

PSP-23-04
Pearce Farms (FKA Tom's Creek)
1st Submittal
Planning/Zoning Comments

Project Background:

The following is the review of Preliminary Subdivision Plat, dated December 1, 2023, completed by McAdams. The applicant proposes 557 single-family detached [SFD] dwellings for the 222.94-acre site. The site was recently annexed (ANX22-07) and rezoning (MA21-10) to RM-CZ. The proposed density of 2.50 dwelling units/acre, less than the Rezoning permitted maximum density of 2.7 DU/AC. The plat has been reviewed against the requirements of the Town of Rolesville Land Development Ordinance (LDO).

Review Comments:

General Comments

1. Please clarify if a phasing plan is to be provided.
2. Per LDO Section 6.2.1.G.11, in multi-phased developments, open space shall be provided for each phase in an amount sufficient to satisfy the open space requirements for the subject phase of development and all preceding phases of development.

Cover Sheet

3. Add case number PSP-23-04 to the cover sheet.
4. Within the Site Data Table, include the following:
 - a. Provide overall site acreage.
 - b. Provide parking space calculations, divided by use type.
 - c. Building Height
5. Total site area was noted as 222.94 in rezoning and annexation approval.
6. Regardless of what is required in the Ordinance (12%) or what is required per the rezoning (40%), the open space totals noted are not consistent when compared to the site acreage.
7. Please provide a box noting all previously approved applications and their appropriate conditions of approval.

Project Notes and Typical Sections

8. Please provide standard floodplain note with the correct FIRM panel reference and date.
9. Please provide a typical lot layout graphic that showcases the location as well as the width of the driveways to be provided.

10. Per LDO Section 6.2.2.2.D.3, label the location of the grass strip required for street tree plantings.
11. Please provide parking calculations for the overall site.

Open Space Plan

12. The table provided is incomplete. Please update to include a description for all open space types.
13. Label the zoning district and use of adjacent properties.
14. Per LDO Section 6.2.1.D.1.b, required open space shall include **at least** one (1) small or medium open space type and one (1) large open space type, or shall include one (1) small open space type and two (2) medium open space types. At least fifty (50) percent of dwelling units must be within one-half ($\frac{1}{2}$) mile of a medium or large park. Please demonstrate compliance or clarify within the table provided which open spaces are fulfilling this requirement.
15. Per LDO Section 6.2.1.G.3, No two open space types shall be adjacent or within one hundred (100) feet of each other. Active use areas are exempted from this standard.
16. Per LDO Section 6.2.1.G.4, open spaces shall make accommodations to provide universal designs that can be enjoyed by different target users and provide for ADA accessibility. Please clarify how this is being provided and met.
17. Per LDO Section 6.2.1.G.5, Public seating shall be required. Public seating shall be appropriate to the intended use of the park area (i.e., benches may be appropriate for active spaces; Adirondack chairs and landscape terraces may be appropriate for passive spaces). Please label the location of these amenities.
18. Per LDO Section 6.2.1.G.6, Refuse and recycling receptacles are required at each entrance and gathering space. Please label the locations and provide details.
19. Per LDO Section 6.2.1.G.7, A maximum fifty (50) percent of total required passive open space may be stormwater facilities. Any stormwater facility used toward that requirement shall be publicly accessible through improved or primitive trail.
 - a. The applicant has noted a private trail with a red dotted line. Please note that this private trail would be unable to be counted towards the 50% allocation.
 - b. For this section, improved and primitive trails are defined below:
 - i. Improved Trail. An improved trail shall be defined as a clearly marked, paved, impervious trail.
 - ii. Primitive Trail. A primitive trail shall be defined as an unpaved, pervious trail that consists of mulch, crushed stone, or similar material.

