

Development Review Committee Comments | 8/30/2022 Case PLAT22-0026

Shady Grove Addition (8340 Shady Grove Road)

WRITTEN STATEMENT OF CONDITIONS

The City of North Richland Hills received this plat on August 19, 2022. The Development Review Committee reviewed this plat on August 30, 2022. The following represents the written statement of the conditions for conditional approval of the plat.

- 1. The proposed subdivision design includes the use of detention ponds, which requires approval of a special use permit (SUP) by the Planning and Zoning Commission and City Council. The SUP application may be submitted online on the NRH E-SERVICES PORTAL. The necessary documents would include the drainage design plans and a landscape plan. The SUP would need to be submitted with the final plat application. NRH Zoning Ordinance §118-729 (Detention/retention pond criteria)
- 2. The street split by the open space lot appears to be planned for a 24-foot-wide pavement section within a 44-foot right-of-way. The street and right-of-way widths do not conform to the minimum standards for residential streets. These widths may be approved only if a waiver is granted by the Planning and Zoning Commission and City Council to this standard. In order to consider a waiver, the applicant must submit a letter stating the grounds for the request and describing the special conditions or circumstances causing hardships that justify the waivers being requested. Additional information is available online at Subdivision Regulations Section 110-42. NRH Subdivision Regulations \$110-368 (Street right-of-way dedication) and \$110-412 (Generally rights-of-way)
- 3. The proposed lot layout is contingent on the flood study for the property and associated site improvements. If the results of the study require significant revisions to the layout, a revise preliminary plat may be required at that time. NRH Subdivision Regulations §110-333 (Requirements for all plat drawings drainage easements) and NRH Flood Damage Prevention Ordinance §102-83 (Standards for new development or subdivision proposals)
- 4. Add a title block to the drawing that includes the following information. NRH Subdivision Regulations §110-331 (Requirements for all plat drawings –title block)

PRELIMINARY PLAT

(ADDITION NAME)
Lot(s) ____, Block(s) ___

BEING XXX.XXX acres of land located in the (Survey Name)
Survey, Abstract No. XXX, an addition to the City of North
Richland Hills, Tarrant County, Texas.
(Date)

- 5. Increase the line weight of the property boundary line so that the property boundary is differentiated from the other lines on the drawing. NRH Subdivision Regulations §110-331 (Requirements for all plat drawings subdivision boundary)
- 6. Revise the vicinity/location map the drawing to indicate the subject property. NRH Subdivision Regulations §110-331 (Requirements for all plat drawings vicinity location map)
- 7. In the site data summary table, revise the residential density to read <u>2.5 DUA</u>. NRH Subdivision Regulations §110-331 (Requirements for all plat drawings plat notes and conditions)
- 8. Shady Grove Road is classified as a C2U Minor Collector street on the Transportation Plan. A C2U roadway requires an ultimate right-of-way of 60 feet. Verify the existing right-of-way with established corner monuments on the west side of the street. Right-of-way dedication may be required depending on the width of the existing right-of-way. NRH Subdivision Regulations §110-368 (Street right-of-way dedication) and §110-412 (Generally rights-of-way)

