

Clearwater Road/Golf Course Drive Bank Traffic Review

Baxter, Minnesota

BAXTE 191260 | June 3, 2026

Baxter City Council Acceptance Date:



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Clearwater Road/Golf Course Drive Bank Traffic Review

Prepared for the City of Baxter

1 Introduction

This traffic review report provides the findings related to the review of the proposed bank with a drive-through on Clearwater Road in the City of Baxter, MN. The proposed site is located in the southwest corner of the intersection of Clearwater Road and Golf Course Drive.

The primary focus of this development traffic review is to determine the potential impact of the proposed bank on the existing roadway network. The review will consider the proposed development trip generation, the proposed access locations, and the potential intersection turn lane considerations.

The proposed development includes a 7,500 square foot (SF) bank with a drive through. The proposed site includes two access locations to enter or exit the site, including one on Clearwater Road and one on Golf Course Drive.

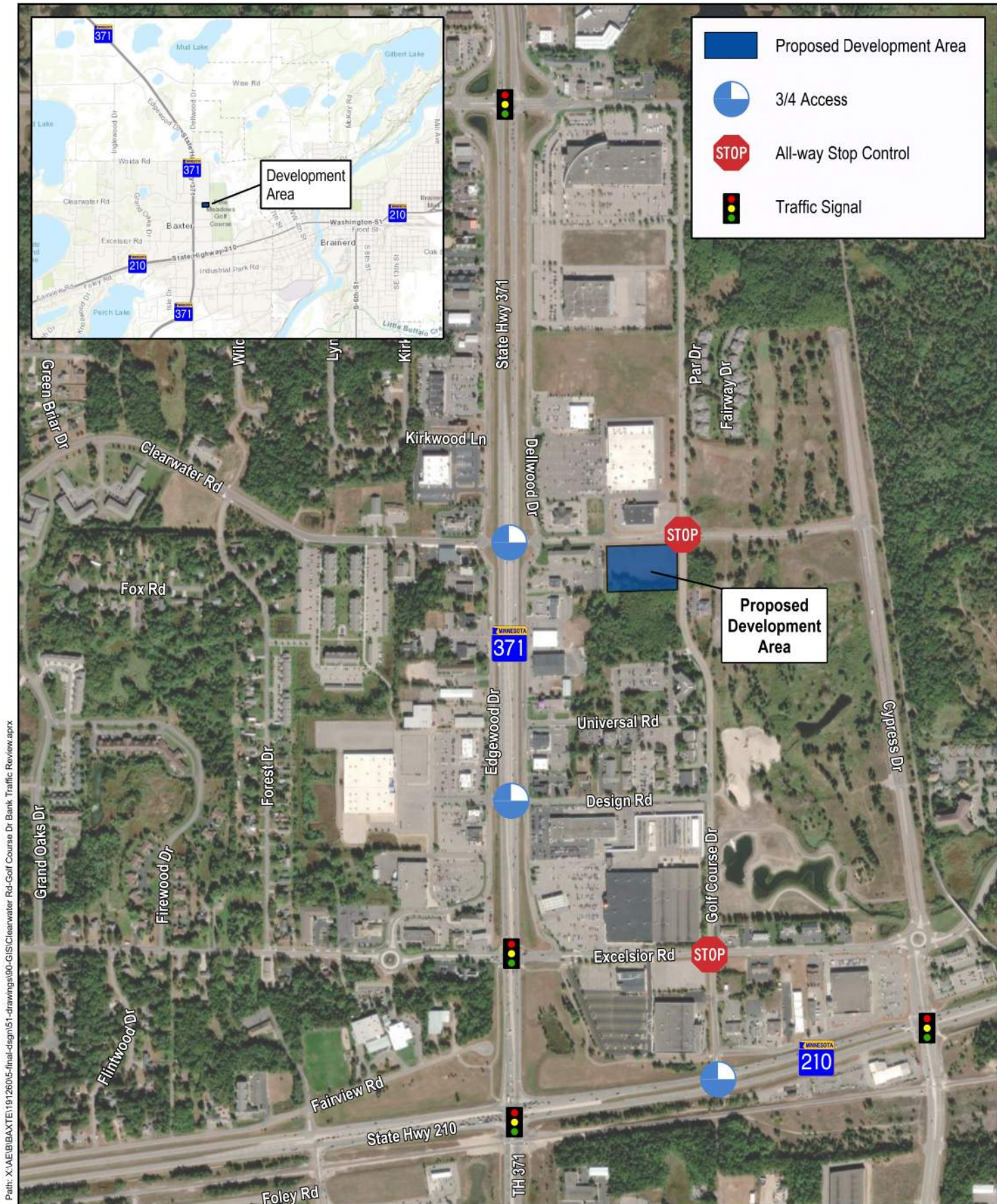
Figure 1 shows the project location and surrounding area within the City of Baxter. **Figure 2** shows a preliminary site plan for the proposed bank; more detail on the proposed site plan can be found in **Appendix A**.

