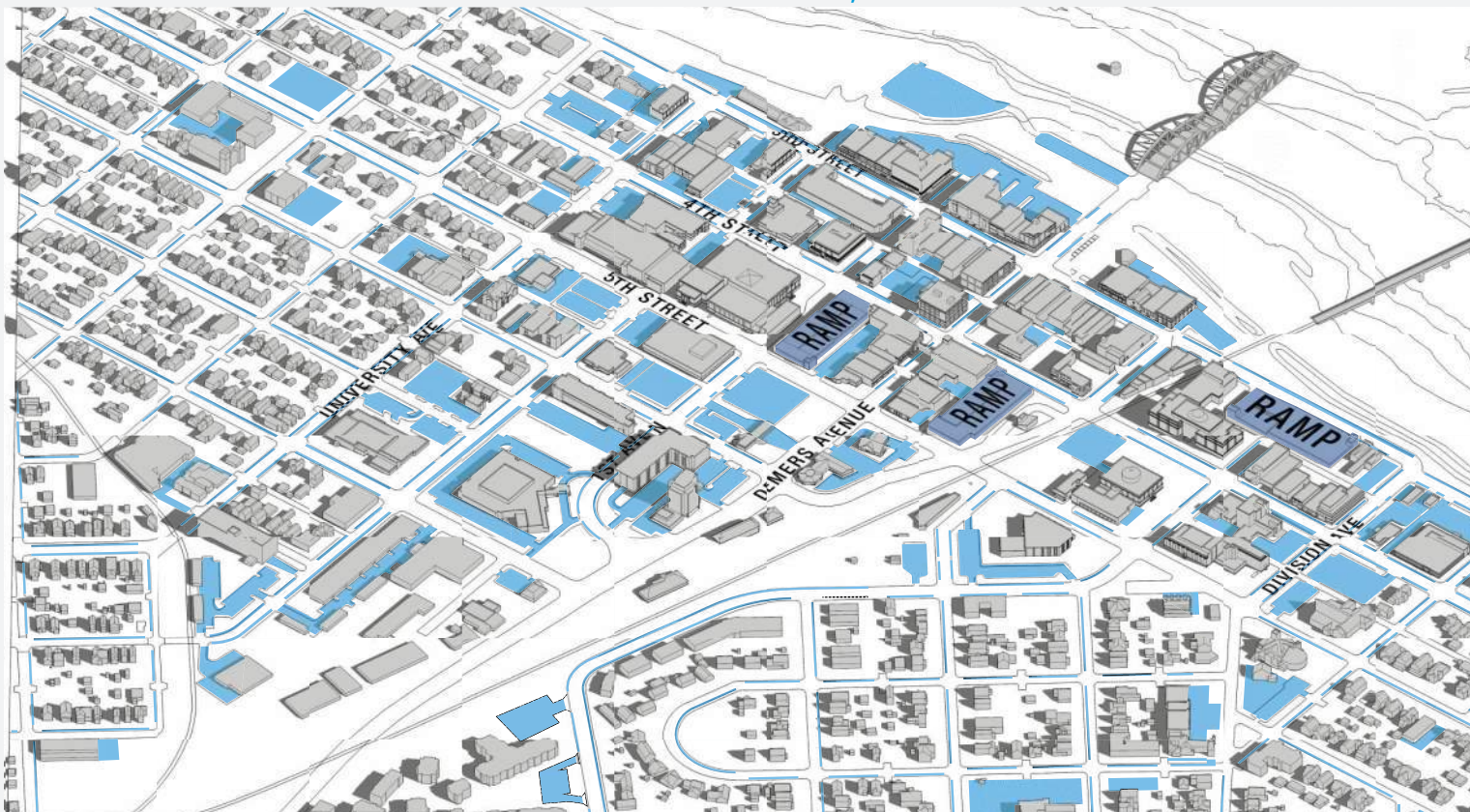
In the final analysis, parking is a

solvable issue in downtown Grand Forks. The biggest parking problem is a misperception of a shortage. Significant local businesses are successful downtown without designated parking. Parking lots should be viewed as a temporary transitional land use with the idea that any could be developed in the future with the right opportunity.

Driving and Parking Recommendations

1. *Continue strengthening institutional partnerships to share parking spaces at various times in the day.* Parking requirements vary among downtown stakeholders according to the time of day. Many who need parking during daytime hours do not require it in the evenings or weekends and vice versa, making sharing possible.

DOWNTOWN PARKING DEPICTED IN BLUE. THERE ARE MORE THAN 4,000 PARKING SPACES DOWNTOWN.



2. **Consider returning N 3rd St and N 4th St to two-way streets.** This would improve traffic safety, pedestrian safety, bicycle access, and promote development of the area north of University Avenue. The high speeds and high traffic throughput offered by these one way pair streets are unnecessary.
3. **Install a roundabout at 5th and Belmont intersection.** This intersection is a critical gateway from south Grand Forks into downtown but the intersection is awkward and confusing for motorists. A roundabout at this location would improve safety and traffic flow.
4. **Consider a reverse angle parking pilot project.** Reverse angle parking is curbside parking where drivers back into the parking space instead of pull forward into a space. This improves safety

because it eliminates the situation where drivers are backing up blind into the oncoming traffic when exiting the parking space. Instead drivers pull forward and back into the space with full visibility and exit of the space driving forward in the direction of traffic flow with a clear view of approaching cars. Children exit the vehicle and run toward the sidewalk instead of toward the street. Reverse angle parking

should not be used in situations where vehicle exhaust impacts sidewalk activity.

5. **Modify curbs at key corners to create bump-outs.** These improvements can increase visibility at intersections, improve pedestrian safety, create safe havens for handicap parking, and create more usable sidewalk space for planters or other amenities.

THE BIGGEST PARKING PROBLEM IN DOWNTOWN IS A MISPERCEPTION OF A SHORTAGE.

A roundabout could improve the Belmont Road and 5th Street intersection. Entrance gateways to downtown are prime spots for public art.

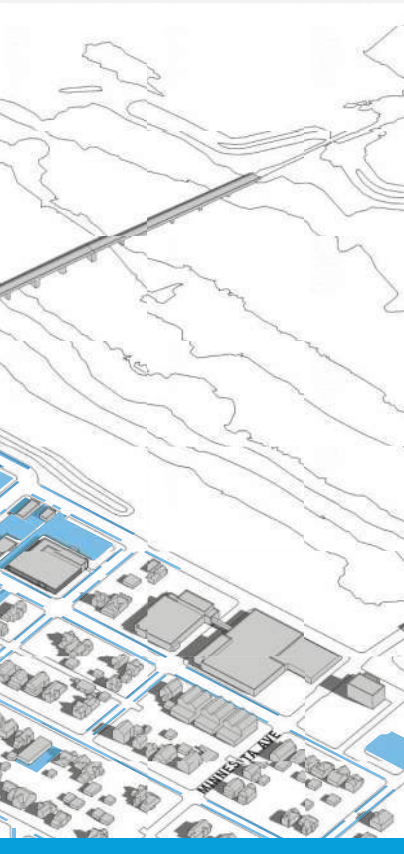


Exhibit B

WALKING AND BIKING

Downtown Grand Forks developed as a walkable, human-scale environment. This is perhaps its most significant difference compared to newer areas of town, making it unique. The slower, more limited traffic on adjacent streets to downtown offers good access for cyclists. The city center is also connected to the city's burgeoning trail system via access to the west near the Demers overpass and to the north and south via the riverfront Greenway trails.

Two key factors influence walkability and bike-ability in a neighborhood: there must be a place to walk to and neighborhoods must be pedestrian friendly and safe. High levels of walkability have been shown to correlate with positive public health, higher home and commercial property values, and good economic perfor-

mance . One method of measuring this is the Walk Score, a numerical indicator of neighborhood walking routes to destinations such as grocery stores, schools, parks, restaurants, and retail . The Walk Score for downtown Grand Forks is 83 (at 500 Demers Ave.). This is the highest Walk Score value in town and places downtown in the "very walkable" category. The overall walk score for the entire city of Grand Forks is 40, placing it in the "car dependent" category.

Bike friendly infrastructure is important, but perhaps the most important method of increasing bicycle use is to improve access to bikes themselves. Many smaller communities are now operating bike share programs. Bike share programs offer

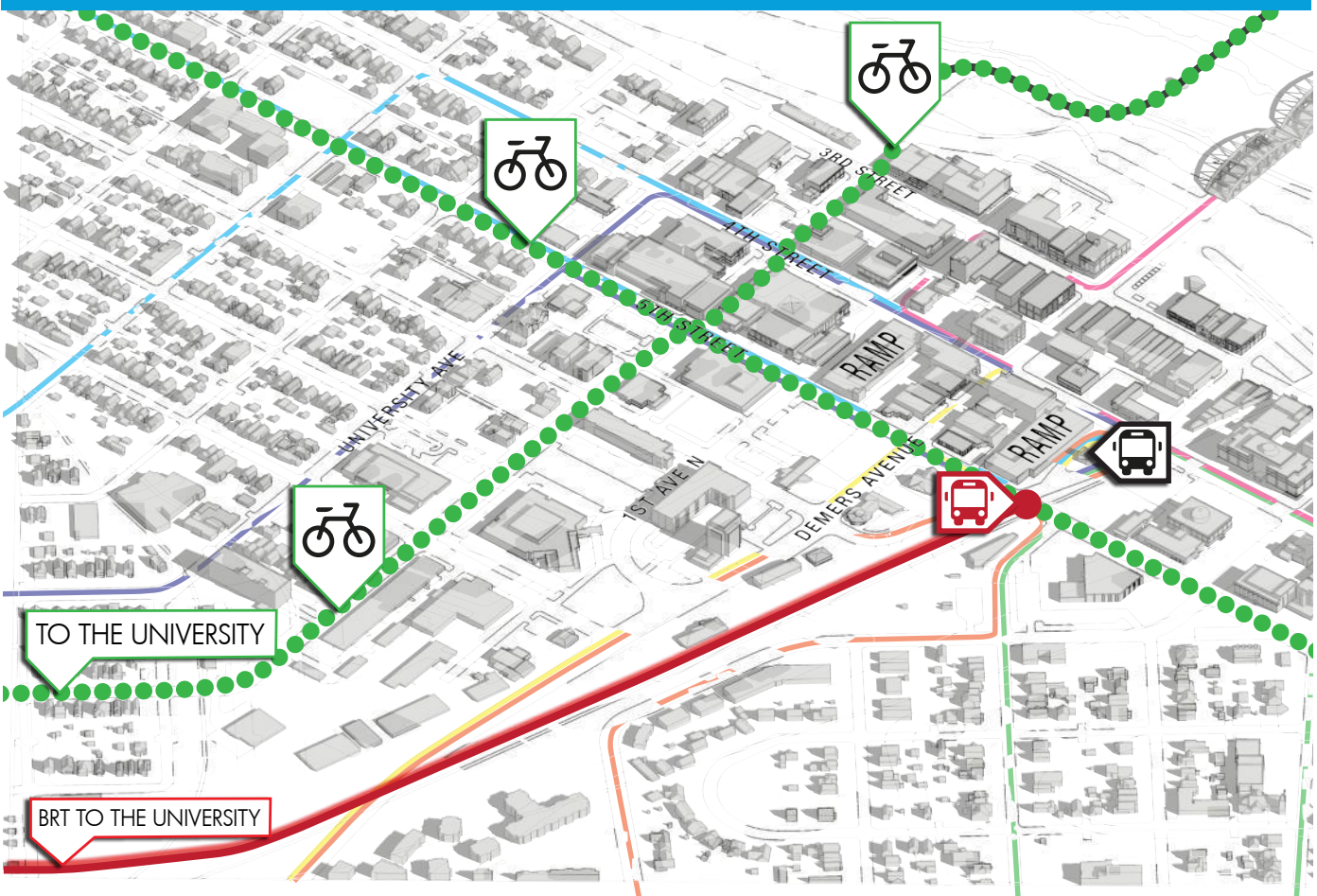
bicycle rental check-out and return stations at key points in the community. This allows residents to use a bike for a small fee when they need it, and return it to any station in the system. Bike share programs also typically offer membership programs for unlimited bike use.

One of the most successful small bike share programs in a small winter city is already operating in Fargo. A bike share program in Grand Forks could provide easy bike access in downtown, the UND campus, and points in between. Downtown stations could provide easy bike rental for residents and travelers to access the greenway.

Walking and Biking Recommendations

1. Initiate a Grand Forks bike share, starting with stations in downtown and at UND. Connect with

2ND AVE & 5TH ST BIKEWAY CONCEPT CONNECTING UND, CENTRAL HIGH, TRANSIT HUB, AND DOWNTOWN DESITNATIONS



bike share proprietors in Fargo to share their experience. Assemble a group of organizations or citizens to drive the process. Reach out to East Grand Forks to partner.

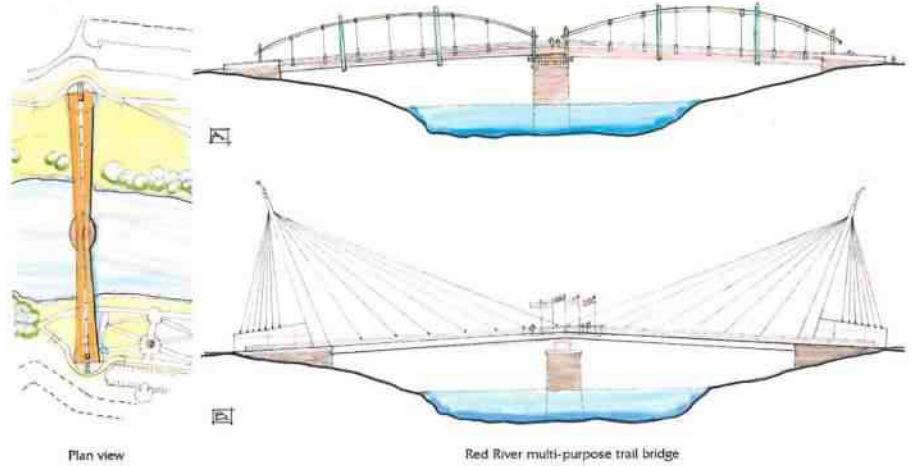
2. Improve bicycle access to and within downtown

- Prioritize downtown in existing Grand Forks Bikeway Plan
- Install dedicated lanes where appropriate with a focus on a 2nd Ave. North bikeway connection to the UND campus
- Install bike share stations
- Improve bike access into west downtown surrounding Demers overpass and trails and Cherry Street region

3. Improve walkability within downtown

- Improve aesthetics in alley areas
- Add benches in strategic locations
- Assess the efficiency and

BELOW: Pedestrian river crossing concepts using the existing historic railroad bridge pier, developed for the 2009 River Forks plan.



pedestrian impact of signal crossings

- Improve lighting downtown, particularly the area beneath the Central High School skyway. Install downward-facing streetlights to light the sidewalk and street areas more directly.

- Assess lighting in alleys. Assess pedestrian access to emerging areas such as the new University Flats Development

4. Connect to East Grand Forks with a pedestrian and bike crossing in downtown area, developed in partnership with East Grand Forks.

Central High School could become a connecting point for new bike infrastructure on 2nd Avenue N. This new bicycle corridor would support a UND-Downtown bike share pilot project, provide a connection to the river, and improve access to downtown in all directions.

