



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: Site Development Plan

Meeting Date: April 27, 2015

From: Jonathan Raiche, Senior Planner

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

Applicant: Pulte Homes of St. Louis, LLC

Description: **Bur Oaks SDP:** A Site Development Plan, Landscape Plan, Tree Preservation Plan, and Tree Stand Delineation for a 21.88 acre tract of land zoned “E-1/2AC” Estate District with a “WH” Wild Horse Creek Road Overlay District designation located on the north side of Wild Horse Creek Road and west of its intersection of Long Road and east of its intersection with Savonne Court.

PROPOSAL SUMMARY

Stock & Associates Consulting Engineers, Inc., on behalf of Pulte Homes of St. Louis, LLC, has submitted a Site Development Plan, Landscape Plan, Tree Preservation Plan, and Tree Stand Delineation for a 21.88 acre single family detached residential development to be known as Bur Oaks. The plans would permit the development of thirty-five (35) detached single family homes accessing Wild Horse Creek Road via one main proposed internal roadway. This proposed roadway will also provide a connection to future development to the east. Development characteristics of this proposal also include two overlook areas, various walking trails with fitness stations, common ground, and landscape buffers.

HISTORY OF SUBJECT SITE

On February 2, 2015, the City of Chesterfield approved Ordinance 2831, which zoned the subject site from an “NU” Non-Urban District to an “E-1/2AC” Estate District with a “WH” Wild Horse Creek Road Overlay District designation. Because of the overlay designation, a preliminary plan was prepared and approved during the zoning process and the proposed plan is found to substantially conform to the approved preliminary plan.

The site currently contains the Mary Schaeffer estate which consists of one (1) residential structure along with two (2) large barn/storage buildings and various other smaller out-buildings. The original structures on the site were built in 1908. These structures were all evaluated by Jesse Francis, Faust Park Historic Village Curator and Ex-Officio Member of the Chesterfield Historic and Landmark Preservation Committee (CHLPC), at the request of the CHLPC. The only structure that was deemed salvageable was the smaller smoke house located to the east of the main structure. The developer is currently working with Faust Park to donate this structure. In recognition of the historical significance of this estate, the developer has included details regarding the installation of a historic marker that is proposed to be near the current buildings. The location and details are provided in the attached Landscape Plan. An aerial of the site can be seen in Figure 1.



Figure 1 Aerial Photo

Land Use and Zoning of Surrounding Properties

Direction	Land Use	Zoning
North	Airport/Industrial/Golf Course	“M3” Planned Industrial District
South	Greystone Subdivision (SF Residential)	“R1” Residential with a PEU
East	Vacant (Approved for Senior Living) Residential	“E-1AC” with a CUP “NU” Non-Urban District
West	Church	“NU” Non-Urban District

STAFF ANALYSIS
Comprehensive Plan

Figure 2 shows the limits of the Wild Horse Creek Road Sub Area in yellow and the subject site in red. The limits of the sub area are also the same limits that encompass the “WH” Overlay area.



Figure 2

In Policy 2.1.11 of the City’s Comprehensive Plan, the desire for restricted access of homes on arterial roads is addressed. The proposed plan has complied with minimizing the direct access through utilizing one permanent access drive. Due to requirements of the Monarch Fire District, the developer is also proposing a temporary fire lane that will travel through the adjacent property located to the southeast. The proposed fire lane will utilize the existing driveway curb-cut for the residence at 17719 Wild Horse Creek Road and will tie into the required future right-of-way in the Bur Oaks Development as seen in Figure 3. This will also be addressed in the Traffic Access and Circulation section of this report.

