



690 Chesterfield Pkwy W ● Chesterfield MO 63017-0760 Phone: 636-537-4000 ● Fax 636-537-4798 ● www.chesterfield.mo.us

## **Planning Commission Staff Report**

**Project Type:** Amended Site Development Plan

Meeting Date: July 27, 2020

From: Annisa Kumerow, Planner

**Location:** North side of Wild Horse Creek Road and east of Harvester Road

**Description:** Wildhorse Acres (16931 WHC Road): An Amended Site Development Plan

for a 2.52 acre tract of land zoned "E-1AC" Estate District located north of

Wild Horse Creek Road east of Harvester Road.

## **PROPOSAL SUMMARY**

Zak Companies, LLC has submitted on behalf of ZH Asset Management, Inc., an Amended Site Development Plan for a 2.52 acre tract of land known as Wildhorse Acres. The plan would permit the development of two detached single-family homes. The subject site is zoned "E-1AC" Estate District and is governed under the terms and conditions of City of Chesterfield Ordinance 1937.



Figure 1: Aerial

#### SITE HISTORY

The subject property was zoned "NU" Non-Urban District prior to the incorporation of the City of Chesterfield. On June 2<sup>nd</sup>, 2003, the City of Chesterfield approved Ordinance 1937, which zoned the subject site from an "NU" Non-Urban District to an "E-1AC" Estate District.

Due to the requirements of the governing ordinance, a Site Development Plan was required for the subject site. On April 14<sup>th</sup>, 2004, City of Chesterfield approved a Site Development Plan. The approved plan featured two single-family detached homes, a single curb cut off of Wild Horse Creek Road, and a shared access drive.

## HARVESTER REALIGNMENT

The Fienup Farms subdivision is the adjacent property to the north of the subject site. In 2017, as part of the development of the Fienup Farms subdivision, the developer dedicated right-of-way to the City of Chesterfield in order to provide for the future realignment of the development's easternmost access with Riverdale Drive, across from the subject property and 16939 Wild Horse Creek Road.

The currently approved Site Development Plan for Wildhorse Acres, approved in 2004,

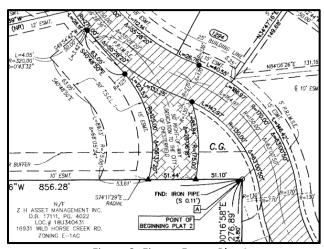


Figure 2: Fienup Farms Plat 1

did not contemplate a realignment of the aforementioned access with Riverdale Drive. Additionally, the applicant has provided a narrative that details practical difficulties with realigning Harvester Drive through the subject site. Per the provided narrative, it would be difficult for the realignment to meet the minimum design standards of the St. Louis County Design Criteria for horizontal curvature. Furthermore, there is an existing creek on the subject site that would necessitate approximately 150 linear feet of roadway bridge, assuming the bridge would be constructed on a straight roadway alignment. The developer is not proposing to construct the Harvester realignment with the proposed Amended Site Development Plan.

#### **STAFF ANALYSIS**

The subject site is located on the north side of Wild Horse Creek Road, east of Harvester Road. The City of Chesterfield Comprehensive Land Use Plan indicates that this development is within the area designated as Residential Single-Family. The City of Chesterfield's Comprehensive Plan also identifies specific plan policies. Outlined below are specific plan policies that are applicable to this request.

#### **Plan Policies**

• 2.1.6 Reinforce Existing Residential Development Pattern - New residential development should reinforce existing residential neighborhood patterns by continuing to enforce high quality site and subdivision design, layout, and planning practices.

- **2.3 Homes in West Sub-Area** New residential development west of Wilson Road generally should consist of single-family homes.
- **7.2.4 Encourage Sidewalks** Sidewalks should be required of all new developments and encouraged along existing roads in the City of Chesterfield, allowing creative placement to protect the natural environment.

### **Plan Comparison**

Similar to the Site Development Plan approved in 2004, the Amended Site Development Plan depicts two lots, in accordance with Ordinance 1937, which permits a maximum of two single-family detached homes. At the time of approval of the 2004 Site Development Plan, Wild Horse Creek Road was maintained by the Missouri Department of Transportation. Wild Horse Creek Road is currently maintained by St. Louis County.

Whereas the Site Development Plan featured a single curb cut off of Wild Horse Creek Road and a shared access drive, the Amended Site Development Plan proposes an individual access to each lot. The proposed access to the western lot is located off of Wild Horse Creek Road and across from Riverdale Drive, and the proposed access to the eastern lot is located off of Harvester Drive. There is a 5' sidewalk along Wild Horse Creek Road proposed with this development.