20. Per LDO Section 6.2.1G.8., A maximum twenty (20) percent of total required passive open space may be environmentally sensitive or unique lands such as wetlands, protected stream buffers, rock outcroppings, and floodplains. Please demonstrate compliance.
21. Per LDO Section 6.2.1.G. 12, A minimum of fifty (50) percent of all required open space shall be dedicated and designed to allow for active recreation features. Please refer to Table 6.2.1.3 for the identified list of these features.
- a. Active recreation is defined as recreational features, often requiring equipment and taking place at prescribed places, sites or fields, which allow for the active recreational needs of residents or users of the development which they serve.
 - b. Passive recreation is defined as recreational features that do not require prepared facilities like sports fields or pavilions and require minimal disruption to a site. These include such activities as walking paths and other features defined in Table 6.2.1.3.
22. LDO Section 6.2.1.J describes specific requirements regarding greenways that are to be adopted into the Town's overall system. Those standards are as follows:
- a. All greenways shall include a multi-use path of a minimum of ten (10) feet wide within a dedicated right-of-way or public easement of at least fifty (50) feet. Greenways shall be wide enough to accommodate a variety of pedestrian mobility, including walkers, hikers, joggers, and bicyclists. An alternative may be granted to reduce the minimum easement of at least fifty (50) feet to thirty (30) feet if site constraints including topography and/or environmental features do not allow for a fifty (50) easement. Cost shall not be considered a site constraint.
 - b. Greenway connectors shall be a minimum of ten (10) feet wide.
 - c. Where land is designated as part of the town's adopted greenway system, a comprehensive greenway and trail plan demonstrating compliance with this section shall be required.
 - d. Sidewalks shall not be constructed in place of required greenways.
 - e. For land designated as part of the adopted greenway/bikeway system, greenways shall provide basic amenities for all targeted users. Such greenways shall provide at least three (3) of the following: Drinking fountains, restrooms, trash receptacles, benches, bicycle racks, and shade structures. Way station facilities may also be considered for greenways. These facilities may also include small buildings/kiosks containing exhibits and/or minor food provisions. **Land not designated as part of the town's adopted greenway/bikeway system is not required to meet this requirement.**
 - f. Land area dedicated as a greenway shall be credited towards applicable open space percentage requirements in Section 6.2.1. Greenways are a passive feature.

Existing Conditions

23. Label demolition proposed (on this sheet or separate if existing conditions under demolition are illegible).
24. Label impervious surface as there is over 17,000 square feet noted to be on site on the cover sheet.
25. Provide the zoning districts of the site and adjacent properties to confirm buffer requirements.
26. Label setbacks.
27. Label existing vegetation (with general description and location).
28. Label all vegetation that is proposed to be removed, especially those that require replacement per LDO Section 6.2.4.5.

Preliminary Plat and Pavement Markings

29. Any stormwater facility used toward the passive open space requirement shall be publicly accessible through improved or primitive trail.
30. Label all setbacks for the overall site.
31. Label required streetscape buffer width and location.
32. Several open spaces (noted on plan set) are not approved open spaces per the Concept Plan. Please revise to ensure compliance.
33. Mail kiosk parking areas are not clearly labeled and will require signage. Please update plans for compliance.
34. A fence is required with a Type 2 Buffer. Please label the location of the fence on all applicable plan sheets.
35. Building envelopes should be free of all easements. Please revise.

Grading and Erosion Control

36. Label impervious surfaces (label and provide calculations).
37. Label existing vegetation (types and locations) as required per LDO Section 6.2.4.5.
38. Label all retaining walls with top and bottom of wall elevations (wall detail required for construction drawings).
39. Label tree protection fencing location (reference detail location if on separate sheet).
40. Label critical root zones as required per LDO Section 6.2.4.

41. Advisory Comment: Erosion Control design shall meet Wake County standards. Please reference the Wake County Sediment and Erosion Control Construction Checklist.

Utility Plan Sheet

42. Label all above-ground utilities and equipment (screened and with details) as required by LDO Sections 6.2.4 and 9.2.6.
43. Label tree protection fencing location (reference detail location if on separate sheet).
44. Advisory Comment: Sewer and water design are to meet the City of Raleigh Public Utility standards.

Site Details

45. Provide the following details: bicycle rack details, parking space detail, fence details, and tree protection detail.

Landscape Plan

The Plat has provided some landscape calculations but is not showing landscaping on the plan sheets themselves. This includes streetscape buffering, perimeter buffering, street trees, or even the location of existing vegetation. For this reason, please see the below comments to help aid in creating a more appropriate preservation & landscape plan submittal.