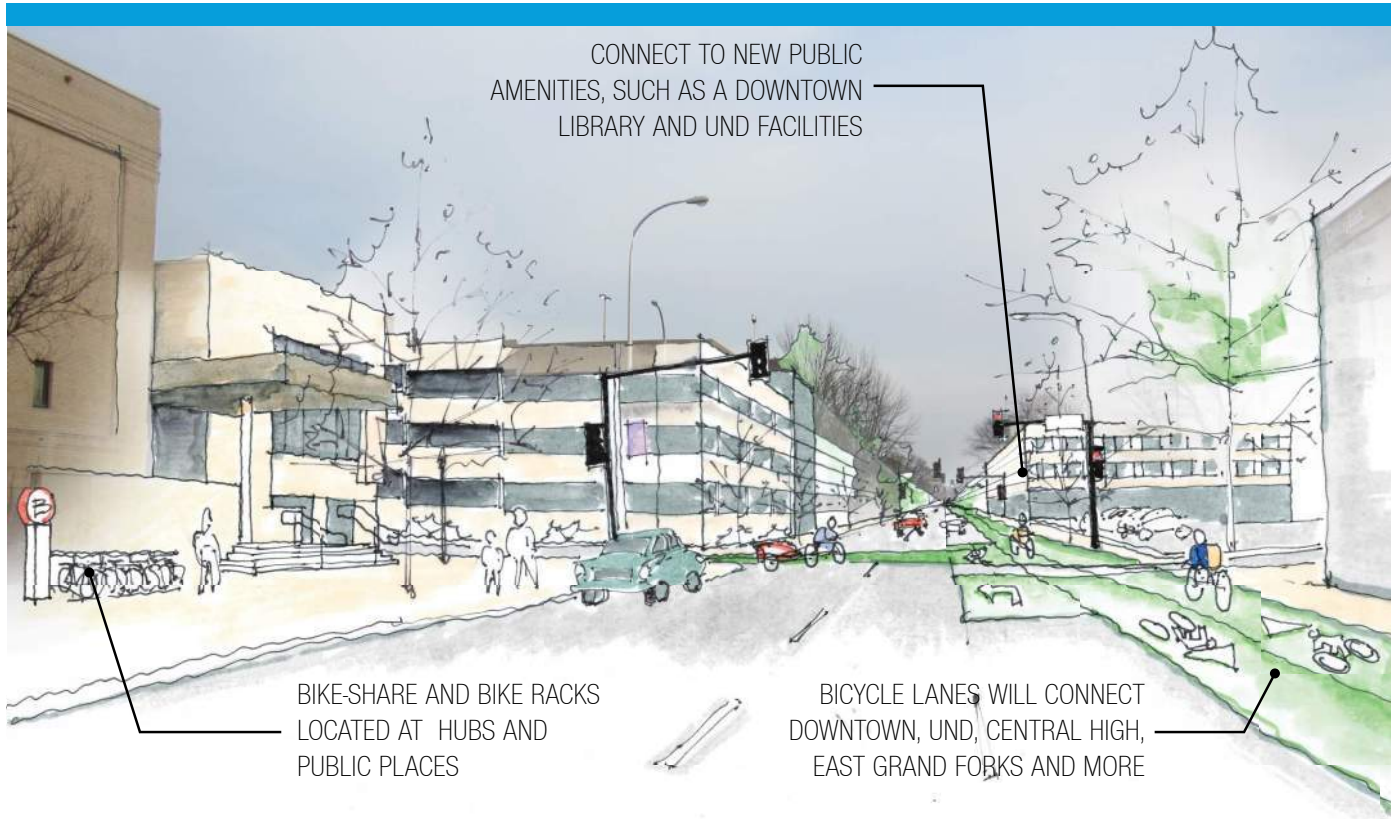


Exhibit B

ANIMATE STREET LIFE

Design matters. Downtown is unique in that it offers many different activities and amenities for all ages at different times of day, making it our manifestation of the “18-hour city.” Downtown is our community’s living room. Thinking about how we would design a living room in our own home. There are several guidelines we can use as we design our public spaces downtown:

1. **Comfort:** Can it provide warmth when it’s cold outside, and can it provide coolness when it’s hot outside? Can I let the sun in when I want to and have an area to block the sun when I want to?
2. **Multiplicity:** Are multiple activities available? In our living room, we can watch television, read a book, take a nap, or play with our kids. Single-use spaces are rarely used. Downtown should feature things to do for people of all ages and abilities at all parts of the day.
3. **Aesthetics:** Is it aesthetically pleasing so that people want to stay? We don’t spend much time in a living room painted with ugly colors. Do the space and art make me feel comfortable? Does the art have meaning and reflect our identity? Does the space tell a story about our community? These stories lead to connection and relationships in our community.
4. **Flexibility:** Is it flexible? No one sets up their living room and keeps it that way for twenty years. It should be easy and inexpensive to change the layout, the art and colors, and the general setup to adapt as our needs change.
5. **Synergy:** Are there amenities nearby? A living room located too far from the kitchen may include a small refrigerator. Is there a restroom close by? We want people to enjoy the space, and if they need something that the space does not provide, it should be available nearby.
6. **Capacity:** Is the space comfortable for a lot of people? A living room is a space to host a group, while an office is designed primarily for solitary work, so spaces for groups and individuals are designed differently. Our public spaces should be designed to host large groups of community members.

Several anchors have emerged downtown. The south-east quadrant is a hub of social services; major residential redevelopment has occurred in the northwest. Third Street from Second Ave North to Kittson Ave is quickly becoming the most vital anchor of downtown. The Third Street area is home to several destination retail and eating establishments. “Alley Alive” events have occurred in the alleys between Third and Fourth Streets. Many citizens gather at events in Town Square and a redeveloped Town Square could increase daily activity and

provide a gateway to the greenway, a new play space or an amphitheater.

Because of its momentum, the Third Street corridor offers the best first opportunity to activate street life using focused streetscape improvement. The seeds of activity have already been planted. Grand Forks should double down on Third’s “Destination Street” status by creating a concrete vision and and by making small aesthetic and streetscape investments and then moving forward with a technical streetscape plan.

Small design improvements can also improve street and business activity downtown. These could include store owners cooperating to keep store fronts lit until a certain time at night, wayfinding signage, continuing use of taller trees instead of low-branched ornamental varieties, and minimizing dark tint in storefront windows. More residents downtown also create more active streets. Is the downtown coffee shop open and active on the weekend? If not, downtown needs more residents.

"YOU GUYS HAVE A BEAUTIFUL MAIN STREET— IT'S VERY CLEAR, IT RUNS PARALLEL TO THE RIVER," HE SAID, REFERRING TO NORTH THIRD STREET. "I LIKE THE RELATIONSHIP OF IT. I PARTICULARLY DON'T READ GRAND FORKS AS A CITY— IT'S MORE OF A TOWN, AND IT HAS A MAIN STREET."

Walter Hood, renowned landscape architect, University of California, Berkeley. Grand Forks Herald, April 1, 2016.



Conceptual examples of streetscape improvements on North 3rd Street looking towards Demers Ave.

First Ave N near N 3rd St offers an opportunity for a new greenway entry, pedestrian bridge, and connection to a UND-to-downtown bikeway.



Exhibit B

CONCLUSION AND NEXT STEPS

Nearly 20 years ago, Grand Forks leaders made the conscious – and unpopular among some – decision to reinvest in downtown after the flood and fire disasters. That investment has paid off. Many businesses returned, it is now a hub of nightlife, cultural, and community events. It is a key connection point to our other major physical asset: the Greenway. Downtown is the most important connection to our neighbor and partner: East Grand Forks, MN. Community members are stepping forward to engage and support downtown. New private investments and developments are emerging.

It is time to expand our economic development investments to target industries that export professional services. These new locally-grown knowledge-based services companies often fit best downtown where the action is and where their employees live. A new co-working space downtown will be a place where these individual professional services entrepreneurs can collaborate. Focusing more economic development efforts downtown could create a 21st century version of the industrial park that caters to the new primary sector: knowledge-based companies that export their services all over the world.

This progress is real. A neighborhood for all ages, downtown Grand Forks is uniquely ours. It is a cornerstone of life in Grand Forks, and it is a critical part of recruiting new talent to our community. The following page lists the recommendations in this report, outlined as an action plan. Implementing our incremental improvements and our big ideas downtown should use authentic citizen engagement to move things forward, “for people, by people.”



DOWNTOWN GRAND FORKS

Action Plan

Immediate Improvements Continue Work Already Underway	Catalytic Physical Projects Begin Planning Discussions	Plans and Big Investments Assess Demand and Feasibility
<ol style="list-style-type: none"> 1. Invest economic development funds downtown. 2. Support existing and create new community open streets events downtown. 3. Seek opportunities to redevelop downtown properties while planning for permanent public art and open spaces. 4. Implement incremental improvements to transit connections between UND and Downtown 5. Continue strengthening institutional partnerships to share parking spaces at various times in the day. 6. Initiate a Grand Forks bike share, starting with stations in downtown and at UND. 7. Expand partnership efforts with East Grand Forks. 8. Support community policing efforts. 9. Improve market information about residential and commercial vacancies downtown. 	<ol style="list-style-type: none"> 1. Invest accumulated City Beautification funds in a Town Square facelift. 2. Implement small streetscape improvements. 3. Improve lighting, aesthetics, and benches for walkability within downtown. 4. Modify curbs at key corners to create bump-outs. 5. Return N 3rd St and N 4th St to two-way streets. 6. Improve bicycle access to and within downtown. 7. Consider a reverse angle parking pilot project. 8. Improve transit connections between downtown and the Alerus Center Corridor. 	<ol style="list-style-type: none"> 1. Create a dedicated, frequent transit connection between UND and downtown. 2. Continue discussions about UND's presence downtown. 3. Install a roundabout at 5th and Belmont intersection. 4. Connect to East Grand Forks with a pedestrian and bike crossing downtown. 5. Commit to a comprehensive downtown planning process, including a plan for downtown public art and open space that connects to the Greenway on both sides of the river; a pedestrian-friendly streetscape plan with wayfinding and parking elements; a transportation/transit component; updated downtown design guidelines that reflect current conditions rather than a disaster-recovery mindset.





(CPR), rehabilitation, reconstruction as well as traffic signal or roundabout improvements. Table 7-5 provides a summary of the City of Grand Forks federally funded State of Good Repair projects by time period.

Table 7-5: City of Grand Forks State of Good Repair Planned Investments (Federally Funded)

Time Period	Federal/City Match	Additional City Funds	YOE Total
Short-Range	\$18,568,000	\$4,744,000	\$23,312,000
Mid-Range	\$42,138,000	\$13,906,000	\$56,044,000
Long-Range	\$40,117,000	\$13,238,000	\$53,355,000
Total	\$100,823,000	\$31,888,000	\$132,711,000

Source: GF/EGF MPO, 2018

The City of Grand Forks identified additional locally funded projects to bring segments of the federal aid system into state of good repair. A prioritized list of illustrative projects by agency, identifying relative importance to one another, is available in Appendix G.

City of Grand Forks Planned Main Street

The City of Grand Forks has identified a series of streetscape, bicycle/pedestrian, transit and downtown revitalization projects as potential “Main Street” program investments to compete for this recently established federal set-a-side available through NDDOT. The focus of these projects is to improve multimodal transportation options in the urban core of Grand Forks while also investing in decorative streetlighting, benches, planters, street signs and other streetscape amenities. Revitalization projects have been identified for east, west, north and south quadrants of the downtown, as well as reconstruction along North and South sections of 3rd Street and 4th Street. Table 7-6 provides a summary of City of Grand Forks Main Street projects by time period.

Table 7-6: City of Grand Forks Main Street Planned Investments

Time Period	YOE Total Federal/City Match
Short-Range	\$6,330,000*
Mid-Range	\$8,293,000
Long-Range	\$24,488,000
Total	\$39,111,000

*One or more of the short-range Main Street projects may be completed in 2021-2022.

Source: GF/EGF MPO, 2018

Grand Forks County Planned State of Good Repair

Grand Forks County has identified State of Good Repair mill and overlay projects along their federal-aid eligible roadway network in the MPO planning area along County Road 6, CR 5, CR 17 and 32nd Avenue west of Interstate 29. The County has also identified various chip seal projects throughout the County roadway network. Table 7-7 summarizes these projects by time period.

Table 7-7: Grand Forks County State of Good Repair Planned Investments

Time Period	Federal/County Match	County Only Funds	YOE Total
Short-Range	\$1,316,000	\$618,000	\$1,934,000
Mid-Range	\$2,702,000	\$1,162,000	\$3,864,000
Long-Range	\$3,845,000	\$1,459,000	\$5,304,000
Total	\$7,863,000	\$3,239,000	\$11,102,000

Source: GF/EGF MPO, 2018

City of Grand Forks Main Street Financially Constrained (2023-2045)

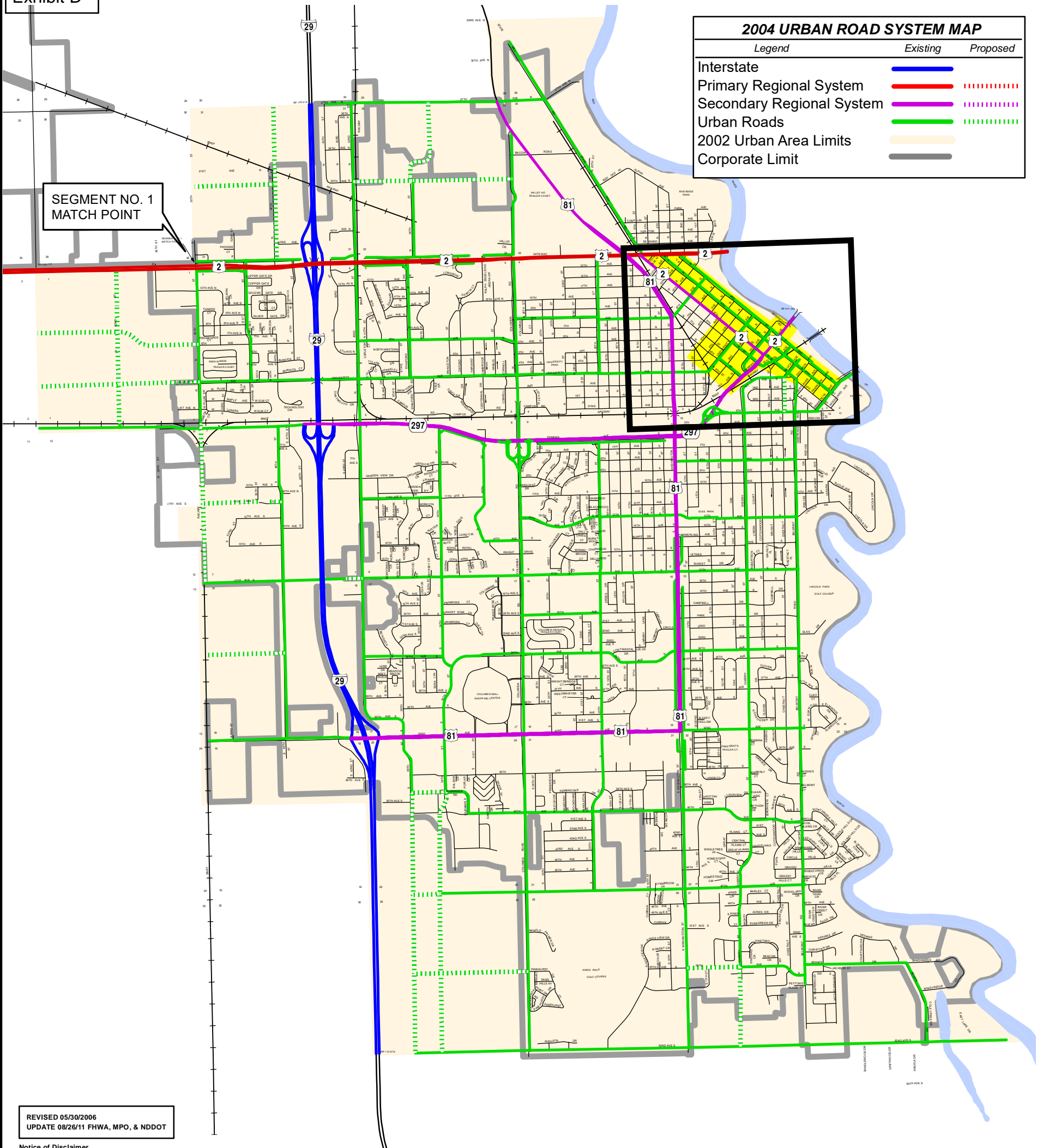
Ref#	Roadway	Termini	Project Type	Agency	Time Frame	YOE Total Federal/City Match
MUL-006	Eastern Downtown Area	Eastern Downtown Area	Revitalization	City of Grand Forks	Short-Range	\$1,000,000
MUL-018	N 3rd Street	DeMers Avenue to 1st Avenue North	Reconstruct	City of Grand Forks	Short-Range	\$1,776,385
MUL-019	N 3rd Street	1st Avenue North to 2nd Avenue North	Reconstruct	City of Grand Forks	Short-Range	\$1,776,385
MUL-020	N 3rd Street	2nd Avenue North to University Avenue	Reconstruct	City of Grand Forks	Short-Range	\$1,776,385
MUL-005	Northern Downtown Area	Northern Downtown Area	Revitalization	City of Grand Forks	Mid-Range	\$1,000,000
MUL-023	N 4th Street	DeMers Avenue to 1st Avenue North	Reconstruct	City of Grand Forks	Mid-Range	\$2,431,056
MUL-024	N 4th Street	1st Avenue North to 2nd Avenue North	Reconstruct	City of Grand Forks	Mid-Range	\$2,431,056
MUL-025	N 4th Street	2nd Avenue North to University Avenue	Reconstruct	City of Grand Forks	Mid-Range	\$2,431,056
MUL-007	Southern Downtown Area	Southern Downtown Area	Revitalization	City of Grand Forks	Long-Range	\$1,000,000
MUL-004	Western Downtown Area	Western Downtown Area	Revitalization	City of Grand Forks	Long-Range	\$1,000,000
MUL-021	S 3rd Street	DeMers Avenue to Kittson Avenue	Reconstruct	City of Grand Forks	Long-Range	\$4,324,540
MUL-022	S 3rd Street	Kittson Avenue to Division Avenue	Reconstruct	City of Grand Forks	Long-Range	\$6,919,263
MUL-026	S 4th Street	DeMers Avenue to Kittson Avenue	Reconstruct	City of Grand Forks	Long-Range	\$4,324,539
MUL-027	S 4th Street	Kittson Avenue to Division Avenue	Reconstruct	City of Grand Forks	Long-Range	\$6,919,263
Total						\$39,109,928