As with the previously approved Site Development Plan, the Amended Site Development Plan depicts a 30 foot landscape buffer along Wild Horse Creek Road, per the "E-1AC" Estate District requirements. Prior to construction, each lot will be required to submit a Tree Stand Delineation, Tree Preservation Plan, and Landscape Plan.

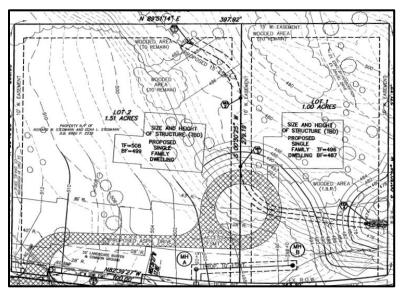


Figure 3: Wildhorse Acres Site Development Plan (2004)

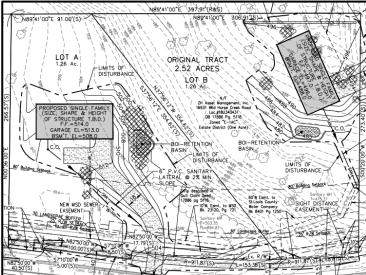


Figure 4: Wildhorse Acres Amended Site Development Plan (2020)

## **STAFF RECOMMENDATION**

Staff has reviewed the Amended Site Development Plan and has found the proposal to be in compliance with the site specific ordinance, Comprehensive Plan, and all City Code requirements. Staff recommends approval to the Planning Commission.

#### **MOTION**

The following options are provided to the Planning Commission for consideration relative to this application:

- 1) "I move to approve (or deny) the Amended Site Development Plan for Wildhorse Acres (16931 WHC Road), as presented."
- 2) "I move to approve the Amended Site Development Plan for Wildhorse Acres (16931 WHC Road) with the following conditions..." (Conditions may be added, eliminated, altered, or modified.)

#### Attachments

- 1. Amended Site Development Plan
- 2. Narrative

## Owner's Certificate

ZH ASSET Management, Inc is the owner of the property shown on this Amended Site Development Plan, previously known as WILDHORSE ACRES SITE DEVELOPMENT PLAN, as recorded in Book 352 at page 396 of the St Louis County Records, St Louis County, Missouri and for and in consideration of being granted a permit to divide the property under the provisions of Chapter \_\_\_\_ of the City of Chesterfield Ordinance No. \_\_\_ do hereby agree and declare that said property from the date of recording this Amended Site Development Plan shall be divided only as shown hereon, unless said plan is amended by the Planning Commission, or voided or vacated by order of ordinance of the City of Chesterfield Council.

**LOCATION MAP** 

Robert W Zak, Jr State of Missouri

County of St Louis

\_\_\_\_ day of \_\_\_\_\_, 2020, before me personally appeared Robert W Zak Jr, to me known, who, being by me duly sworn, did say that he is the President of ZH ASSET Management, Inc., a corporation in the State of Missouri, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation and that said instrument was signed and sealed on behalf of said corporation by authority of it's Board of Directors, and said Robert W Zak, Jr. acknowledged said instrument to be the free act and deed of said corporation.

My commission expires: \_\_\_\_\_ Seal (below)

\_\_\_\_\_\_ Notary Signature

## Description:

A tract of land in U.S. Survey 125 being part of Shares (Lots) 3, 4 and 5 of BRYAN MULLANPHY ESTATE PARTITION, Township 45 North, Range 4 East and being tracts conveyed to ZH Asset Management, Inc by deed recorded in Book 17111 at page 4022 and Book 17886 pg 5119 of the St Louis County Records, St Louis County, Missouri and being described as follows:

Beginning at the Northeast corner of a tract of land conveyed to ZH Asset Management Inc. by deed recorded in Book 17111 at page 4022 of the St Louis County Records; thence South 00 degrees 20 minutes 00 seconds West a distance of 273.40 feet to a point, said point being in the Northern right of way line of Wild Horse Creek Road (Variable Widths); thence along said right of way along a curve to the right having a radius of 911.87 feet an arc distance of 241.08 feet and a chord bearing and distance of South 89 degrees 35 minutes 34 seconds West 240.37 feet to a point; thence continuing along said right of way line the following courses and distances, North 82 degrees 50 minutes 00 seconds West a distance of 17.79 feet to a point; thence South 07 degrees 10 minutes 00 seconds West a distance of 8.50 feet to a point; thence North 82 degrees 50 minutes 00 seconds West a distance of 100.00 feet to a point; thence South 07 degrees 10 minutes 00 seconds West a distance of 5.00 feet to a point; thence North 82 degrees 50 minutes 00 seconds West a distance of 40.50 feet to a point; thence leaving said Road right of way North 00 degrees 36 minutes 00 seconds East a distance of 266.57 feet to a point in the North line of said ZH Asset Managements Inc. tract; thence North 89 degrees 41 minutes 00 seconds East along the North line of said tract a distance of 397.91 feet to the point of beginning and containing 2.52 acres, more or less.

