



# City of Austin

Founded by Congress, Republic of Texas, 1839  
Watershed Protection Department  
P.O. Box 1088, Austin, Texas 78767

June 29, 2018

Mr. Jon Geiselbrecht  
Environmental Coordinator  
Texas Department of Transportation  
P.O. Drawer 15426  
Austin, TX 78761-5426

Re: City of Austin Comments on the Draft Environmental Impact Statement for the  
Oak Hill Parkway EIS No. 20180078.

Dear Mr. Geiselbrecht:

The City of Austin (the City) has reviewed the Draft Environmental Impact Statement (DEIS) for the Oak Hill Parkway Project (OHP), which was published for public comment on May 4, 2018. We offer the following comments for your consideration.

The City looks forward to continuing our collaboration with the project sponsor, the Austin District of the Texas Department of Transportation (TXDOT), during the design and construction phases of the project. We feel it is important to engage collaboratively to achieve a shared goal of avoiding, minimizing, and mitigating potential adverse flooding and environmental impacts. Also, one of our primary goals in providing these comments is to identify potential locations for stormwater quality controls that we believe could present partnering opportunities between TXDOT and the City, similar to the funding partnership for the replacement of the Old Bee Cave Road bridge.

The attached comments include suggestions on various technical issues to be considered for the OHP. Importantly, many of the technical and coordination issues and opportunities associated with this project are substantially similar to issues and opportunities associated with other projects that have recently undergone environmental review, specifically the SH45 SW and MoPac South Intersections projects. Accordingly, we are hopeful that TXDOT will apply coordination processes, environmental protection strategies, and other best practices similar to what was employed in those projects.

The City looks forward to continuing to build a strong collaborative relationship with TxDOT for the betterment of our community and the region, both in terms of addressing pressing mobility issues and protecting the natural environment. If the project is reconfigured to include the tolled lanes option again, we will want to extend our collaboration and partnering to include the Central Texas Regional Mobility Authority.

Should you have any questions or would like to further discuss these concerns, please contact Mr. Mike Kelly, P.E. at (512) 974-6591, or at [mike.kelly@austintexas.gov](mailto:mike.kelly@austintexas.gov).

Sincerely,

A handwritten signature in blue ink that reads "Michael L. Personett". The signature is fluid and cursive, with the first name "Michael" being the most prominent part.

Michael L. Personett, Interim Director  
Watershed Protection Department

cc: Carlos Swonke, P.G., Director of Environmental Affairs, TxDOT  
Joe Pantalione, Interim Assistant City Manager, City of Austin  
Robert Goode, P.E., Assistant City Manager, City of Austin,  
Robert Spillar, P.E., Director, Austin Transportation Department, City of Austin

**Oak Hill Parkway – US 290/SH 71  
Draft Environmental Impact Statement  
Summary of City of Austin Comments  
June 29, 2018**

**General Comments:**

**Comments on Flood Mitigation Modeling and Design:**

1. This project is located within an area, and upstream of areas, where significant flooding has occurred on the Gaines Tributary of Barton Creek, and on Williamson Creek. We have had many citizens impacted by flooding along both creeks express their concern about the flood impacts of the OHP project. The spillover from Williamson Creek to the Gaines Tributary located near Patton Ranch Road is critical to flood control on both Williamson Creek and on the Gaines Tributary. Any changes in the distribution of flow at this location could increase the risk of flooding on one or both creeks. Please provide the City the opportunity to review and discuss grading plans/changes in this critical area during the design process. In addition, due to the flooding problems noted above, and the desires of the local community to go beyond the minimum requirements to meet state and federal standards, we hope that TxDOT will consider complying with City of Austin flood control standards in this project during final design. In general, COA policy is to control post development runoff such that no development will result in additional adverse flooding impacts. These standards can be found in the Drainage Criteria Manual at [https://library.municode.com/tx/austin/codes/drainage\\_criteria\\_manual?nodeId=DRCRMA](https://library.municode.com/tx/austin/codes/drainage_criteria_manual?nodeId=DRCRMA). We would appreciate commitments to this standard of design to be included in the FEIS.
2. HEC-HMS and HEC RAS models were provided to the City on 3/27/2018. Following are questions/comments regarding these models used in Appendix I - Hydrology and Hydraulics Study US 290/SH 71 Oakhill Parkway Project - Travis County – June 2017:
  - a. The current effective hydrologic model was converted from HMS 2.2.2 to HMS 3.5 to create the revised effective model – was an evaluation of the differences in the results of the two models conducted? How do the revised effective flows compare to the current effective flows? The flows in the RAS flow table in the existing conditions model are substantially different than those in the current effective model (e.g., for 1% existing conditions, XS90177 is 1289.5 in the revised effective model, and 3170 in the current effective model).
  - b. In Table 14 of the H&H study, the WSEL elevation at XS 86254 is 887.43 for existing conditions. The WSEL in the current effective model is 888.46, an almost 1-ft difference. We believe the WSELs in the current effective and revised effective models should agree. Please explain.
  - c. The Kincheon subbasin modifications mentioned in the H&H report (p21) were not included in the revised proposed effective models (the subbasin areas not adjusted).

