

Memorandum

Planning & Development Services Division



To: Planning and Public Works Committee

From: Jonathan Raiche, Senior Planner

Date: January 8, 2015

RE: **P.Z. 09-2014 Bur Oaks (17751 Wild Horse Creek Road):** A request for a zoning map amendment from an "NU" Non-Urban District to an "E-1/2AC" Estate District with a Wild Horse Creek Road Overlay District designation for 21.876 acres located on the north side of Wild Horse Creek Road west of its intersection of Long Road and east of its intersection with Savonne Court (18V510105).

Summary

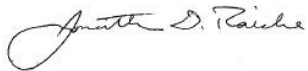
Stock and Associates, on behalf of Pulte Homes of St Louis, has submitted a request for a zoning map amendment from an "NU" Non-Urban District to an "E-1/2 AC" Estate District with a Wild Horse Creek Road "WH" Overlay District designation for this 21.867 acre tract of land. This change of zoning would allow zoning entitlements to construct a new residential subdivision with thirty-five (35) single family dwellings. Development characteristics of this proposal also include an overlook area, incorporation of walking trails, common open space, landscape buffers, and community amenities. In addition to the site specific requirements set forth in the Attachment A, attached hereto, if zoning is approved, this site will be required to adhere to all design criteria and development conditions found within the Unified Development Code, including all conditions of the "WH" Overlay District.

A Public Hearing relative to this petition was held at the October 27, 2014 Planning Commission meeting. An Issues Meeting was held on November 24, 2014 to discuss the changes made by the applicant and a subsequent Vote Meeting at the Planning Commission was held on December 8, 2014. The Planning Commission approved the plan by a vote of 8-0 and a copy of the Planning Commission Vote Report is attached for your review. The Planning Commission's approval is conditioned upon the City Council's approval of one modification request presented by the developer. The modification request is for a reduction in side yard setback from the required 15 feet to a proposed 8 feet; however, the setback requirement between structures will be maintained.

The new Wild Horse Creek Road Overlay District regulations, approved in October of 2014, provide the developer with an ability to request modifications to a specific subset of the district requirements. These modification requests, however, are not voted on by the Planning Commission. Each modification request requires a separate, super majority vote by the City Council for approval. As required by the ordinance, the developer has included a note on the plan identifying the modification request that will be voted on by the City Council.

Attached to this report is the Planning Commission Vote Report prepared by Staff along with the Attachment A and Preliminary Plan as recommended for approval by the Planning Commission.

Respectfully submitted,



Jonathan Raiche, AICP
Senior Planner

Cc: Aimee Nassif, Planning and Development Services Director

Attachments

1. Planning Commission Vote Report
 2. Attachment A
 3. Preliminary Plan
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Planning Commission Vote Report

Subject: Change of Zoning Vote Report

Meeting Date: December 8, 2014

From: Jonathan Raiche, Senior Planner

Location: North of Wild Horse Creek Road, west of its intersection of Long Road and east of its intersection with Savonne Court

Petition: **P.Z. 09-2014 Bur Oaks (17751 Wild Horse Creek Road)**

Proposal Summary

Stock and Associates, on behalf of Pulte Homes of St Louis, has submitted a request for a zoning map amendment from an "NU" Non-Urban District to an "E-1/2 AC" Estate District with a "WH" Overlay designation for this 21.867 acre tract of land. This change of zoning would allow zoning entitlements to construct a new residential subdivision with thirty-five (35) single family dwellings. Development characteristics of this proposal also include an overlook area, incorporation of walking trails, common open space, landscape buffers, and community amenities. In addition to the site specific requirements set forth in the Attachment A, attached hereto, if zoning is approved, this site will be required to adhere to all design criteria and development conditions found within the Unified Development Code, including all conditions of the "WH" Overlay District.

Site History

The subject site was zoned "NU" Non-Urban District by St. Louis County in 1965 and there have been no other site zoning map amendments on this site since that time. The site currently contains one (1) residential structure along with two (2) large barn/storage buildings and various other smaller out-buildings. These structures, known as the Mary Schaeffer Farmhouse, were built in 1908 and are on the Chesterfield Historic and Landmark Preservation Committee's (CHLPC) list of structures to be evaluated for historic significance and value. In October, Jesse Francis (Museum Curator Faust Park) Ex-Officio Member of the CHLPC evaluated all structures on the property. His report, which was provided to the Planning Commission at the Issues Meeting, determined that due to a variety of reasons the only structure on the site of historic interest was the smokehouse.

After expressing interest in obtaining and preserving the smokehouse, the property owners have agreed to donate it to Faust Park. Subsequent to this visit, the CHLPC coordinated with the property owner/developer to allow a representative to come onto the property to photo document the exterior and interior of all structures. These photographs have been received by the City and a few of these photographs are provided below.

In addition, the developer will be placing historic markers and signage at various locations throughout the residential development to educate future residents and honor the history of this area.



Surrounding Land Uses

The land use and zoning for the properties surrounding this parcel are as follows:

North: The property to the north across the Missouri Pacific Railroad is the Landings at Spirit subdivision zoned "M-3" Planned Industrial. The current use on this property includes a recreational golf course. The Spirit of St. Louis Airport is located north of the golf course.

South: The properties to the south across Wild Horse Creek Road include the Greystone residential subdivision zoned "R1" Residence District with a Planned Environment Unit and the Chesterfield Elementary School zoned "NU" Non-Urban. Current uses include single-family residential and educational.

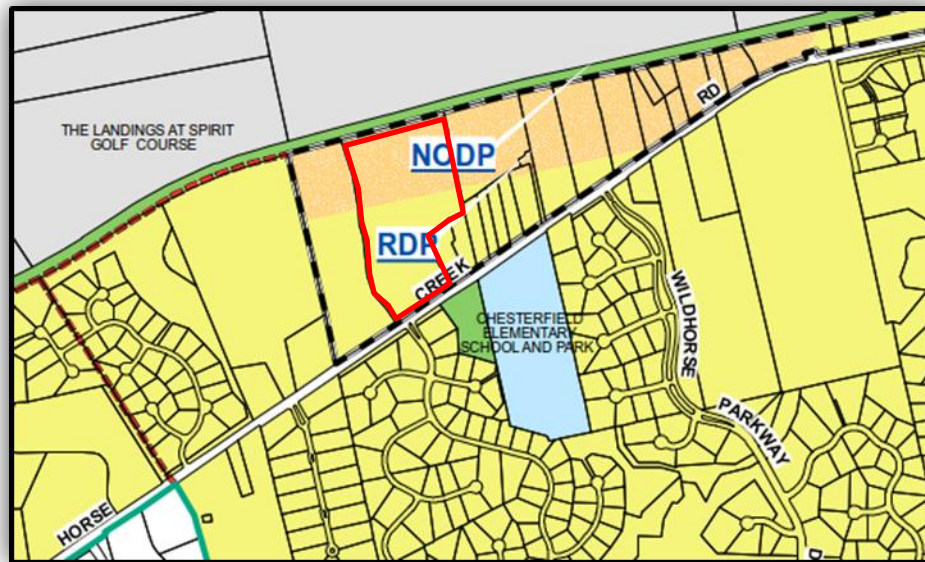
East: The properties to the east include six (6) single-family residential lots zoned "NU" Non-Urban and the Wildhorse-Schaeffer subdivision zoned "E-1AC" with a Conditional Use Permit to permit a Nursing Home and Senior Living units. The latter of these adjacent uses is currently a vacant lot.

West: The property to the west is the West County Christian Church subdivision zoned "NU" Non-Urban and is currently occupied by a church.



Comprehensive Plan Analysis

The subject site is located within both Neighborhood Office Development Policy (NODP) area and Residential Development Policy (RDP) area of the Wild Horse Creek Road Sub-area as seen in the figure below. As previously mentioned, the ordinance for this area was recently amended which eliminated the provisions for Neighborhood Office uses and placed an emphasis on single-family residential use throughout the entire overlay district. The proposed plan does comply with the desire for single-family residential uses to occupy this site. Below is a snapshot of the City's Comprehensive Land Use Plan for this area. The parcels in yellow are designated for residential uses.



Analysis

This zoning map amendment request would authorize zoning entitlements for development of a new, single family residential development with a maximum of thirty-five (35) single family homes. Zoning to the "E-1/2" Acre District with the "WH" Overlay designation results in additional design standards and criteria above what is typically found and required in traditional residential zoning districts. To ensure quality development and protection of the scenic area, those parcels located within the bow tie area of the Wild Horse Study Sub Area, must select one of the Estate District Zoning Categories with the "WH" Overlay when seeking a change of zoning.

The Estate Districts require inclusion of a 30 foot landscape buffer around the perimeter of the development and also include a minimum setback to be maintained between structures. Neither of these are found in the traditional residential or "R" districts in City Code. As discussed during the issues meeting, the developer will adhere to this setback requirement and has also reconfigured his site layout so that all landscape buffers are located outside of any individual, private lots. This will help ensure protection and preservation of plantings around the site perimeter and provide a natural screening from other developments.

In addition, the Wild Horse Overlay District ("WH" Overlay) includes a variety of additional criteria and standards above and beyond that of the Estate District. Table 1 from Article 03-05C of the UDC listing these specific and additional design criteria is provided below.