Subject to easements, restrictions, reservations and covenants of record, if any.

## Engineer's / Surveyor's Certificate

We certify that Heideman + Associates, Inc. have amended an existing Site Development Plan recorded in Plat Book 356 Page 396 of the St. Louis County Public Records, St. Louis, Missouri.

In witness whereof I have hereunto set my hand and official seal this \_\_\_ day of \_\_\_\_, 2020.

MARK WILEY P.L.S. 2437

## CITY OF CHESTERFIELD PLANNING CERTIFICATE

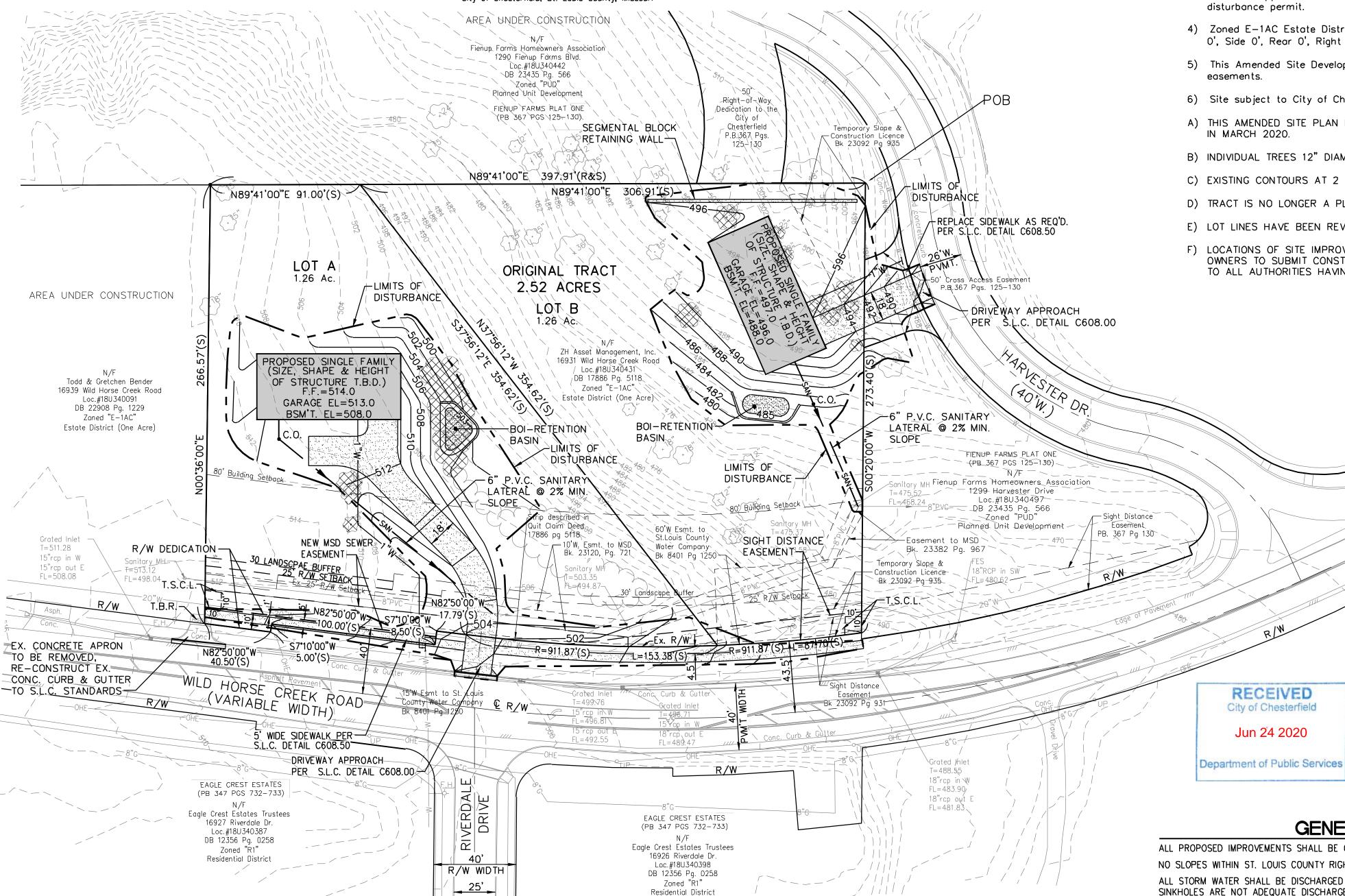
This Amended Site (Development) Plan was approved by the City of Chesterfield Planning Commission and duly verified on the \_\_\_\_\_ day of \_\_\_\_\_, 2020, by the Chairperson of said Commission, authorizing the recording of this Amended Site Plat pursuant to Chesterfield Ordinance Number 200, as attested to by the Director of Planning and the City Clerk.

