

Environmental Services Report

AESA22-0004b/Cyrene at Hickory Creek (Barrel Strap Residential)

City Council District #4

AESA REQUEST:

The applicant, Jared Helmburger, on behalf of Justin Pasternak of Curve Development, has requested an Alternative Environmentally Sensitive Areas (AESA) Plan to remove a total of 0.66 acres of a complex of Environmentally Sensitive Areas that includes both Undeveloped Floodplain and Riparian Buffer, which is described in more detail below. The application is proposing to improve ecological conditions on the remainder of the Environmentally Sensitive Areas (ESAs) and open space, for a total of 1.234 acres.

Within the City of Denton certain areas with ecological value are designated as Environmentally Sensitive Areas. These areas are subject to regulations that limit land-disturbing activities to protect water quality, provide habitat, and provide critical wildlife corridors. Areas identified on the official ESA map are assessed as part of the development process.

Approval of an AESA Plan must first be obtained if a property owner wishes to deviate from protection requirements of an ESA provided in Section 7.4 of the Denton Development Code (DDC). Approval of an AESA Plan requires two public hearings, the first at the Planning and Zoning Commission for a recommendation and the second at the City Council for ultimate approval.

A full explanation of the request is below.

EXISTING SITE CONDITIONS:

An ESA Field Assessment (ESA21-0027) was performed by a third-party consultant and confirmed there is a complex of Undeveloped Floodplain ESA and a Riparian Buffer ESA of approximately 1.7 acres that supports Unnamed Tributary 3 to Bryant Branch. A more detailed description of the evaluated ESAs is provided in the Cyrene at Hickory Creek Alternative ESA Plan (Exhibit 4).