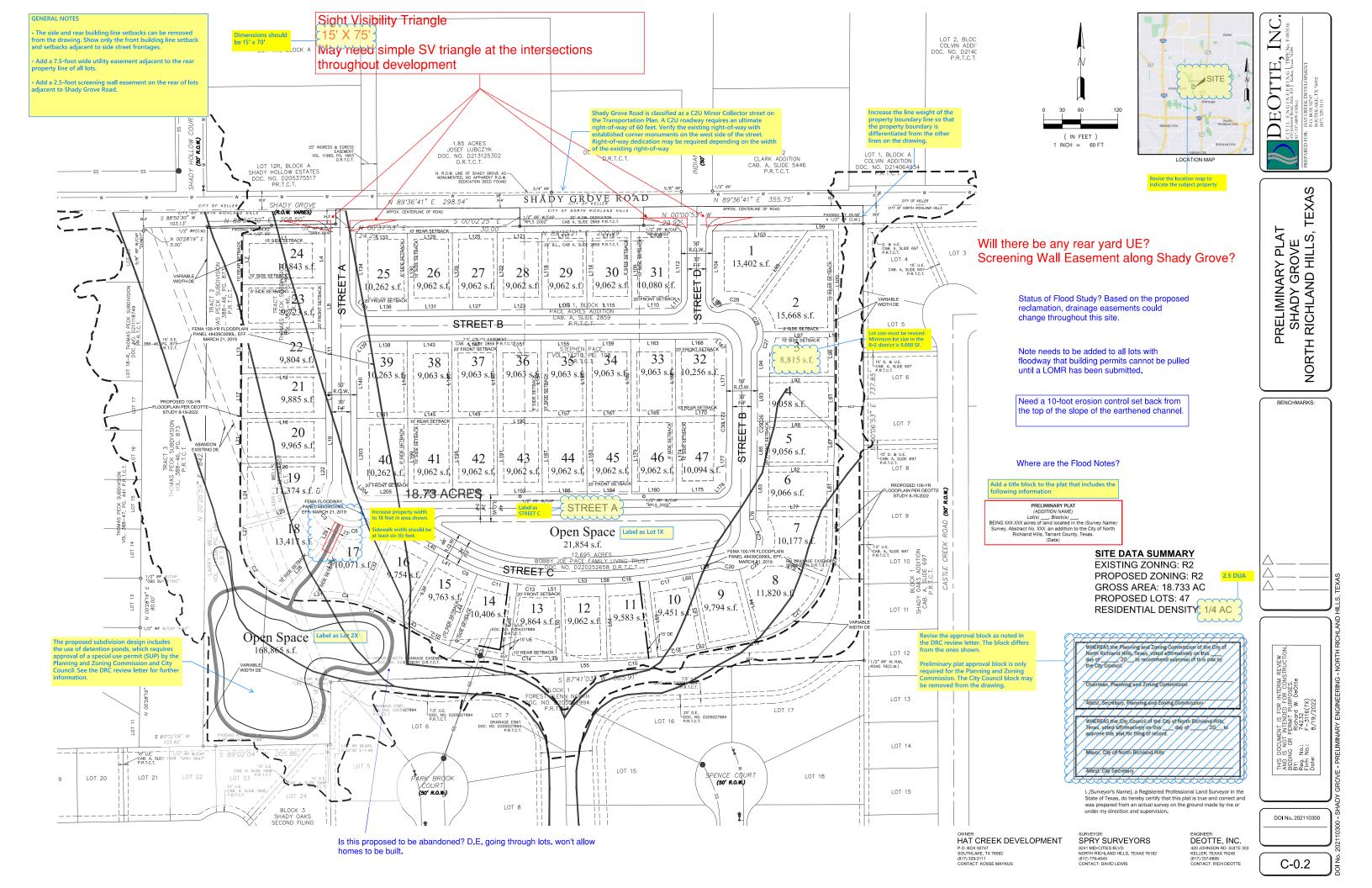
- 9. Label the square footage of the potential right-of-way dedication for Shady Grove Road. NRH Subdivision Regulations §110-368 (Street right-of-way dedication) and §110-412 (Generally rights-of-way)
- 10. Label the street split by the open space lot as Street C rather than Street A. NRH Subdivision Regulations §110-331 (Requirements for all plat drawings street names)
- 11. Lot 3 does not meet the minimum area requirement for the R-2 (Single-Family Residential) zoning district. The lot must be increased in area to at least 9,000 square feet. NRH Subdivision Regulations §110-412 (Design criteria lot dimensions) and NRH Zoning Ordinance §118-729 (Detention/retention pond criteria)
- 12. Show only the front building line setback and setbacks adjacent to side street frontages on the lots. The side and rear building lines may be removed from the drawing. NRH Subdivision Regulations §110-331 (Requirements for all plat drawings building setback lines)
- 13. Add lot numbers to the open space lots as shown on the marked-up plat. These lots include an 'X' suffix to distinguish from the residential lots. NRH Subdivision Regulations §110-331 (Requirements for all plat drawings lot and block numbering)
- 14. Add a 7.5-foot-wide utility easement adjacent to the rear property line of all lots. NRH Subdivision Regulations §110-331 (Requirements for all plat drawings easements)
- 15. Add a 10-foot erosion control easement as measured from the top of the slope of the earthen channel. Cross fencing is prohibited within the easement. NRH Subdivision Regulations §110-332 (Additional requirements for preliminary plat drawings floodplain features)
- 16. Will the variable width drainage easement (D200076151) be abandoned? If the easement remains there are several lots that would not be restricted from construction. If the intention is to abandon the easement, add a label or note to the plat drawing. NRH Subdivision Regulations §110-331 (Requirements for all plat drawings easements)
- 17. In the southwest corner of the development, increase the width of the open space lot connection to the street from 15 feet to 18 feet in the area shown on the marked-up drawing. The sidewalk within the open space lot should be at least six (6) feet wide. These dimensions are consistent with pedestrian passages through blocks that connect streets and open space areas. NRH Subdivision Regulations §110-372 (Sidewalk requirements) and NRH Zoning Ordinance §118-471 Town Center development standards Passage and path)
- 18. Add the following note to the drawing: The city limit boundary does not represent an on-the-ground survey and represents only the approximate relative location of the city limit boundary using various official and unofficial sources. NRH Subdivision Regulations §110-331 (Requirements for all plat drawings city limit lines)
- 19. Add sight visibility easements (15 ft by 70 ft) at the corners of the street intersecting Shady Grove Road. NRH Zoning Ordinance §118-714 (Visibility sight triangles)
- 20. Add a 2.5-foot screening wall easement on the appropriate lots where screening walls will be constructed adjacent to public rights-of-way. NRH Subdivision Regulations §110-331 (Requirements for all plat drawings easements)
- 21. Revise the Planning and Zoning Commission approval block on the plat to read as follows. NRH Subdivision Regulations §110-332 (Additional requirements for preliminary plat drawings certificate of approval)

