

Rationale for the Detention Pond

1. The City performed a storm water analysis which indicated that flooding occurs in the East Forest neighborhood. The City determined that the homes experience modeled flooding along Old Post Road. The house at 6937 Old Post Road experiences first floor and crawl space flooding. The house at 6931 Old Post Road experiences crawl space flooding. The house at 6925 Old Post Road experiences crawl space flooding. The City storm water study results matched reported flooding in the neighborhood and documented photographs of rain events in the area (see photos attached).
2. In an effort to reduce the impacts of storm water on these properties, the downstream system was proposed to be increased in size. This pipe system begins at 6931 Old Post Road, follows down McLaughlin Drive, and empties in the CSXT railroad right-of-way. The new pipe design would increase ponding in the CSXT right-of-way since it would reduce flooding in the neighborhood and more efficiently direct the storm water to the railroad property. This design would have removed ponding that currently impacts the houses referenced above.
3. Because the pipe system ends in the railroad right-of-way, CSXT required their review of the construction plans. CSXT requested the City provide storm water detention in order to not increase water flowing onto the CSXT right-of-way. Without CSXT approval, the City cannot legally work on CSXT property and therefore an alternate design was developed. Other than detention, another alternative considered was to install a larger pipe under the railroad. This would prevent the increase of water ponding on railroad property. This alternate was determined by the project team to not be feasible because it would require enlarging the project significantly in scope, cost, and time. In order to install a larger pipe under the railroad, the project would need to take years to study the impacts of releasing this additional water below the railroad. This is required to ensure there would not be impacts to roads and houses downstream. Although there has been no determination of what the additional project work could cost, the effort was estimated in the millions based on City experience.
4. The City pursued detention opportunities in the neighborhood as the most effective solution to support the proposed sidewalk work and to reduce flooding in the project area.
5. The first area considered for detention was at the old swim club location. This alternate was determined to not be the most cost efficient solution for the storm water issues in the neighborhood. This alternate would also involve installing storm water improvements in an area of the neighborhood that doesn't experience storm water problems.
6. The second area considered for detention was at 6931 Old Post Road. In order to provide enough area to handle the storm water during rain events and to not impact the railroad property downstream, it was determined that the house would need to be demolished. Therefore, the City planned to purchase the house and assist the owner to relocate. This alternative was determined to be the most cost efficient solution for the storm water issues in the neighborhood. This alternate also, addresses the storm water issues at the location of the flooding problems.