Exhibit D

2004 URBAN ROAD SYSTEM MAP

Legend	Existing	Proposed
Interstate		
Primary Regional System		
Secondary Regional System		
Urban Roads		
2002 Urban Area Limits		
Corporate Limit		

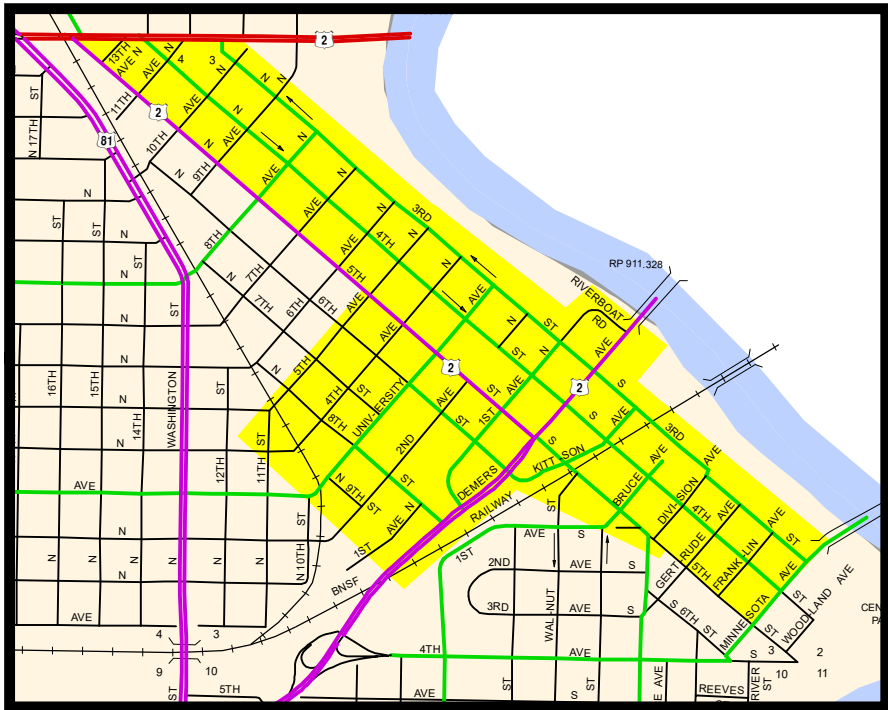
SEGMENT NO. 1
MATCH POINT



REVISED 05/30/2006
UPDATE 08/26/11 FHWA, MPO, & NDDOT

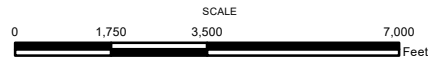
Notice of Disclaimer
The North Dakota Department of Transportation (NDDOT) makes this map available on an "as is" basis as a public service. Under no circumstances does NDDOT warrant or certify the information to be free of errors or deficiencies of any kind. NDDOT specifically disclaims all warranties, express or implied, including but not limited to the warranties of merchantability and fitness for a particular purpose.
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MAP SALES, ND DEPARTMENT OF TRANSPORTATION, 608 E. BLVD. AVE., BISMARCK, N.D. 58505-0700

PROGRAM FOCUS AREA



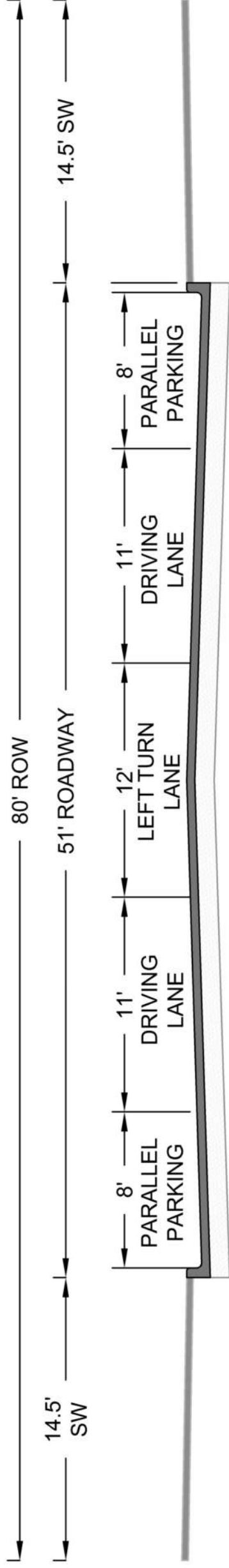
2004
URBAN ROADS SYSTEM
2010 POPULATION 52,838
GRAND FORKS
GRAND FORKS COUNTY
NORTH DAKOTA

PREPARED BY
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
PLANNING AND PROGRAMMING DIVISION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

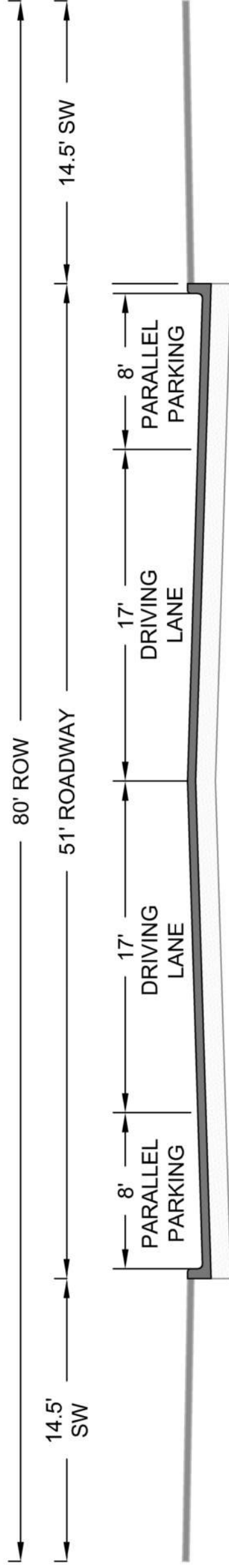


F:\PLANNING\Steve_Nelson\MXDS2018\LikelyDowntownArea_Urban_Grand Forks.mxd
GRAND FORKS, NORTH DAKOTA

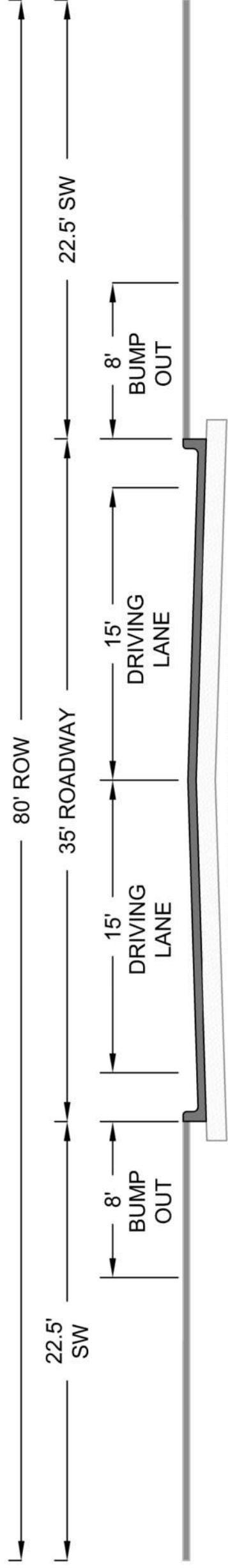
EXHIBIT E



EXISTING/PROPOSED NORTH 4TH STREET
(NEAR THE INTERSECTION OF DEMERS AVE)



EXISTING/PROPOSED NORTH 4TH STREET
(DEMERS AVE TO 1ST AVE N)



PROPOSED NORTH 4TH STREET
BUMP OUT LOCATIONS
(1ST AVE N)

UNIFYING STREETScape ELEMENTS

EXHIBIT F

Themes

The concept for the streetscape celebrates the city's historical connection with the Red River, iconic Paddle Wheel sculpture, relationship with University of North Dakota (UND) and North Dakota's clay and pottery.

All of these themes are blended and celebrated with light, giving the district distinct experiences during both day and night.

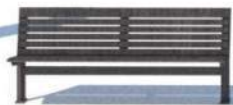
Elements

Design elements should be made of attractive and durable materials and include benches, planters, bicycle racks, trash receptacles, art pedestals, and lighting. These should be used where required by function and program, but overuse of street furnishings should be avoided. The features along the street should unify the district and tease people to interact with elements.

Landscaping from property to property should include a rhythm of furnishings, surface materials, lighting, and plantings (trees, shrubs, flowers, grasses). Intersections should receive special attention, preserving visibility while improving their appearance with bump-outs.



Art pedestal on
stone bench



Bench



Trash/Recycle
Receptacle



Planter Seat Wall

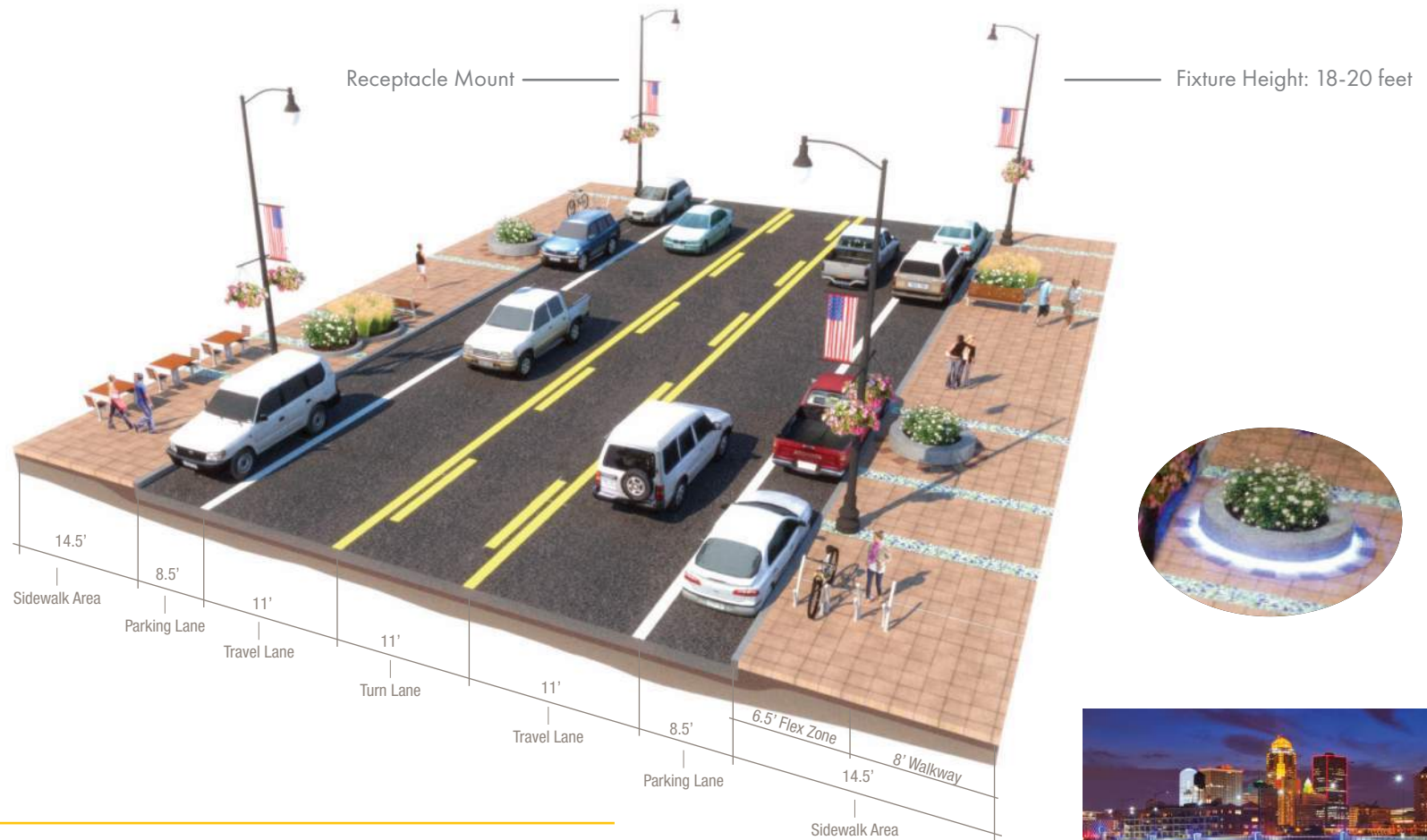


Bicycle Rack



Street Light

LIGHTING AS A DISTINCTIVE FEATURE



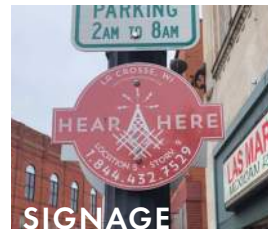
The right-of-way (property line to property line) on Demers Avenue is 80 feet. The existing street section provides two 11' travel lanes, one 11' turning lane, and 8.5' parallel parking. The proposed street section retains this configuration and replaces the street, curb, sidewalk, and buried utilities.

The sidewalk area includes a flex zone and walkway. The flex zone is 6.5' behind the curb and includes planters, trees, landscaping, street lighting, seating, and art. Detailed design of the "flex zone" should adapt to individual conditions, such as near the Empire Theater and alleys. Sidewalks are constructed of concrete, while the flexible landscape zone could have contrasting pavement color and materials. Pavers should be designed and installed to prevent heaving and separation. Setting the pavers in a concrete pad will limit the movement of individual pavers.



STREETLIGHTS

The light fixture in downtown should be updated to direct light towards the street and sidewalk. The existing fixtures emit a significant amount of ambient light that bleeds into upper-story windows and are difficult to maintain. Light poles should be specified to support banners and planters. Mounting systems should match the pole's color or be integrated into the pole itself. Also, poles should have an electrical receptacle near the top for plugging seasonal accent lighting or draping lights over the street.



FURNISHINGS

The style and design of furniture along the street works best when all elements are part of a family. Products should resist adverse weather, and be stocked for future replacement. Furnishings along DeMers Avenue include:

- **Benches.** Benches should be located near refuges along the block and near intersections. The preferred style should have a warm appearance and be not made solely of metal.
- **Trash Receptacles.** The trash receptacles should be consistent throughout downtown and located near gathering spaces, restaurants, bars, and areas with pedestrian traffic.
- **Bicycle Parking.** Bicycle parking should be convenient to business fronts, but avoid obstructing the walkway. Simple forms are most efficient and least intrusive. Bicycle racks should be installed near the high school, as well.