46. Provide tree calculation boxes for the following calculations: Street trees required and provided, buffer landscaping required and provided, and streetscape buffer landscaping required and provided.
47. Streetscape buffer landscaping shall be provided in accordance with LDO Section 6.2.2.2. Please refer to this Section for all requirements and context. The following standards are ones that need to be reflected on the plans at this time:
- a. Per LDO Section 6.2.2.2, The width of the streetscape buffer shall be at least thirty (30) feet for thoroughfares, fifteen (15) feet for collectors, and ten (10) feet for local streets as measured from the right-of-way line.
 - b. The width of the streetscape buffer shall be at least thirty (30) feet for thoroughfares, fifteen (15) feet for collectors, and ten (10) feet for local streets as measured from the right-of-way line.
 - c. If the streetscape is disturbed or non-vegetated, the property owner or developer shall install and maintain the following vegetation every forty (40) linear feet of frontage. Along collector streets, this vegetation may be installed up to every fifty (50) linear feet of frontage. Along local streets, this vegetation may be installed up to every sixty (60) linear feet:
 - i. One (1) street tree of two (2) and one-half (1/2) inches in caliper; or,
 - ii. Two (2) understory ornamental type trees one-and-one-half (1.5) inches in caliper (this option is used only with overhead utility lines).

iii. Small trees shall be located under overhead power lines. Such small trees shall be at least one-and-one-half (1.5) inches in caliper at the time of installation and two such trees shall be installed or maintained for every forty (40) linear feet of streetscape, rather than one (1) larger tree per forty (40) feet required above.

- d. Trees shall not be planted between the curb and sidewalk (a grass strip is required). Please ensure the grass strip is also labeled on pavement typical.
- e. Each large canopy tree in the streetscape shall be provided with at least three-hundred-and-fifty (350) square feet of pervious ground area for root growth. Any planting area bounded by an impervious surface shall be at least ten (10) feet wide.

48. Please a detailed plant list keyed to plan and showing what requirement each plant will fulfill, caliper size and height of plants, condition of root ball, common name and botanical name, number of each plant.

- a. When twenty (20) or more canopy or accent trees are required to be planted on a site to meet the standards of this LDO, a mix of genera shall be provided as shown in Table 6.2.4.3

Total Trees Planted on Site	Minimum Number of Genera Required	Maximum Percentage of any Genera
20 or less	1	Not applicable
21-50	2	60 percent
51-100	3	50 percent
101 or more	4	40 percent

49. Per LDO Section 6.2.4.2.A., a Preservation Plan is required. This can also be on the landscape plan sheet, but Staff would suggest this be its own plan sheet as it must include all the following:

- a. A tree and/or vegetative survey preferred to be prepared by a Certified Arborist (LDO Section 6.2.4.5B)
- b. The plan must show there will be no disturbance within a critical root zone of trees, as defined in the LDO.
- c. A critical root zone shall be protected from encroachment and damage. The preferred method is to restrict access by installing a barrier to keep materials, people, or equipment out of the critical root zone, as required in the preservation standards above.
- d. Barriers shall be accompanied by temporary signs labeling the critical root zone.
- e. The critical root zone area shall remain free of all building materials and debris.
- f. The plan shall include a location plan and boundary line survey of the property.
- g. The plan shall show the size, location, and species of trees.
- h. The plans shall show areas where trees, vegetation, and soils are to be protected and preserved and areas where trees, vegetation, and soil are to be removed or modified.
- i. The plan shall graphically identify each tree to be saved or removed.