\_\_\_\_\_

# WILDHORSE ACRES AMENDED SITE DEVELOPMENT PLAN

BEING A TRACT OF LAND IN U.S. SURVEY NO. 886 AND U.S. SURVEY NO. 125, BEING PARTS OF LOTS 3, 4 AND 5 OF BRYAN MULLANPHY ESTATE PARTITION TOWNSHIP 45 NORTH, RANGE 4 EAST,

> ZONED E-1AC ESTATE DISTRICT (one acre) City of Chesterfield, St. Louis County, Missouri



## SURVEYOR'S NOTES:

- 1) Basis of Bearings shown on North line of parcel being a line of "RESUBDIVISION OF PART A OF FIENUP TRACT" as recorded in Plat Book 227 page 99 of the St Louis County Records.
- 2) This tract is Urban Property.

## 15 YEAR / 20 MINUTE DIFFERENTIAL RUNOFF CALCULATIONS:

EXISTING CONDITIONS:	
TOTAL AREA OF SITE:	2.52 ac.
GREENSPACE (5%):	2.52  ac.x  1.70 = 4.28  c.f.s.
GRAVEL AREA (85%):	0.00  ac.x  3.17 = 0.00  c.f.s.
ROOF / PAVEMENT AREA (100%):	0.00  ac.x  3.54 = 0.00  c.f.s.
ROOF AREA (Direct Connection):	$0.00 \text{ ac.} \times 4.20 = 0.00 \text{ c.f.s.}$
EXISTING 15yr/20min. RUNOFF:	4.28 c.f.s.
PROPOSED IMPROVEMENTS:	
GREENSPACE (5%):	2.23  ac.x  1.70 = 3.79  c.f.s.
GRAVEL AREA (85%):	0.00  ac.x  3.17 = 0.00  c.f.s.
ROOF / PAVEMENT AREA (100%):	$0.29 \text{ ac.} \times 3.54 = 1.03 \text{ c.f.s.}$
ROOF AREA (Direct Connection):	$0.00 \text{ oc.} \times 4.20 = 0.00 \text{ c.f.s.}$
PROPOSED 15yr/20min. RUNOFF:	4.82 c.f.s.

15yr./20min. DIFFERENTIAL RUNOFF: + 0.54 c.f.s. \*NO FLOOD PROTECTION REQUIRED PER MSD STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES CHAPTER 4, SECTION 4.060.01 IN FEBRUARY 1, 2018 REGULATIONS. \*NO CHANNEL PROTECTION REQUIRED PER MSD STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES CHAPTER 4. SECTION 4.060.02.3 IN FEBRUARY 1, 2018 REGULATIONS.

# GRAPHIC SCALE 1 inch = 40 ft.

DISTRICTS & UTILITIES MONARCH FIRE PROTECTION DISTRICT AMEREN UE

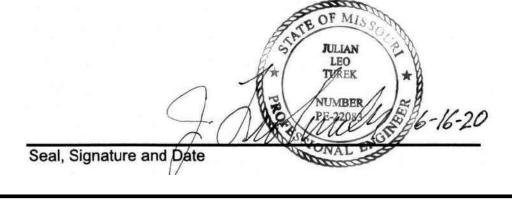
MISSOURI AMERICAN WATER COMPANY SPIRE ENGINEERING METROPOLITAN SEWER DISTRICT AT&T

## STORMWATER MANAGEMENT NOTE:

ON-SITE LAND AREA DISTURBED = 0.85 ACRES OFF-SITE LAND AREA DISTURBED = 0.10 ACRES (SIDEWALK CONSTRUCTION) ANY FUTURE LAND DISTURBANCE AND/OR INCREASE IN IMPERVIOUS AREA ON THIS SITE MAY REQUIRE ADDITIONAL STORM WATER MANAGEMENT PER MSD REQULATIONS IN PLACE AT THAT TIME.

