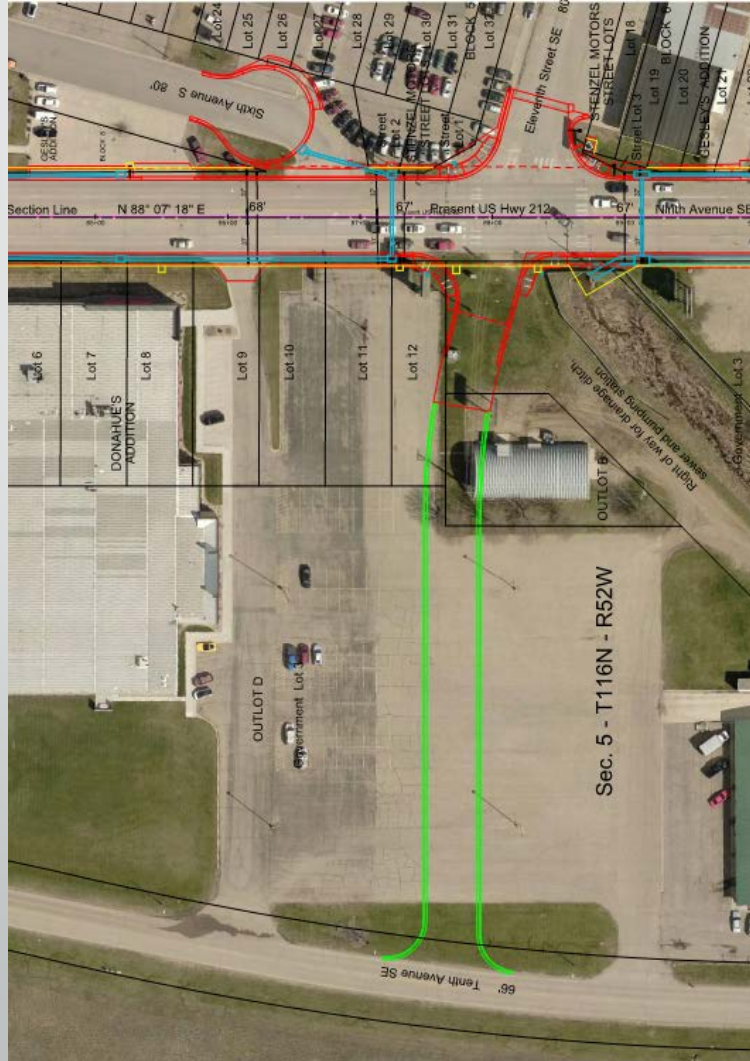


Highway 212 Phase II Traffic Impact Study Discussion

Heath VonEye, M.Sc., P.E., City Engineer

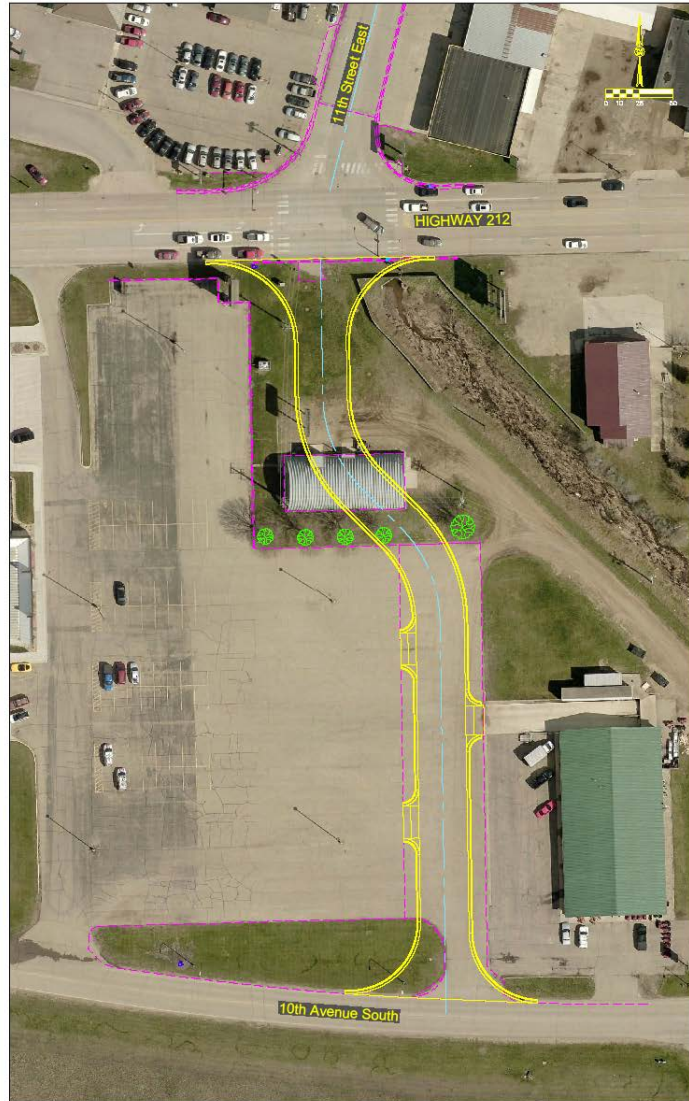
Colin Paulsen, Assistant City Engineer

11th Street SE Extension



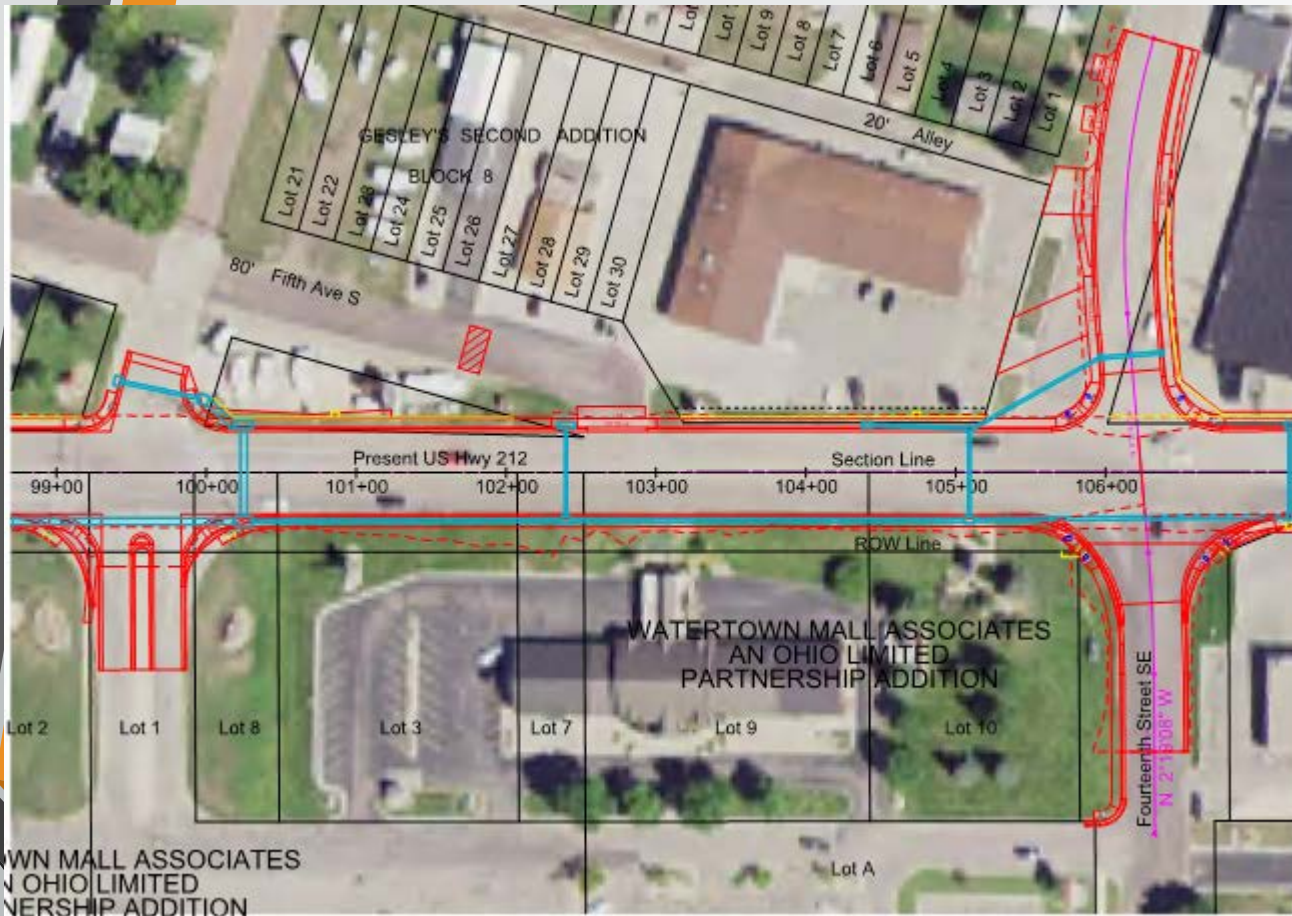
- Property owner to south has requested access at this location
- State is moving forward with design as a public roadway connection to the south
- State will be responsible for signal upgrades
- Potential City cost in this area will be fencing along Roby Creek and potential drainage improvements
- Note: 6th Avenue SE will be disconnected from Highway 212