Table 1: Specific Design Requirements	
Building Design	Rear and side facades shall be designed with similar detailing and be compatible with the principal facades of the building.
Internal Roadway System	As development occurs in the area, an internal roadway system, complete with buffers, landscaping, pedestrian circulation, and cross access shall be required as directed by the City of Chesterfield.
Pedestrian Circulation	To achieve pedestrian circulation, all development shall include sidewalks and/or trails.
Preservation of Slopes and Natural Features	Development on slopes in excess of 20% shall be minimized to the greatest extent practicable except for necessary infrastructure and public improvements.
Protection of Historic Features	Future development shall minimize any impact to historic and heritage sites. Historic buildings and archeological sites shall be of utmost importance.

As shown on the Preliminary Plan, a series of trails and sidewalks are being incorporated into the development. The site also includes community amenities such as an overlook area and workout stations. Preservation efforts have been achieved by the inclusion of historic markers and signage, as well as donation of the Smokehouse to Faust Park. The proposed internal drive will be dedicated as a public street, meeting all city standards for street design. As shown on the Preliminary Plan, this road connects to the future internal roadway system that is planned as development occurs to the east which will help to prevent traffic congestion and excessive curb cuts on Wild Horse Creek Road.

If zoning is approved, the next phase of the process will be Site Development Plan review. It is during this time that such site design items as lighting, tree planting selections, and architectural elevations will be reviewed by the City. The developer is aware of the requirement related to the rear and side facades being compatible in color, design, and material to the front facades of the residential structures.

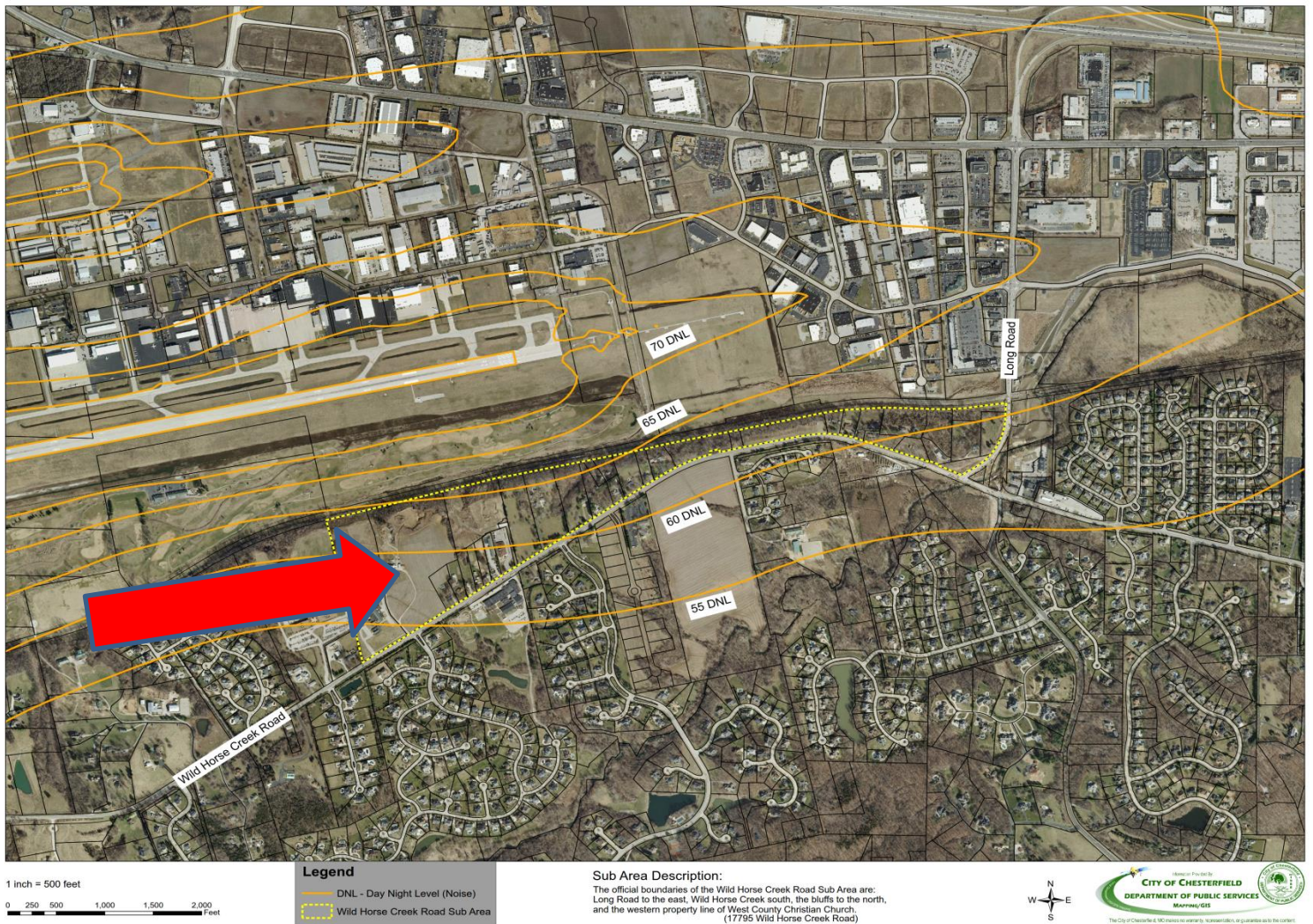
The Wild Horse Overlay also includes a series of Development Criteria which must be achieved. Table 2 (Also from Article 03-05C of the UDC) describes these criteria:

Building Height	The building height for residential structures shall not exceed 50 feet.
Structure Setbacks	Structure setbacks shall be as established in the underlying zoning district.
Landscape Buffering	The perimeter landscape buffer required in the underlying estate district zoning category shall not be located within any developed lot with a residential structure on it. The landscape buffer may include areas of common ground or conveyed park lands.
Protection of Wild Horse Creek Road Character	To protect the scenic character of Wild Horse Creek Road, all developed lots must be set back at least fifty (50) feet from Wild Horse Creek Road right of way and screened from view. In addition, when any residential structure's rear façade fronts Wild Horse Creek Road, additional landscape buffering and vegetative screening such as landscape berms shall be provided within a permanent landscape easement to screen the view of the structure from Wild Horse Creek Road.
Common Ground	A minimum of 30% common ground shall be provided in the development. Common ground shall be deed restricted, not concentrated in one area of the development site, and not located within any developable lot. However, common ground may be concentrated in areas in a residential development which lie above the 65 DNL line. Any land conveyed for public park purposes may be counted toward the Common Ground requirement.

As discussed earlier in this report, landscape buffers are being achieved and the lots fronting Wild Horse Creek Road are situated so that they are 50 feet from Wild Horse Creek Road. This then creates an additional green space separating the homes from Wild Horse Creek Road. As shown on the Preliminary Plan, which is made part of the legislation as Attachment B, 31% common ground is being achieved. As with the architectural elevations, the building heights of all structures will be submitted to the Department and reviewed by the City during the Site Development Plan stage.

Noise/Spirit of St Louis Airport Analysis

As required per ordinance, any area of the residential development located within a Day Night Level (DNL) Line of 65 or greater, should only contain common ground, community amenities, or other such preservation areas. According to Spirit of St Louis Airport, while they have not updated their Noise Contour Map at this time, they do consider the 65 DNL line as shown on that map to be lower than that and more realistically just a 60 DNL area. As you can see from the map below, only a small section of the 65 DNL line encroaches onto this project site. Therefore, they are considering this project to be outside of any 65 DNL areas. Regardless, the developer has located all developable lots with residential structures away from this area.



Comments from the Spirit of St Louis Airport have been received and incorporated into the Attachment A as well. In addition, during site development plan review, the developer will be required to provide information related to sound attenuation methods they are including (regardless of the 65 DNL line).

As mentioned previously, the developer will be requesting a modification to the side yard structure setback from the City Council. The request is to maintain an 8 foot side yard setback in lieu of the 15 foot side yard setback requirement. This note is added to the preliminary plan and the request will require a two-thirds vote of the City Council. If not approved, the preliminary plan will be amended and as required by Code, sent back to the Planning Commission for review. While the applicant is requesting this modification, the Preliminary Plan has documented compliance with the 30 foot minimum distance between structures as required in the "E-1/2" Acre District.

An issues meeting was held before the Planning Commission on November 24, 2014. At that time, discussion centered on the updated Preliminary Plan and all previous issues were addressed with no additional items introduced. Other than the Applicants, no additional speakers were present at this meeting.

Request

Staff has reviewed the requested zoning map amendment by the Applicant as it pertains to the "E-1/2 AC" request with a "WH" Overlay and has prepared an Attachment A reflecting this request for consideration by the Planning Commission. The Preliminary Plan has been reviewed by Staff and is marked hereto as Attachment B. Staff has no further comments or outstanding issues on the zoning request before the Commission.

The petition has met all filing requirements and procedures of the City of Chesterfield. Additionally, all agency comments have been received and comments are represented in the provided Attachment A. Staff requests action on P.Z. 09-2014 Bur Oaks (17751 Wild Horse Creek Road). Upon receiving recommendation on this petition from the Planning Commission, this zoning request will be forwarded to the City Council for review. If approved, the Site Development Plan process will then commence.