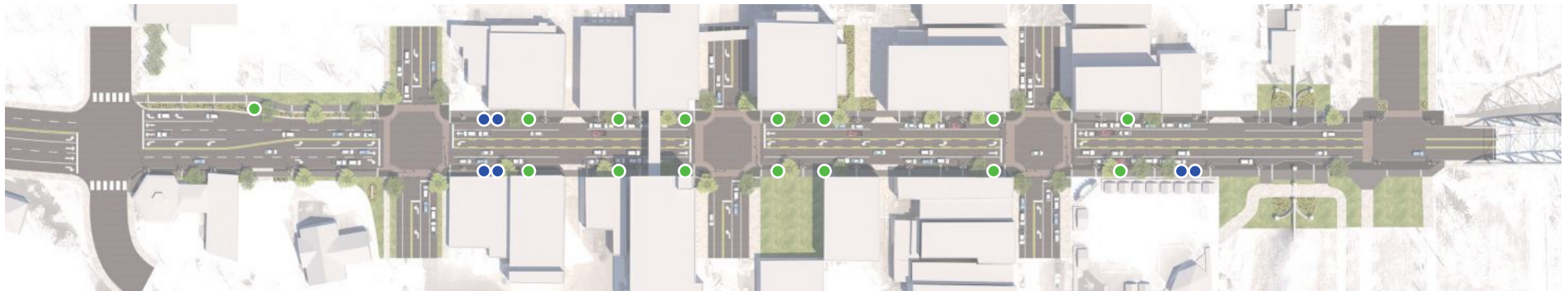
Bench
Manufacturer: Forms+Surfaces
Model: Knight Bench



Trash/Recycle Receptacle
Manufacturer: Forms+Surfaces
Model: Cordia Receptacle



Bicycle Rack
Manufacturer: Anova Furnishings
Model: Allure

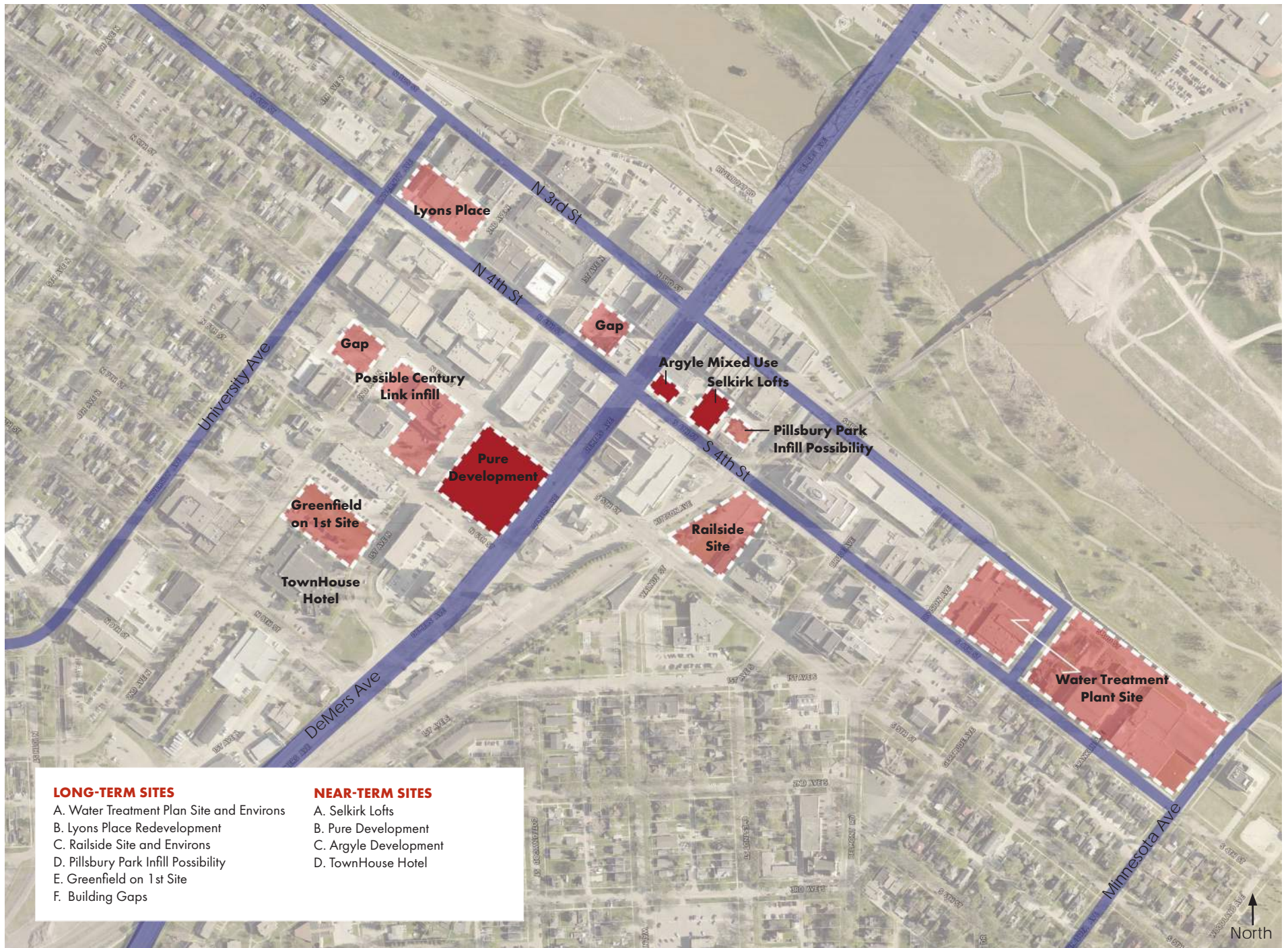


- Planter Seating
- Bench

DOWNTOWN MOBILITY



The streetscape elements for DeMers Avenue is envisioned to extend to other areas of downtown, creating a unifying theme for the entire district.



LONG-TERM SITES

- A. Water Treatment Plan Site and Environs
- B. Lyons Place Redevelopment
- C. Rainside Site and Environs
- D. Pillsbury Park Infill Possibility
- E. Greenfield on 1st Site
- F. Building Gaps

NEAR-TERM SITES

- A. Selkirk Lofts
- B. Pure Development
- C. Argyle Development
- D. TownHouse Hotel



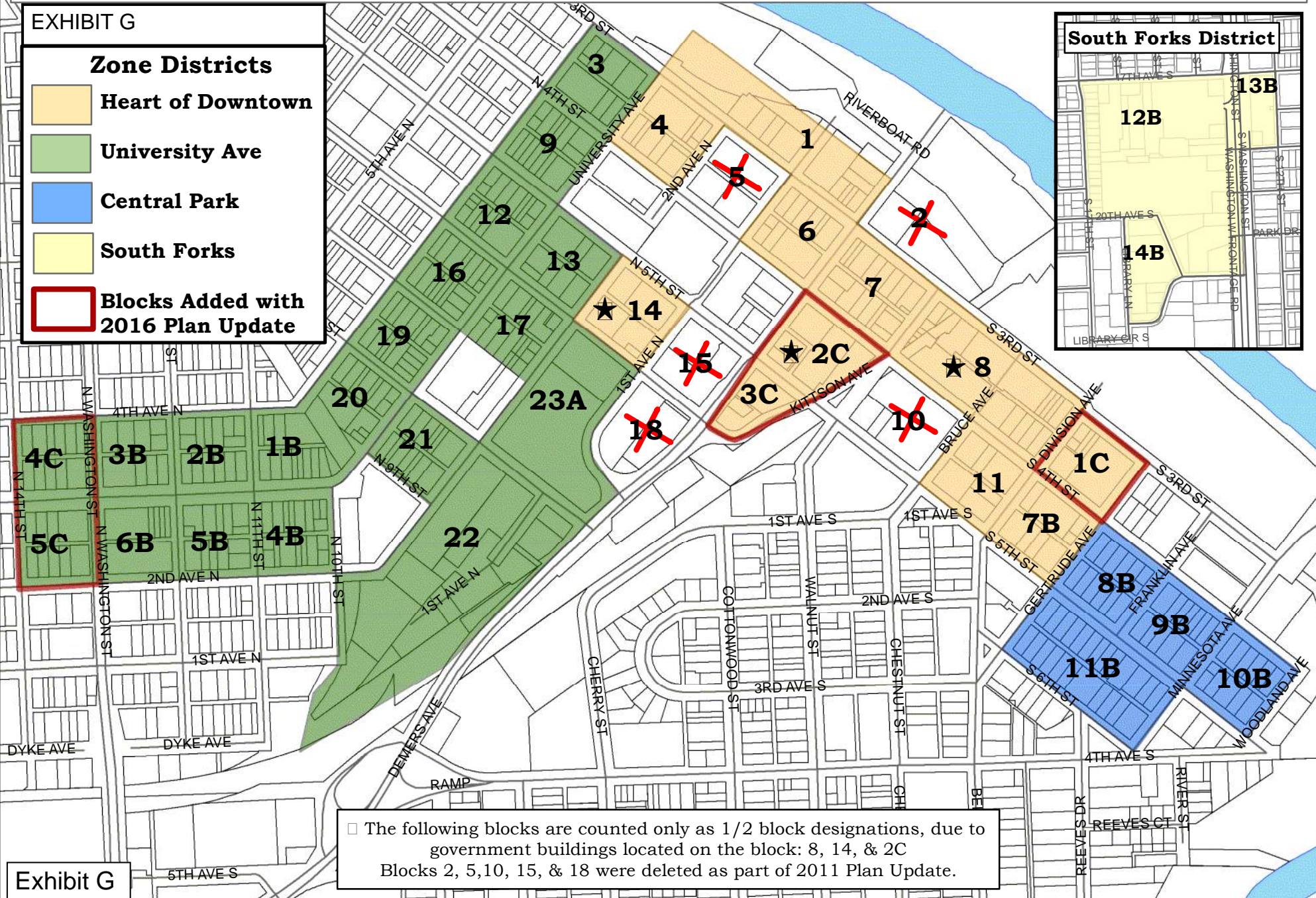
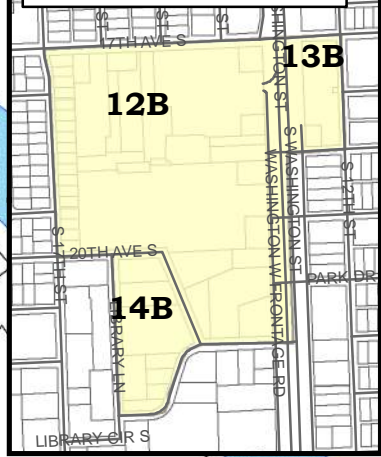
Grand Forks Renaissance Zone

EXHIBIT G

Zone Districts

- Heart of Downtown
- University Ave
- Central Park
- South Forks
- Blocks Added with 2016 Plan Update

South Forks District



□ The following blocks are counted only as 1/2 block designations, due to government buildings located on the block: 8, 14, & 2C
 Blocks 2, 5, 10, 15, & 18 were deleted as part of 2011 Plan Update.

Exhibit G

2019 Urban Grant Program

Exhibit H

Updated 12/3/2019

North 4th Street Reconstruct (Demers to 1st Ave N)

8" Concrete on 12" Salvage Base Course with Fabric

Spec No.	Description	UNIT	UNIT PRICE	TOTAL QUANTITY	TOTAL
103	CONTRACT BOND	L SUM	\$ 12,000.00	1	\$ 12,000.00
105	POTHOLE UTILITY	EA	\$ 1,200.00	5	\$ 6,000.00
105	UTILITY RESOLUTION	EA	\$ 1,000.00	5	\$ 5,000.00
201	REMOVAL OF TREES 18IN	EA	\$ 1,200.00	8	\$ 9,600.00
202	REMOVAL OF PAVEMENT	TON	\$ 32.00	2600	\$ 83,200.00
202	REMOVAL OF PIPE ALL TYPES AND SIZES	LF	\$ 65.00	780	\$ 50,700.00
202	REMOVAL OF MANHOLES	EA	\$ 2,400.00	4	\$ 9,600.00
202	REMOVAL OF INLETS	EA	\$ 1,000.00	9	\$ 9,000.00
202	REMOVAL OF PAVERS	SY	\$ 15.00	1300	\$ 19,500.00
203	TOPSOIL	CY	\$ 50.00	10	\$ 500.00
203	COMMON-EXCAVATION-WASTE	CY	\$ 18.00	850	\$ 15,300.00
216	WATER	M GAL	\$ 35.00	100	\$ 3,500.00
252	SOD	SY	\$ 18.00	70	\$ 1,260.00
252	HYDRAULIC MULCH	SY	\$ 20.00	70	\$ 1,400.00
302	SALVAGED BASE COURSE	TON	\$ 28.00	1580	\$ 44,240.00
411	MILLING PAVEMENT SURFACE - 2 INCH	SY	\$ 15.00	230	\$ 3,450.00
430	COMMERCIAL GRADE HOT MIX ASPHALT	TON	\$ 250.00	30	\$ 7,500.00
550	8IN NON-REINF CONCRETE PAVEMENT CL AE	SY	\$ 80.00	1600	\$ 128,000.00
550	8IN REINF CONCRETE PAVEMENT CL AE	SY	\$ 85.00	525	\$ 44,625.00
550	NON REINF CONCRETE PVMT CL AE - COLORED	SY	\$ 150.00	400	\$ 60,000.00
702	MOBILIZATION	L SUM	\$ 115,000.00	1	\$ 115,000.00
704	TRAFFIC CONTROL	L SUM	\$ 35,000.00	1	\$ 35,000.00
708	INLET PROTECTION SPECIAL	EA	\$ 125.00	18	\$ 2,250.00
708	REMOVE INLET PROTECTION SPECIAL	EA	\$ 50.00	18	\$ 900.00
709	GEOTEXTILE FABRIC-TYPE G	SY	\$ 3.00	2525	\$ 7,575.00
714	PIPE CONDUIT 12IN - STORM DRAIN	LF	\$ 190.00	230	\$ 43,700.00
714	PIPE CONDUIT 15IN - STORM DRAIN	LF	\$ 200.00	180	\$ 36,000.00
714	PIPE CONDUIT 18IN - STORM DRAIN	LF	\$ 250.00	370	\$ 92,500.00
722	MANHOLE 48IN	EA	\$ 5,000.00	3	\$ 15,000.00
722	MANHOLE RISER 48IN	LF	\$ 315.00	12	\$ 3,780.00
722	INLET	EA	\$ 4,000.00	10	\$ 40,000.00
722	ADJUST GATE VALVE BOX	EA	\$ 700.00	3	\$ 2,100.00
722	ADJUST MANHOLE SPECIAL	EA	\$ 1,000.00	1	\$ 1,000.00
748	CURB & GUTTER	LF	\$ 36.00	870	\$ 31,320.00
750	SIDEWALK-DECORATIVE	SY	\$ 156.00	1360	\$ 212,160.00
750	DRIVEWAY CONCRETE	SY	\$ 70.00	100	\$ 7,000.00
750	DETECTABLE WARNING PANELS	SF	\$ 45.00	80	\$ 3,600.00
752	TEMPORARY SAFETY FENCE	LF	\$ 10.00	100	\$ 1,000.00
754	SIGNING	L SUM	\$ 3,000.00	1	\$ 3,000.00
762	EPOXY PVMT MK MESSAGE	SF	\$ 4.00	16	\$ 64.00
762	EPOXY PVMT MK 4 IN LINE	LF	\$ 5.90	1440	\$ 8,496.00
762	EPOXY PVMT MK 6 IN LINE	LF	\$ 8.90	240	\$ 2,136.00
762	EPOXY PVMT MK 24IN LINE	LF	\$ 33.50	60	\$ 2,010.00
770	SCREW IN BASE FOUNDATION	EA	\$ 1,000.00	9	\$ 9,000.00
770	1.5IN DIAMETER RIGID CONDUIT	LF	\$ 6.00	800	\$ 4,800.00
770	REMOVE LIGHT STANDARD	EA	\$ 330.00	8	\$ 2,640.00
770	ORNAMENTAL LT STD 16FT MT HT	EA	\$ 2,500.00	9	\$ 22,500.00
770	ORNAMENTAL LIGHT FIXTURE-100WATT	EA	\$ 1,500.00	9	\$ 13,500.00
770	MULTIPLE UNERGROUND CABLE 4NO6 STYL	LF	\$ 6.00	800	\$ 4,800.00
970	DECORATIVE CONCRETE PLANTER	EA	\$ 16,000.00	2	\$ 32,000.00
970	DECORATIVE PLANTER	EA	\$ 2,000.00	2	\$ 4,000.00
970	BENCH	EA	\$ 3,500.00	2	\$ 7,000.00
970	TRASH RECEPACLE	EA	\$ 2,400.00	2	\$ 4,800.00
970	SITE FURNISHINGS	EA	\$ 10,000.00	2	\$ 20,000.00
970	BIKE RACKS	EA	\$ 575.00	2	\$ 1,150.00
970	LANDSCAPE PLANTINGS	LSUM	\$ 2,000.00	1	\$ 2,000.00
970	TREES	EA	\$ 600.00	8	\$ 4,800.00
Subtotal					\$ 1,312,956.00
~20% contingencies					\$ 263,044.00
Rounded 2019 Construction Subtotal					\$ 1,576,000.00
Rounded Subtotal inflated to 2022 (4% Interest)					\$ 1,773,000.00
15% Design Engineering					\$ 266,000.00
15% Construction Engineering					\$ 266,000.00
Project Total					\$ 2,305,000.00
Federal Share (80%, No Design Engineering)					\$ 1,631,200.00
City Share (20%+ Design Engineering)					\$ 673,800.00

Overcoming Barriers Strengthening Connections



Ensuring Opportunities Planning One Community

Entity: City of Grand Forks
Date: November 21, 2019

Contact Person: Allen Grasser
Phone Number: 701-746-2640

Revision: November 2019

If you have questions with filling out the list, please contact Stacey Hanson at 701-746-2657

FISCAL YEAR	FUNDING CATEGORY ⁽¹⁾	FUNCTIONAL CLASSIFICATION ⁽²⁾	INVESTMENT STRATEGY ⁽³⁾	TYPE OF WORK ⁽⁴⁾	PROJECT LOCATION	PROJECT COST				
						TOTAL	FEDERAL	STATE	LOCAL	NON-PARTICIPATING
2020	URP	Minor Arterial	PM	Mill & Overlay	University Ave (Mill & Overlay) (State St to N 3rd St)	\$3,461,000	\$2,459,000		\$614,000	\$388,000
2021	URP	Principal Arterial	N/R	Reconstruct	N Columbia Rd (Reconstruction) (Overpass to University Ave)	\$6,244,000	\$4,376,000		\$1,094,000	\$774,000
2022	URP	Principal Arterial/ Minor Arterial/ Collector	PM	Signals	Traffic Signal Maintenance Citywide Non-Regional	\$3,100,000	\$2,280,000		\$570,000	\$250,000
2024	URP	Principal Arterial	PM	Bridge Rehabilitation	Columbia Rd Overpass	\$8,930,000	\$6,744,000		\$1,686,000	\$500,000

Notes Description

- (1) PriR = Primary Regional, SecR = Secondary Regional, URP = Urban Roads Program, INT = Interstate, BRI = Bridge
- (2) Interstate, Principal Arterial, Minor Arterial, Collector
- (3) PM = Preventive Maintenance, MiR = Minor Rehabilitation, SI = Structural Improvement, MaR = Major Rehabilitation, N/R = New/Reconstruction
- (4) Brief description of the project (Exs: Thin Lift Overlay, Mill and Overlay, Concrete Pavement Repair, etc.)

**URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET**

DATE: 11/22/2019

PRIORITY# 2024-URP

City: Grand Forks

Street: Columbia Rd Overpass

County: Grand Forks

Length:~1,420 ft

Proposed Improvement: The rehabilitation work on the Columbia Rd Overpass will likely include replacement of the pot bearings, replacement of pier bearings, as well as sand blasting and painting of the bridge girders.

Cost Estimates Breakdown (in \$1,000)							
Alternate	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
				8,430			

Present Road: Surface Width? 54'

Surface Type? Concrete

On Street Parking Allowed? No

Present: (No) One Side Both Sides Angle Parallel

Proposed: (No) One Side Both Sides Angle Parallel

Proposed Improvements		
ADT Present: <u>21,785</u>	Yr: <u>2018</u>	Travel Way Width : 65'
ADT Design: <u>26,652</u>	Design year <u>2045</u>	No. of Lanes: 4
Design Speed: 35mph		Roadway Width: 54'
Maximum Curve: _____		Min. R/W Width: _____
Maximum Grade: _____		

Right of Way
Will Additional ROW or easement be acquired? No_ ROW acquisition by: City DOT
Has any ROW easements been acquired since 7-1-72: _____ ROW Condemnation by: City DOT
Est. No. of occupied family dwelling to be displaced? 0
Est. No. business to be displaced? 0

Impacts

Will there be any additional Impacts (Cultural and Environmental Resources): There is a potential for impacts that could be found of a typical bridge rehabilitation project. These potential impacts will be further evaluated through the NEPA process.

Will there be any impacts to 4(f) or 6(f) properties: No

Airports: No Public Hearings: No

Environmental Classification (Cat-Ex, EA, EIS): Cat-Ex

Transportation Enhancements: None

Intermodal: None

Pedestrian Needs: None

Railroads Crossings

RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
BNSF		22 Railyard	Unknown		Grade Separation	Grade Separation

Purpose and Need Statement

1. When was the current street section built. Has there been any additional maintenance to the street section.
Structure originally constructed in 1984
Structure widened in 1989
Finger joint and approach panel replacement in 2007
Bridge deck slab repair 2012
Bridge bearing replacement and deck slab repair in 2014
2. How many driving lanes and turning lanes does the street section currently have and what are the widths of the driving and turning lanes.
Four approximately 12' wide driving lanes, no turn lanes are present
3. What is the condition of the pavement section.
The Upper Great Plains Transportation Institute completed data collection for both Pavement Condition Index (PCI) and International Roughness Index (IR) in 2015. This overpass had seven data points which can be found in the Geographic Roadway Infrastructure Tool. All seven of the data points had PCI scores of 100 and IRI ranging between 80 in/mi and 134 in/mi with an average of 97 in/mi. In 2018 the City of Grand Forks hired Good Pointe Technologies to collect PCI and IRI scores throughout the entire city street network, the overpass had a PCI score of 84, and an IRI of 3.4 m/km (~215 in/mi). In 2018 the City of Grand Forks hired Interstate Engineering to assemble maintenance and repair planning document for the Columbia Rd Overpass. This document provides a list of maintenance and repair recommendations for the next ten years.

4. How are the existing geometrics of the roadway?
The geometrics of the overpass appear to be sufficient.
5. Are there any access points to adjoining properties that present a special concern?
There is a pedestrian walkway from the Boden Apartments on the west side which allows pedestrians to go from the Boden to the Columbia Rd overpass enclosed walkway system.
6. Are there any existing sidewalks or shared use path in place? Yes there is an enclosed walkway on the west side of the structure.
7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?
There are no storm sewer concerns.
8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?
There are no water or sewer concerns.
9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
400W High Pressure Sodium street light fixtures are installed on the west side.
10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?
There are no traffic signals within the proposed project limits. Traffic signals located near the proposed project are N Columbia Rd and 2nd Ave N, which is to be replaced with the 2021 reconstruction project, a traffic signal located at the northbound Columbia on/off ramp with Demers Ave, and a traffic signal located at the southbound Columbia on/off ramp with Demers Ave, which is currently under construction. The overpass and nearby intersections are not listed on the most current High Crash Locations. The majority of the more recent crashes within the proposed project limits have been rear end accidents with a severity of property damage only. No additional turn lanes are being requested at this time.

Remarks:

City Engineer: 

Date: 12/3/19

Note: Please attach a map showing location and extent of the project.

Columbia Rd Overpass Rehabilitation



B. Recommended Actions

1. Monitoring Program

a. Piers

In addition to the bi-annual inspections it is recommended that the plumbness of the piers be monitored. This involves using a carpenter's level or survey equipment to measure the plumbness or degree of out of plumb at each column of each pier. The piers should be marked so that plumbness is checked at the same place on each column. In order to determine if temperatures affect the pier movements the plumbness should be checked at the coldest period of the winter and hottest part of the summer. After this data has been collected for several years it may become evident if there's continued movement (tilting) of the piers. If no movement is detected checking plumbness during the bi-annual inspections will provide sufficient information to detect if unusual movements are occurring or if tilting is resuming.

It is recommended that initially the plumbness of each column of each pier be checked. If subsequent measurements indicate that if there is movement, that all columns of a given pier move together then subsequent monitoring can be performed by checking only one column on each pier.

b. Pot Bearings

The bi-annual inspections performed by the NDDOT should include reviewing the condition of each pot bearing especially those on the piers. The observations in 2018 indicate that a large majority of the pier bearings are leaking lubricant. The bi-annual inspections should include visual review of each bearing with special attention for the appearance of small, black "shavings" which signifies deterioration of the elastomeric pad at the base of the pot. Deterioration of the elastomeric pad can lead to the bearing no longer accommodating tilting movements.

At the abutments the state of corrosion should be noted along with any debris that can trap moisture against the bearing components or the girders themselves.

2. Maintenance Program

Once weather conditions permit each spring the abutments should be flushed off to remove sediments that have built up on the pedestals. Preferably this would be performed after the deck is swept.

Flushing of the abutment seats should also be performed late in the fall, prior to when freezing of the runoff could cause problems under the bridge.

3. Repair Items

The following repair items, listed in order of priority, will be required to maintain the integrity of the Columbia Road Overpass.

a. Replace Pot Bearings at Abutments

The pot bearings under girders 3 and 4 on the north abutment are heavily corroded due to historical soil impaction (**FIGURE 6** and **FIGURE 7**).

This corrosion has removed the protective coatings and this is allowing the corrosion to continue. These bearings, in their present condition are allowing the girders to move longitudinally and laterally. It is not known if the elastomeric pads that allow for bearing rotation are intact as these are located at the base of the pot and not exposed to view. There was no evidence of the fine black “filings” which indicate failure of the elastomeric pads. Lack of this finding is inconclusive since the amount of runoff that falls from the finger joint to the bearing areas could have flushed such evidence away.

As with the replacement of the bearing under girder 4 at the south abutment, the concrete pedestals will need to be removed and reconstructed.

The bearing under girder 4 is in more critical condition because of the manner in which the sole plate is welded to the girder. There are small welds on the south edge of the sole plate. The other edges of the sole plate are inaccessible so these are the only welds. The failure of the paint coating isolated to areas of the welds suggests that the welds are undergoing excessive movements or are beginning to crack (**FIGURE 7**).



Figure 6 - Bearing at North Abutment under Girder No. 3



Figure 7 - Bearing at North Abutment. Girder No. 4 Note notch cut into top of pedestal because pedestal was cast too tall. Also note failed paint coating in vicinity of welds between sole plate and girder flange.

As shown in (**FIGURES 8** and **9**), respectively the the North Abutment bearings under girders 1 and 2 have not corroded as severely. Their condition at the time of this report does not warrant replacement. However, it may be prudent to replace these bearings when the bearings under Girders 3 and 4 are replaced due to the relative costs of mobilization and traffic control required for bearing replacements. The probable cost presented here includes replacement of all (4) pot bearings on the north abutment and the (3) original pot bearins on the south abutment. The work on the south abutment will require work much of the same traffic control as require for the work on the north abutment so including the work on the south abutment at the same time will provide cost savings by limiting duplicity of the traffic control.



Figure 8 – Bearing at North Abutment under Girder No. 1 (West Fascia Girder)



Figure 9 – Bearing at North Abutment under Girder No. 2. Note bars on sides of sole plate that provide lateral restraint.

Although not directly related to the replacement of bearings the concrete overlay should be replaced where the patches around the floor drains have failed along the west gutter line (**FIGURE 10** and **FIGURE 11**).



Figure 10 - Failed patch over abandoned deck drain along west barrier (south drain)



Figure 11 - Failed patch over abandoned deck drain west barrier (north drain)

b. Deck Surface Restoration

The driving surface has become worn to the point that the original tining of the low slump concrete overlay has become noticeably reduced in the wheel tracks of each lane. If the reduction of surface friction leads to reduction in traffic speed when the surface is wet the roughness and thereby the friction and traction can be restored by grinding. Although the grinding will improve friction, the dynamic action of grinding may weaken the bond between the low slump overlay concrete and the structural concrete deck. The grinding should be limited in depth to reduce the dynamic forces imparted onto the overlay. Once the grinding is completed a penetrating surface treatment should be applied to the newly exposed surface. Diamond grinding can restore the friction of a concrete surface for 5 to 10 years, depending on depth of grinding, aggregate hardness in the existing concrete overlay and traffic characteristics (eg., percent of heavy commercial traffic).

c. Blast Clean and Repaint Girders

The paint coating system on the west (3) girders dates back to 1984 and the coating system on the west girder dates back to 1989. With the exception of areas where the coating system was damaged by physical impacts (accidental) or jacking without adequate protection the coating system is intact. The main exceptions are at the girder ends where water and debris falls through the finger joints. Sand blasting and repainting this bridge will require restrictions on vehicle height on Demers Avenue, coordination with the BNSF Railroad and closing of the parking areas below and adjacent to the north (3) spans when the work is being performed over these areas.

In general, the useful life of paint coatings is difficult to predict since it is affected by environmental factors as well as maintenance.

Based on the present condition of the coating system it seems reasonable to expect the present coating to have a useful age of 40 years or more if areas where the coating has failed or has been damaged are spot repaired.

Of importance during the sand blasting phase is the protection of the bearings to prevent damage to the stainless steel surface on the bottom of the sole plate, damage to the teflon pad or damage to the brass bearing seals in the pot. It would be prudent to have the bearing sole plates and weldment areas on the bottoms of the girders blast cleaned and painted as a part of the bearing replacement so that when the girders are painted each bearing can be masked off in its entirety.

d. Replace Pier Bearings

Although the pot bearings on the piers are showing signs of age overall, they still have useful life remaining. As noted in the recommendations for monitoring the need to replace the pier bearings will become apparent as the visual inspections start to detect isolated failures such as the elastomeric bearing pads failing.

Replacement of pier bearings will not require the removal of concrete as will be necessary at the abutments. The distance from the bottoms of the girders to the top of the pier caps will accommodate replacement bearings of this style. The anchoring of the bearings may have to be modified.

Because of the relative cost of the traffic control necessary for replacement of pier bearings it is assumed that all of the pier bearings will be replaced at once. As bearing failures start to occur the decision to replace bearings on a piecemeal basis or all at once can be revisited.

e. Replace Low Slump Concrete Overlay

It is inevitable that during the useful life of this bridge the wearing surface will need to be replaced. The wearing surface consists of a 1.5 inch low slump concrete overlay. At present the repairs to the overlay made in 2014

are standing up to traffic and there is no visual evidence that delamination is occurring elsewhere.

There are (2) situations which could create the need to remove and replace the concrete overlay:

- i. Rutting of the wheel tracks due to wear is so deep that deck grinding will not correct the rutting.
- ii. Wide spread delamination that renders spot removal and replacement impractical.

Removal of the existing overlay can be performed in (2) lanes while traffic is allowed in the other (2) lanes. Placement of the new low slump concrete overlay will require closure of the entire structure to traffic. Traffic induced vibrations and movement can cause the bond between the overlay concrete and structural concrete to weaken or fail leading to delamination of the new overlay.

Since the placement of a new overlay and the replacement of the bearings will require closure of the bridge there may be some consideration of coordinating the replacement of the deck overlay with replacement of the pier bearings. However, in doing this the City may be replacing the deck overlay or the bearings before they have served their useful life since it is unlikely that both components will need to be replaced at the same time.

A bituminous overlay should not be considered for this bridge. Bituminous pavements crack and allow the intrusion of salt laden runoff to collect between the bituminous and concrete layers. This leads to deterioration of the deck concrete and reinforcing steel that goes undetected until the bituminous material is removed. Furthermore, a darker deck surface will exacerbate the thermal expansion this structure experiences in the summer months. Whereas a bituminous overlay may seem a lower cost, more convenient alternative, the use of bituminous surfacing will lead to premature deterioration of the structural concrete deck and in the long term, lead to more costly repairs.

f. Replace Approach Panels

Although the approach panels are not an integral part of the bridge the smoothness of the ride as traffic crosses from the approach panel to the bridge has a significant affect on the useful life of the bridge or approach components should the transition between the surfaces be rough. Planing of the south approach panel has improved the ride quality at the south end of the bridge. Approach panels can be removed and replaced piecemeal and therefore will not require closure of the bridge to traffic but can be accomplished with lane closures.

The south approach panel is good condition and may not require replacement for ten or more years.

The north approach to the bridge has extensive cracking longitudinally and transversely and replacement should be considered. It would be prudent to investigate the cause of distress in the north approach roadway. It appears there may be settlement of the subgrade. This could be the result of consolidation of the foundation soils or outward movement of the reinforced earth retaining walls. It is recommended that City Staff monitor the condition of the approaches since they are not subject to the bi-annual inspections of the bridge performed by the NDDOT.

IV. PROBABLE COSTS FOR CONSTRUCTION

A. General

As noted earlier the probable costs presented here include a contingency of 25% added to cover the cost of construction work items that may become apparent and necessary as the planning phases of the work evolve into detail design.

The probable costs also include an allowance of 25% of the construction cost to cover the cost of non-construction costs such as project administration, engineering, legal and interest.

Finally, the probable costs are based on 2018 cost data and no attempt is made to adjust these costs to reflect construction market trends and inflation for work performed in the future.

B. Recommended Actions, Schedules and Probable Costs for Repair Items

1. Replace (4) Bearings at North Abutment and (3) Bearings at South Abutment

a. Major Tasks

- i. Construct traffic control to reduce traffic to 2-lane, 2-way traffic in the west lanes and close off UND parking area below bridge.
- ii. Remove and replace concrete patches in the low slump concrete overlay at the (2) abandoned floor drains along the west gutter.
- iii. Remove and replace pot bearings and concrete pedestals under Girder 4 (north abutment only) and Girder 3.
- iv. Reconfigure traffic control to shift traffic to the (2) east lanes once the patches at the floor drains have had sufficient time to cure.
- v. Remove and replace concrete pedestals and pot bearings under Girders 2 and 1 at both abutments.
- vi. Remove traffic control and open bridge to 4-lane, 2-way traffic.
- vii. Blast clean and paint north and south ends of all (4) girders including new bearings and their weldments to the beam flanges.
- viii. Remove traffic control to reopen UND parking lot under bridge.

b. Schedule

- i. Design for bid letting in late part of year prior to performing work.