- d. It appears some RAS cross sections (current effective and proposed models) in the uppermost reach of Williamson Creek were eliminated (upstream of XS90177) and that run optimizations were turned off to run the model. Please explain.
3. It is expected that the Atlas 14 rainfall data and analyses will be published in October 2018, well before the OHP project design is completed. Preliminary Atlas 14 information indicates the new 100-year rainfall depth will be on the order of 13.0 inches, or nearly equivalent to the existing 500-year event. An increase of this magnitude will almost certainly impact the design of the proposed detention ponds and other drainage infrastructure on the project. The City of Austin is in the process of adopting the updated Atlas 14 rainfall intensities data and for consistency, we recommend TXDOT adopt when analyzing 100-year floodplains. At the least, we recommend that the EIS recognize and discuss the implications of Atlas 14.
4. The City of Austin, in its capacity as floodplain administrator through the NFIP, maintains the floodplain maps for Williamson Creek. Projects, such as the Oak Hill Parkway, that result in any changes to water surface elevations at any cross sections within a FEMA mapped floodplain are required to submit a LOMR after completion of the project. The LOMR and revised models are critical to provide accurate information for future flood risk reduction efforts, as well as for new development in the area. We encourage TXDOT to develop and submit a LOMR for this area, using the Atlas 14 rainfall intensities.

#### **Comments on water quality and environmental features**

1. Most of the proposed roadway improvements is within the recharge zone of the Barton Springs segment of the Edwards Aquifer and, as noted in the DEIS, is subject to the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Rules. However, as noted in the many public meetings on the project, the community concern for water quality protection goes beyond the requirements of TCEQ regulations. The City requests that that TXDOT consider compliance with the City of Austin standards for protection (i.e., buffers) of Critical Environmental Features (CEFs). The CEF's of primary concern are recharge features within the limits-of-construction.
2. Concerning Table 3-2 Item 4, please be advised that in addition to an Edwards Aquifer Protection Plan (EAPP) to meet the stated objectives in section 2.2.1 of the DEIS, we request that the project attain a higher standard of water quality protection as represented by the standards achieved on the SH45 SW project. With the area being relatively congested, achieving non-degradation may be infeasible for the whole road. Alternatives, such as purchase of undeveloped land elsewhere in the BSZ, might be considered as mitigation.
3. One significant sinkhole feature, Flea Market Sink, was not identified in the Geological Assessment in Appendix D. This sink is located at 5600 Block of US Hwy 290. This feature should be included and addressed in the FEIS geologic assessment. It seems to appear in the previous plans for the TxDOT project constructed in 1996-1998 under Federal Aid Project 0113-09-048. Inspection of the site indicates that there is a vertical pipe in the bottom of the feature and it appears to be connected to the storm sewer system of the Industrial Oaks Pond as DA 2-A26.

This feature does not appear to accept roadway runoff but should remain protected with a vegetative buffer and be considered for restoration as a functioning recharge feature

4. In addition to the Flea Market Sink, Gaines Sink is another significant recharge feature located within the US Hwy 290 right-of-way at the intersection with Loop 1. We would like to participate in the preliminary engineering and design phase to determine the feasibility of constructing a water quality control that would improve the quality of recharge to this feature. Please contact David Johns, P.G. for consultation and assistance.

Karst features are abundant in this area and excavation into bedrock likely will encounter additional unknown features. Mitigation of karst features encountered during construction is required under ECM 1.12.0. We request that TXDOT apply these requirements in the project design and in construction specifications.

5. Appendix H P. 13: Ponds A, K, P, and Q are identified as noted as bioretention ponds. The TCEQ has updated its criteria for these controls, but has not yet modified the guidance document in RG-348 to correspond to these changes. The modified criteria include increased water depth, reduced filtration media thickness, and reduced organic matter (i.e., elimination of compost) in filtration media. These changes bring TCEQ criteria into closer alignment to those in the City of Austin Environmental Criteria Manual. These changes were made through the Edwards Aquifer Program Committee via Interoffice Memorandum (Garrett 2012). We can provide a copy of the updated criteria prior to the design phase if needed.
6. We understand most of the work to be done on U.S. 290 east of Joe Tanner to Loop 1 will be widening, resurfacing and restriping and that no new permanent water quality controls will be required under the TCEQ Edwards Aquifer Rules. We would however like to discuss the potential to retrofit this portion of the project with water quality controls to at least TCEQ standards and perhaps better. If feasible and with required approvals, this could be funded in whole or part by the City.
7. TXDOT provided plans for two previously proposed projects in the OHP project area: (1) US 290/SH71 from east of Industrial Oaks Boulevard to west of Westgate Boulevard, and Loop 1 from north of Gaines Creek to US 290 Interchange [1989-1991]; and (2) US 290/SH 71 from east of the Williamson Creek Bridge to 0.5 miles east of Industrial Oaks Boulevard [1996-1998]. Water quality controls are shown in both plan sets. We would like to examine this area further during the OHP design phase to evaluate the feasibility and cost of adding water quality controls to improve treatment of existing roadway impervious cover. We would appreciate acknowledgement of this potential partnering opportunity in the FEIS, along with a commitment to assist with the evaluation.
8. From site reconnaissance, there appear to be four specific locations that may be opportunities for improved stormwater treatment for the previously constructed segments of the OHP project. As with the areas described above, we would like to discuss the feasibility and costs of improved water quality control at these locations, again with the potential funding by the City. These locations are described below and illustrated in the attached map:
  - a. Existing Regional Facility near Flea Market Sink;