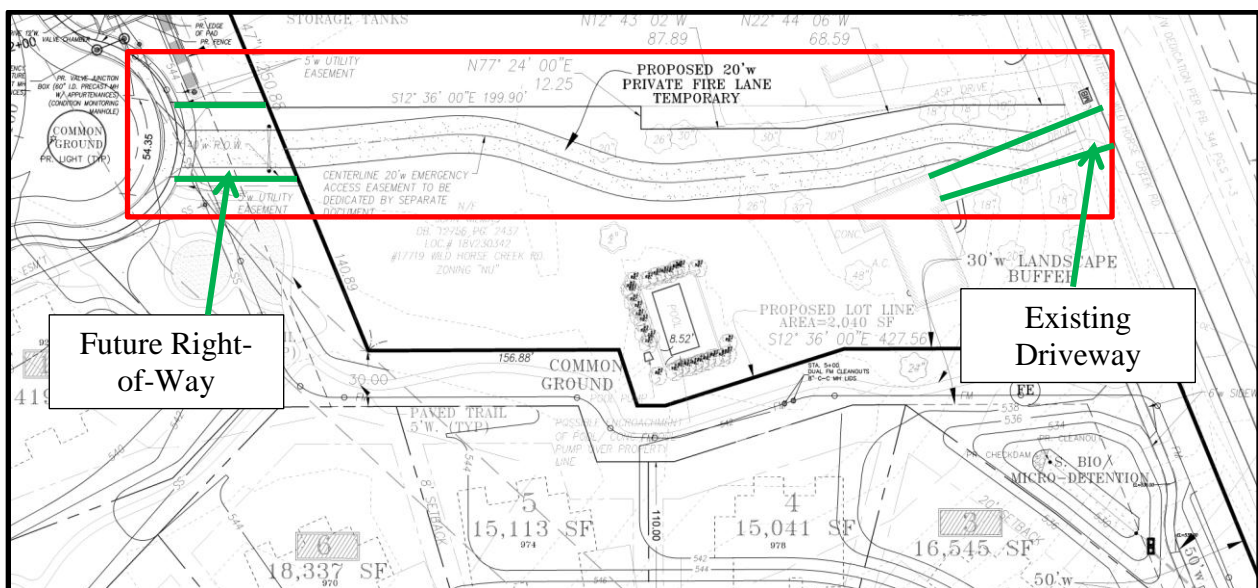


Figure 3

Policy 2.1.5 of the Comprehensive Plan addresses the desire for appropriate buffering along arterial roads. The plan proposes a 30' landscape buffer along three sides of the site as well as a 50' landscape buffer along Wild Horse Creek Road. This landscape buffer specifically addresses the Policies 2.1.5 and 11.2 of the Comprehensive Plan which call for the development in the Wild Horse Creek Road Sub Area to be set back and screened from the road. A number of the other Comprehensive Plan policies specific to the Wild Horse Creek Road Sub Area are addressed in the following sections of this report.

Zoning

As previously mentioned, the subject site is governed by Ordinance 2831 as well as the current "WH" Overlay District requirements. The proposed plans comply with the development criteria contained within the site-specific ordinance by providing thirty-five (35) single family detached homes. The proposed lots vary between approximately 15,000 square feet and 18,000 square feet in size. This complies with the minimum 15,000 square foot lot size requirement which corresponds to the underlying "E-1/2AC" Estate District within the "WH" Overlay.

Traffic Access and Circulation

In order to limit the number of direct access points on Wild Horse Creek Road and to comply with the City's Driveway Access Location and Design Standards, this proposal features one main permanent entrance that is located directly across from the existing Greystone Manor Parkway. This is proposed as a public right-of-way that meanders through the site and features two turnaround opportunities. The roadway will feature 4' wide sidewalks along both sides in addition to the proposed trails that traverse through the site. The end of the proposed road will feature a cul-de-sac; however, the road will also be built to connect to the future development to the east as that site is developed. The proposed plan also incorporates a future right-of-way dedication that will be utilized to access the 6 smaller parcels to the southeast as they are redeveloped. This future right-of-way will also be used as the connection to the temporary fire lane as previously mentioned but will be gated near the property line with access provided to the fire district. This fire lane will be effective until a time that a second permanent access is provided for this development to Wild Horse Creek Road. The timing of this is currently undetermined.

Common Ground

The "WH" Overlay requires a minimum of 30% Common Ground which corresponds to Policy 11.3 of the Comprehensive Plan that calls for the preservation of open space to emphasize the scenic character of Wild Horse Creek Road. The developer has provided approximately 31% Common Ground that is dispersed throughout the site. Some of this Common Ground also coincides with the natural bluff which meets the requirement of the overlay district for the preservation of slopes and natural features.

Landscaping

A Landscape Plan has been submitted showing the proposed trees and shrubs to be installed on the site. The underlying zoning district for this site requires a 30' wide landscape buffer along the perimeter of the development. The "WH" Overlay also requires a 50' lot setback along Wild Horse Creek Road in an effort to provide additional buffering between the development and the road. The developer has chosen to expand the 30' wide landscape buffer along Wild Horse Creek Road and is proposing a 50' wide landscape buffer to match the required lot setback and provide additional visual screening between the development and the road thus maintaining the character of Wild Horse Creek Road.