1.1 Current and Past Studies

There are two on-going Minnesota Department of Transportation (MnDOT) studies that could impact vehicle routing and access between the proposed bank and Trunk Highway (TH) 371 or TH 210:

- Highway 371 Corridor Study – Baxter to Nisswa
- Highway 371 and Highway 210 – Baxter Intersection Improvement Project.

Based on the recommendations of those studies, both the intersections of TH 371/Clearwater Road and TH 210/Golf Course Drive are expected to remain $\frac{3}{4}$ access intersections; however, as a condition for the City of Baxter's Municipal Consent for the TH 371/TH 210 interchange design, the intersection of TH 371 and Clearwater Road will be further studied by MnDOT after completion of the interchange construction to determine if intersection improvements are needed to address traffic operations or safety.



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Project: BAXTE 191260
Print Date: 4/29/2026

Map by: jdanibas
Projection: Crow Wing Co. Coords.
Source: ESRI

PROJECT LOCATION Clearwater Road/Golf Course Drive Bank Traffic Review Baxter, MN

Figure
1

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2 Existing Conditions

The proposed development includes proposed access driveways on two existing roadways, including Clearwater Road and Golf Course Drive.

Clearwater Road is an east-west roadway which extends from Whipple Lake on the west to Cypress Drive on the east. Clearwater Road is functionally classified as a local roadway between TH 371 and Cypress Drive in the project area. East of TH 371, Clearwater Road is a 2-lane undivided roadway with left turn lanes at major roadway connections. In the study area, Clearwater Road serves as a primary east-west connection to commercial land uses as well as connecting to primary north-south routes such as TH 371, Dellwood Drive, Golf Course Drive, and Cypress Drive. The posted speed limit on Clearwater Road in the project area is 30 mph.

Golf Course Drive is a north-south roadway which extends from TH 210 to Wolda Road, which is functionally classified as a major collector. Golf Course Drive is a 2-lane undivided roadway with no turn lanes. In the study area, Golf Course Drive serves as a backage road to the commercial development on the east side of TH 371, providing connection to primary east-west routes such as TH 210, Excelsior Road, Design Road, Clearwater Road, and Wolda Road. The posted speed limit on Golf Course Drive is 30 mph.

The intersection of Clearwater Road and Golf Course Drive, located on the northeast corner of the proposed bank site, is all-way stop controlled with dedicated left turn lanes in each direction on Clearwater Road, but with no turn lanes on the Golf Course Drive approaches. The

intersection was converted to all-way stop in Fall 2023 to address crash issues with the previous minor street stop control.

At TH 371, Clearwater Road is a $\frac{3}{4}$ access intersection, with eastbound and westbound through and left turn movements prohibited. Nearby full access intersections on TH 371 include Excelsior Road, approximately $\frac{1}{2}$ mile south, and Woida Road, approximately $\frac{1}{2}$ mile north. At TH 210, Golf Course Drive is also a $\frac{3}{4}$ access, with northbound and southbound through and left turn movements prohibited. Cypress Drive, approximately $\frac{1}{4}$ mile east of Golf Course Drive, provides a full access intersection on TH 210.