- Bearing delivery occurs approximately (4) months after approval of shop drawings.
 - Based on their present condition the abutment bearings have an estimated useful life that will allow for their replacement in the next (5) to (8) years (2023 to 2026).
- ii. Construction can begin during freezing weather but must be completed (painting) before cold weather sets in at the end of the construction season.
 - iii. Replacing (7) pot bearings on the abutments and blast cleaning and painting the girder ends has an estimated duration of on-site construction of 6 weeks. This does not include the lead time for show drawing submittals and review or fabrication of the pot bearings.

c. Probable Cost for Construction

- i. \$820,000.00

2. Deck Surface Restoration

a. Major Tasks

- i. Construct traffic control to reduce traffic to 2-lanes and restrict traffic to 2-way traffic in the remaining (2) lanes.
- ii. Diamond grind closed lanes tapering grinding to feather in along barrier and finger joints at ends.
- iii. Construct traffic markings on refinished surface.
- iv. Apply penetrating surface treatment to refinished surface.
- v. Reposition traffic control to open resurfaced lands to traffic and close other (2) lanes.
- vi. Diamond grind closed lanes, construct traffic markings penetrating surface treatment on refinished lanes.
- vii. Remove traffic control to open all (4) lanes to traffic.

b. Schedule

- i. No problems related to the reduced texture of the deck overlay have been identified to date but there may come a time when it is deemed necessary. The schedule for this work will be determined should the need become evident.
- ii. This work has an estimated duration of 3 weeks.

c. Probable Cost for Construction

- i. \$293,000.00

3. Blast Clean and Paint Girders

- a. Major Tasks
 - i. Construct work canopies over Demers Avenue and BNSF Tracks.
 - ii. Blast clean and paint exposed surfaces of girders and bearings.
- b. Schedule
 - i. The coating system on the original (3) girders will be 40 years old in the year 2024.
 - ii. Design should be completed so bids can be awarded in late 2023 or early 2024.
 - iii. Design should be completed so bids can be awarded late in the year prior to the year the work is to be performed to provide ample time for contractor coordination with the railroad and related permitting.
 - iv. The estimated duration of this work is 14 weeks.
- c. Probable Cost for Construction
 - i. \$2,910,000.00

4. Replace Pier Bearings

- a. Major Tasks
 - i. Construct traffic control to close bridge to traffic and establish detour.
 - ii. Jack and support beams
 - This can be done at (1) pier at a time or multiple piers at once.
 - iii. Remove existing bearings including sole plate, masonry plate and pad.
 - iv. Install new bearings and secure to pier.
 - v. Construct temporary timber rail crossings at railroad tracks to provide access to piers nested between tracks.
 - vi. Construct temporary timber rail crossings at railroad tracks, in areas adjacent to piers to provide necessary work areas without having to remove tracks.
 - vii. Jack and support beams and remove and replace bearings similar to manner used at other piers.
 - viii. Paint bearings and portions of girders where weldment around sole plate was removed for welding or jacking damaged coating.
 - ix. Remove traffic control and reopen bridge to traffic.
- b. Schedule
 - i. While the bearings are showing signs of wear they are not showing any more deterioration than would be expected for their age. These bearings will continue to deteriorate over time but it should be reasonable to assume that they have a remaining useful life of ten to

fifteen years (2028 or 2033). The piers should be monitored as part of the bridges regular biannual inspection and the actual replacement date determined by their condition should the rate of deterioration begin to accelerate.

- ii. The duration of this work on-site is estimated to be 12 weeks. This does not include the lead time for shop drawing submittal and review or fabrication of the pot bearings.

- c. Probable Cost for Construction

- i. \$3,260,000.00

- 5. Replace Low Slump Concrete Overlay

- a. Major Tasks

- i. Construct traffic control to close bridge to traffic and establish detour.
 - ii. Mill off or otherwise remove existing concrete overlay.
 - iii. Sand blast and prep structural concrete deck to receive new concrete overlay.
 - iv. Cast low slump concrete overlay in (3) or (4) passes.
 - v. Re-establish traffic markings.
 - vi. Apply penetrating surface treatment on new overlay.
 - vii. Remove traffic control and re-open bridge to traffic.

- b. Schedule

- i. At present it seems reasonable to expect the existing low slump concrete overlay surface to have a remaining useful life of ten to fifteen years (2028 or 2033). Patch repairs may be required should small areas delaminate before side spread failures occur. The actual replacement date should be determined by the condition of the surface such as rutting in the wheel tracks or areas needing patching becoming considerably larger and more frequent. Monitoring of the driving surface condition will provide a means to determine when replacing the concrete overlay is becoming necessary.
 - ii. The duration of this work is estimated to be 8 weeks.

- c. Probable Cost for Construction

- i. \$3,230,000.00

- 6. Replace North Approach Roadway

- a. Major Tasks

- i. Construct traffic control to close (2) lanes and limit traffic to single lane 2-way traffic across bridge and approaches.

- ii. Remove and replace concrete approach pavements on 1/2 of the approach.
 - iii. Construct traffic markings on reconstructed approach roadway.
 - iv. Shift traffic to lanes where new approach has been completed.
 - v. Repeat process to replace remaining 1/2 of approach roadway including traffic markings.
 - vi. Remove traffic control and open bridge to 4-lane traffic.
- b. Schedule
- i. The condition of the north approach roadway.
 - Soil testing may indicate if the subsidence of the subgrade is due to lateral movement of the retaining walls supporting the approach fill or condition of the soil below this fill.
 - If attributed to movement of the retaining walls reconstructing the retaining walls will be necessary.
 - ii. The duration of this work is estimated to be 6 weeks, 10 weeks if the retaining walls are reconstructed.
- c. Probable Cost for Construction
- i. \$644,000 without retaining wall reconstruction
 - ii. \$1,544,000 with retaining wall reconstruction

V. EXECUTIVE SUMMARY

The Columbia Road Overpass is a public asset with a probable replacement cost of \$18 million to \$22 million. This Planning Document indicates (6) major actions for the repair and maintenance of this structure. The following table summarizes these tasks, probable costs and tentative schedules for these actions.

TABLE PROBABLE COSTS

ACTION	TENTATIVE YEAR	DURATION	PROBABLE COST
Replace Pot Bearings at North & South Abutment	2023-2026	6 Weeks	\$820,000.00
Deck Surface Restoration	TBD	3 Weeks	\$293,000.00
Blast Clean and Repaint Girders	2023-2026	14 Weeks	\$2,910,000.00
Replace Pot Pier Bearings	2028-2033	12 Weeks	\$3,260,000.00
Replace Low Slump Concrete Overlay	2028-2033	8 Weeks	\$3,230,000.00
Replace North Approach Roadway (without retaining walls)	2023-2026	6 Weeks	\$664,000.00
Replace North Approach Roadway (with retaining walls)	2023-2026	10 Weeks	<u>\$1,544,000.00</u>
Total Probable Cost without reconstruction Retaining Walls			\$11,172,000.00
Total Probable Cost with reconstruction Retaining Walls			\$12,057,000.00

These actions, with continued maintenance and monitoring will serve to preserve the Columbia Road Overpass as an asset that will continue to provide safe and efficient traffic movements along Columbia Road in Grand Forks.

The worked noted above is scheduled over a number of years so that components of the structure are not replaced much before the end of their useful life. Combining any of the actions recommended here into a single project is possible but should take into consideration available funding resources as well as public acceptance of the traffic delays that could be more significant with combined repair projects.

Finally, it should be noted that the total probable cost of construction based on the methodology used here is 80% of the total probable cost shown. The total construction cost for the repair items identified herein represents about 49% to 60% of the probable cost for replacement. This is below the recommended maximum ratio rehabilitation vs replacement cost of 70%. Also, the bridge, at an age of 34 years is at the average midlife age for bridge structures.

MAINTENANCE AND REPAIR PLANNING DOCUMENT

REPLACE POT BEARINGS AT NORTH ABUTMENT

**COLUMBIA ROAD OVERPASS
BRIDGE No. 297-001-276
GRAND FORKS, NORTH DAKOTA
OCTOBER 2018**

ITEM No.	REMARKS	DESCRIPTION	UNITS	EST. QUAN.	PROBABLE UNIT COST	EXTENDED PROBABLE COST
1	1	Mobilization	Lump Sum	1	\$ 67,824.00	\$ 67,824.00
2	2	Temporary Traffic Control (Detour)	Lump Sum	1	\$ 20,000.00	\$ 20,000.00
3	3	Jack and Support Beam	Each	7	\$ 35,000.00	\$ 245,000.00
4	4	Remove Existing Pot Bearing	Each	7	\$ 10,000.00	\$ 70,000.00
5		Furnish Pot Bearing	Each	7	\$ 4,600.00	\$ 32,200.00
6	5	Install Pot Bearing	Each	7	\$ 12,000.00	\$ 84,000.00
7	6	Remove Overlay Concrete	Sq. Ft.	0	\$ 50.00	\$ -
8	6	Class Special Concrete (Deck Repair)	Sq. Ft.	12	\$ 80.00	\$ 960.00
SUBTOTAL						\$ 519,984.00
CONTINGENCY (~25%)						\$ 130,016.00
SUBTOTAL						\$ 650,000.00
ADMINISTRATION, ENGINEERING, LEGAL, INTEREST (~25%)						\$ 170,000.00
ENGINEER'S PRELIMINARY OPINION OF PROBABLE COST FOR CONSTRUCTION						\$ 820,000.00

REMARKS

- 1 Approximately 15% of sum of other items.
- 2 Includes sequential lane closures and closing of UND parking area below bridge at north end.
- 3 Includes jacking and supporting adjacent beam(s) as needed to prevent over-flexing deck to replace bearing under girder being lifted.
- 4 Includes removal of existing concrete pedestal. Approximately (2) Cu. Yd. per pedestal.
- 5 Includes reinforcing steel of approximately 250 Lbs and Class AE3 concrete of approximately (2) Cu. Yd. per pedestal.
- 6 For replacing failed patches over (2) abandoned deck drains along west barrier.

The original draft document used for the estimate approved by City Council identified \$490,000 worth of work replacing only 4 of the bearings instead of \$820,000 to replace 7 bearings. \$490,000 with a 4% inflation calculating a 2024 year of expenditure compared to a 2018 estimate. The difference between the draft and final document is approximately 5% of the overall project and could be absorbed by the 25% contingencies listed in the estimate. As the amount approved by City Council was based on the draft document's \$490,000, this value will be used for the funding request.

\$490,000 x 1.04^(2024-2018) = ~620,000
 80% Federal Share = \$496,000
 20% Local Match = \$124,000

MAINTENANCE AND REPAIR PLANNING DOCUMENT

BLAST CLEAN AND REPAINT GIRDERS

**COLUMBIA ROAD OVERPASS
BRIDGE No. 297-001-276
GRAND FORKS, NORTH DAKOTA
OCTOBER 2018**

ITEM No.	REMARKS	DESCRIPTION	UNITS	EST. QUAN.	PROBABLE UNIT COST	EXTENDED PROBABLE COST
1	1	Mobilization	Lump Sum	1	\$ 242,610.00	\$ 242,610.00
2		Railroad Protective Insurance	Lump Sum	1	\$ 10,000.00	\$ 10,000.00
3	2	Railroad Flagging	Days	50	\$ 1,000.00	\$ 50,000.00
4		Temporary Traffic Control (Detour)	Lump Sum	1	\$ 35,000.00	\$ 35,000.00
5		Blast Clean and Paint Structural Steel	Sq. Ft.	90,240	\$ 10.00	\$ 902,400.00
6	3	Waste Collection and Disposal	Lump Sum	1	\$ 542,000.00	\$ 542,000.00
7	4	Railroad Crossing	Each	13	\$ 6,000.00	\$ 78,000.00

SUBTOTAL \$ 1,860,010.00

CONTINGENCY (~25%) \$ 465,990.00

SUBTOTAL \$ 2,326,000.00

ADMINISTRATION, ENGINEERING, LEGAL, INTEREST (~25%) \$ 584,000.00

ENGINEER'S PRELIMINARY OPINION OF PROBABLE COST FOR CONSTRUCTION \$ **2,910,000.00**

REMARKS

- 1 Approximately 15% of sum of other items.
- 2 To be paid for as an allowance wherein Contractor gets reimbursed for actual cost from Railroad. Number of Days shown allows (5) weeks to blast clean and paint the three spans over Railroad Property.
- 3 Taken as ~60% of the total cost for Blast Clean and Paint Structural Steel.
- 4 Materials to be furnished by Contractor and installed by BNSF personnel to provide access over tracks as needed to work on piers on Railroad Property. Width of crossings TBD by Contractor. Probable Unit Cost includes installation so that Probable Cost for Construction includes work to be performed by BNSF Forces

\$2,910,000 with a 4% inflation calculating a 2024 year of expenditure compared to a 2018 estimate

$\$2,910,000 \times 1.04^{(2024-2018)} = \sim 3,685,000$

80% Federal Share = \$2,948,000

20% Local Match = \$737,000

MAINTENANCE AND REPAIR PLANNING DOCUMENT

REPLACE PIER BEARINGS

**COLUMBIA ROAD OVERPASS
BRIDGE No. 297-001-276
GRAND FORKS, NORTH DAKOTA
OCTOBER 2018**

ITEM No.	REMARKS	DESCRIPTION	UNITS	EST. QUAN.	PROBABLE UNIT COST	EXTENDED PROBABLE COST
1	1	Mobilization	Lump Sum	1	\$ 272,055.00	\$ 272,055.00
2		Railroad Protective Insurance	Lump Sum	1	\$ 10,000.00	\$ 10,000.00
3	2	Railroad Flagging	Days	50	\$ 1,000.00	\$ 50,000.00
4		Temporary Traffic Control (Detour)	Lump Sum	1	\$ 35,000.00	\$ 35,000.00
5		Jack and Support Beam	Each	39	\$ 20,000.00	\$ 780,000.00
6		Remove Existing Pot Bearing	Each	39	\$ 5,000.00	\$ 195,000.00
7		Furnish Pot Bearing	Each	39	\$ 4,300.00	\$ 167,700.00
8		Install Pot Bearing	Each	39	\$ 10,000.00	\$ 390,000.00
9	3	Railroad Crossing	Each	13	\$ 6,000.00	\$ 78,000.00
10	4	Railroad Work Area	Each	6	\$ 18,000.00	\$ 108,000.00

SUBTOTAL \$ 2,085,755.00

CONTINGENCY (~25%) \$ 522,245.00

SUBTOTAL \$ 2,608,000.00

ADMINISTRATION, ENGINEERING, LEGAL, INTEREST (~25%) \$ 652,000.00

ENGINEER'S PRELIMINARY OPINION OF PROBABLE COST FOR CONSTRUCTION \$ **3,260,000.00**

REMARKS

- 1 Approximately 15% of sum of other items.
- 2 To be paid for as an allowance wherein Contractor gets reimbursed for actual cost from Railroad. Number of Days shown allows (10) days for each pier on Railroad Property.
- 3 Materials to be furnished by Contractor and installed by BNSF personnel to provide access over tracks as needed to work on piers on Railroad Property. Width of crossings TBD by Contractor. Probable Unit Cost includes installation so that Probable Cost for Construction includes work to be performed by BNSF Forces
- 4 Materials to be furnished by Contractor and installed by BNSF personnel to provide work area over tracks adjacent to piers on Railroad Property. Width of work areas TBD by Contractor. Probable Unit Cost includes installation so that Probable Cost for Construction includes work to be performed by BNSF Forces.

