

There are seven T intersections along this route:

- Price Way - there is an entrance opposite of this roadway
- 290<sup>th</sup> Street (south junction E63) - there is a safety ramp here already
- Sanford Avenue - there is a safety ramp here already
- 280<sup>th</sup> Street (north junction E63) - there is a safety ramp here already
- 275<sup>th</sup> Street - a safety ramp will be evaluated after survey is obtained
- 265<sup>th</sup> Street - a safety ramp will be added here within existing right of way
- 260<sup>th</sup> Street - a safety ramp will be evaluated after survey is obtained

Survey has been requested for safety ramps at 275<sup>th</sup> Street, 265<sup>th</sup> Street, and 260<sup>th</sup> Street from Marshalltown construction.

There are three bridges located within the project limits. No bridge work is anticipated with this project. The following bridge related work is proposed as part of this project:

- FHWA #35361/IDOT 64094.4S014 (1985, Over South Timber Cr., 150' x 44')
  - Update guardrail. Based on current guardrail standards, entrances in the northwest and southwest corners may need to be relocated to allow for the required guardrail layout. Survey will be requested from Marshalltown construction.
  - Replace the EF joints (both approaches)
- FHWA #35381/IDOT 64096.5S014 (1985, Over Middle Timber Cr., 123' x 44')
  - Update guardrail.
  - Replace approach pavement (both approaches). This will likely involve closing one traffic lane using temporary signals.
- FHWA #35391/IDOT 64097.7S014 (1992, Over Timber Creek, 138' x 44' wide)
  - Update guardrail.
  - Replace the EF joints (both approaches)
  - Mill existing HMA and overlay approach pavement (both approaches)

There is one culvert along this route marked with a Type 2 or 3 object marker. The Type 2 object marker is at station 465+79 right (MP 98.0) for a 3'x2' RCB. The right side of the RCB will be extended with a 36-inch diameter RCP and apron.

During the five-year study period from January 1, 2007 through December 31, 2011, there were 83 crashes including: 0 fatal crashes, 2 major injury crashes, 5 minor injury crashes, 9 possible/unknown injury crashes, and 67 property damage only (PDO) crashes. The crash rate for this project was 237 crashes per hundred million vehicle miles travelled (HMVMT), while the injury/fatal crash rate was 45 per HMVMT. The comparable statewide rural primary Iowa rates are 97 per HMVMT (all crashes) and 29 per HMVMT (injury/fatal crashes). The major causes of the crashes were as follows:

<b>Major Cause</b>	<b># of Crashes</b>
Animal	47
Swerving/evasive action	7