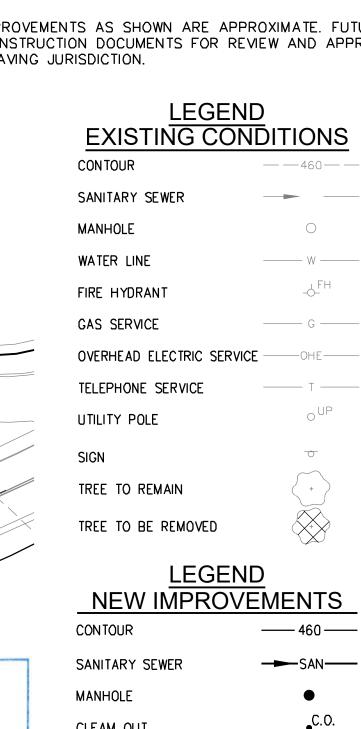
# GEOTECHNICAL ENGINEERS STATEMENT

Brucker Engineering Company and the undersigned engineer has reviewed this conceptual Amended Site Development Plan in reference to geotechnical considerations. A previous preliminary subsurface exploration included test pits dug in 2003 in the area of Lot 1 for a different site layout, and we have reviewed published geologic conditions. In general, there is some undocumented fill and the virgin soils are of considerable variation depending on location on the site. It is our opinion the site can be developed provided all work is completed in accordance with approved individual geotechnical design reports to be prepared for each lot. The geotechnical design reports should be prepared by a Missouri registered professional engineer based on pre-construction subsurface exploration conducted for the actual proposed development and should evaluate bearing capacity, settlement and slope stability, and comply with generally accepted geotechnical standards and the standards of Chesterfield, Missouri.



# SURVEYOR'S NOTES

- 1) Bearings on this Plat were from A RESUBDIVISION OF PART A OF FIENUP TRACT, a subdivision filed for record in Plat Book 227 at page 99 of the St. Louis County Records.
- 2) Floodplain Zone 'X' areas determined to be outside 500-year floodplain. Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 29189C0163K dated February 4, 2015.
- 3) A land disturbance permit is required for any new construction on this site. Plat approval should not be construed as approval of a land
- 4) Zoned E-1AC Estate District (one acre) Setback requirements, Front O', Side O', Rear O', Right of Way 25'.
- 5) This Amended Site Development Plan does not vacate any existing
- 6) Site subject to City of Chesterfield Ordinance 1937
- A) THIS AMENDED SITE PLAN DEPICTS THE EXISTING CONDITIONS AS FOUND
- B) INDIVIDUAL TREES 12" DIAMETER AND LARGER ARE SHOWN.
- C) EXISTING CONTOURS AT 2 FOOT INTERVALS.
- D) TRACT IS NO LONGER A PLANNED DEVELOPMENT.
- E) LOT LINES HAVE BEEN REVISED TO CREATE TWO 1.26 ACRE LOTS.
- F) LOCATIONS OF SITE IMPROVEMENTS AS SHOWN ARE APPROXIMATE. FUTURE OWNERS TO SUBMIT CONSTRUCTION DOCUMENTS FOR REVIEW AND APPROVAL TO ALL AUTHORITIES HAVING JURISDICTION.



CLEAM OUT WATER LINE —— W —— CONCRETE PAVEMENT

# **GENERAL NOTES:**

ALL PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED TO ST. LOUIS COUNTY STANDARDS. NO SLOPES WITHIN ST. LOUIS COUNTY RIGHT-OF-WAY SHALL EXCEED 3 (HORIZ.) TO 1 (VERT.). ALL STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.

ALL PROPOSED ACCESS TO ST. LOUIS COUNTY ROADS SHALL MEET MINIMUM ST. LOUIS COUNTY SIGHT DISTANCE REQUIREMENTS.

ALL SIDEWALKS & ASSOCIATED ACCESSIBILITY IMPROVEMENTS SHALL BE CONSTRUCTED TO ST.LOUIS COUNTY ADA STANDARDS. A SIGNED/SEALED NOTE SHALL BE ADDED TO THE CONSTRUCTION PLANS INDICATING THAT THE

UNIMPROVED EXISTING SIDEWALK/PEDESTRIAN PATH ALONG THE PROJECT FRONTAGE MEETS CURRENT ST. LOUIS COUNTY ADA STANDARDS. ALL GRADING AND DRAINAGE SHALL BE IN CONFORMANCE WITH ST. LOUIS COUNTY AND MSD

ALL HYDRANTS, POWER POLES OR OTHER POTENTIAL OBSTRUCTIONS WITHIN THE ST. LOUIS

COUNTY ROAD RIGHT OF WAY HAVE A MINIMUM TWO (2) FOOT SETBACK FROM FACE OF CURB OR EDGE OF PAVEMENT, AS DIRECTED BY THE ST. LOUIS COUNTY DEPARTMENT OF HIGHWAYS & TRAFFIC. ANY ENTITY THAT PERFORMS WORK ON ST. LOUIS COUNTY MAINTAINED PROPERTY SHALL PROVIDE THE COUNTY WITH A CERTIFICATE OF INSURANCE EVIDENCING GENERAL LIABILITY COVERAGE (BODILY INJURY AND PROPERTY DAMAGE) IN THE AMOUNTS SPECIFIED AS THE LIMITS OF LIABILITY SET BY THE STATE FOR PUBLIC ENTITIES. SUCH CERTIFICATE SHALL INCLUDE ST. LOUIS COUNTY AS AN ADDITIONAL INSURED AND SHALL BE PROVIDED PRIOR TO THE ISSUANCE OF ANY PERMIT.