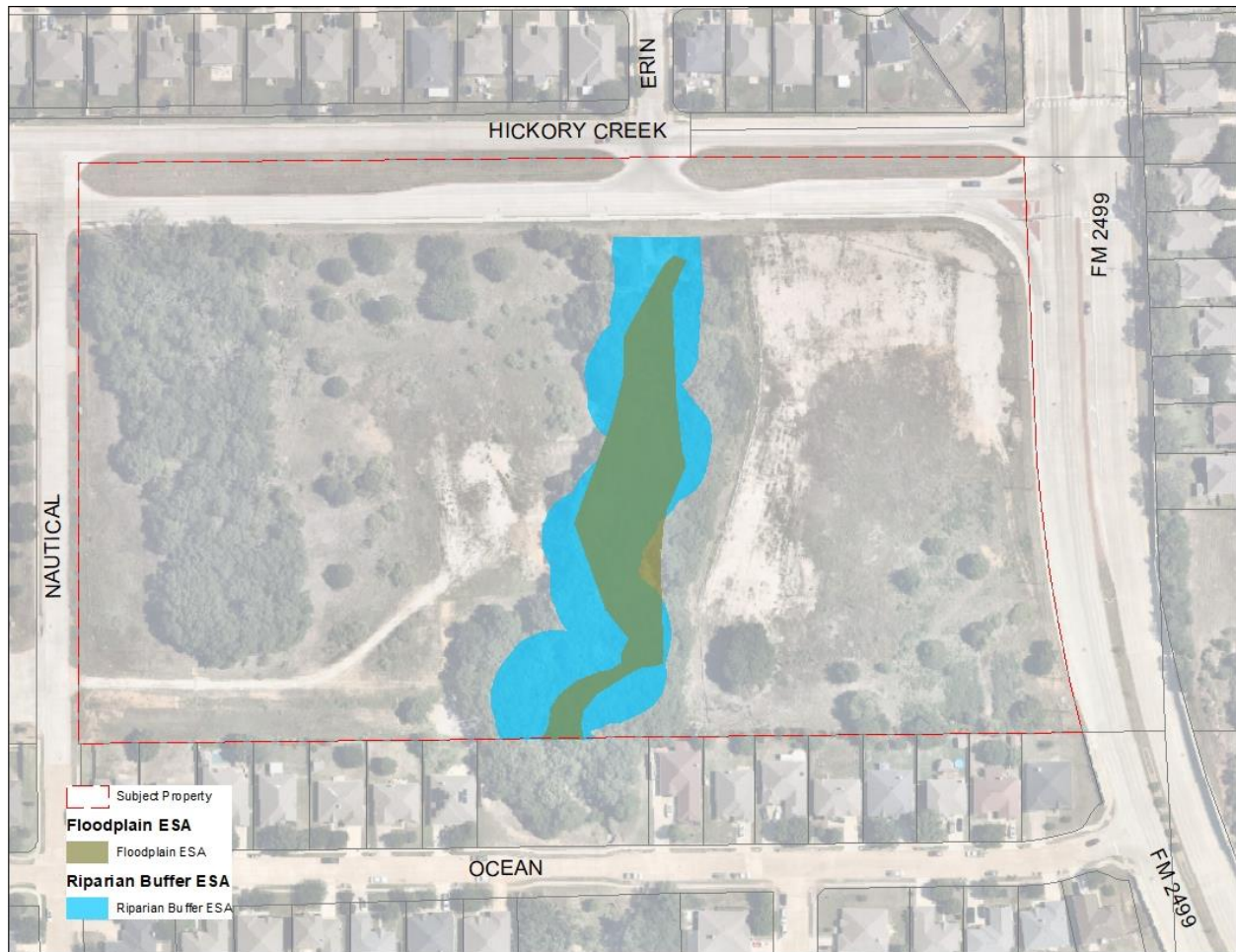


Figure 1: Existing Environmentally Sensitive Areas

A gas well located on the subject property was plugged and abandoned on March 17, 2022.

The development is seeking to align the northern entrance at a median opening on Hickory Creek Road, which also aligns with Erin Lane to the north.

PROPOSED IMPACTS TO THE ENVIRONMENTALLY SENSITIVE AREAS:

The applicant proposes to permanently remove 0.66 acre of ESAs (an overlap of 0.25 acre of Undeveloped Floodplain ESA and 0.66 acre of Riparian Buffer ESA). Placing the stormwater runoff in a storm drain pipe will allow the developer to construct an entrance to the neighborhood that aligns with Erin Lane, to the north. Additional construction impacts to support the development include stormwater outfalls and a sewer line. The location of the proposed impacts is shown in Figures 2 and 3 below.