Attachments:

1. Attachment A
2. Preliminary Plan (Attachment B)
3. Tree Stand Delineation Plan
4. Project Narrative from Applicant

cc: Aimee Nassif, Planning and Development Services Director

ATTACHMENT A

All provisions of the City of Chesterfield City Code shall apply to this development except as specifically modified herein.

I. SPECIFIC CRITERIA

A. PERMITTED USES

1. The uses allowed in this "E-½ AC" Estate District with a Wild Horse Creek Road "WH" Overlay District shall be:
 - a. Dwellings, Single Family Detached.

B. DENSITY REQUIREMENTS

The total number of single family residential units shall not exceed thirty-five (35) units.

C. SETBACKS

1. Structure Setbacks

No building or structure, other than: a freestanding subdivision identification sign, light standards, or flag poles will be located within the following setbacks:

- a. Twenty-five (25) feet from the internal right-of-way shown as Oak Ridge Lane on the Preliminary Plan attached hereto and marked as Attachment B.
- b. All other setbacks shall adhere to City Code.

2. Lot Setbacks

- a. All lots shall be set back a minimum of seventy-seven (77) feet from the northern boundary of this district.

D. DEVELOPMENT STANDARDS

Minimum lot size for this development shall be 15,000 sf.

E. PARKING AND LOADING REQUIREMENTS

1. Parking and loading spaces for this development will be as required in the City of Chesterfield Code.
2. No construction related parking shall be permitted within Wild Horse Creek Road right-of-way or on any other existing roadways. All construction related parking shall be confined to the development.
3. On-street parking shall be limited to one side of internal street identified as Oak Ridge Lane on the Preliminary Plan attached hereto and marked as Attachment B.

F. LANDSCAPE AND TREE REQUIREMENTS

1. Landscape Buffers requirements:
 - a. A thirty (30) foot Landscape Buffer shall be required around the entire perimeter of the district except on the southern border. A fifty (50) foot Landscape Buffer shall be required along the southern border adjacent to Wild Horse Creek Road.
 - b. The required Landscape Buffer shall be outside of any developed lot.
2. A minimum of thirty percent (30%) Common Ground shall be required for this district.

G. SIGN REQUIREMENTS

1. Signs shall be permitted in accordance with the regulations of the City of Chesterfield Code.
2. Ornamental Entrance Monument construction, if proposed, shall be reviewed by the City of Chesterfield, and/or MoDOT, for sight distance considerations prior to installation or construction.

H. LIGHT REQUIREMENTS

Provide a lighting plan and cut sheet in accordance with the City of Chesterfield Code.

I. ARCHITECTURAL

The development shall adhere to the Architectural Review Standards and the "WH" Overlay District of the City of Chesterfield Code.

J. ACCESS/ACCESS MANAGEMENT

1. Access to the development shall be as shown on the Preliminary Plan attached hereto and marked as Attachment B, and adequate sight distance shall be provided, as directed by the City of Chesterfield and the Missouri Department of Transportation, as applicable.
2. If adequate sight distance cannot be provided at the access location(s), acquisition of right-of-way, reconstruction of pavement and other off-site improvements may be required to provide the required sight distance as required by the City of Chesterfield and the agency in control of the right of way off which the access is proposed.
3. Secondary access to the development shall be provided as directed by the City of Chesterfield and Monarch Fire Protection District.
4. No lot shall be allowed direct access to Wild Horse Creek Road.

K. PUBLIC/PRIVATE ROAD IMPROVEMENTS, INCLUDING PEDESTRIAN CIRCULATION

1. Oak Ridge Lane shall be a public street and shall not be gated.
2. Provide street connections and right-of-way to the adjoining properties as shown on the Preliminary Plan attached hereto and marked as Attachment B and as directed by the City of Chesterfield and the Missouri Department of Transportation.
3. Stub streets shall conform to the requirements set forth in Article 4 of the Unified Development Code.
4. All roadway and related improvements in each plat or phase of the development shall be constructed prior to issuance of building permits exceeding 60% for that plat or phase. Delays due to utility relocation and/or adjustment, for which the developer is responsible monetarily, shall not constitute a cause to issue permits in excess of 60%.
5. Obtain approvals from the City of Chesterfield and the Missouri Department of Transportation and other entities as necessary for locations of proposed curb cuts and access points, areas of new dedication, and roadway improvements.
6. Additional right-of-way and road improvements shall be provided, as required by the Missouri Department of Transportation and the City of Chesterfield.
7. Provide a 5 foot wide sidewalk, conforming to ADA standards, along Wild Horse Creek Road. The sidewalk shall provide for future connectivity to adjacent developments and/or roadway projects. The sidewalk may be located within right-of-way controlled by another agency, if permitted by that agency or on private property within a 6 foot wide sidewalk, maintenance and utility easement dedicated to the City of Chesterfield.
8. Provide an on-site pedestrian walking trail and community recreation area as shown on the Preliminary Plan attached hereto and marked as Attachment B.
9. Any work within MoDOT's right of way will require a MoDOT permit.
10. The entrance geometrics and drainage design shall be in accordance with MoDOT standards and shall be reviewed and approved by MoDOT.
11. The petitioner shall provide adequate detention and/or hydraulic calculations for review and approval of all storm water that will affect MoDOT right of way.
12. All drainage detention storage facilities shall be placed outside of the standard governmental agencies' planning and zoning setbacks, or 15 feet from the new or existing right of way line, whichever is greater.

13. All proposed work in MoDOT right of way must comply with MoDOT standards, specifications, conform to MoDOT's Access Management Guidelines with detailed construction plans being received and approved by MoDOT.
14. The proposed driveway location is subject to meet MoDOT's sight distance criteria and Access Management Engineering Policy.
15. All sidewalk and pedestrian facilities within MoDOT right of way must meet the ADA standards.
16. A left turn lane will need to be constructed for access to this subdivision from Wild Horse Creek Road as directed by MoDOT and the City of Chesterfield.

L. TRAFFIC STUDY

1. A traffic study may be required as directed by the City of Chesterfield and/or MoDOT. The scope of the study shall include internal and external circulation and may be limited to site specific impacts, such as the need for additional lanes, entrance configuration, geometrics, sight distance, traffic signal modifications or other improvements required, as long as the density of the proposed development falls within the parameters of the City's traffic model. Should the density be other than the density assumed in the model, regional issues shall be addressed as directed by the City of Chesterfield.
2. MoDOT may require a scoping meeting to discuss what type of traffic analysis will be needed to determine the necessary roadway improvements. A traffic impact study may be required to assess the impacts of the proposed development to the state highway system.

M. POWER OF REVIEW

Either Councilmember of the Ward where a development is proposed or the Mayor may request that the plan for a development be reviewed and approved by the entire City Council. This request must be made no later than twenty-four (24) hours after Planning Commission review. The City Council will then take appropriate action relative to the proposal. The plan for a development, for purposes of this section, may include the site development plan, site development section plan, site development concept plan, landscape plan, lighting plans, architectural elevations, sign package or any amendment thereto.

N. STORM WATER

1. The site shall provide for the positive drainage of storm water and it shall be discharged at an adequate natural discharge point(s) or an adequate piped system(s). The adequacy and condition of the existing downstream system(s) shall be verified and upgraded as necessary.

2. Storm water quantity management, channel protection, and water quality improvements shall be provided as required by the Metropolitan St. Louis Sewer District (MSD), Missouri Department of Transportation (MoDOT), St. Louis County, the Monarch Chesterfield Levee District, and the City of Chesterfield. The location and types of storm water management facilities shall be identified on all Site Development and Improvement Plans.
3. Emergency overflow drainage ways to accommodate runoff from the 100-year storm event shall be provided for all storm sewers, as approved by the City of Chesterfield.
4. Offsite storm water shall be picked up and piped to an adequate natural discharge point. Such bypass systems must be adequately designed.
5. The lowest opening of all structures shall be set at least two (2) feet higher than the one hundred (100) year high water elevation in detention/retention facilities. All structures shall be set at least thirty (30) feet horizontally from the limits of the one hundred (100) year high water.
6. Locations of site features such as lakes and detention ponds must be approved by the City of Chesterfield and the MSD.
7. Storm water control easements are required as detailed in Article 4 of the Unified Development Code.
8. The developer shall be responsible for construction of any required storm water improvements per the Chesterfield Valley Master Storm Water Plan, as applicable, and shall coordinate with the owners of the properties affected by construction of the required improvements. In the event that the ultimate required improvements cannot be constructed concurrently with this development, the developer shall provide interim drainage facilities and establish sufficient escrows as guarantee of future construction of the required improvements, including removal of interim facilities. Interim facilities shall be sized to handle runoff from the 100-year, 24-hour storm event as produced by the Master Storm Water Plan model. The interim facilities shall provide positive drainage and may include a temporary pump station, if necessary. Interim facilities shall be removed promptly after the permanent storm water improvements are constructed.