UPON REQUEST, THE COUNTY WILL PROVIDE THE SPECIFIC AMOUNTS FOR BOTH PER PERSON AND PER OCCURRENCE LIMITS. PRIOR TO SPECIAL USE PERMIT ISSUANCE BY THE ST. LOUIS COUNTY, A SPECIAL CASH ESCROW OR A SPECIAL ESCROW SUPPORTED BY AN IRREVOCABLE LETTER OF CREDIT, MAY BE REQUIRED TO BE ESTABLISHED WITH THE ST. LOUIS COUNTY DEPARTMENT OF HIGHWAYS & TRAFFIC

CERTIFICATE SHALL PROVIDE FOR A 30 DAY POLICY CANCELLATION NOTICE TO ST. LOUIS COUNTY.

TO GUARANTEE COMPLETION OF THE REQUIRED ROADWAY IMPROVEMENTS. CONTINUOUS PEDESTRIAN ACCESS SHALL BE PROVIDED DURING THE CONSTRUCTION PROCESS. PRIOR TO THE START OF CONSTRUCTION, ADEQUATE PEDESTRIAN ACCESS AROUND THE SITE SHALL BE PROVIDED AND VERIFIED. NO EXISTING SIDEWALK SHALL BE REMOVED WITHOUT PROVIDING ADEQUATE PEDESTRIAN FACILITIES AND ROUTES DURING CONSTRUCTION ACTIVITIES.

# **ENGINEERING DECLARATION**

The information on this plan is from existing available data. the engineering is preliminary and conceptual and shall not be construed as the final design for construction, but for preliminary costs and concept only. This preliminary plan is subject to change based on complete field information, engineering calculations, and future available data.

REVISIONS DESCRIPTION DATE 06/24/2020

DRAWN DPB CHECKED MJV SHEET NO.

636. 636.

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MANAGEMENT

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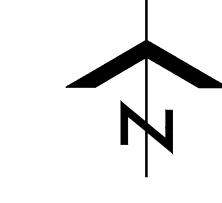
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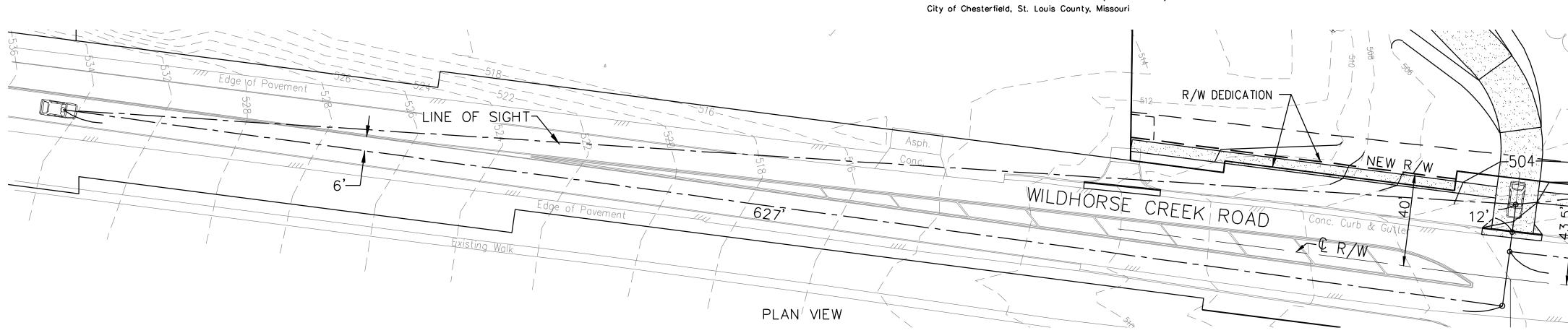
1 of 2

# WILDHORSE ACRES AMENDED SITE DEVELOPMENT PLAN

BEING A TRACT OF LAND IN U.S. SURVEY NO. 886 AND U.S. SURVEY NO. 125, BEING PARTS OF LOTS 3, 4 AND 5 OF BRYAN MULLANPHY ESTATE PARTITION

TOWNSHIP 45 NORTH, RANGE 4 EAST, ZONED E-1AC ESTATE DISTRICT (one acre)





<u>Table - 5.9-1</u>					
Design Speed (MPH)	St Louis County Minimum Sight Distance for Residential Driveway Serving 1 or 2 Lots (feet)				
15	85				
20	135				
25	180				
30	240				
35	300				
40	390				
POSTED SPEED—45	480				
DESIGN SPEED — (50)	570				