2.1 Vehicle Volumes

No traffic data was collected as part of this review. However, a high-level review of the posted daily traffic volumes was done to assess any potential capacity concerns for the proposed development.

Based on the MnDOT Transportation Data Management System (TDMS), the following are the Average Annual Daily Traffic (AADT) volumes for each roadway.

- Clearwater Road – west of Golf Course Drive 2,050 vehicles per day (2023)
- Golf Course Drive – south of Clearwater Road 5,300 vehicles per day (2019)

3 Proposed Development

The proposed bank site extends over four existing parcels, with a total of 3 acres of land that is currently not occupied, it currently consists primarily of open space and woods. The proposed bank will utilize the northwestern portion of the site, with the existing wooded area in the southern portion of the site expected to remain in place. The proposed bank site includes a 7,500 SF bank with a drive through on the south side of the building.

The proposed development includes two access points, one on Clearwater Road and one on Golf Course Drive. Both access driveways are two-way accesses, allowing vehicles to both enter and exit the site.

3.1 Trip Generation

The Institute of Transportation Engineers (ITE) Trip Generation Manual, 12th Edition was used to estimate the number of trips generated by the proposed bank.

ITE land use code 912 – “Drive-in Bank” was used to estimate the trips for the 7,500 SF bank with drive through. ITE provides a daily trip estimate as well as AM and PM peak hour trips.

Table 1 provides the estimated trips generated by the proposed bank development.

Table 1 – Estimated Site Trip Generation

Land Use:	Units	Daily Trips	AM Peak Hour			PM Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
Bank	7,500 SF	742	44	31	75	79	79	158

3.2 Trip Distribution

The expected trip distribution is based on the surrounding roadway network. Clearwater Road provides direct access to/from TH 371 via a $\frac{3}{4}$ access intersection, as well as providing access to north-south roadways that can provide access to TH 210 or to Wolda Road or Excelsior Road, which have full access intersections at TH 371. Golf Course Drive provides direct access to/from TH 210 via a $\frac{3}{4}$ access intersection, as well as providing access to east-west roadways that can provide access to TH 371 or to Cypress Drive, which has a full access intersection at TH 210.

With both roadways providing access to/from both TH 371 and TH 210 either directly or through connecting roadways, it is expected that trips will be distributed approximately 50/50 between the Clearwater Road and Golf Course Drive access points. It is expected that most drivers will enter the site using the first driveway they pass and drivers will exit to their desired destination, either Clearwater Road or Golf Course Drive using the access that is closest to where they park or exit the drive through.

3.3 Assessment of Traffic Impact

Based on the estimated trip generation for the proposed development, less than 750 vehicles per day are expected to enter and exit the site, in addition, the peak hour traffic volumes are expected to have less than 160 total vehicles entering and exiting the site. The assumed trip distribution spreads the trips to existing roadways and the volumes are expected to be served at the surrounding intersections with little impact.

Therefore, no traffic operations analysis was performed as part of this development review.

4 Development Site Review

The proposed development site has two driveway accesses with connections to Clearwater Road and Golf Course Drive. The access locations were reviewed based on the City of Baxter's access spacing guidelines. In addition to access spacing, intersection turn lane warrants were reviewed to determine whether turn lanes should be added on Clearwater Road or Golf Course Drive.

4.1 Access Spacing

The City of Baxter's 2015 Comprehensive Plan provides access management guidelines for providing adequate access while maintaining traffic flow and safety along roadways. The access spacing guidelines depend on the type of roadway and type of access as well as other factors such as roadway speed, traffic volume, sight distance, etc.

Clearwater Road is classified as a local roadway, which means that commercial driveway spacing should be at least 100 feet depending on speed, volume, and sight distance based on the City's access spacing guidelines. Golf Course Drive is a major collector and commercial driveway spacing should be at least 1/16th mile to 1/8th mile (330 to 660 feet).