- b. HazMat Trap 1 near the Gaines Creek tributary to Barton Creek;
- c. HazMat Trap 1 near the Gaines Creek tributary to Barton Creek; and
- d. Flea Mark Sink – potential SCMs in ROW.

**Additional Comments on DEIS:**

1. ES-21: Existing utilities including water, sewer, electrical, and natural gas lines have been a consistent problem with TxDOT projects in the Austin area. This may just be a function of the industry; however, in some cases utility coordination is not conducted in compliance with City codes because it is not strictly required of TxDOT. We feel that if TxDOT would take the same care with utility coordination that other developers do under City Code, some of the conflicts we have had on projects could be determined earlier and corrected in appropriate design phase.
2. ES-21: In addition to utility coordination, several recent projects in the Edwards Aquifer Zone associated with TxDOT roadway projects have encountered voids while in the process of constructing or moving utilities. This is probably inevitable, and you have procedures in place for this purpose, but we would appreciate if you could consider reviewing these recent events in terms of “lessons learned” to update any of your procedures or contracts or subcontractor agreements to better handle void mitigation and preservation of caves and recharge features when possible. In addition, if you would like any help with such a review, please contact David Johns P.G. or Scott Hiers P.G. at the City for assistance.
3. ES-21: The DEIS states that the build alternative will be constructed following the “usual method for reconstructing and upgrading a rural highway to an urban freeway with frontage roads”. As we suggested on SH45SW, we would appreciate if TxDOT would consider an alternative method of construction inspection and contract with an independent third party Environmental Compliance Manager (ECM) who reports to TxDOT (owner) rather than the contractor to oversee those aspects of construction that may have potential to result in offsite impacts. This has been successful on several City of Austin projects, and is most beneficial when the Environmental Compliance Manager has authority to stop work when a problem is identified. This is not the “usual method”, but an innovation that may help in this highly sensitive watershed. Also, as used in SH45SW, we recommend developing an Environmental Compliance Management Plan (ECMP) to provide all the necessary information related to environmental standards of performance to construction staff and contractors in one document. Finally, we recommend that the environmental performance responsibilities for contractors and their subcontractors be included in contract documents as clearly as possible including environmental training requirements, adherence to the ECMP and following instructions from the ECM.
4. P. 142: “A variety of regulations” are referred to that are in place to protect the quality of groundwater in Barton Springs; however, only compliance with 30TAC213 is proposed. Preparation of a WPAP according to these rules will not guarantee protection of groundwater quality. The Optional Enhanced Measures that “may be adopted to further protect water quality” are mentioned, yet this project does not comply with these measures. Also, the 2013 TxDOT-TCEQ MOU is mentioned to “require coordination with TCEQ” yet nothing is provided to say what this means or how this is supposed to add to protection of groundwater quality. Please explain.
5. P. 53: Section 4.2.1.2 cites Imagine Austin as locating the Oak Hill Activity Center for “Redevelopment in Sensitive Environmental Areas” and requiring “state-of –the art and carefully

evaluated development practices to improve stormwater retention and the water quality flowing into the aquifer”. Although the stormwater controls planned for the OHP project are adequate to meet the state and federal regulations for the location, they would not be “state-of-the-art”, meet City of Austin regulations for the area, or even be designed to meet the Optional Enhanced Measures under the Edwards Aquifer Rules. As with the SH45SW project, we request that TxDOT commit to the higher standards adopted on SH45.

6. Appendix H P. 5: The maintenance guidelines of RG-348 for BMPs in the Edwards Aquifer Region are referenced, but little is discussed in specifics here or in the remainder of the DEIS concerning these maintenance activities, the importance of them, the frequency, or who will conduct them. This is typically left to final contracts and specifications stages and hopefully such things are considered in design. As suggested in previous projects in the BSZ, the level of care and oversight of BMP maintenance is one way that operations can be improved in environmentally sensitive areas. Although we have not been able to work out a method to do so in the past, we could still consider contracting with TxDOT for inspection and maintenance responsibilities by the City of Austin WPD Field Operations Division for TxDOT BMPs. Please contact Mike Personett to discuss this further.

#### References:

Edwards Aquifer Program Committee (EAPC) (2012). TCEQ Interoffice Memorandum to Susan Jablonski, P.E. Director, Central Texas Area. Revision of Bioretention in Technical Guidance Manual. June 1, 2012.