11th Street SE Extension Traffic Impact Study Results



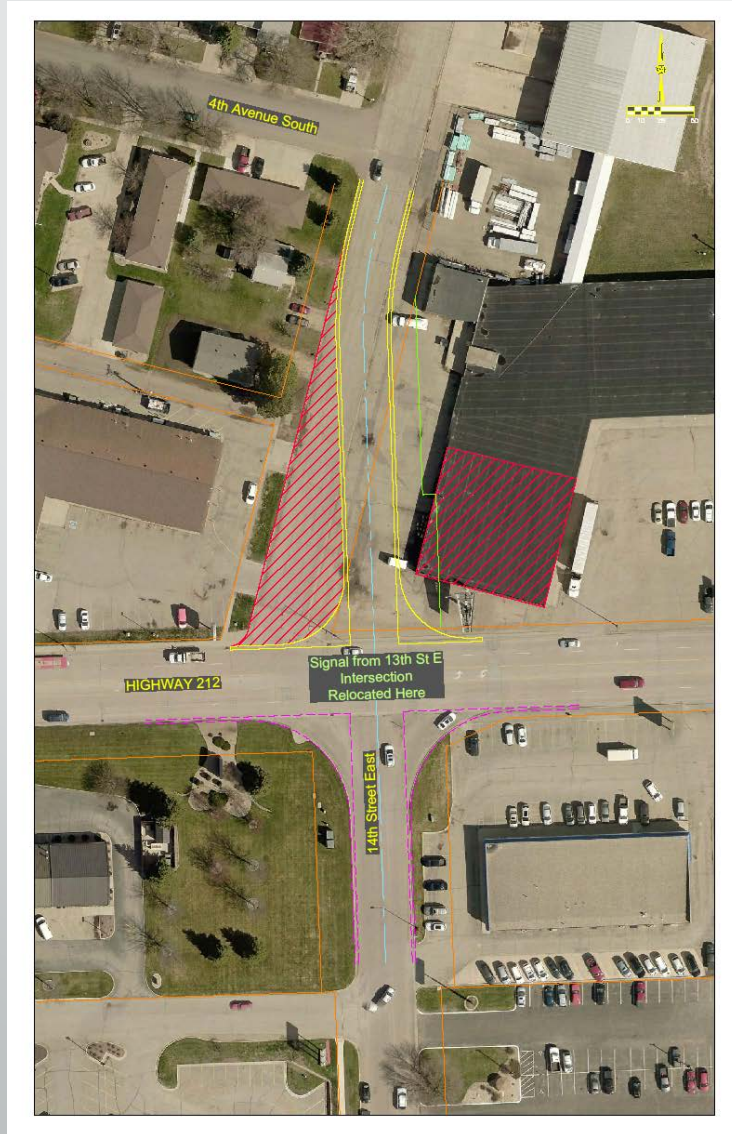
- Current Level of Service (LOS): A
- 2041 LOS: B
- Under 2041 build conditions, this intersection showed adequate operations during peak hours
- No adverse impacts to Highway 212 expected
- Alignments strictly for representational purposes only
- Future extension of 11th Street will be the responsibility of the developer