9. The developer may elect to propose alternate geometry, size and/or type of storm water improvements that are functionally equivalent to the required improvements per the Chesterfield Valley Master Storm Water Plan. Functional equivalence is said to be achieved when, as determined by the Public Works Director, the alternate proposal provides the same hydraulic function, connectivity, and system-wide benefits without adversely affecting any of the following: water surface profiles at any location outside the development; future capital expenditures; maintenance obligations; equipment needs; frequency of maintenance; and probability of malfunction. The City will consider, but is not obligated to accept, the developer's alternate plans. If the Public Works Director determines that the developer's proposal may be functionally equivalent to the Chesterfield Valley Master Storm Water Plan improvements, hydraulic routing calculations will be performed to make a final determination of functional equivalence. The Director will consider the developer's proposal, but is not obligated to have the hydraulic analysis performed if any of the other criteria regarding functional equivalence will not be met. The hydraulic routing calculations regarding functional equivalence may be performed by a consultant retained by the City of Chesterfield. The developer shall be responsible for all costs related to consideration of an alternate proposal, which shall include any costs related to work performed by the consultant.
10. All Chesterfield Valley Master Storm Water Plan improvements, as applicable, shall be operational prior to the paving of any driveways or parking areas unless otherwise approved.
11. Formal project development plans, shall be submitted to MSD for review, approval, and permits. The development shall be designed in accordance with the MSD Rules and Regulations and Engineering Design Requirements for Sanitary Sewer and Drainage Facilities that apply at the time of formal submission to MSD.
12. Easement to MSD will be required for any public sewers. The project is located within the Caulks Creek Impact area and is subject to applicable fees.
13. Storm water quality, channel protection, and flood detention requirements will apply. This development will be considered "new development", and controls shall be designed and implemented to reasonably mimic pre-construction runoff conditions (including runoff volume) to the maximum extent practicable. MSD will assess storm water quality and flood detention effectiveness based on the site's January 2000 pre-construction condition.
14. To comply with the region's MS4 Permit, site characteristics should be considered upfront to ensure adequate planning for storm water compliance. A pre-existing natural resources plan should be prepared and used to guide development layout and location of storm water facilities.

15. The drainage areas tributary to each bio-retention cell should be limited to five (5) acres in order to preserve BMP performance and filter longevity. Pretreatment is also required for the point discharges into these facilities. If these items place constraints on the design, MSD encourages the developer to explore methods for reducing impervious area and land disturbance as well as distributing BMPs into other site features located within green space in an effort to minimize water quality impacts and runoff volume generation on the site.
16. Sewers draining into the Chicago Rock Island and Pacific Railroad right-of-way may require approvals and licenses from them.
17. MoDOT approval will be required prior to formal MSD plan approval for public sewer construction located within the Wild Horse Creek Road right-of-way.

O. SANITARY SEWER

1. Sanitary sewers and pump stations shall be as approved by the Metropolitan St. Louis Sewer District and the City of Chesterfield.
2. The proposed public gravity sewer and sanitary pump station shall be designed and configured such that non-sewered offsite properties may connect to it.
3. The receiving sanitary sewer system(s) shall be evaluated to ensure adequate capacity and to ensure the project has no negative impacts to the existing system(s).
4. Easement to MSD will be required for any public sewers. The project is located in the Caulks Creek Impact area and subject to applicable fees.

P. GEOTECHNICAL REPORT

Prior to Site Development Plan approval, the developer shall provide a geotechnical report, prepared by a registered professional engineer licensed to practice in the State of Missouri, as directed by the City of Chesterfield. The report shall verify the suitability of grading and proposed improvements with soil and geologic conditions and address the existence of any potential sinkhole, ponds, dams, septic fields, etc., and recommendations for treatment. A statement of compliance, signed and sealed by the geotechnical engineer preparing the report, shall be included on all Site Development Plans and Improvement Plans.

Q. MISCELLANEOUS

1. Historic Markers shall be included in the development in recognition of the historic significance of the property. Details and location shall be approved by the City of Chesterfield during Site Development Plan review.
2. All utilities shall be installed underground.

3. Prior to record plat approval, the developer shall cause, at his expense and prior to the recording of any plat, the reestablishment, restoration or appropriate witnessing of all Corners of the United States Public Land Survey located within, or which define or lie upon, the out boundaries of the subject tract in accordance with the Missouri Minimum Standards relating to the preservation and maintenance of the United States Public Land Survey Corners, as necessary.
4. Prior to final release of subdivision construction deposits, the developer shall provide certification by a registered land surveyor that all monumentation depicted on the record plat has been installed and United States Public Land Survey Corners have not been disturbed during construction activities or that they have been reestablished and the appropriate documents filed with the Missouri Department of Natural Resources Land Survey Program, as necessary.
5. Road improvements and right-of-way dedication shall be completed prior to the issuance of an occupancy permit. If development phasing is anticipated, the developer shall complete road improvements, right-of-way dedication, and access requirements for each phase of development as directed by MoDOT and/or the City of Chesterfield. As previously noted, the delays due to utility relocation and adjustments will not constitute a cause to allow occupancy prior to completion of road improvements.
6. Spirit of St. Louis Airport's existing FAA Part 150 Airport Noise Compatibility Study recommends that housing developments are not compatible with airport operations if the noise level at the subject site is greater than 65 DNL. The proposed development lies just outside the 65 DNL noise contour. A notation shall be placed on all plans regarding this development that clearly states the project is approximately 2,000 feet away from Spirit's Runway 26L and therefore aircraft noise will be noticeable at the site on a daily basis.

II. TIME PERIOD FOR SUBMITTAL OF SITE DEVELOPMENT PLANS

- A.** The developer shall submit a Site Development Plan within eighteen (18) months of City Council approval of the change of zoning.
- B.** Failure to comply with these submittal requirements will result in the expiration of the change of zoning and will require a new public hearing.
- C.** Said Plan shall be submitted in accordance with the combined requirements for Site Development Section and Concept Plans. The submission of Amended Site Development Plans of this project to the Planning Commission shall be permitted if this option is utilized.
- D.** Where due cause is shown by the developer, the City Council may extend the period to submit a Site Development Plan for eighteen (18) months.

III. COMMENCEMENT OF CONSTRUCTION

- A.** Substantial construction shall commence within two (2) years of approval of the Site Development Plan, unless otherwise authorized by ordinance.
- B.** Where due cause is shown by the developer, the City Council may extend the period to commence construction for not more than two (2) additional years.

IV. GENERAL CRITERIA

A. SITE DEVELOPMENT PLAN SUBMITTAL REQUIREMENTS

The Site Development Plan shall include, but not be limited to, the following:

1. Location map, north arrow, and plan scale. The scale shall be no greater than one (1) inch equals one hundred (100) feet.
2. Outboundary plat and legal description of property.
3. Density calculations.
4. Parking calculations. Including calculation for all off street parking spaces, required and proposed, and the number, size and location for handicap designed.
5. Provide open space percentage for overall development including separate percentage for each lot on the plan.
6. Provide Floor Area Ratio (F.A.R.).
7. A note indicating all utilities will be installed underground.
8. A note indicating signage approval is separate process.
9. Depict the location of all buildings, size, including height and distance from adjacent property lines, and proposed use.
10. Specific structure and parking setbacks along all roadways and property lines.
11. Indicate location of all existing and proposed freestanding monument signs.
12. Zoning district lines, subdivision name, lot number, dimensions, and area, and zoning of adjacent parcels where different than site.
13. Floodplain boundaries.

14. Depict existing and proposed improvements within 150 feet of the site as directed. Improvements include, but are not limited to, roadways, driveways and walkways adjacent to and across the street from the site, significant natural features, such as wooded areas and rock formations, and other karst features that are to remain or be removed.
15. Depict all existing and proposed easements and rights-of-way within 150 feet of the site and all existing or proposed off-site easements and rights-of-way required for proposed improvements.
16. Indicate the location of the proposed storm sewers, detention basins, sanitary sewers and connection(s) to the existing systems.
17. Depict existing and proposed contours at intervals of not more than one (1) foot, and extending 150 feet beyond the limits of the site as directed.
18. Address trees and landscaping in accordance with the City of Chesterfield Code.
19. Comply with all preliminary plat requirements of the City of Chesterfield Subdivision Regulations per the City of Chesterfield Code.
20. Signed and sealed in conformance with the State of Missouri Department of Economic Development, Division of Professional Registration, Missouri Board for Architects, Professional Engineers and Land Surveyors requirements.
21. Provide comments/approvals from the appropriate Fire District, Monarch Levee District, Spirit of St. Louis Airport, Metropolitan St. Louis Sewer District (MSD) and the Missouri Department of Transportation.
22. Compliance with Sky Exposure Plane.
23. Compliance with the current Metropolitan Sewer District Site Guidance as adopted by the City of Chesterfield.

V. TRUST FUND CONTRIBUTION

A. ROADS

The developer shall contribute a Traffic Generation Assessment (TGA) to the Eatherton – Kehrs Mill Road Trust Fund (Trust Fund No. 552). This contribution shall not exceed an amount established by multiplying the ordinance-required parking space by the following rate schedule:

<u>Type of Development</u>	<u>Required Contribution</u>
Single Family	\$1,055.10/Parking Space

(Parking spaces as required by the site-specific ordinance or by Section 1003.165 of the St. Louis County).

If types of development proposed differ from those listed, rates shall be provided by the St. Louis County Department of Highways and Traffic.

Allowable credits for required roadway improvements will be awarded as directed by the St. Louis County Department of Highways and Traffic and the City of Chesterfield. Sidewalk construction and utility relocation, among other items, are not considered allowable credits.