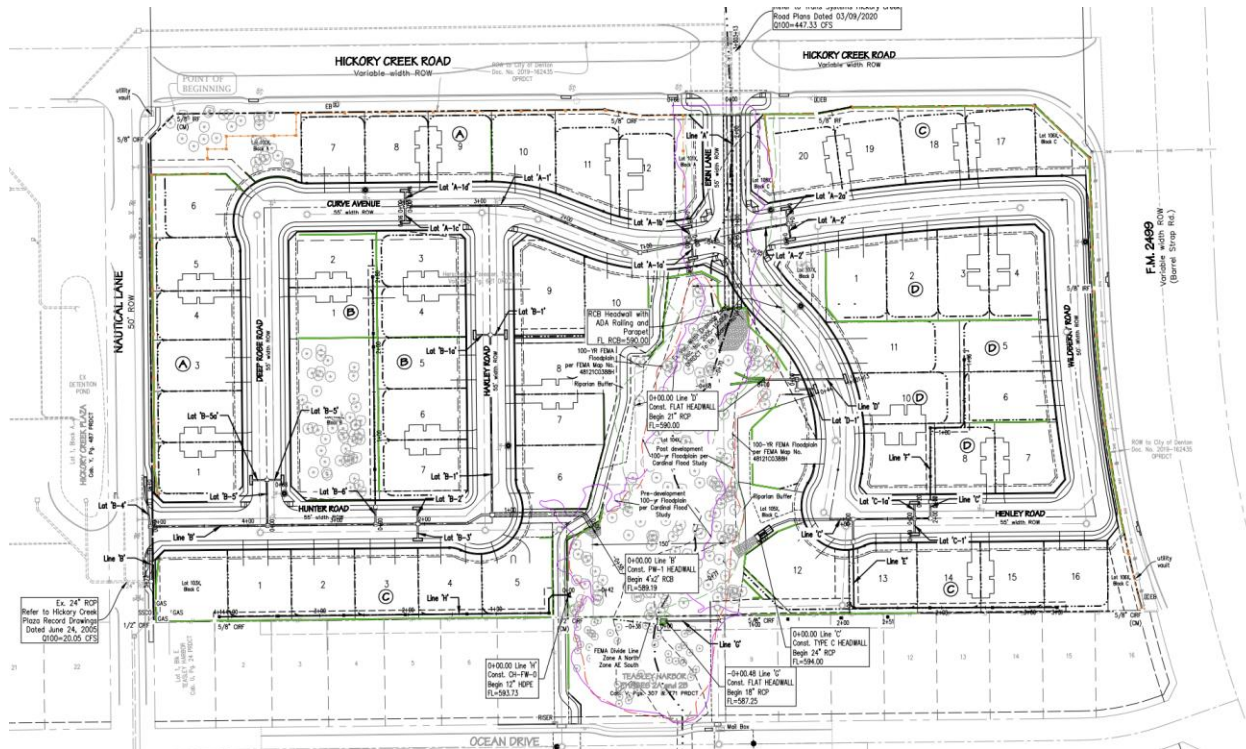


Figure 2: Proposed Development Layout

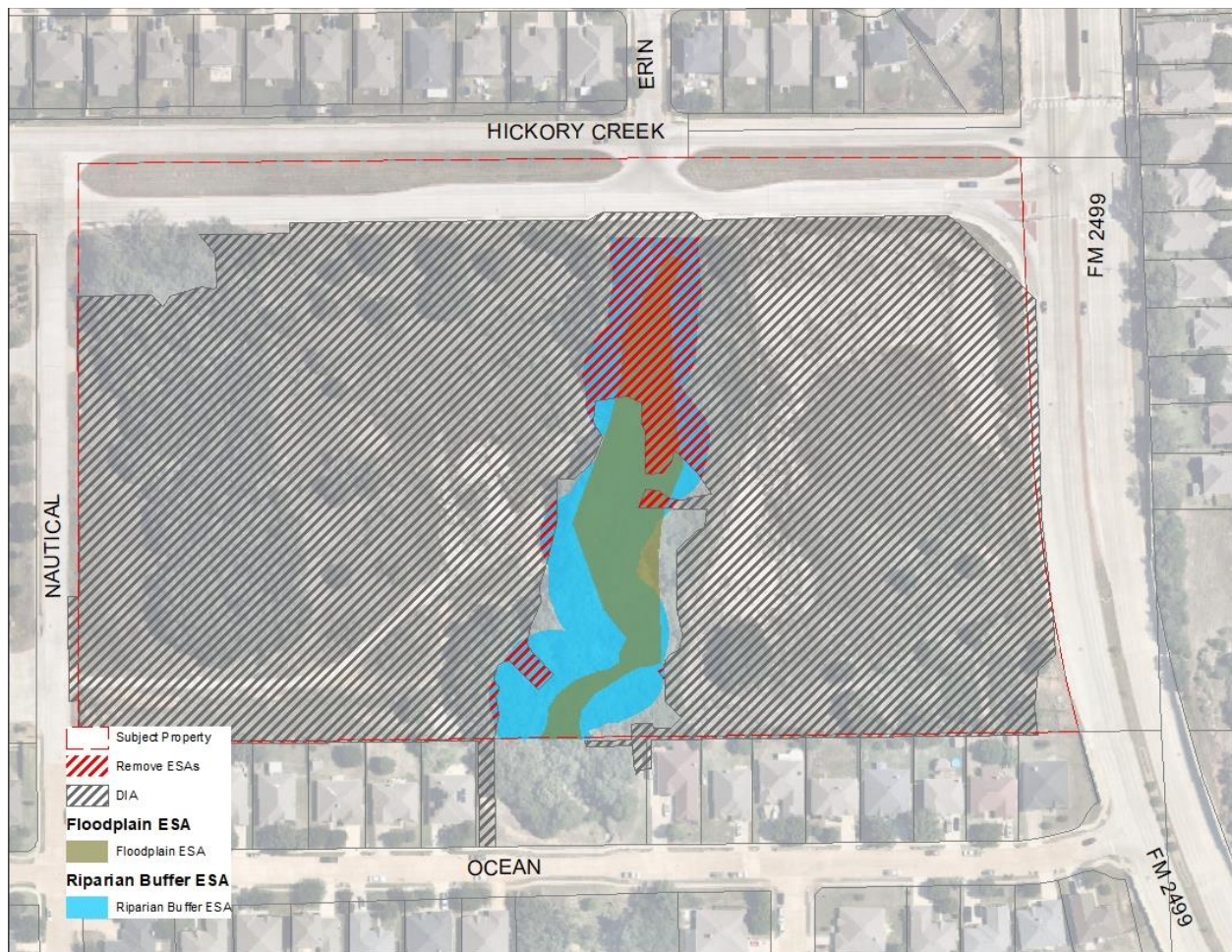


Figure 3: Proposed Development Impact Area, including the ESAs to be permanently removed

PROPOSED ALTERNATIVE ESA PLAN:

In exchange for the permanent removal of the ESAs the applicant is proposing to improve current habitat conditions within the remaining 1.234 acres of land. This will be achieved through a two-phase procedure. The first phase will be a targeted removal of the invasive privet plant. It is necessary to perform this work in the winter months (December/January) to reduce the opportunity for seed sprouting and mature plant re-sprouting. This also allows for a follow-up targeted re-growth in the early spring prior to further reduce the privet.

The second phase of habitat improvement is to re-introduce native grasses, trees and shrubs that are intended to reforest, reoccupy the space, outcompete invasive plants, and re-introduce a healthy habitat for wildlife and improved surface water conditions.



Figure 4: Proposed AESA Plan

Tree Impacts Consideration:

In accordance with DDC Section 7.4.10, trees within the development that are proposed to be removed are included in the Development Impact Area (DIA; the total area outside of preserved ESA that will be disturbed by development) and included in the accounting of whether a development meets minimum tree preservation in accordance with DDC Section 7.7. Seventy-seven (77) trees (1,030 DBH) within the ESAs are proposed to be removed and will therefore be included in the DIA and be mitigated for in compliance with DDC Section 7.7. However, there are additional trees within the ESAs that are at risk of damage or death due to the construction of the development. The applicant has stated additional protection will be afforded to ESA trees during construction. Construction activities near these trees include the construction of a retaining wall, excavation for stormwater flow, and grading for infrastructure.