Along Clearwater Road, the proposed driveway access is located approximately 320 feet west of Golf Course Drive, approximately 175 feet west of the Michaels access, and approximately 100 feet east of the shared Target/Michaels access.

- The Clearwater Road access meets spacing guidelines, with at least 100 feet between each access. The spacing between the driveways provides enough space to stripe a short westbound left turn lane for vehicles entering the driveway.

Along Golf Course Drive, the proposed driveway access is located approximately 170 feet south of Clearwater Road, at the existing parcel lines on both the east and west side of the road.

- The proposed access does not fully meet access spacing guidelines as it is not 330 feet from Clearwater Road; However, the driveway lines up with the property lines on the east side of Golf Course Drive; the east side of Golf Course Drive should have a shared driveway in the future for the two parcels directly south of Clearwater Road.

4.2 Intersection Turn Lane Review

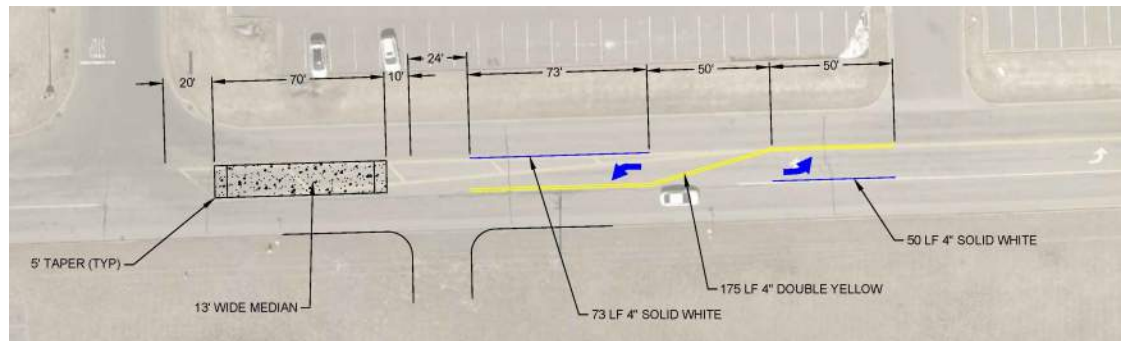
Providing turn lanes at an intersection or access driveway can provide a significant safety benefit as vehicles decelerate to make the maneuvers. A review of the two driveway access locations on Clearwater Road and Golf Course Drive were reviewed for intersection turn lanes.

Chapter 4 of MnDOT's *Traffic Engineering Manual* provides guidance on when intersection or driveway turn lanes may be warranted; it should be noted that meeting a warrant does not require the addition of turn lanes as other factors may be considered. MnDOT provides volume warrant thresholds that were considered at the following locations:

- Clearwater Road at Bank Access:
 - Proposed driveway is expected to have less than 375 vehicles per day.
 - Clearwater Road has a 2023 AADT of 2,050 vehicles.
 - Based on Tables 4-23 and 4-24 in the MnDOT *Traffic Engineering Manual*, the access does not meet the left or right turn lane requirements
- Golf Course Drive at Bank Access:
 - Proposed driveway is expected to have less than 375 vehicles per day.
 - Clearwater Road has a 2019 AADT of 5,300 vehicles.
 - Based on Tables 4-23 and 4-24 in the MnDOT *Traffic Engineering Manual*, the access does not meet the left or right turn lane requirements.

The proposed access locations on Clearwater Road and Golf Course Drive are not expected to meet turn lane warrants based on daily roadway and driveway volumes. However, it is recommended that Clearwater Road be restriped to include a short westbound left turn lane (50-100 feet) for the Clearwater Road access to make use of the existing striped median/turn lane space along Clearwater Road. To add the turn lane, the eastbound left turn lane and taper length at the intersection of Clearwater Road and Golf Course Drive will need to be shortened slightly, while still maintaining space for left turns into the Michaels access. A median should be added between the shared Target/Michaels access and the proposed bank access to prevent vehicles from using the median space to make a left turn into the Days Inn and Suites Driveway, which is located west of the shared Target/Michael access, presenting a safety issue for head-on left turning vehicles. **Figure 3** shows the recommended Clearwater Road adjustments; a full layout and vehicle turning movements are provided in **Appendix B**.