- j. The plan shall demonstrate compliance with all vegetation preservation standards of LDO Section 6.8.4.5C.
 - k. Tree protection fencing location (reference detail location if on separate sheet).
50. Per LDO Section 6.2.4.5.B, preservation standards, to be represented and confirmed with the tree survey and landscape, include:
- a. Deciduous and evergreen trees shall be preserved to the greatest extent possible. At least ten (10) percent of all existing trees in good health (as determined by a professional arborist) shall be preserved within developments that are two (2) acres or greater in size, excluding non-native invasive plants as listed by the US Forest Service or the NC Forest Service.
 - b. Within applicable sites, evergreen trees at least twenty (20) inches diameter at breast height and deciduous trees at least eighteen (18) inches diameter at breast height, and in good health (as determined by a professional arborist), and within required buffering and landscaping areas, shall be tagged prior to any site clearance and be preserved to the greatest extent possible.
 - c. In any case where removal of a qualifying evergreen or deciduous tree from subsection (2) is required for site development, it shall be replaced on-site with at least four (4) or more trees of similar species and size.
 - d. Trees sixty (60) inches diameter at breast height and in good health based upon a professional arborist, must be preserved to the greatest extent possible and not be removed. If removal is required for site development, diameter at breast height shall be replaced one (1) for one (1) using a minimum of three (3) inch caliper trees on site. Existing buffers and canopy may be used for up to twenty- five (25) percent of replacement.
51. A 6-foot fence is required for a Type 2 buffer according to LDO Section 6.2.2.1. Label fence location and provide a detail.
- a. Fences and walls shall be constructed of high-quality materials including brick and stone, stucco over concrete masonry blocks, treated wood, wrought iron/aluminum, composite fencing, or PVC vinyl.
 - b. The finished side of the fence shall face the adjoining property.
 - c. Fences/walls shall be placed at the rear of a buffer, so the adjoining property benefits from the view.
 - d. All fences and walls shall comply with the standards of Section 6.5: Fences, Walls, and Berms.

Lighting Plan

A lighting plan was not provided by the applicant though it is required per LDO Section 6.6.F to be included with the site plan submittal. The following comments are being made to assist the applicant in the submittal of these drawings.

52. A lighting plan is required per LDO Section 6.6.F. It shall be prepared, signed, and sealed by a licensed engineer. It shall be of an engineered scale that is easily legible and include the following:
- a. Title of project.

- b. Professional seal.
 - c. Dimensions, scale, and north arrow.
 - d. All proposed and existing buildings on the site.
 - e. Pedestrian and vehicular areas.
 - f. Other above-ground improvements.
 - g. The horizontal location of all proposed and existing outdoor lighting fixtures, including pole and wall-mounted fixtures.
 - h. Mounting heights of each fixture.
 - i. Overall height of each pole above grade.
 - j. Location of externally illuminated signs and associated fixtures.
 - k. The location of all architectural and landscape lighting fixtures.
53. Please ensure that the Photometrics/Lighting Plan is compliant with LDO Section 6.6.F.1.
- a. The manufacturer's cut sheets (specifications) for each proposed fixture must be submitted.
 - b. Clearly label the mounting heights of each fixture.
 - c. Clearly label the overall height of each pole above grade.
54. Lighting plans shall be specified and calculated in maintained footcandles (FC). Measurements of light levels shall be taken at finished grade with an accurate and calibrated light meter – LDO 6.6.F.3
55. The plan must include a footcandle plan that provides typical footcandle contours and a point photometric grid that indicates footcandle levels measured at grade across the site. Maximum, average, and minimum site foot-candles, uniformity ratio (average and minimum), and depreciation factors also are required. The plan must show initial horizontal illuminance values in foot-candles for the area to be illuminated. These values must be calculated at grade and include contributions from all onsite fixtures.
56. The plan must plot foot-candles of illumination at ground level to the nearest tenth of a foot-candle, and at horizontal grid intervals of no more than ten (10) feet.
57. The plan shall show illumination level at the lot line (or perimeter of a development, if applicable) to ensure maximum illumination levels are not exceeded.
58. A lighting fixture schedule that presents the following information: Fixture type, including the manufacturer's product identification catalog number and fixture mounting height.
59. In accordance with LDO Section 6.6.G.10, full cut-off lighting shall be provided in loading areas. The plans should be revised to provide cut-off/shield details and demonstrate compliance.
60. Building façade and accent lighting will not be approved unless the light fixtures are carefully selected, located, aimed, and shielded so that light is directed only onto the building façade and spillover light is negligible.
61. Lighting design shall be coordinated with the landscape plan to ensure that vegetation growth will not substantially impair the intended illumination.