WHEREAS the Planning and Zoning Commission of the City of North Richland Hills, Texas, voted affirmatively on this day of, 20, to approve this preliminary plat.
Chair, Planning and Zoning Commission
Attest: Secretary, Planning and Zoning Commission

DESIGN PRINCIPLES

The following comments represent suggested modifications to the plat drawing based on general NRH design principles and standard practices in city planning. While conformance to these principles is not required by the subdivision regulations, the applicant is encouraged to include these modifications as part of the revised plat.

- 1. Add the City case number near the bottom right corner of the drawings (Case PLAT22-0026).
- 2. Provide a status update on the flood study. The study must be reviewed and approved by Public Works before the final engineering plans can be approved.
- 3. Provide a description of the proposed perimeter fencing adjacent to Shady Grove Road. It was noted during the zoning hearing for the property that a masonry screening wall is planned, and that improvement would be the expectation of the City Council.
- 4. <u>Informational comments</u>. These comments are informational only and do not affect the drawing.
 - a. Comments regarding the preliminary civil plans for the project are noted on marked-up copies of the plans. These comments should be addressed on the final construction plan set.
 - b. Prior to submittal of the final plat application, public infrastructure plans must be submitted for review to the city engineer. A final plat application cannot be accepted until final construction plans are approved.
 - c. US Postal Service policy changes require cluster mailbox requirements for new residential developments. This subdivision will be affected by this policy. It is recommended that the applicant contact the Fort Worth District Office on Mark IV Parkway at 817-317-3701 to discuss the requirements for this development.
 - d. Approval of a preliminary plat is effective for one year from the date of approval. If a final plat is not submitted on at least a portion of the area covered by the preliminary plat within one year, the preliminary plat is considered null and void.





September 26, 2022

Mr. Kosse Maykus Hat Creek Development PO Box 92747 Southlake, TX 76092

Re: Shady Grove Addition – Rough Proportionality Analysis

Dear Mr. Maykus:

The purpose of this letter is to provide a rough proportionality calculation for the proposed Shady Grove Addition subdivision located roughly between Smithfield Road and Clay Hibbins Road on the south side of the road. The Shady Grove Addition subdivision is designed with sole access via Shady Grove Road, a City of North Richland Hills roadway; owned and maintained exclusively by the City of North Richland Hills. For roads, the "rough proportionality" calculation is an analysis of the capacity provided by a development compared to the traffic impacts of the proposed development.

Proportionality Methodology

Traffic generation of new development impacts the area roadway system by using available capacity. To measure system impacts, an analysis using vehicle-miles of travel in the PM peak hour was conducted. Using vehicle-miles of travel, the capacity provided by roadway improvements can be compared with the traffic generated by a proposed development. For roadway improvements, supply (vehicle-miles) is determined by multiplying the length of the facility by its available capacity. Capacity values are based on criteria from the North Central Texas Council of Governments (NCTCOG). In cases where only the right-of-way necessary for future roadway improvements is provided, a percentage of the supply provided by the future improvements is included. For site traffic generation, demand (vehicle-miles) is determined by multiplying an appropriate trip rate for a specific use by an average trip length associated with such use. Trip generation rates and resulting trip estimates are found in the *Institute of Transportation Engineers (ITE)* publication entitled *Trip Generation, 11th Edition*.

Using this supply and demand information, a comparison can be made to determine the roughly proportional impacts.