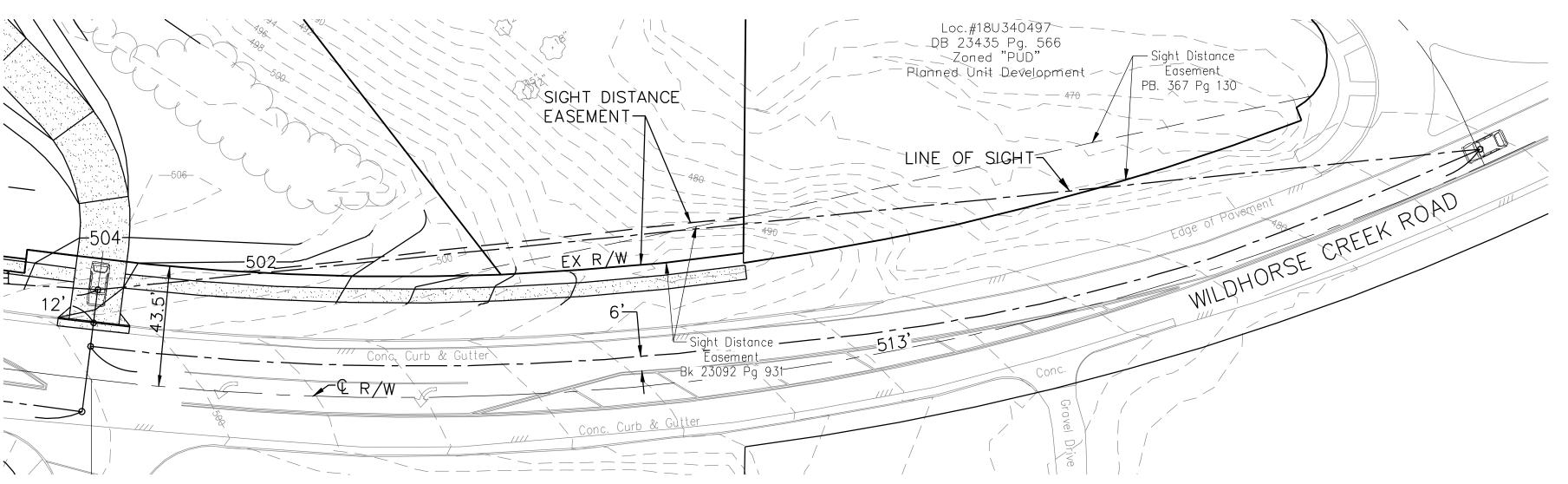
F40		× KWA F10
540		<u>&gt;</u>   <u>340</u>
530 $\frac{1}{1}$	LINE OF SIGHT	当 530
540 530 520		الا 520
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		<u>-3.5</u> '
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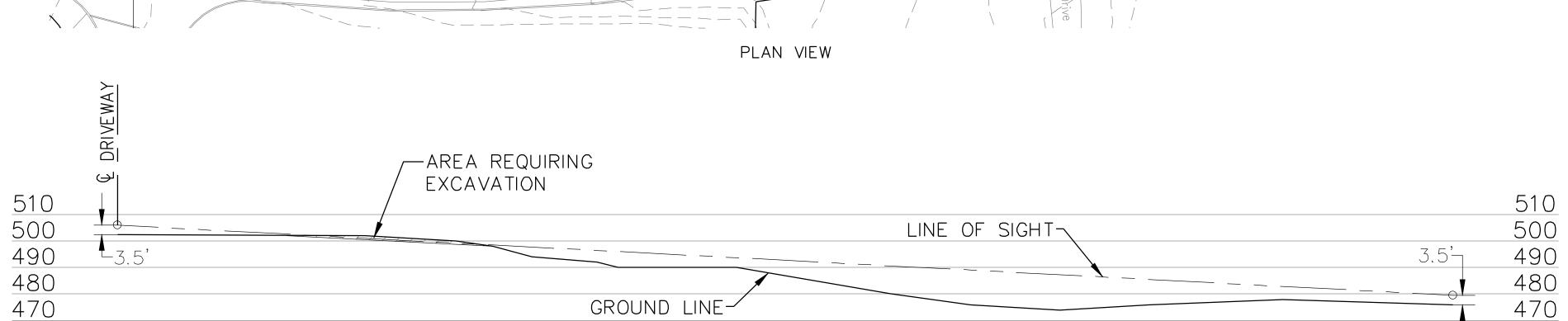
	<u>Table 5.9-2 - Adjustment Factors for Table 5.9-1</u> <u>Based on Approach Grade</u>								
	Approach Grade	Design Speed (mph)							
		15	20	25	30	35	40	45	50
	-9	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2
	-6	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2
APPROACH GRADE — FROM WEST	-5	1	1	1.1	1.1	1.1	1.1	1.1	1.1
TROW WEST	-4	1	1	1	1.1	1.1	1.1	1.1	1.1
	-3 to +3	1	1	1	1	1	1	1	1
	+4	0	0	0	0	0	0.9	0.9	0.9
APPROACH GRADE—FROM EAST	+5	0	0	0	0.9	0.9	0.9	0.9	0.9
THOM LAST	+6	0	0	0.9	0.9	0.9	0.9	0.9	0.9
	+9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9

# PROFILE

POSTED SPEED LIMIT = 45 m.p.h. DESIGN SPEED LIMIT = 50 m.p.h.