Figure 3 – Clearwater Road Adjustments



5 Conclusion

The proposed 7,500 square foot (SF) bank with drive-through is located on the southwest corner of the intersection of Clearwater Road and Golf Course Drive. The proposed bank is expected to generate approximately 742 trips per day, with 75 in the AM peak hour and 158 in the PM peak hour.

Based on the site location, trips to and from the site are expected to spread between both Clearwater Road and Golf Course Drive to access major roadways such as TH 371, TH 210, Excelsior Road, Cypress Drive, and Wolda Road. The development is not expected to significantly impact traffic operations.

The proposed site plan includes two driveway access locations, one on Clearwater Road and one on Golf Course Drive.

- The Clearwater Road access meets spacing guidelines, with at least 100 feet between each access. The spacing between the driveways provides enough space to stripe a short westbound left turn lane for vehicles entering the driveway.
- The Golf Course Drive access does not meet the 1/16th mile (330-foot) spacing guideline; However, the driveway lines up with the property lines on the east side of Golf Course Drive for a future shared access.

The proposed access locations on Clearwater Road and Golf Course Drive are not expected to meet MnDOT *Traffic Engineering Manual* turn lane warrants based on daily roadway and driveway volumes. However, it is recommended that Clearwater Road be restriped to include a short westbound left turn lane (50-100 feet) for the Clearwater Road access to make use of the existing striped median/turn lane space along Clearwater Road. To add the turn lane, the eastbound left turn lane and taper length at the intersection of Clearwater Road and Golf Course Drive will need to be shortened slightly. A median should be added between the shared Target/Michaels access and the proposed bank access.

5.1 Recommendation

Based on the high-level traffic review of the proposed bank with driveway through development in the southwest corner of the intersection of Clearwater Road and Golf Course Drive, the development is not expected to significantly impact the surrounding roadway network. The access locations as currently shown are acceptable, with the Clearwater Road access meeting the 100-foot spacing guidelines and the Golf Course Drive access lining up with the property lines