\$3,260,000 with a 4% inflation calculating a 2024 year of expenditure compared to a 2018 estimate

$$\$3,260,000 \times 1.04^{(2024-2018)} = \sim 4,125,000$$

$$80\% \text{ Federal Share} = \$3,300,000$$

$$20\% \text{ Local Match} = \$825,000$$

Summary Total

$$\text{Total Project Cost} = \$620,000 + \$3,685,000 + \$4,125,000 = \$8,430,000$$

$$80\% \text{ Federal Share} = \$496,000 + \$2,948,000 + \$3,300,000 = \$6,744,000$$

$$20\% \text{ Local Match} = \$124,000 + \$737,000 + \$825,000 = \$1,686,000$$

TELUS - TIP URBAN SCORING SHEETS

2020-2024 NEW PROJECTS

	Columbia Rd Overpass Rehabilitation				
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Category 1 Economic Vitality

A	0		0		0
B	0		0		0
C	0		0		0
D	0		0		0
E	1	Principal Arterial	0		0
Total	2		0		0

Category 2 Security

A	0		0		0
B	0		0		0
C	0		0		0
D	0		0		0
Total	0		0		0

Category 3 Accessibility & Mobility

A	0		0		0
B	0		0		0
C	0		0		0
D	0		0		0
E	0		0		0
Total	0		0		0

Category 4 Environmental/Energy/QOL

A	0		0		0
B	1	Is located in an EJ area	0		0
C	0		0		0
D	1	no impact	0		0
E	0		0		0
F	0		0		0
Total	3.33		0.00		0.00

Category 5 Integration and Connectivity

A	0		0		0
B	0		0		0
C	0		0		0
D	0		0		0
Total	0		0		0

Category 6 Efficient System Management

A	0		0		0
B	1	Rehabilitation of bridge structure	0		0
C	0		0		0
D	0		0		0
Total	1.25		0.00		0.00

Category 7 System Preservation

A	1	Utilizes Pavement Management	0		0
B	1	Structure rehabilitation	0		0
C	0		0		0
D	0		0		0
E	1	Structure rehabilitation	0		0
Total	9.00		0.00		0.00

Category 8 Safety

A	0		0		0
B	0		0		0
C	0		0		0
D	0		0		0
E	0		0		0
Total	0.00		0.00		0.00

Category 9 Local/Regional Factors

A	1	Conforms with 2045 LRTP	0		0
B	1	project will consider implementation risk	0		0
C	1	Single project over railyard vs multiple	0		0
D	0		0		0
Total	7.50		0.00		0.00

Total Score	23.08		0.00		0.00
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Overcoming Barriers Strengthening Connections



Ensuring Opportunities Planning One Community

Entity: Grand Forks Contact Person: Les Noehre Revision: November 2019
 Date: November 26, 2019 Phone Number: 701-787-6500 If you have questions with filling out the list, please contact Stacey Hanson at 701-746-2657

FISCAL YEAR	FUNDING CATEGORY ⁽¹⁾	FUNCTIONAL CLASSIFICATION ⁽²⁾	INVESTMENT STRATEGY ⁽³⁾	TYPE OF WORK ⁽⁴⁾	PROJECT LOCATION	PROJECT COST				
						TOTAL	FEDERAL	STATE	LOCAL	NON-PARTICIPATING
2020	SecR	Principal Arterial	MiR	ADA Ramps	Bus US 81/N Washington St Hammerling Ave to 8th Ave N	\$ 670,000	\$ 542,231	\$ 60,769	\$ 67,000	
2020	PriR	Principal Arterial	PM	3" Mill & Overlay and Chipseal	US 2/Gateway Dr (N 55th St to N 69th St)	\$ 567,500	\$ 454,000	\$ 113,500	\$ -	
2020	SecR	Principal Arterial	MiR N/R	Mill and Overlay/ Reconstruction	N 5th St (Bus US 2) (US 2/Gateway Dr to SH 297/Demers Ave)	\$ 1,813,140	\$ 1,467,374	\$ 136,434	\$ 209,332	
2020	SecR	Principal Arterial	PM	CPR, Grinding, Dowelbar Retrofit	Bus US 81/N Washington St 8th Ave N to 0.4 miles north of US 2	\$ 1,323,000	\$ 1,071,000	\$ 120,000	\$ 132,000	
2020	INT	Interstate/Minor Arterial		NEPA Documentation	I-29 NEPA Document Addressing Congestion at Bus US 81/32nd Ave S	\$ 2,000,000	\$ 900,000	\$ 100,000	\$ 1,000,000	
2022	SecR	Minor Arterial	N/R	Reconstruction RR Bridge and Roadway	Bus US 81/N Washington St (5th Ave N to 1st Ave S)	\$ 17,600,000	\$ 14,244,000	\$ 1,596,000	\$ 1,760,000	
2022	SecR	Principal Arterial	PM	Chip Seal	N 5th St (Bus US 2) (US 2/Gateway Dr to 2nd Ave N)	\$ 100,000	\$ 80,930	\$ 9,070	\$ 10,000	
2023 P2022	SecR	Principal Arterial	PM	Signal Maintenance	Traffic Signal Rehabilitation on the Regional Roads System	\$ 6,200,000	\$ 4,960,000	\$ 620,000	\$ 620,000	
2024	INT	Interstate/Minor Arterial	N/R	Interchange	I-29 NEPA Construction Project Addressing Congestion at Bus US 81/32nd Ave S	\$ 37,500,000	\$ 30,000,000	\$ 3,750,000	\$ 3,750,000	
2024	SecR	Principal Arterial	N/R	Reconstruction	Bus US 81/S Washington St (Hammerling Ave to 8th Ave S)	\$ 5,700,000	\$ 4,560,000	\$ 570,000	\$ 570,000	
2025	PriR	Principal Arterial	PM	CPR & Grinding	US2/Gateway Dr (Red River to I-29)	\$ 1,564,000	\$ 1,251,200	\$ 312,800	\$ -	
2025	SecR	Principal Arterial	N/R	Reconstruction	Bus US 81/S Washington St (8th Ave S to Demers Ave)	\$ 5,922,000	\$ 4,737,600	\$ 592,200	\$ 592,200	

Notes Description

(1) PriR = Primary Regional, SecR = Secondary Regional, URP = Urban Roads Program, INT = Interstate, BRI = Bridge
 (2) Interstate, Principal Arterial, Minor Arterial, Collector
 (3) PM = Preventive Maintenance, MiR = Minor Rehabilitation, SI = Structural Improvement, MaR = Major Rehabilitation, N/R = New/Reconstruction
 (4) Brief description of the project (Exs: Thin Lift Overlay, Mill and Overlay, Concrete Pavement Repair, etc.)

TELUS - TIP REGIONAL SCORING SHEETS

2020-2025 NEW PROJECTS

	2020 Mill & Overlay and Chipseal Gateway Dr (N 55th St to N 69th St)		2020 M&O, CPR, & Reconstruction N 5th St (Demers to Gateway Dr)		2020 NEPA Document Congestion at I-29 and 32nd Ave S	
Category 1 Economic Vitality						
A	0		0		0	
B	0		1	Truck Route	1	Truck Route
C	0		0		1	Could provide new access
D	0		0		0	
Total	0		2.5		5	
Category 2 Security						
A	0		0		0	
B	0		0		0	
C	0		0		0	
D	0		0		1	Could provide additional access for Special Events
Total	0		0		1.25	
Category 3 Accessibility & Mobility						
A	0		0		1	improvement to LOS on 32nd Ave
B	0		0		0	
C	0		0		0	
D	0		0		1	improvement to LOS on 32nd Ave
E	0		0		1	improvement to freight service options
Total	0		0		9	
Category 4 Environmental/Energy/QOL						
A	0		0		0	
B	0		0		0	
C	0		0		1	Likely provide short routes
D	1	No impacts anticipated	1	No impacts anticipated	0	
E	0		0		0	
F	0		0		0	
Total	1.67		1.67		1.67	
Category 5 Integration and Connectivity						
A	0		0		1	likely reduce travel delays
B	0		0		0	
C	0		0		0	
D	0		0		0	
E	1	Regional Primary	0		0	
Total	2.5		0		2.5	
Category 6 Efficient System Management						
A	0		1	Likely incorporate elements	0	
B	0		0		0	
C	0		0		0	
D	0		0		0	
Total	0.00		1.25		0.00	
Category 7 System Preservation						
A	1	Uses pavement management	1	Uses pavement management	0	
B	1	system rehabilitation	1	system rehabilitation	0	
C	0		0		0	
D	0		0		0	
E	1	Better System maintenance	1	Better System maintenance	0	
Total	12.00		12.00		0.00	
Category 8 Safety						
A	0		0		0	
B	0		0		0	
C	0		0		0	
D	0		0		0	
E	0		0		0	
Total	0.00		0.00		0.00	
Category 9 Local/Regional Factors						
A	1	2045 LRTP	1	2045 LRTP	1	2045 LRTP
B	1	project will consider implementation risk	1	project will consider implementation risk	1	project will consider implementation risk
C	0		0		0	
D	0		0		0	
Total	5.00		5.00		5.00	
Total Score						
21.17		22.42		24.42		

TELUS -
2020-2025

	2022 Chip Seal N 5th St (2nd Ave N to Gateway Dr)		2024 I-29 Construction Addressing Congestion at I-29 and 32nd Ave S		2024 Reconstruction S Washington St (Hammerling to 8th)	
Category 1						
A	0		0		0	
B	1	Truck Route	1	Truck Route	1	Truck Route
C	0		1	Could provide new access	0	
D	0		0		0	
Total	2.5		5		2.5	
Category 2						
A	0		0		0	
B	0		0		0	
C	0		0		0	
D	0		1	Could provide additional access for Special Events	0	
Total	0		1.25		0	
Category 3						
A	0		1	improvement to LOS on 32nd Ave	0	
B	0		0		0	
C	0		0		0	
D	0		1	improvement to LOS on 32nd Ave	0	
E	0		1	improvement to freight service options	0	
Total	0		9		0	
Category 4						
A	0		0		0	
B	0		0		0	
C	0		1	Likely provide short routes	0	
D	1	No impacts anticipated	0		1	No impacts anticipated
E	0		0		0	
F	0		0		0	
Total	1.67		1.67		1.67	
Category 5						
A	0		1	likely reduce travel delays	0	
B	0		0		0	
C	0		0		0	
D	0		1	provide addiitonal connection	0	
E	0		0		0	
Total	0		5		0	
Category 6						
A	0		1	Likely incorporate elements	1	Likely incorporate elements
B	0		0		0	
C	0		0		0	
D	0		0		0	
Total	0.00		1.25		1.25	
Category 7						
A	1	Uses pavement management	0		0	
B	1	system rehabilitation	0		0	
C	0		0		0	
D	0		0		0	
E	1	Better System maintenance	0		0	
Total	12.00		0.00		0.00	
Category 8						
A	0		0		0	
B	0		0		0	
C	0		0		0	
D	0		0		0	
E	0		0		0	
Total	0.00		0.00		0.00	
Category 9						
A	1	2045 LRTP	1	2045 LRTP	1	2045 LRTP
B	1	project will consider implmentation ri	1	project will consider implmentation ri	1	project will consider implmentation ri
C	0		0		0	
D	0		0		0	
Total	5.00		5.00		5.00	
Total Score						
21.17		28.17		10.42		

TELUS -
2020-2025

	2025 CPR & Grinding Gateway Dr (Red River to I-29)		2025 Reconstruction S Washington St (8th Ave S to Demers)	
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Category 1

A	0		0	
B	1	Truck Route	1	Truck Route
C	0		0	
D	0		0	
Total	2.5		2.5	

Category 2

A	0		0	
B	0		0	
C	0		0	
D	0		0	
Total	0		0	

Category 3

A	0		0	
B	0		0	
C	0		0	
D	0		0	
E	0		0	
Total	0		0	

Category 4

A	0		0	
B	0		0	
C	0		0	
D	1	No impacts anticipated	1	No impacts anticipated
E	0		0	
F	0		0	
Total	1.67		1.67	

Category 5

A	0		0	
B	0		0	
C	0		0	
D	0		0	
E	1	Regional Primary	0	
Total	2.5		0	

Category 6

A	0		1	Likely incorporate elements
B	0		0	
C	0		0	
D	0		0	
Total	0.00		1.25	

Category 7

A	1	Uses pavement management	0	
B	1	system rehabilitation	0	
C	0		0	
D	0		0	
E	1	Better System maintenance	0	
Total	12.00		0.00	

Category 8

A	0		1	Demers and Washington on HCL
B	0		0	
C	0		0	
D	0		0	
E	0		0	
Total	0.00		3.00	

Category 9

A	1	2045 LRTP	1	2045 LRTP
B	1	project will consider implementation ri	1	project will consider implementation ri
C	0		0	
D	0		0	
Total	5.00		5.00	

Total Score	23.67		13.42	
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**URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET**

DATE:11/22/2019 Regional: (Y)/N Urban: Y/(N)

PRIORITY# Principal Arterial Bus US 81/S Washington St Reconstruction in 2024

City: Grand Forks Street: Bus US 81/S Washington St (Hammerling Ave to 8th Ave S)

County: Grand Forks Length: ~0.5 miles

Proposed Improvement: Reconstruction of Bus US 81/ S Washington St from Hammerling Ave to 8th Ave S.

Cost Estimates Breakdown (in \$1,000)							
Alternate	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
				5,700			

Present Road: Surface Width? 60' Surface Type? 9" Concrete with asphalt overlay

On Street Parking Allowed? _____ Present: (No) One Side Both Sides Angle Parallel
Proposed: (No) One Side Both Sides Angle Parallel

Proposed Improvements	
ADT Present: _____ Yr: _____	Travel Way Width :60'
ADT Design: _____ Design year _____	No. of Lanes: 5
Design Speed: 35 MPH	Roadway Width:60'
Maximum Curve: _____	Min. R/W Width: _____
Maximum Grade: _____	

Right of Way
Will Additional ROW or easement be acquired? Likely ROW acquisition by: City (DOT)
Has any ROW easements been acquired since 7-1-72: Likely ROW Condemnation by: City DOT
Est. No. of occupied family dwelling to be displaced? 0
Est. No. business to be displaced? 0

Impacts

Will there be any additional Impacts (Cultural and Environmental Resources): None anticipated

Will there be any impacts to 4(f) or 6(f) properties: None Anticipated

Airports: None Anticipated Public Hearings: Maybe

Environmental Classification (Cat-Ex, EA, EIS): PCE or DCE

Transportation Enhancements: Will be determined during NEPA phase

Intermodal: Will be determined during NEPA phase

Pedestrian Needs: Will be determined during NEPA phase

Railroads Crossings

RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
	None					

Purpose and Need Statement

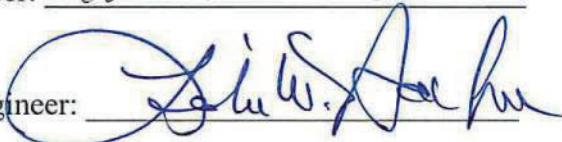
1. When was the current street section built. Has there been any additional maintenance to the street section.
Original Construction was in 1952, with overlays in 1974, 1985, 2002, and 2018. At the time of the proposed construction the existing asphalt overlay will be 6 years old and the underlying concrete will be 72 years old.
2. How many driving lanes and turning lanes does the street section currently have and what are the widths of the driving and turning lanes.
There are currently five lanes, two through lanes in each direction with a shared left turn lane. The through lanes and turn lanes are approximately 12' wide.
3. What is the condition of the pavement section.
The pavement was recently overlaid and the surface is in good condition.
4. How are the existing geometrics of the roadway?
The existing roadway alignment is relatively straight and level.
5. Are there any access points to adjoining properties that present a special concern?
There are a number of existing access points for businesses along this corridor. Past studies have indicated that some effort should be made in reducing the number of access points in the future.
6. Are there any existing sidewalks or shared use path in place?
There are existing sidewalks on both sides of the road. These sidewalks span from the back of the curb to the edge of the existing right of way line. Numerous street lights and signs can be found in the sidewalk.

7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?
Existing storm sewer had surface repair work completed by the city prior to the mill and overlay project in 2018. This did not address any subsurface issues. Further investigation will be required to determine the extent of any storm sewer repairs or replacement.
8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?
The majority of city sanitary sewer and watermain do not parallel Bus US 81 and instead cross at the sidestreet locations. Additional investigations will need to be done to determine any additional work which may be requested with the project.
9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
The existing street lighting is 40' steel davit arm style poles, with a 250W High Pressure Sodium (HPS) fixture with staggered spacing placed on both sides of the road.
10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?
There is a traffic signal located at the intersection of Bus US 81/S Washington St and 13th Ave S.