# SIGHT DISTANCE LOOKING WEST





PROFILE

POSTED SPEED LIMIT = 45 m.p.h. DESIGN SPEED LIMIT = 50 m.p.h.

SIGHT DISTANCE LOOKING EAST
SCALE: 1"= 30"

REVISIONS DESCRIPTION DATE 06/24/2020 DRAWN DPB CHECKED MJV

2 of 2

SHEET NO.

June 24, 2020

City of Chesterfield Department of Planning 690 Chesterfield Parkway West Chesterfield, MO 63017

Re: Wildhorse Acres

Ms. Kumerow,

This letter is in response to the concerns regarding the elimination of a potential future roadway connection from Wild Horse Creek Road to Harvester Lane as a result of this development.

Harvester Lane was recently constructed as part of Fienup Farms and serves as one of two access points to Wild Horse Creek Road from the new residential development. I have reviewed the alignment of which this potential roadway connection would be and find that it would be difficult to meet the minimum design standards of the St. Louis County Design Criteria for horizontal curvature. The minimum roadway centerline radii for a horizontal curve based on a 25-m.p.h. posted speed limit (30 m.p.h. design speed) is 125 feet. There is also an existing creek that runs thru the property which would require approximately 150 linear feet of roadway bridge. This assumes the roadway bridge would be constructed on a straight roadway alignment.

Note that projects that affect wetland or waters of the United States will likely be accompanied by an additional assessment of the project as required by the U.S. Army Corp of Engineers and/or Missouri Department of Natural Resources under Clean Water Act section 401/404 permitting requirements.

If a roadway connection were to be constructed thru the site at 16931 Wild Horse Creek Road it would be located only 500 feet west of the current Harvester Lane connection at a great cost to the jurisdictional authority providing funding, without providing any real benefit to the residence of the Fienup Farms residence.

(Refer to attached Exhibit for reference.)

Sincerely.

Dan Bogaski
Senior Designer | Civil



City of Chesterfield

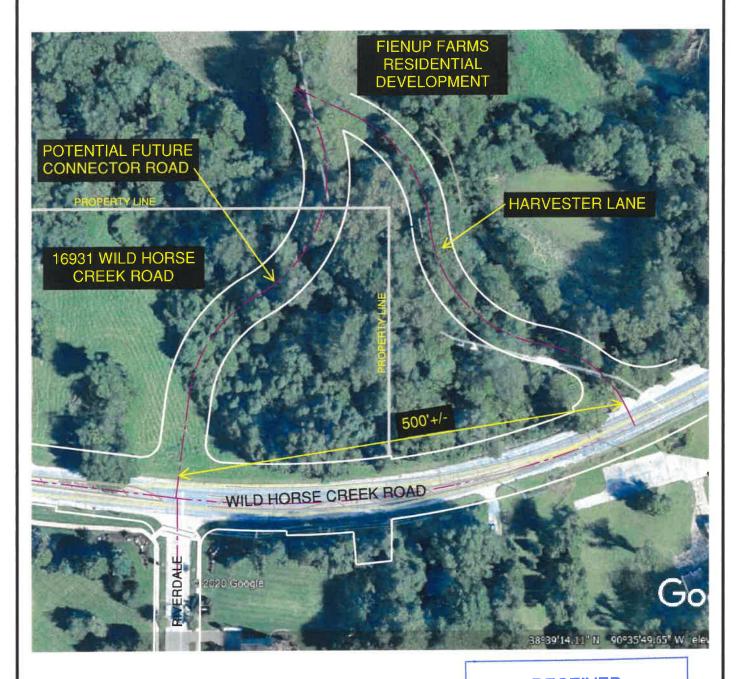
Jun 24 2020

Department of Public Services



240 Larkin Williams Industrial Court Fenton, Missouri 63026-2413

p 636-492-3200 f 636-492-3202





JUL - 1 2020

City of Chesterfield-Department of Planning



#### Consulting Engineers

HEIDEMAN

ASSOCIATES, INC.

A Zak Company

240 Larkin Williams Industrial Ct. p 636.492.3200 Fenton, Missouri 63026 f 636.492.3200 www.zakcompanies.com