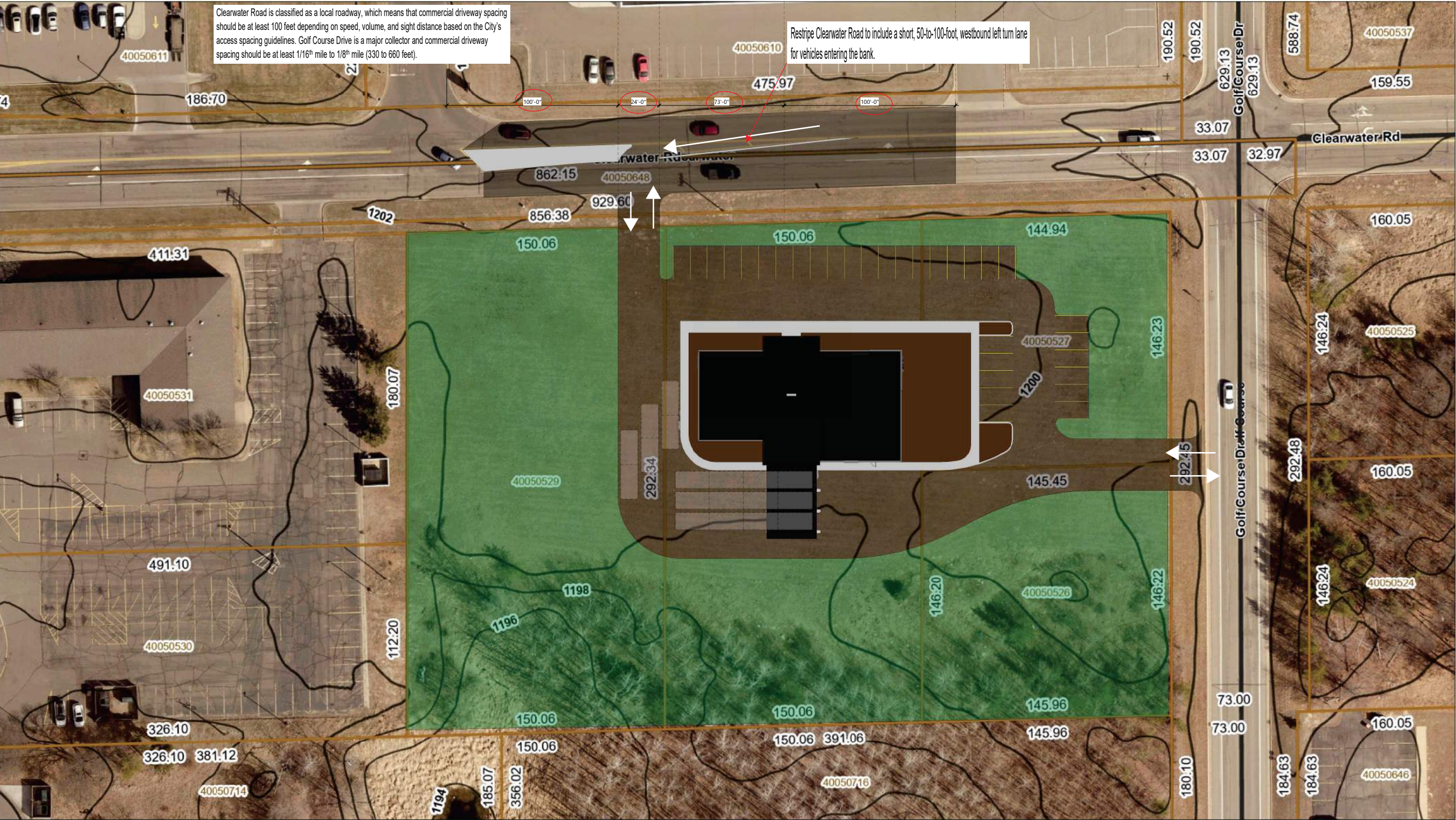
on the east side of Golf Course Drive, providing the opportunity for a future shared access on the east side of the roadway.

The following improvements should be made along Clearwater Road as part of the development:

- Restripe Clearwater Road to include a short westbound left turn lane by shortening the eastbound left turn lane and taper length at the intersection of Clearwater Road and Golf Course Drive.
- A median should be added on Clearwater Road between the shared Target/Michaels access and the proposed bank access to prevent vehicles from using the median space to make a left turn into the Days Inn and Suites Driveway, which presents a safety issue for head-on left turning vehicles.
- **Figure 3** shows the recommended Clearwater Road adjustments; a full layout and vehicle turning movements are provided in **Appendix B**.