Traffic Generation Assessments shall be paid prior to issuance of building permits. Payment shall be made to Treasure, St. Louis County.

As this development is located within a trust fund area established by St. Louis County, any portion of the traffic generation assessment contribution which remains following completion of road improvements required by the development shall be retained in the appropriate trust fund.

The amount of the required contribution, if not approved for construction by January 1, 2015 shall be adjusted on that date and on the first day of January in each succeeding year thereafter in accord with the construction cost index as determined by St. Louis County Department of Highways and Traffic.

VI. RECORDING

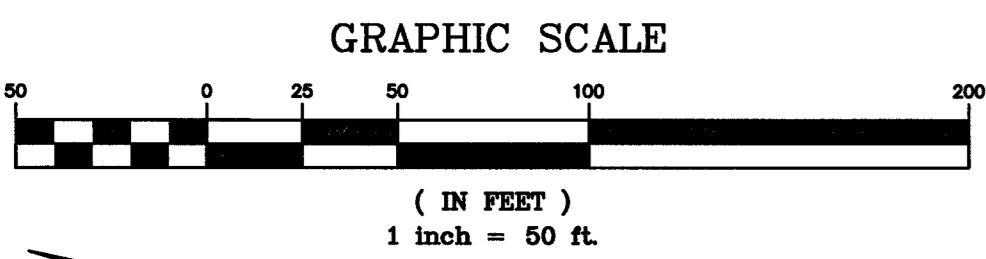
Within sixty (60) days of approval of any development plan by the City of Chesterfield, the approved Plan will be recorded with the St. Louis County Recorder of Deeds. Failure to do so will result in the expiration of approval of said plan and require re-approval of a plan by the Planning Commission.

VII. ENFORCEMENT

- A.** The City of Chesterfield, Missouri will enforce the conditions of this ordinance in accordance with the Plan approved by the City of Chesterfield and the terms of this Attachment A.
- B.** Failure to comply with any or all the conditions of this ordinance will be adequate cause for revocation of approvals/permits by reviewing Departments and Commissions.
- C.** Non-compliance with the specific requirements and conditions set forth in this Ordinance and its attached conditions or other Ordinances of the City of Chesterfield shall constitute an ordinance violation, subject, but not limited to, the penalty provisions as set forth in the City of Chesterfield Code.
- D.** Waiver of Notice of Violation per the City of Chesterfield Code.
- E.** This document shall be read as a whole and any inconsistency to be integrated to carry out the overall intent of this Attachment A.

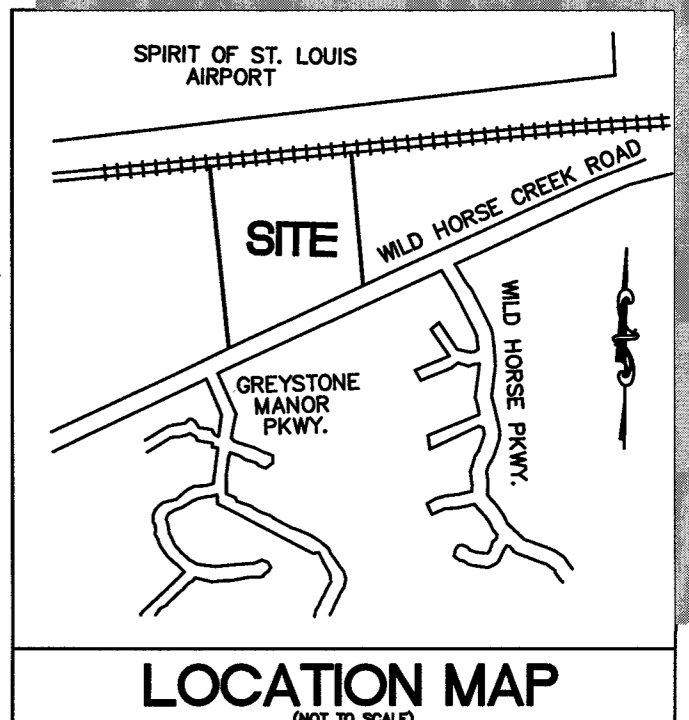
BUR OAKS SUBDIVISION

A TRACT OF LAND BEING PART OF LOT 1 OF MARY SCHAEFFER ESTATES SUBDIVISION, AS RECORDED IN PLAT BOOK 17, PAGE 4 OF THE ST. LOUIS COUNTY RECORDS AND PART OF SHARE 6 OF THE PARTITION OF THE ESTATE OF MISSOURI A. STEVENS, ALSO BEING A PART OF LOT 24 OF R.H. STEVENS FARM SUBDIVISION AND LOCATED IN U.S. SURVEY 122, TOWNSHIP 45 NORTH, RANGE 3 EAST OF THE FIFTH PRINCIPAL MERIDIAN CITY OF WILDWOOD, ST. LOUIS COUNTY, MISSOURI



PERTINENT DATA

OWNER	= ETHEL WILMAS FAMILY LTD. PARTNERSHIP
SITE ADDRESS	= 17751 WILD HORSE CREEK ROAD CHESTERFIELD, MISSOURI 63005
LOCATOR NO.	= 18V510105
WATER SHED	= BONHOMME CREEK
EXISTING ZONING	= NU1 - NON-URBAN DISTRICT
PROPOSED ZONING	= E-1/2 ACRE W/ WILD HORSE CREEK OVERLAY
FIRE DISTRICT	= MONARCH FPD
SCHOOL DISTRICT	= ROCKWOOD



ST. LOUIS COUNTY BENCHMARK

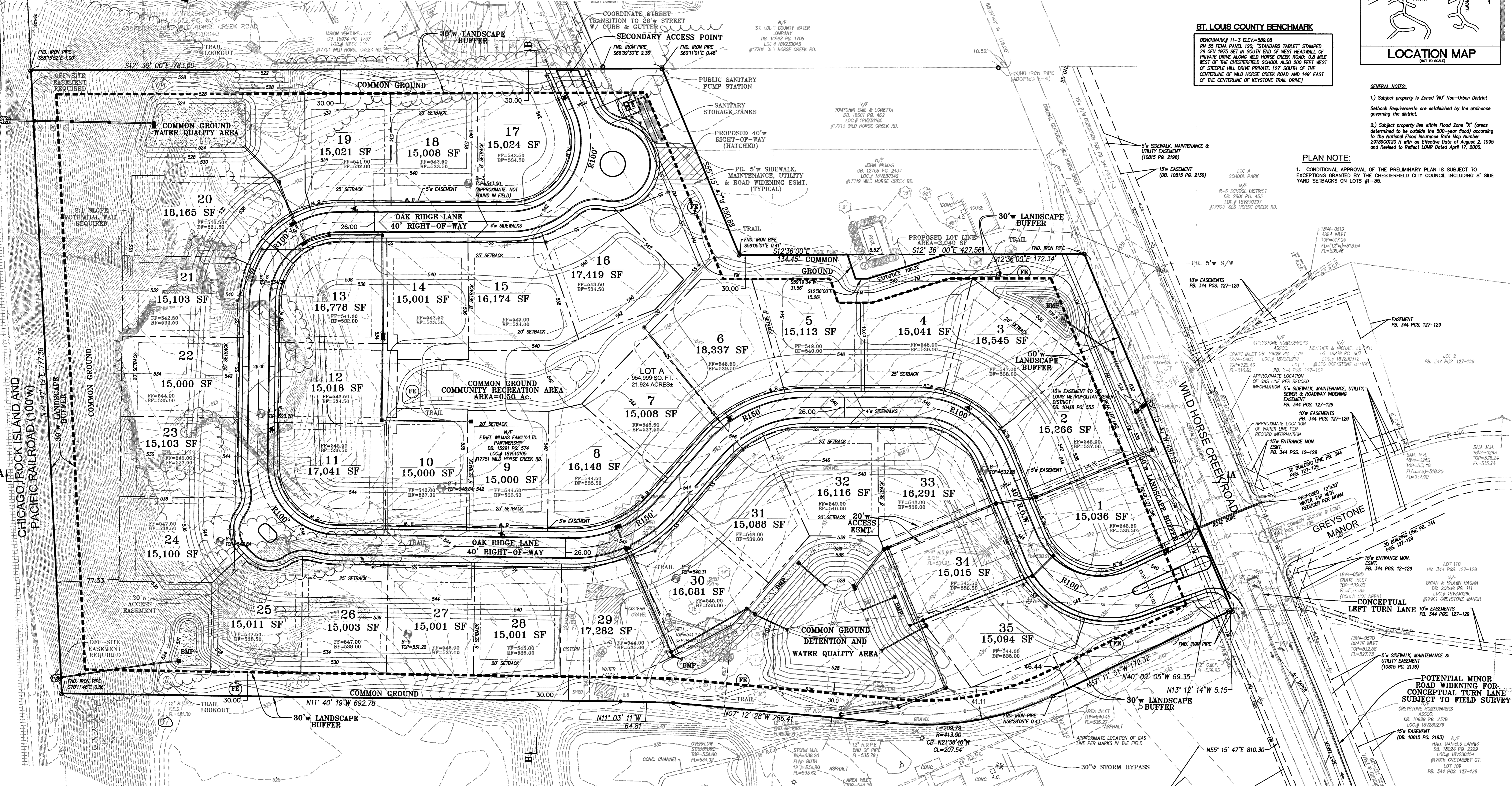
BENCHMARK 11-3 ELEV=898.08
ON 5/2 FEMA PANEL 122 "STANDARD TABLE" STAMPED
29 02 1975 SET IN SOUTH END OF WEST HEADWALL OF
PRIVATE DRIVE ALONG WILD HORSE CREEK ROAD, 0.5 MILE
WEST OF THE CHESTERFIELD SCHOOL, ALSO 200 FEET WEST
OF STEEP HILL DRIVE PRIVATE, 127' SOUTH OF THE
CENTERLINE OF WILD HORSE CREEK ROAD AND 140' EAST
OF THE CENTERLINE OF KEYSTONE TRAIL DRIVE.