14th Street SE Realignment



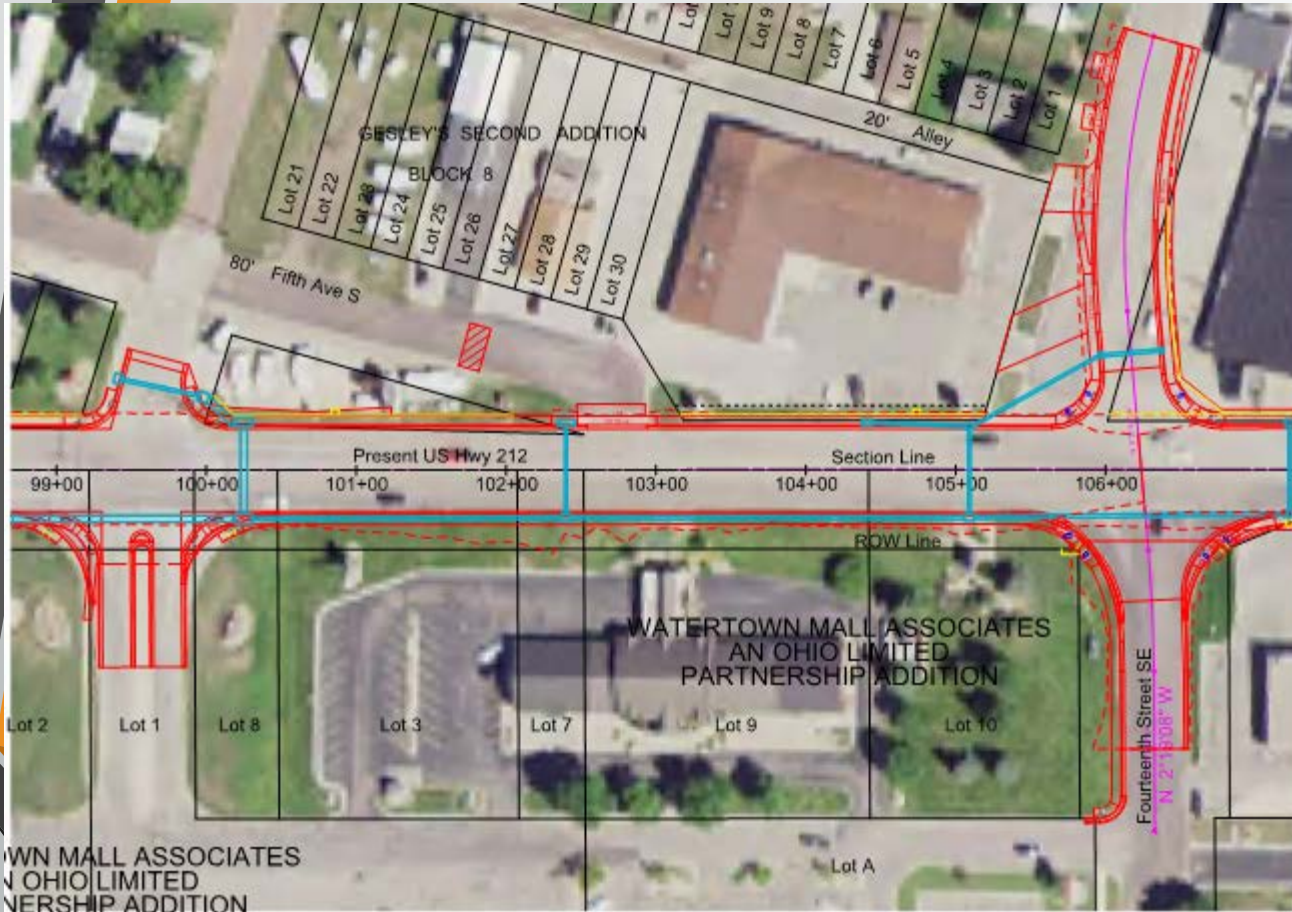
- Traffic signal from 13th Street SE will be relocated to 14th Street SE
- State is currently moving forward with realignment design on 14th Street SE
- North leg will be realigned to match south leg
- No impacts to existing buildings are expected
- Sidewalk and Curb and Gutter will be extended to north
- All associated costs beyond Highway 212 right-of-way will be a City expense
- Note: 5th Avenue SE will be disconnected from Highway 212

14th Street SE Realignment Traffic Impact Study Results



- Current Level of Service (LOS): F
- 2041 LOS (with signal and realignment): A
- 2041 LOS (without signal): F
- LOS does drop to a B during weekend peak hours under sporting event conditions
- Under 2041 build conditions, this intersection showed adequate operations during peak hours
- No adverse impacts to Highway 212 expected
- Would significantly decrease delays and queues on minor leg of intersection
- Traffic Signal is warranted

13th Street SE Traffic Impact Study Results



- Current Level of Service (LOS): B
- 2041 LOS (with signal): A
- With intersection under stop control on 13th Street SE in 2041, study shows poor operation during peak hours
- However, a sensitivity analysis shows adjacent signalized intersections will accommodate highest traffic demands in a 2041 full-build situation
- No adverse impacts to Highway 212 expected, even with relocation of signal
- If traffic is redistributed to other intersections (11th and 14th), 13th Street is expected to function at acceptable levels

17th Street SE/19th Street SE Realignment



- 10th Avenue would extend to 19th Street and Target parking lot
- Frontage road would no longer have access onto 19th Street
- Four-way intersections possible at 17th Street/10th Avenue and 19th Street/10th Avenue
- City would pay most of these costs associated with this realignment
- State is still reviewing possible cost participation

17th Street SE/19th Street SE Realignment Traffic Impact Study Results



- 17th Street Current Level of Service (LOS): F
- Future LOS was not analyzed
- If this intersection is removed, no adverse impacts to Highway 212 expected.

- 19th Street Current Level of Service (LOS): C
- 2041 LOS (no build and full-build): B
- No adverse impacts to Highway 212 expected with changes.

- Frontage Road Current Level of Service (LOS): B
- 2041 (No build) LOS: D
- 2041 (full-build) LOS: F
- Planned improvements should consider future turning movements
- No adverse impacts to Highway 212 expected with changes.

Staff Summary

- Engineering staff agrees with results of the Traffic Impact Study
- City staff will continue to work with SD DOT to implement desired improvements
- Potential City costs for improvements will be presented at a later meeting
- City will be responsible for drainage improvements, upgraded lighting, upgraded cosmetics, and most work completed outside Highway 212 right-of-way