Remarks:

City Engineer: 

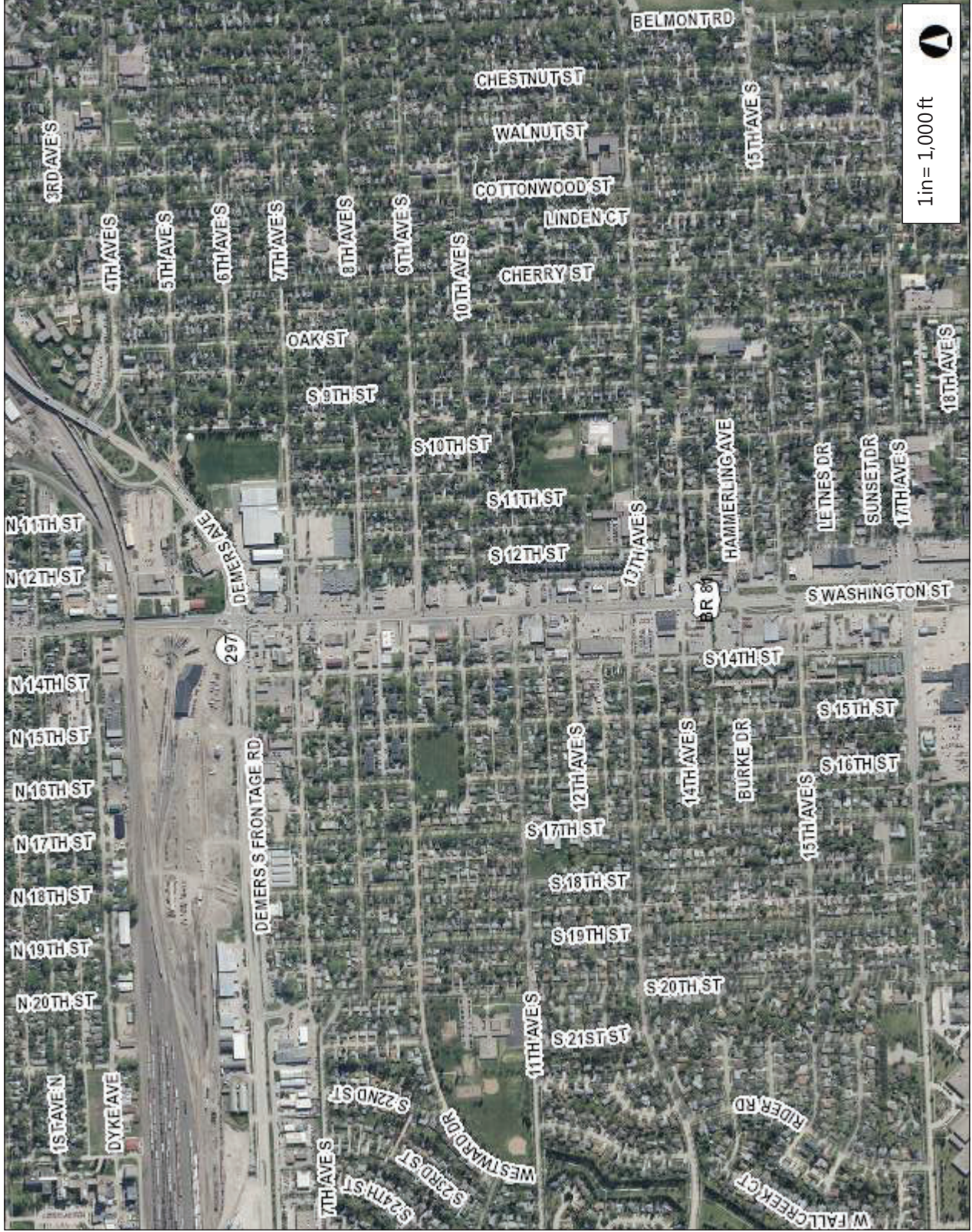
Date: 12/13/19

District Engineer: 

Date: 12/15/19

Note: Please attach a map showing location and extent of the project.

Bus US 81/S Washington St Reconstruction 8th Ave S to Hammerling Ave



Legend

- Intersections
- Boundary City Limit
- Boundary Gray Area
- EGF Streets
- Road Labels

Notes

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THIS MAP IS NOT TO BE USED FOR NAVIGATION

2,000.0 0 1,000.00 2,000.0 Feet

NAD_1983_StatePlane_North_Dakota_North_FIPS_3301_Feet
City of Grand Forks GIS

**URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET**

DATE: 11/25/2019 Regional: (Y)/N Urban: Y/(N)

PRIORITY# US Highway 2/Gateway Drive CPR & Grind - 2025

City: Grand Forks Street: US Highway 2/Gateway Dr

County: Grand Forks Length: ~2.6 miles

Proposed Improvement: Concrete Panel Repair and Grind of US Highway 2/Gateway Dr (Red River to I-29)

Cost Estimates Breakdown (in \$1,000)							
Alternate	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
				1,564			1,564

Present Road: Surface Width? 4 lane divided

Surface Type? Concrete

On Street Parking Allowed? _____ Present: (No) One Side Both Sides Angle Parallel
Proposed: (No) One Side Both Sides Angle Parallel

Proposed Improvements	
ADT Present: <u>14,430-19,705</u> Yr: <u>2018</u>	Travel Way Width : _____
ADT Design: <u>23,863-30834</u> Design year <u>2045</u>	No. of Lanes: 4
Design Speed: 35/40 MPH	Roadway Width: 41 x 2
Maximum Curve: _____	Min. R/W Width: _____
Maximum Grade: _____	

Right of Way
Will Additional ROW or easement be acquired? maybe ROW acquisition by: City (DOT)
Has any ROW easements been acquired since 7-1-72: Unknown ROW
Condemnation by: City (DOT)
Est. No. of occupied family dwelling to be displaced? 0
Est. No. business to be displaced? 0

Impacts

Will there be any additional Impacts (Cultural and Environmental Resources): None Anticipated _____
 Will there be any impacts to 4(f) or 6(f) properties: None anticipated
 Airports: _None Anticipated Public Hearings: Maybe
 Environmental Classification (Cat-Ex, EA, EIS): Cat-Ex
 Transportation Enhancements: _____
 Intermodal: _____
 Pedestrian Needs: pedestrian access and crossing limited near US2/Gateway Dr and Bus US 81/N Washington St

Railroads Crossings

RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
BNSF 062505C	1	1 At Grade			Gates Arms Flashers Signs	Same
BNSF 081297E	1	1 At Grade			Flashers Signs	Same

Purpose and Need Statement

The Purpose and Need Statement should address the following issues:

1. When was the current street section built. Has there been any additional maintenance to the street section.
 US2/Gateway Dr from the Red River to I-29 was constructed under two projects F-6-002(031)356 and F-6-002(034)355 in 1988
 In 1990 repair work was completed at the railroads crossings
 in 2011 and 2012 a Concrete Panel Replacement and Grinding project was completed between the Red River and I-29

2. How many driving lanes and turning lanes does the street section currently have and what is the widths of the driving and turning lanes.
 Four 12' wide driving lanes

3. What is the condition of the pavement section.
 The pavement is showing signs of distress comparable with it's age.

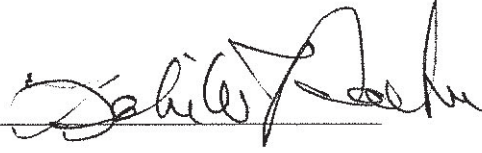
4. How are the existing geometrics of the roadway?
Existing Geometrics appear to be satisfactory for the most part, there are existing skewed intersections located at N Washington St and N 5th St/Mill Rd which are currently under study by the Grand Forks East Grand forks MPO.
5. Are there any access points to adjoining properties that present a special concern?
There are businesses which have large or closely spaced accesses to US 2
6. Are there any existing sidewalks or shared use path in place? Yes there is a sidewalk on north and south sides for the most part. There is a bike path on the north side of the businesses on the north side of the road between N 3rd St and N Columbia Rd. There is a bike path on the south side of the road from N Columbia Rd to the interstate.
7. What is the condition of the existing storm sewer? Original storm sewer was constructed in 1985, condition is unknown
Will any additional storm sewer work need to be done along with this project?
Unknown
8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?
The city water line along US 2/Gateway Dr has had a number of breaks in it the past few years. The city is currently considering a project to replace/relocate the water pipe. The majority of the sanitary sewer pipe is not directly underneath the roadway.
9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
There are 400W HPS fixtures on 40' tall poles offset on both sides of the road.
10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?
These intersections have a traffic signal: N 3rd St, N 5th St, N Washington St, N 20th St, N Columbia Rd, Stanford Rd, N 42nd St, east & west on/off ramps of I-29.

Remarks:

City Engineer: 

Date: 12/3/19

District Engineer:

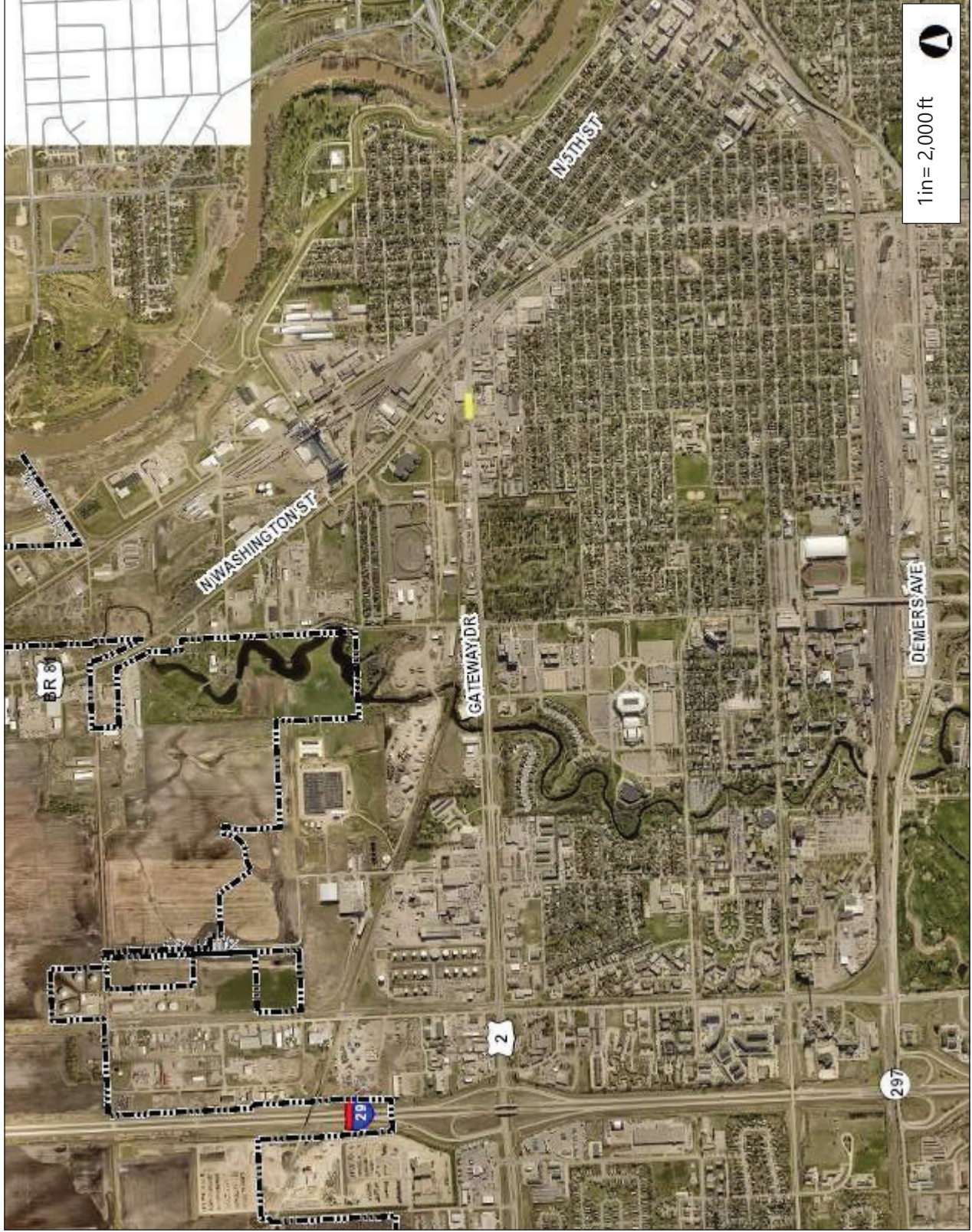


Date:

12/5/19

Note: Please attach a map showing location and extent of the project.

Gateway Dr CPR & Grind - 2025



Legend

- Boundary City Limit
- Boundary Gray Area
- Address Labels
- Road Labels

Notes

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4,000.0 0 2,000.00 4,000.0 Feet

NAD_1983_StatePlane_North_Dakota_North_FIPS_3301_Feet
City of Grand Forks GIS

**URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET**

DATE:11/25/2019 Regional: (Y)/N Urban: Y/(N)

PRIORITY# Principal Arterial Bus US 81/S Washington St Reconstruction in 2025

City: Grand Forks Street: Bus US 81/S Washington St (8th Ave S to Demers Ave)

County: Grand Forks Length: ~0.2 miles

Proposed Improvement: Reconstruction of Bus US 81/ S Washington St from 8th Ave S to Demers Ave.

Cost Estimates Breakdown (in \$1,000)							
Alternate	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
				5,922			5,922

Present Road: Surface Width? 60' Surface Type? 9" Concrete with asphalt overlay

On Street Parking Allowed? _____ Present: (No) One Side Both Sides Angle Parallel
Proposed: (No) One Side Both Sides Angle Parallel

Proposed Improvements		
ADT Present: <u>26,680</u>	Yr: <u>2018</u>	Travel Way Width :60'
ADT Design: <u>36,966</u>	Design year 2045 _____	No. of Lanes: 5
Design Speed: 35 MPH		Roadway Width:60'
Maximum Curve: _____		Min. R/W Width: _____
Maximum Grade: _____		

Right of Way
Will Additional ROW or easement be acquired? Likely ROW acquisition by: City (DOT)
Has any ROW easements been acquired since 7-1-72: Likely ROW Condemnation by: City (DOT)
Est. No. of occupied family dwelling to be displaced? 0
Est. No. business to be displaced? 0

Impacts

Will there be any additional Impacts (Cultural and Environmental Resources): None anticipated

Will there be any impacts to 4(f) or 6(f) properties: None Anticipated

Airports: None Anticipated Public Hearings: Maybe

Environmental Classification (Cat-Ex, EA, EIS): PCE or DCE

Transportation Enhancements: Will be determined during NEPA phase

Intermodal: Will be determined during NEPA phase

Pedestrian Needs: Will be determined during NEPA phase

Railroads Crossings

RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
	None					

Purpose and Need Statement

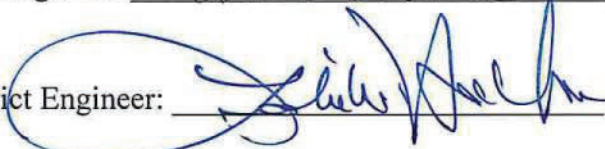
1. When was the current street section built. Has there been any additional maintenance to the street section.
Original Construction was in 1952, with overlays in 1974, 1985, 2002, and 2018. At the time of the proposed construction the existing asphalt overlay will be 7 years old and the underlying concrete will be 72 years old.
2. How many driving lanes and turning lanes does the street section currently have and what are the widths of the driving and turning lanes.
There are currently five lanes, two through lanes in each direction with a shared left turn lane. The through lanes and turn lanes are approximately 12' wide.
3. What is the condition of the pavement section.
The pavement was recently overlaid and the surface is in good condition.
4. How are the existing geometrics of the roadway?
The existing roadway alignment is relatively straight and level.
5. Are there any access points to adjoining properties that present a special concern?
There are a number of existing access points for businesses along this corridor. Past studies have indicated that some effort should be made in reducing the number of access points in the future.
6. Are there any existing sidewalks or shared use path in place?
There are existing sidewalks on both sides of the road. These sidewalks span from the back of the curb to the edge of the existing right of way line. Numerous street lights and signs can be found in the sidewalk.

7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?
Existing storm sewer had surface repair work completed by the city prior to the mill and overlay project in 2018. This did not address any subsurface issues. Further investigation will be required to determine the extent of any storm sewer repairs or replacement.
8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?
The majority of city sanitary sewer and watermain do not parallel Bus US 81 and instead cross at the sidestreet locations. Additional investigations will need to be done to determine any additional work which may be requested with the project.
9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
The existing street lighting is 40' steel davit arm style poles, with a 250W High Pressure Sodium (HPS) fixture with staggered spacing placed on both sides of the road.
10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?
There is a traffic signal located at the intersection of Bus US 81/S Washington St and SH297/Demers Ave.

Remarks:

City Engineer: 

Date: 12/13/19

District Engineer: 

Date: 12/15/19

Note: Please attach a map showing location and extent of the project.

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**TRANSPORTATION PLAN UPDATE AND IMPLEMENTATION
ACTIVITIES**

CODE	AREA	TASK	%	ORIGINAL COMPLETION DATE	PROJECTED COMPLETION DATE	
200.2	Public Participation Plan	MPO Board gave preliminary approval; documents are offically out for 45 day review and comment.	85%	31-Dec-19	19-Mar-20	
3001	Functional Classification (Update)	COMPLETED				
300.1	ITS Regional Architecture (Update)	Review has ended. ATAC is drafting up the revisions that were noticed.	80%	31-Dec-19	19-Mar-20	
	CAT Route Changes	COMPLETED				
300.2	CORRIDOR PLANNING	US 2/US 81 Skewed Intersection Study	Draft final report has been reviewed and approved by the Steering Committee. Final presentations and approval will happen in January	95%	31-Oct-19	28-Feb-20
		Grand Forks Downtown Parking Study	COMPLETED			
		MN 220 N Corridor Study	COMPLETED			
		Downtown Transportation Study	The Steering Committee met on Dec 9th to review the Study and Existing Coniditions Report. The draft is out for comment.	50%	30-Jun-20	
		Traffic Count Program	Vision Camera Data Collection & Traffic Analysis Enhancements.	60%	On-going	
		300.5	SPECIAL STUDIES EGF ADA Transition Plan	COMPLETED		
300.54	CAT/UND Shuttle Merger	COMPLETED				

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