GENERAL NOTES:

- 1) Subject property is Zoned "NU" Non-Urban District. Setback Requirements are established by the ordinance governing the district.
- 2) Subject property lies within Flood Zone "X" (areas determined to be subject to the 500-year flood) according to the National Flood Insurance Rate Map Number 25189C0210 H with an Effective Date of August 2, 1995 and Revised to Reflect LOMR Dated April 12, 2000.

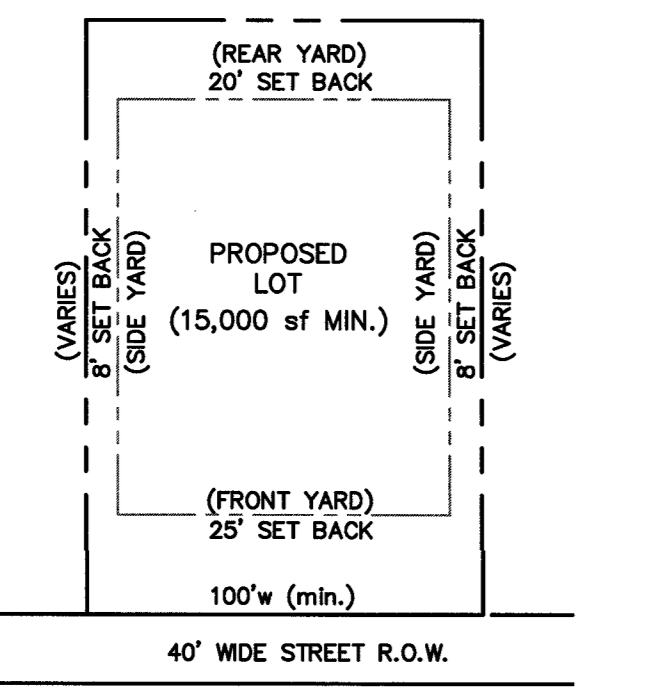
PLAN NOTE:

1. CONDITIONAL APPROVAL OF THE PRELIMINARY PLAN IS SUBJECT TO EXCEPTIONS GRANTED BY THE CHESTERFIELD CITY COUNCIL, INCLUDING 8' SIDE YARD SETBACKS ON LOTS #1-35.



GENERAL NOTES

1. EXISTING CONTOURS PER ALTA/ACSM LAND TITLE SURVEY DATED 3/14/14 PREPARED BY STOCK & ASSOCIATES CONSULTING ENGINEERS, INC.
2. UNDERGROUND FACILITIES, STRUCTURES & UTILITIES HAVE BEEN PLOTTED FROM BEST AVAILABLE RECORDS. THEREFORE THE RELATIONSHIP BETWEEN PROPOSED WORK AND EXISTING FACILITIES, STRUCTURES & UTILITIES MUST BE CONSIDERED APPROXIMATE, AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR LOCATION AND THE EXISTENCE OF ANY NOT SHOWN.
3. THIS PLAN IS FOR THE EXCLUSIVE USE OF PLUITE GROUP, IT IS NOT INTENDED TO BE USED FOR CONSTRUCTION BUT RATHER FOR RE-ZONING CONCEPT AND QUANTITY TAKE-OFFS. NO UTILITY RESEARCH OR COORDINATION HAS BEEN PERFORMED BY STOCK & ASSOCIATES.
4. THIS PLAN IS SUBJECT TO ALL LOCAL, STATE AND FEDERAL REGULATIONS. THERE HAS BEEN NO WETLAND Delineation, GEOTECHNICAL OR ENVIRONMENTAL DATA PROVIDED TO THIS ENGINEER PRIOR TO DESIGNING THIS PLAN.
5. NO UTILITY MEETINGS HAVE BEEN PERFORMED TO VERIFY EXISTING OR PROPOSED UTILITY FACILITIES AS WELL AS CONFIRMATION OF DESIGN REQUIREMENTS FOR THIS SITE. ALL PROPOSED UTILITY CONNECTIONS AND SITE DESIGN ELEMENTS ARE SUBJECT TO REVIEW & APPROVAL BY EACH RESPECTIVE AGENCY HAVING JURISDICTION OVER THIS SITE.
6. ALL IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE PENDING FINAL ENGINEERING AND APPROVALS OF GOVERNING AGENCIES AND UTILITY COMPANIES.



TYPICAL LOT DETAIL
LOTS 1-35
AVERAGE LOT SIZE = 15,669 SF

LAYOUT NOTES

1. LAYOUT SUBJECT TO CITY OF CHESTERFIELD & OUTSIDE AGENCY APPROVAL.
2. LAYOUT SUBJECT TO CITY APPROVAL OF RE-ZONING TO E-1/2 WITH WILD HORSE CREEK OVERLAY.
3. LOT YIELD SUBJECT TO SITE GRADING AND STORMWATER DETENTION/WATER QUALITY DESIGN.

EARTHWORK QUANTITIES
BULK CUT: 75,200 cy. ±
BULK FILL: 81,200 cy. ±

LEGEND

FITNESS TRAIL EQUIPMENT..... (FE)
SEE LANDSCAPE PLAN
LANDSCAPE BUFFER..... (LB)

NOTES:

1. BOUNDARY AND TOPOGRAPHIC SURVEY BY STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC.
2. SITE INFO.
PROPOSED ZONING: E-1/2 ACRE WITH WILD HORSE OVERLAY
DESIGN DEPTH = 150' MIN.
DESIGN WIDTH = 100' MIN.
FRONT SETBACK = 25'
SIDE SETBACK = 8' (DEVIATION FROM E-1/2 ACRE SETBACK = 15')
REAR SETBACK = 20'
MINIMUM 30' BETWEEN STRUCTURES
3. GRADING AND DRAINAGE PER CITY OF CHESTERFIELD, M.S.D. AND ST. LOUIS COUNTY STANDARDS AND SPECIFICATIONS. STORM WATER TO DISCHARGE AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE NATURAL DISCHARGE POINTS.
4. NO SLOPE GREATER THAN 3:1 ALLOWED WITHOUT CITY AND GEOTECH. APPROVAL. GRADING SHALL FOLLOW GEOTECHNICAL RECOMMENDATIONS. SEE GEOTECHNICAL REPORT PREPARED BY SO ENGINEERING INC. DATED MARCH 2014, FOR ALL RECOMMENDATIONS.
5. TOTAL SITE AREA = 954,999 SF (21.92 AC.)
6. ON-STREET PARKING TO BE RESTRICTED TO ONE SIDE OF STREET ONLY.
7. STREET TREES, STREET LIGHTS AND SIDEWALKS SHALL BE PER CITY OF CHESTERFIELD & ST. LOUIS CO. HWY. DEPT. STANDARDS.
8. SITE AREA CALCULATIONS:
EXISTING GROSS OVERALL SITE PER OUTBOUNDARY SURVEY, SUBMITTED 8/12/14 TO CITY = 952,958 s.f. (21.876 Ac.±)
TOTAL COMMON GROUND = 299,683 s.f. (31.45% OF NET SITE AREA)
9. RIGHT OF WAY AND ROAD DESIGN TO BE DETERMINED AT THE SITE DEVELOPMENT PLAN STAGE.
10. MAXIMUM STRUCTURE HEIGHT PER WILD HORSE CREEK OVERLAY DISTRICT = 50 FEET.
11. PROJECT LOCATED WITHIN 2,000 FEET OF SPIRIT OF ST. LOUIS AIRPORT RUNWAY 26L. THEREFORE AIRCRAFT NOISE WILL BE NOTICEABLE AT THE SITE ON A DAILY BASIS.
12. STEEP SLOPES (20% OR GREATER)
TOTAL EXISTING AREA = 112,355 s.f. (2.58 Ac.±)
TOTAL AREA WITHIN PROPOSED LOTS = 17,855 s.f. (0.41 Ac.±)
PERCENTAGE = 15.80%
13. PERMIT REQUIRED FOR ALL WORK WITHIN MOOT RIGHT-OF-WAY. ALL WORK SHALL BE IN ACCORDANCE WITH MOOT STANDARDS, SPECIFICATIONS AND ACCESS MANAGEMENT GUIDELINES.
14. CONCEPTUAL LEFT TURN LANE SHOWN PER MOOT COMMENTS. DESIGN TO BE FINALIZED DURING SITE DEVELOPMENT PLAN REVIEW PROCESS.
15. HISTORIC MARKERS TO BE PLACED ON SITE. DETAILS AND LOCATIONS TO BE DETERMINED DURING SITE DEVELOPMENT PLAN REVIEW PROCESS.
- 15' EASEMENT TO ST. LOUIS METROPOLITAN SEMER DISTRICT DB 10418 PG. 553

POTENTIAL MINOR ROAD WIDENING FOR CONCEPTUAL TURN LANE SUBJECT TO FIELD SURVEY

PREPARED BY:
STOCK & ASSOCIATES
Consulting Engineers, Inc.