The applicant has developed a plan to reduce the risk of damage to these trees' root systems by proposing alternative retaining wall construction, additional tree protection fencing and, when necessary, hand grading within the critical root zone (CRZ). In addition, some trees will be provided trunk protection measures.

Staff has also addressed these concerns by including a requirement in the Conditions for Approval (Condition 5) of this AESA Plan to replace any trees that are damaged or killed identified on the tree survey included in three-year post-construction annual inspection progress of the Alternative ESA Plan.

Floodplain Fill Consideration:

This development is proposing to modify a floodplain identified on Federal Emergency Management Agency (FEMA)'s Flood Insurance Rate Maps (FIRMs). In partnerships with cities, FEMA requires the concurrence review and approval of city floodplain managers when floodplain modifications are proposed.

At the time of this report the City Floodplain Manager has reviewed the requested floodplain modification application (Certified Letter of Map Revision, or CLOMR) and signed a letter of concurrence. This letter and a corresponding floodplain modification report has been sent to FEMA for review and approval. As with any application under review, it is in FEMA's scope to require additional modifications to drainage calculations and/or construction plans beyond what the city floodplain administrator has reviewed and approved.

Staff is proposing a condition to lessen the possibility of the remaining ESA and proposed 1.234 acres mitigation area to be further negatively impacted while at the same time providing flexibility to the applicant to address any FEMA requirements beyond what city staff has initially approved during the CLOMR concurrence review. Condition 3 allows temporary disturbance with mitigation, but not permanent removal, of the remaining ESA and mitigation area up to 10% (0.123 acre) for any changes necessary for addressing FEMA requirements. Any proposed impacts greater than this amount would require the applicant to seek a modification to this ordinance (Condition 4).

