

SE Main Ave/20 St/21 St Project Open House Cullen Hockey Center August 12, 2021; 4-6 pm Frequently Asked Questions

Schedule/General

1. Will any increases in project cost affect proposed special assessments?

No. The maximum special assessment was set by the notices sent prior to the project hearing on May 29, 2019, and by Council action at that hearing. Please refer to the project hearing notice.

2. When will the intersection of SE Main Ave and 20 St/21 St be opened to traffic?

While construction schedules can vary greatly depending on weather, it is anticipated that the underpass will open to traffic in July 2022.

3. What are the approved construction hours?

The contractor is typically allowed to work during daylight hours, but must limit the type of work before 7 am, to activities that do not produce significant noise. Daily meetings, equipment startup, and other preparatory work happens before 7 am. Starting this week, the crew schedule was shifted to 6:30 am-6:30 pm Monday-Friday. The current schedule for the next month does not include work on Saturdays, but Saturday work may be added as rain makeup days. If crews work on Saturday, the schedule would be 6:30 am-3:45 pm.

4. Will there be another period of night time construction?

The City Council has authorized one more period of night construction for up to three weeks. This work will be limited to the excavation of the remaining soils in the area of the temporary BNSF railroad grade (shoo-fly) and will begin after the permanent BNSF railroad track is operational (anticipated about November 1).

Traffic Control

1. Will the temporary traffic signal at 34 St & 4 Ave S be removed after the project?

The temporary traffic signal will remain throughout construction. In 2023, it will be replaced with a permanent traffic signal.

2. What efforts are being taken to address cut-through traffic and speeding on Oak Way?

- a. **Speed feedback signs.** These have been in place most of the summer and can stay until late fall. Due to shortened battery life in cold weather, these signs are not effective during the winter.
- b. **Police enforcement.** Non-scheduled or random enforcement is planned so it doesn't become predictable when enforcement is taking place. This will help reduce speeds for a longer period after enforcement.
- c. Speed humps. These could be installed but would be temporary and must be removed during the winter for snow plow operations. Speed humps would discourage cut-through traffic and related speeding, but they would also impact every trip made by area residents. A determination has not been made on installing speed humps. Feedback is welcome.

- d. **Can the speed humps be permanent?** In order to make the speed humps permanent, they would need to meet the requirements of the City Traffic Calming Policy. The Traffic Calming Policy can be found on the City of Moorhead website (cityofmoorhead.com). Search for Traffic Calming Policy.
- e. **Rensvold Blvd area.** This area has also seen increased traffic throughout the construction project. It is possible to include the Rensvold area in the deployment of traffic calming devices.
- f. **Data collection.** Speed data has been collected this summer to assess the impact of the roundabout removal. Additional speed data will be collected in September to see the impact of school being in session. Data from Oakway, 4 Ave S, and Rensvold Blvd will be collected.

Project Monitoring

1. How is construction noise monitored and what is being been done to mitigate it?

The City has periodically engaged a consultant to evaluate the noise level of the construction activities along Birch Lane, Morningside Park, and the apartment buildings to the west of the project area. The initial monitoring results determined that mitigation methods should be employed to reduce the noise impact of the pile driving and sheet pile driving activities, with a goal of reducing the levels by 10 to 20 decibels (dB). To mitigate noise, the contractor installed a buffer of hay bales. Additional monitoring determined that the bales reduced the noise levels by 3 to 10 dB, so more robust mitigation measures were necessary to meet the noise reduction goal. The contractor replaced the bales with sound curtains. The City will test their effectiveness within the next couple of weeks.

2. What controls are in place to limit vibrations from construction activities?

The City has had several vibration monitors in place throughout most of the construction. The monitors have been moved as necessary to keep them close to the most significant construction activity. The monitors notify the contractor and the inspectors when vibrations exceed a threshold that is about 30% of the level that studies have found have the potential to cause structural damage. When these notifications have occurred, the contractor has adjusted its construction methods to reduce vibrations.

3. I may have experienced damage due to construction vibration. When and how do I file a claim for that damage?

Because the project is not complete, claim submission would be premature at this time. As the project nears completion, claim submission procedures will be released. Vibration monitoring and mitigation – to the extent practical – will continue throughout construction.

4. What is being done to control construction dust?

Construction activities routinely generate the stirring of dust and dirt particles, especially during hot, dry and windy weather. To counter the spread of dust, construction roads are periodically sprayed with water and the dirt tracked onto roadways and other hard surfaces is swept or otherwise contained.

For project updates and photos, visit cityofmoorhead.com and view the Current & Future Projects page under the Engineering Department Heading.



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Construction Vibrations

A construction project is soon to start or may be ongoing near your property. It is common to feel vibrations generated by construction and the construction team is aware of this potential. A few frequently asked questions are answered below.

My building is shaking, is that normal?

Construction vibrations are normal as are vibrations caused by wind, door slams, thunder, and walking/running. People are much more sensitive to these vibrations than our buildings are.

Is my building going to be damaged?

Damage due to construction vibrations is rare and requires very high vibration levels to occur. Building finishes such as plaster or drywall are the most sensitive aspects of a structure, and masonry or stone foundations/walls are less sensitive. Typically changes in temperature and humidity can at times cause greater stress on a structure than construction vibrations.

My dishes are rattling, what about loose items?

Loose items are difficult to set vibration thresholds for. If you are concerned about something shifting or falling, we recommend you secure it or move it to a more stable location. If you wouldn't feel comfortable slamming your door, you should improve the mounting or stability of the item.

What is being done to prevent damage?

Construction projects often hire a 3rd party engineering firm to monitor vibration levels and provide vibration threshold level recommendations. Vibration monitors are deployed during the project at buildings closest to the construction work to record the highest vibration levels. If vibrations approach a level where damage is possible, the construction team is typically notified automatically by email.

My building is further away, but I'm still concerned.

Vibration levels decrease with distance. As the vibration moves away from the source it spreads out and reduces in a process known as geometric spreading. This always occurs. Other factors reduce vibration levels as well, but by measuring vibrations at the closest receptor (or building), we understand that those further away would be experiencing lower vibration levels.

There's a lot more vibration than normal, will this reduce the lifespan of my building?

Fatigue of building elements is typically not a major concern. Research indicates that for most construction vibration sources, it takes hours of constant vibrations at a level, or frequency (Hz), which would likely be intolerable for occupants within minutes to result in superficial crack of plaster or drywall.

This is so annoying, is there anything I can do?

If the vibrations are bothering you, it is best to know that they are temporary. Vibrations are typically the strongest at the start and end of construction projects, so it is unlikely to be the whole duration. Unfortunately, construction projects require some level of vibration producing activities.

Can they turn down machines or do it another way?

Construction machinery is designed to operate at frequencies that are less damaging to buildings, unfortunately these frequencies are more annoying to people. Turning the machine down may be worse for your building. Low or zero vibration methods are possible but add tens to hundreds of thousands of dollars to project costs.

How do I know I can trust you?

Braun Intertec is a third-party engineering company who acts first and foremost on the behalf of the general public. It is our first responsibility as professional engineers to "Hold paramount the safety, health, and welfare of the public" as stated in the NSPE Code of Ethics for Engineers. We take this code very seriously and our licensure and reputation rely on it.