Proposed Development and Roadway Improvements

Based upon information provided by the applicant, the proposed Shady Grove Addition development will ultimately consist of the following land use:

• 47 Single-Family Dwelling Units

The proposed roadway improvements for the development consist of the following (based on the currently adopted *Transportation Plan*):

• <u>Shady Grove Road</u> – Construction of ½ (1 lane) of a Minor Collector (C2U – Two (2) lane undivided section within 60' of ROW) adjacent to the proposed development (1,063 linear feet)

Proportionality Calculation

Projected Demand of Proposed Site

The projected vehicle-miles of demand are calculated by multiplying the proposed size of development by its appropriate trip rate and trip length. The PM peak hour trip rate for the land use is as follows.

• Single-Family (per dwelling unit or d.u.)

0.94 vph

Trip length accounts for the trip end associated with the site and limited to travel on city roadways (thus, removing travel on state and federal facilities). The resulting average trip length is approximately 1.4 miles (average trip length to/from Davis Boulevard and the City of Keller boundary on North Tarrant Parkway).

• 47 SF d.u. x 0.94 trips/d.u. x 1.4 miles = vm_d = vehicle-miles of demand

61.85 vmd

Capacity Supplied by Proposed Roadway Improvements

This calculation determines the vehicle-miles of supply provided by the proposed roadway improvements and is based on length of improvement and hourly roadway capacity values as defined by the NCTCOG. Capacity values are based on an area type of suburban residential resulting in hourly capacity values of 420 vehicles per hour per lane (vphpl) for collectors.

• Shady Grove Road, ½ of the 2-lane undivided facility, 1,063' / 5,280 feet/mile x 1 lane x 420 vphpl = 84.56 vms vms = vehicle-miles of supply



Demand vs. Capacity Results

A comparison of projected demand of the site relative to the roadway supply being provided reveals that the projected demand falls short of the capacity supplied by the developer constructing a lane along the entire frontage of the development.

• $61.85 \text{ vm}_d < 84.56 \text{ vm}_s [\sim 73.1\%]$

In order for the supplied capacity to be roughly proportionate to the traffic demand, the length of the supplied roadway improvements would need to be reduced by 26.9% to yield the 61.85 vm:

- $61.85 \text{ vm}_s \text{ x } 5,280 \text{ feet/mile} / 420 \text{ vphpl} = 777', OR$
- 1,063' x 73.1% = 777'

Value of Right-of-Way Dedication

The proposed development is dedicating public right-of-way along 862.79' of Shady Grove Road frontage. At 30' wide, the total area of land dedicated for Shady Grove Road is:

• 862.79' x 30' = 25.883.70 sf = 0.5942 acres

The value of this land at current appraisal district rates is calculated using an average square footage price based on TAD land values:

Property	Area (acres)	TA	D Land Value	\$ / SF
8340 Shady Grove Road	2.00	\$	310,389.00	\$ 3.56
8320 Shady Grove Road	1.99	\$	262,438.00	\$ 3.03
8316 Shady Grove Road	1.99	\$	277,875.00	\$ 3.21

Average \$ 3.27

The calculated value of the dedicated right-of-way is:

• 25,883.70 sf x \$3.27/sf = \$84,639.70

Conclusion

The purpose of this evaluation was to assess the impacts of the proposed development on the City roadway system and to determine the roughly proportional supply of roadway capacity necessary to address the added demand. The analysis revealed that the City is



justified in having the applicant construct a portion of Shady Grove Road (777') adjacent to the development.

In lieu of construction of the justified improvements at the time of development of the subdivision, the City of North Richland Hills will accept funds sufficient to construct said improvements at a future date. The total cost is based on the following:

Item	Unit	Qty.	Unit Price		Total	
6" Reinforced Concrete Street	SY	1,727	\$	75.00	\$	129,525.00
Curb & Gutter	LF	717	\$	15.00	\$	10,755.00
Concrete Sidewalk (5' wide)	SY	398	\$	65.00	\$	25,870.00
Interior Hydrated Lime	Ton	41	\$	225.00	\$	9,225.00
8" Stabilized Subgrade	SY	1,813	\$	10.00	\$	18,130.00

Total	\$ 193,505.00			
ROW Credit _	\$ (84,639.70)			
Remainder	\$ 108.865.30			

The indicated Unit Prices will fluctuate depending on when this work is bid in the open market. However, the Public Works Department is satisfied that these amounts are sufficient for the indicated street improvements through at least the end of this month (October 2022).

Regards,

Caroline Waggoner, P.E.
Director of Public Works