

Designing a Single-Family Residential Development under UDO Regulations

Scenario:

You are a developer proposing a new single-family residential subdivision in a designated zoning district (e.g., R-1 Single-Family Residential) within College Station. The proposed site spans 10 acres, with plans for 30 homes, roads, and basic community infrastructure.

Your task is to use the College Station UDO (Unified Development Ordinance) to determine all relevant regulations for this single-family residential development. You will identify any potential challenges or areas requiring variances. You will use this document to list key focus areas based on the UDO. The goal is to familiarize yourself with the UDO to ensure your development complies with all applicable regulations.

Assignment: Key Focus Areas

Use the [College Station UDO](#) to identify regulations about the following. You may answer the questions by listing the applicable regulations in bullet point format.

a) Zoning District Regulations:

- In the UDO, find the following regulations specific to single-family districts, and list them below:
 - Minimum lot size = 5,000 square feet
 - Lot width and depth = 50' x 100'
 - Building setbacks (front, side, and rear) = 25' (f), 7.5' (s), 20' (r)
 - Maximum building height = 2.5 stories
 - Lot coverage percentage = 55%

b) Subdivision Design Standards:

- Layout requirements for streets, sidewalks, and utilities.
 - Where there are existing streets, intersections will be aligned and constructed. One external street is required for a development with 30

or less lots. No dead-end streets will be allowed and will utilize cul-de-sacs since we will have less than 30 lots.

- Sidewalks will be installed on both sides of the street
- Street width and connectivity standards.
 - New streets will be developed in alignment with existing streets
 - Wide streets will be developed to help alleviate any traffic any parking
- Ingress and egress requirements
 - A neighborhood traffic analysis will be conducted to determine capacity
- Requirements for open space or parkland dedication (if applicable).
 - A playground and walking trail will be built for open space requirements
 - A fee will be paid in lieu of parkland dedication

c) Infrastructure and Stormwater Management:

- Stormwater drainage design and on-site management.
 - The development will comply with the MS4 requirements
 - After final stabilization, perennial vegetation will be established with 80% native density
 - A note will be placed on all plats stating that the development is in accordance with a master grading plan which will be submitted to the city
 - The maximum slope of grading of the development will not exceed 10% and swales will avoid point discharges to avoid damage to adjacent properties
 - Each individual lot will have a maximum slope grading of 25%
 - A detention pond will also be created to mitigate drainage from the development
- Utility service plans, including water, sewer, and power.

- All electric lines will be installed underground with some overhead feeder lines
- All water mains, distribution, and services lines will be provided to each lot
- All wastewater collection mains and services lines will be provided to each lot
- A gravity sewer master plan will be created and adhered by

d) Landscaping and Tree Protection:

- Requirements for tree preservation or planting within lots or common areas.
 - The development will have a minimum of 800 landscape points, including credit for irrigation and berms for park screening.
 - Each lot will have one 4" caliper tree
 - All landscaping will be chosen from the hardiness map zone 8 to ensure longevity
 - The common areas will have 100% perineal groundcover and consist of at least 50% canopy trees
 - There will be 6 landscape points per LF on the entry way consisting of 1 canopy tree every 25 LF of frontage
- Buffers, if needed, for nearby non-residential areas.
 - One side of the community is adjacent to commercial property requiring a 10' buffer. This will include an 8' concrete wall for visual and noise barrier purposes
 - The remaining sides are adjacent to other single-family residents requiring one 5-gal shrub that is 3" in height every 3 LF and one 2' caliper canopy tree every 25'

e) Parking and Driveways:

- Minimum parking requirements for single-family homes.
 - Garages shall have a minimum setback of 20'.
 - A minimum of 2 total spaces of off-street parking

- Parking will only be allowed on one side of the street to improve traffic flow through the development
- Driveway standards (width, surface type, etc.).
 - The standard driveway width will be 20' and allow for a minimum 2 car parking
 - Driveways will all be concrete
 - Driveways will be every 125' for opposite left driveways and 175' for minor collector and local streets

f) Additional Requirements:

- Consider neighborhood amenities or compliance with overlay district standards (e.g., Historic Preservation Overlay if applicable).
 - Adherence to the Restricted Occupancy Overlay (ROO) to preserve the single-family character of the community
 - An HOA will be established to maintain the common areas within the subdivision
- Evaluate if variances might be required for design flexibility.
 - At this time, there should be no variances

Assignment: Summary

Now that you have identified several key focus areas based on the UDO, summarize the requirements and standards, and explain how these will inform your design for a single-family residential development.

- Describe your single-family development. You do not need to provide an actual site plan or drawing. Simply include details on lot configurations, roadways, open spaces, etc.
 - I envision this development to be very consistent in nature regarding lot sizes, mostly 55', except for cul-de-sac lots which will be larger. Streets will easily be navigated due to their larger width and parking restrictions.

There will be a beautiful playground area and a walking trail around the perimeter for residents to enjoy. Lush landscaping and trees will allow for a calming, shady environment to enjoy.

- Summarize key zoning and development standards, identifying the zoning and development standards that apply to your project. Make sure to demonstrate how your plans from the question above demonstrate compliance with UDO.
 - The development will meet the standards of all environmental, building, and utility regulatory bodies. It will not only be compliant but built to a standard where builders and potential homeowners will have confidence that they're making a sound investment.
- How do zoning and development standards shape the design and feasibility of single-family residential projects?
 - The standards shape the design and feasibility by offering a blueprint of how the streets, utilities, and lots are laid out. We can determine a lot count and project the potential income from the development.
- Reflect on the balance between compliance and creativity in development. What challenges or opportunities does this create for development?
 - Knowing your restrictions can enhance your creativity- it makes you think outside of the box. For example, the requirement for open space can allow for a creative community area where residents can gather and enjoy their lives. The challenge can be finding the amenity that will suit the majority of your demographic and your budget.