CONSIDERATIONS:

Section 2.8.4 of the Denton Development Code outlines the criteria for approval of an Alternative ESA Plan. These criteria are as follows:

| Criteria for Approval | Applicable to Project | Strategy to Meet Criteria |
|---|------------------------------|---|
| Mitigation goals are obtained by creating, expanding, and/or improving environmentally sensitive areas. | Yes | In exchange for the permanent removal of 0.66 acre the applicant is proposing to improve ecological conditions on the remaining 1.234 acres of ESAs and open space at a rate of 1 acre removal to 1.8 acres mitigation. |

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| Mitigation goals are obtained by preserving environmentally sensitive areas above the minimum requirements, exchanges between different types of ESAs, installing pollution prevention controls, and/or implementing best management practices or any other approaches that result in the improvement of the environment being impacted. | Yes | Best management practices will be employed to ensure a long-term healthier forested habitat by removing and excluding the invasive privet plant. |
| Areas offered as mitigation are linked to existing or planned open space or conserved areas to provide an overall open space system. | Yes | The remaining open space is connected to the HOA open space lot in the adjacent neighborhood to the south, creating an expanded contiguous open space. |
| Development is arranged for maximizing access and utilization of the environmentally sensitive areas by citizens. | Yes | A public access trail is designed to connect the new development with adjacent neighborhoods and will contribute to the Parks Master Trails Plan. |
| Areas offered as mitigation are placed either in a lot or lots that incorporate a permanent conservation easement, a preserved habitat, restrictive covenants, or such other legal mechanism to allow for the long-term conservation of said areas. Such legal mechanisms shall limit any future land disturbing activity or construction within the ESAs, shall run with the land and shall be binding upon all successors and assigns of the current owner. | Yes | The remainder 1.234 acres of ESAs and open space will be placed in a common lot to be maintained by the management company. A long-term maintenance plan has been included in the covenant documents. |
| The Alternative ESA Plan shall demonstrate that the developer's alternative proposal results in a high-quality development meeting the intent of the standards in this DDC. | Yes | The applicant has demonstrated meeting all other applicable City of Denton development standards. |

RECOMMENDATION:

The Planning and Zoning Commission voted [6-1] to recommend **approval** of the request with the following conditions.

1. Land disturbances within Environmentally Sensitive Areas are limited to the Development Impact Area, as described in **Exhibit “A”** and depicted in **Exhibit “B”**.
2. The two-phase mitigation plan, as described in **Exhibit “E”**, will commence during the winter months of December of the same year or January of the subsequent year in which the development has received permission from the City to clear and grade for development. The development shall achieve initial planting goals within the mitigation area prior to the issuance of any building permits.
3. Temporary land disturbances of up to 10 percent (0.123 acres) of the remaining Environmentally Sensitive Areas, as described in **Exhibit “C”** and depicted in **Exhibit “D”**, may be proposed by the applicant to satisfy any remaining drainage design requirements and may be approved by City Staff, provided that the disturbed land be restored by following the mitigation plan.
4. Notwithstanding the limited administrative approval in Condition 3, the City reserves the right to require approval by ordinance any amendments or alternations to the Alternative ESA Plan.
5. Following the installation and inspection of the revegetation, the Property owner shall submit an annual report to the Environmental Services and Sustainability Director during the first three (3) years describing the cumulative mitigation work performed and the survivability of the plantings and existing trees for staff review and inspection, as described in **Exhibit “E”**. Within 30 days of approval of the report by staff, the applicant shall replace any plants that were identified in the report as removed, destroyed, or dead; and mitigate at the applicable ratios in DDC Section 7.7.4 for any existing trees that were removed, destroyed or dead.
6. The Property owner retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep and maintenance of the AESA Property, and the responsibility to implement and enforce the requirements of the Alternative ESA Plan, and cure any defaults of the Alternative ESA Plan.