Appendix A

Development Site Plan



BELL BANK - BAXTER, MN

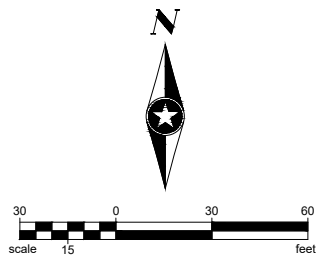
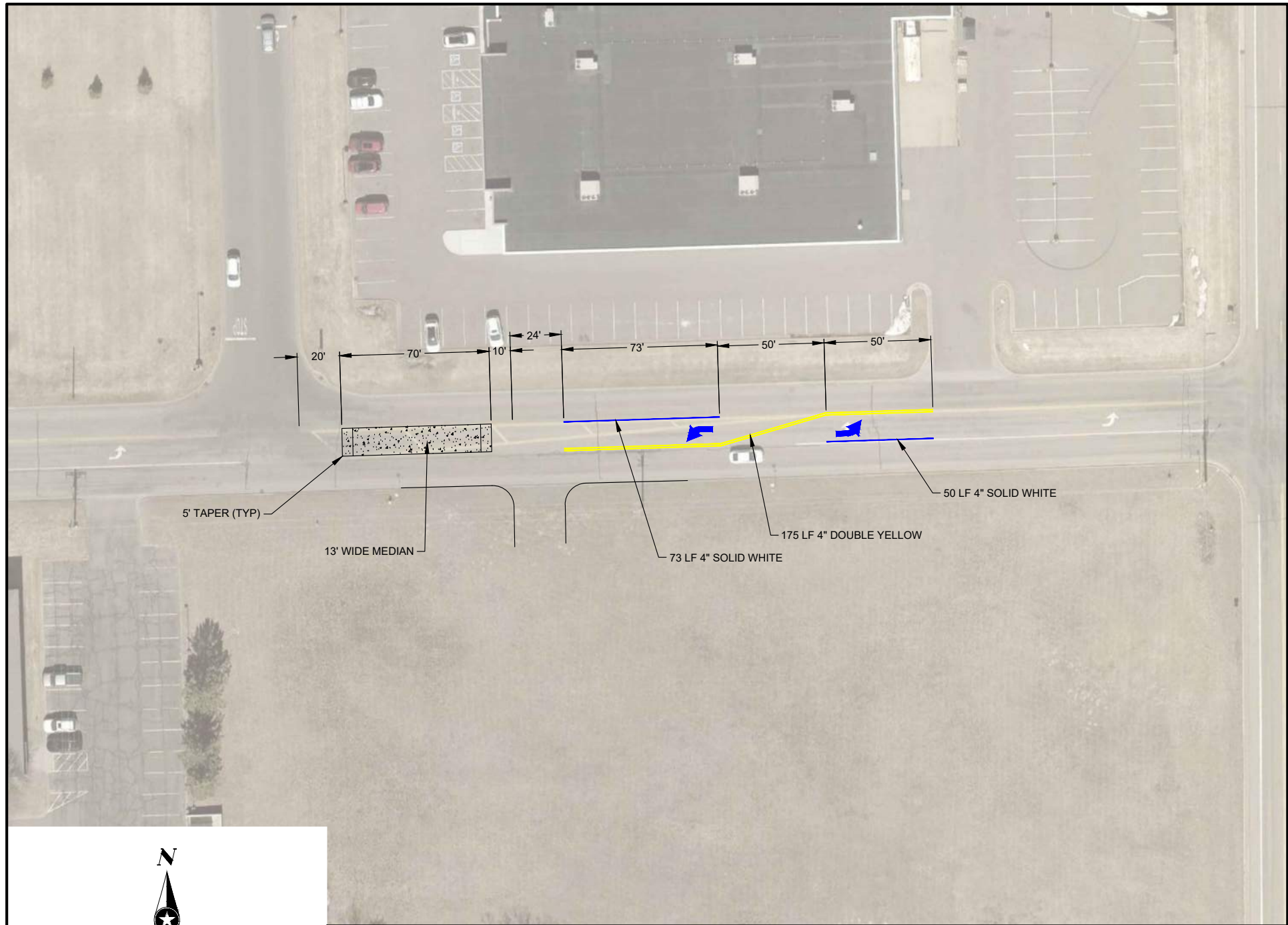
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Appendix B