PRELIMINARY PLAN FOR:
RE-ZONING FROM NU TO E-1/2 ACRE W/ WILD HORSE CREEK OVERLAY
BUR OAKS SUBDIVISION
17751 WILD HORSE CREEK RD.

DEC 02 2014
GEORGE MICHAEL STOCK
MEMBER
PE-21114

REVISIONS:

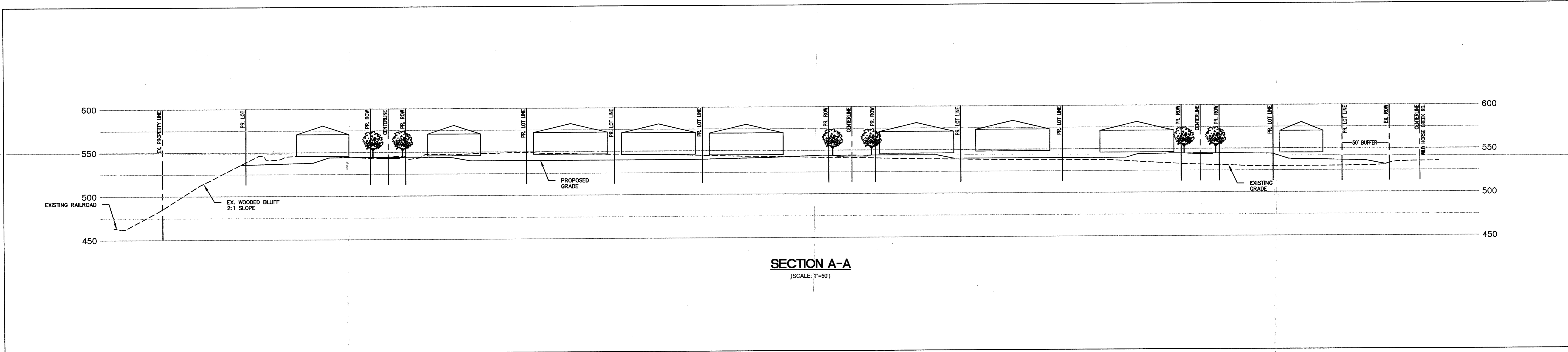
1.	2014-10-02	REVISED PER CITY COMMENTS
2.	2014-10-21	REVISED PER CITY COMMENTS
3.	2014-11-06	REVISED PER CITY COMMENTS
4.	2014-11-24	REVISED PER CITY COMMENTS
5.	2014-12-02	REVISED PER CITY COMMENTS

PRELIMINARY PLAN

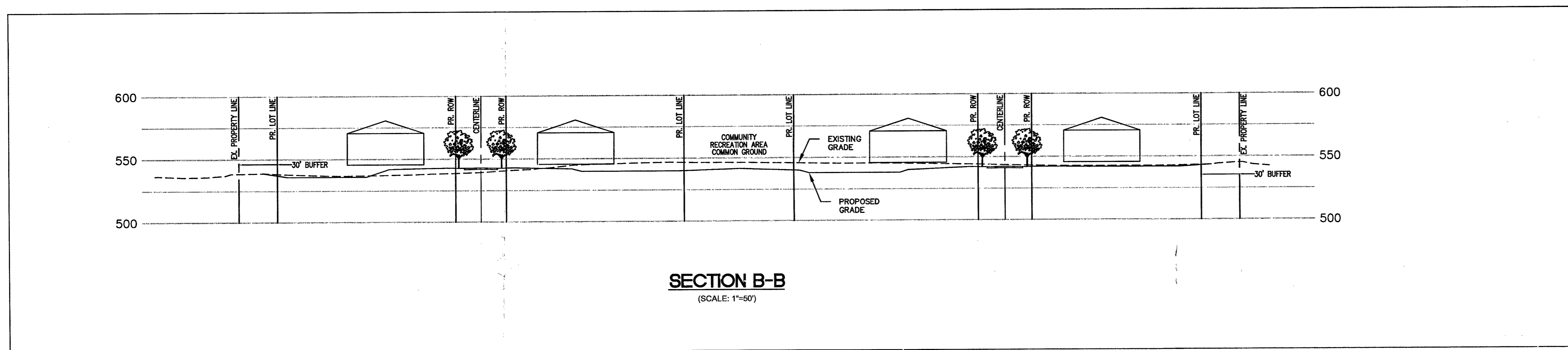
SHEET NO: **C1.0**

PREPARED FOR:
PLUITE GROUP
C/O BJ KEANE, PE - LAND DEVELOPMENT MANAGER
1707 CHESTERFIELD AIRPORT ROAD, SUITE 120
CHESTERFIELD, MISSOURI 63005
PHONE: (636) 537-7292
FAX: (636) 537-9652

1544.20
N12° 2' 08" W
N/F
BARAT ACADEMY FOUNDATION
DB 19899 PG. 1294
LOC # 18V40089
#17701 WILD HORSE CREEK RD.



SECTION A-A
 (SCALE: 1"=50')



SECTION B-B
 (SCALE: 1"=50')

NOTE: MAXIMUM STRUCTURE HEIGHT PER WILD HORSE CREEK OVERLAY DISTRICT = 50 FEET

SURVEYOR'S CERTIFICATION

This plan has been prepared from record and survey information and represents the current and proposed land subdivision. This plan does not represent an actual Property Boundary Survey.

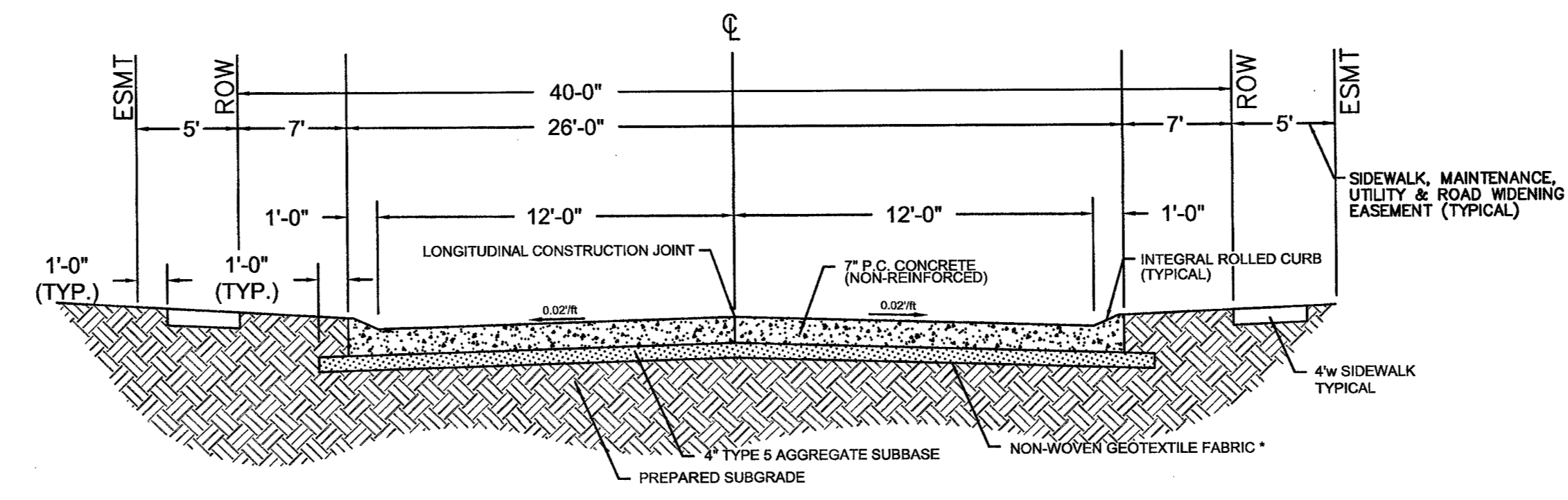
STOCK & ASSOCIATES CONSULTING ENGINEERS, INC.
 LC 222-D

By: *[Signature]* 12/02/14
 Daniel Ehlmann, Missouri P.L.S. No. 2215

Zoning Land Description

A tract of land being Part of Lot 1 of Mary Schaeffer Estates Subdivision, as recorded in Plat Book 17, Page 4 of the St. Louis County Records and part of Share 6 of the Partition of the Estate of Missouri A Stevens, also part of Lot 24 of R.H. Stovene Farm Subdivision, located in U.S. Survey 122, Township 45 North, Range 3 East of the 6th Principal Meridian, City of Chesterfield, St. Louis County, Missouri being more particularly described as follows:

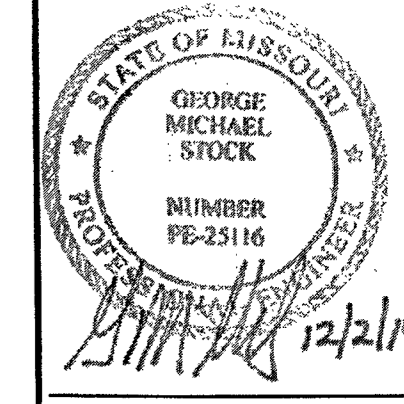
Beginning at a found iron pipe located at the intersection of the northern right-of-way line of Wild Horse Creek Road, variable width, with the western line of a tract of land as conveyed to John Wilmas, by instrument recorded in Book 12756, Page 2437 of above said records; thence along said right-of-way line, South 55 degrees 15 minutes 47 seconds West, 451.15 feet to a found iron pipe at the eastern line of a tract of land as conveyed CDF Holdings, LLC by instrument recorded in Book 16588, Page 2418 of above said records; thence along the eastern line of said CDF Holdings, LLC tract the following courses and distances: North 13 degrees 12 minutes 14 seconds West, 5.15 feet to a found iron pipe; North 40 degrees 09 minutes 05 seconds West, 69.35 feet to a found iron pipe; North 37 degrees 11 minutes 51 seconds West, 172.32 feet to the beginning of a non-tangent curve to the right having a radius of 413.50 feet, from which a found iron pipe bears North 58 degrees 28 minutes 05 seconds East, 0.43 feet; along said curve with an arc length of 209.79 feet and a chord which bears North 21 degrees 38 minutes 45 seconds West, 207.54 feet; North 07 degrees 12 minutes 28 seconds West, 268.41 feet; North 11 degrees 03 minutes 11 seconds West, 64.81 feet and North 11 degrees 40 minutes 19 seconds West, 692.78 feet to the southern right-of-way line of the Chicago Rock Island and Pacific Rail Road, 100 feet wide, from which a found iron pipe bears South 70 degrees 11 minutes 48 seconds East, 0.50 feet; thence along said right-of-way line, North 74 degrees 47 minutes 19 seconds East, 777.36 feet to the northeast corner of a tract of land as conveyed to Vision Ventures, LLC by instrument recorded in Book 18974, Page 1757 of above said records, from which a found iron pipe bears South 56 degrees 15 minutes 52 seconds East, 1.00 feet; thence along the western line of said Vision Ventures, LLC tract, South 12 degrees 36 minutes 00 seconds East, 753.00 feet to the northeast corner of a tract of land as conveyed to Emil & Lorella Tomachin by instrument recorded in Book 16801, Page 462 of above said records, from which a found iron pipe bears South 60 degrees 11 minutes 01 seconds East, 0.49 feet; thence along the northern line of said Tomachin and above said Wilmas tracts, South 50 degrees 15 minutes 47 seconds West, 250.88 feet to the northeast corner of said Wilmas tract from which a found iron pipe bears South 59 degrees 01 minutes 01 seconds East, 0.41 feet; thence along the western line of said Wilmas tract, South 12 degrees 36 minutes 00 seconds East, 134.45 feet; thence departing last said western line the following courses and distances: South 59 degrees 19 minutes 34 seconds West, 31.56 feet, South 12 degrees 36 minutes 00 seconds East, 15.26 feet and South 30 degrees 00 minutes 01 seconds East, 100.37 feet to the western line of said Wilmas tract; thence along said western line, South 12 degrees 36 minutes 00 seconds East, 172.34 feet to the Point of Beginning and containing 952,068 square feet or 21.576 acres more or less as per a survey by Stock & Associates Consulting Engineers, Inc. during March, 2014.



OAK RIDGE LANE
Typical Section (Public)
 (NOT TO SCALE; FOLLOW DIMENSIONS)

* NOTE:
 FABRIC UNDER STREET MUST COMPLY WITH AASHTO M828-86 FOR SEPARATION PURPOSES. NON-WOVEN FABRICS, WITH SURVIVABILITY CLASS TWO (2) AND A MINIMUM PERMEABILITY OF 0.02, SUCH AS AMOCO 4552; TYPARKS01, CARTIAGE MILLS FX-60-HS, MIRAFI 160N OR PRE-APPROVED EQUAL.

PRELIMINARY PLAN FOR:
 RE-ZONING FROM NU TO E-1/2 ACRE W/ WILD HORSE CREEK OVERLAY
BUR OAKS SUBDIVISION
 17751 WILD HORSE CREEK RD.



REVISIONS:

- 2014-10-02 REVISED PER CITY COMMENTS
- 2014-10-21 REVISED PER CITY COMMENTS
- 2014-11-06 REVISED PER CITY COMMENTS
- 2014-11-24 REVISED PER CITY COMMENTS
- 2014-12-02 REVISED PER CITY COMMENTS

DRAWN BY: J.M.B. CHECKED BY: J.M.B.
 DATE: 08/11/2014 JOB NO: 213-5241
 M.S.D. # P-XXXXXX BASE MAP # 181
 S.L.C. HAT # XXXX HAT SUPP. # XXXXXX
 M.D.N.R. # MO-XXXXXX

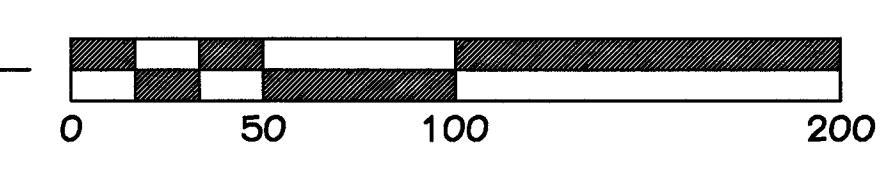
SHEET TITLE: SITE SECTIONS

SHEET NO.: C1.1



Bur Oaks Subdivision
17751 Wild Horse Creek Road
 Chesterfield, MO

TREE STAND DELINEATION
 SCALE 1" = 50'



17751 Wild Horse Creek Rd - Tree Inventory:

No.	Tree Name	Size	Spread	Rating	Comment
1	Silver Maple	30"	18'r	1	
2	Silver Maple	48"	24'r	2	Hollow trunk
3	Pecan	32"	15'r	1	Half dead
4	Silver Maple	30"	15'r	3	
5	Silver Maple	28"	12'r	3	
6	Silver Maple	36"	18'r	3	
7	Silver Maple	20"	12'r	3	
8	Silver Maple	33"	20'r	3	
9	Red Maple	18"	12'r	3	
10	Miyabe Maple	11"	8'r	3	
11	Sugar Maple	24"	15'r	2	
12	Silver Maple	12"	10'r	3	
13	Redbud	12"	10'r	2	
14	Mulberry	12"	10'r	2	Multi-stem
15	Cottonwood	10"	8'r	3	
16	Cottonwood	8"	7'r	3	
17	Mulberry	12"	18'r	2	
18	Bitternut Hickory	20"	26'r	3	Monarch
19	Silver Maple	22"	24'r	3	

- TREE CONDITION RATING**
- Superior: Speciman quality with sound trunk, healthy bark, good limb structure and balance, no corrective pruning or maintenance needed, good foliage color, no insects or diseases, twig's showing excellent growth.
 - Above Average: Similar to above except tree may have minor insect problems or need minor corrective maintenance.
 - Average: Sound trunk and healthy bark, fair limb structure with minor broken branch stubs, moderate maintenance needed, insect or disease problem present, fair twig growth and leaf color.
 - Fair: Similar to above plus evidence of trunk scars and early stages of decay present.
 - Poor: Advanced stage of decline with major problems in roots, trunk, and foliage.

- LEGEND:**
- 6 (circle with dot) Existing Individual Tree
 - 18 (M) Existing Monarch Tree
 - Existing Woodland "A" (stippled pattern)
 - Existing Woodland "B" (cross-hatched pattern)

- TREE NOTES:**
- Woodland A dominant and co-dominant species include Elm, Honeylocust, Juniper, Hackberry, and Hackberry. The average DBH is 8-10" and a density of 60 trees/acre. The understorey is made up of small Sugar Maple and Honeyuckle.
 - Woodland B made up of 2-6" diameter Cottonwood.

ZONING DESIGNATION:
 Present Zoning: NU "Non-Urban"
 Total Site Area: 21.924 Acres
 Floodplain Map Number: 29189C0120H

WOODLAND "A" = 162,606 sq.ft.
 WOODLAND "B" = 15,197 sq.ft.
 INDIVIDUAL TREES OUTSIDE OF WOODLAND BOUNDARIES = 10,093 sq.ft.
 TOTAL SQ.FT. OF EXISTING CANOPY = 188,096 sq.ft. (4.318 acres)

Revisions:

Date	Description	No.
8/11/14	Project Name Change	1
11/7/14	City Resubmittal	2

Drawn: LWH
 Checked: JAS

loomisAssociates
 landscapeArchitects/planners
 877 S. Kirkwood, Suite 105
 St. Louis, MO 63105
 P: 314.455.5555 F: 314.455.5555
 E: info@loomisassociates.com
 Loomis Associates Inc.
 Missouri State Certificate of Authority #: LAC #000019

Sheet Title: Tree Stand Delineation

Sheet No: TSD

Tree Stand Delineation Plan Prepared under direction of Douglas DeLong Certified Arborist MW-4826A
Douglas DeLong

Date: 02/07/14
 Job #: 935.007