Clearwater Road Adjustments Layout

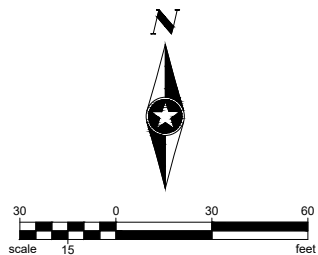
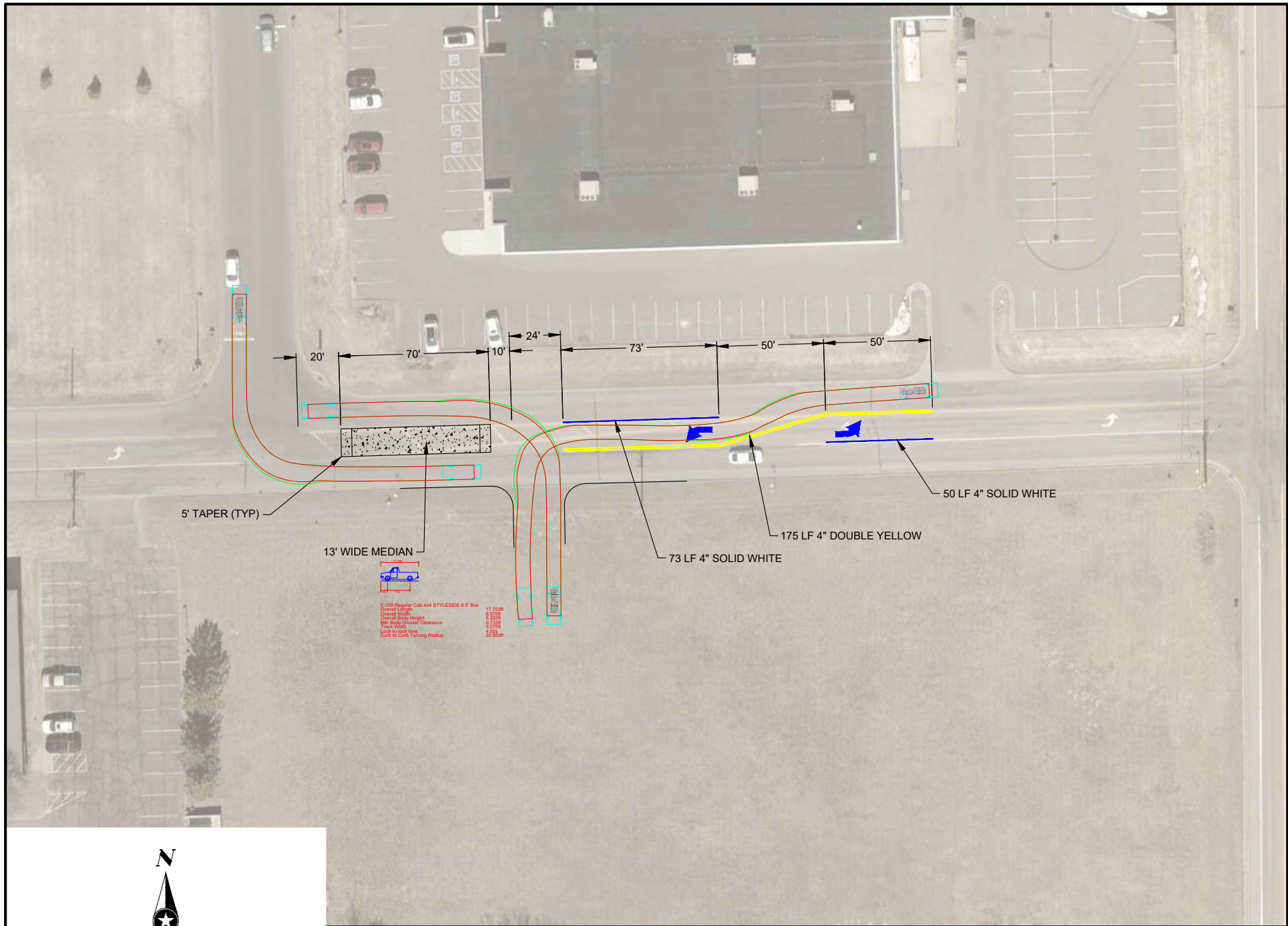
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06/03/2026

**CITY OF BAXTER
CLEARWATER ROAD ADJUSTMENTS
BELL BANK**

**FIGURE
NO. 1**



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**CITY OF BAXTER
CLEARWATER ROAD ADJUSTMENTS
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**FIGURE
NO. 2**

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