The required buffer along the north boundary is fulfilled through preservation of the existing woodland. The buffers provided along the east, west, and south borders consist of a combination of deciduous, ornamental, and evergreen trees along with various shrub varieties. The plantings generally follow the proposed sidewalk and trails that traverse through the site which will also provide a more pleasant experience to residents using the trails. In addition to an adequately planted buffer that meets the City's requirements, the developer has also provided plantings of smaller sized native trees above and beyond the minimum requirements in an effort to increase tree diversity throughout the proposed buffers. Since these trees are above and beyond the required trees, they are not subject to the minimum size requirements. The proposal also features plantings located throughout the centralized common ground area, cul-de-sacs, and entrance median. The street trees provided along the internal road and Wild Horse Creek Road also meet all City requirements.

Tree and Slope Preservation

The majority of the existing woodland and steep slope areas are located on the north end of the site. The City requires that 30% of the existing tree canopy be preserved. The developer is proposing a preservation of 43% of the canopy which again exceeds the minimum requirements. The majority of the preserved trees are located in the north woodland area with a small portion of trees also preserved near the existing home. The tree and slope preservation requirements reflect Policies 11.5 and 11.6 of the Comprehensive Plan which call for the preservation of natural features and slopes. Similarly, the "WH" Overlay requires that development on slopes exceeding 20% shall be minimized. The developer has proposed development on approximately 16% of these steep slopes which fulfills this requirement.

Lighting

The plan proposes street lights along the internal road including one located in the entrance median of the development near Wild Horse Creek Road. The proposed street lights are the Early American style Ameren UE approved light fixture which meet all City Code requirements. The light will not be less than 16' above grade and will be fully shielded in order to provide a safe environment while still minimizing light trespass.

Architectural Elevations

The developer has submitted 5 different floor plan models each with multiple elevation options for a total of twenty-five architectural elevations. Staff has reviewed each of the proposed elevations for compliance with the Architectural Review Standards as well as the “WH” Overlay requirement for compatible design on all sides of the homes. The elevations provided to staff include a variety of architectural styles and all utilize durable, high quality materials. The exterior materials proposed include brick, stone, and fiber cement siding (lap siding, shake siding, and flat cement board siding) on the principal façade with a masonry element extending around the bottom portion of the remaining façades. The proposed elevations all feature side-entry garages which provide a more aesthetically pleasing principal façade. Staff has included copies of 5 different architectural renderings as a representative sampling of the architectural elements and styling proposed for this development.

The principal façade includes the most variation through materials and the use of architectural elements that offer various setbacks to avoid a monotonous, flat elevation. However, the rear and side facades have been designed to include multiple materials in order to be compatible with the principal façade as shown in the attached architectural exhibits.

Community Amenities

One of the Minimum Standards of Design for the “WH” Overlay District is the inclusion of community amenities. The developer has incorporated a wide variety of amenities for use by the residents of the subdivision. There are trails located throughout the development that tie into the sidewalks provided along the proposed road at multiple points. The trails can be used to access the two lookout areas located in the northeast and northwest corners of the subdivision to highlight the views that are offered from the top of the bluff. As previously mentioned, the trails and other common ground areas are also landscaped throughout. Along the trail, the developer has also proposed three fitness equipment stations along with a children’s playground area. The last community amenity is a large community gathering area located in the center of the development that provides two separate seating areas and is accessed via the proposed trail system.

DEPARTMENT INPUT

Staff has reviewed the Site Development Plan, Landscape Plan, Tree Preservation Plan, and Tree Stand Delineation and has found the proposal to be in compliance with the site specific ordinance and all City Code requirements. Staff recommends approval of the proposal as presented.

MOTION

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

- 1) “I move to approve (or deny) the Site Development Plan, Landscape Plan, Tree Preservation Plan, and Tree Stand Delineation for the Bur Oaks subdivision.
- 2) “I move to approve the Site Development Plan, Landscape Plan, Tree Preservation Plan, and Tree Stand Delineation for the Bur Oaks subdivision, with the following conditions...” (Conditions may be added, eliminated, altered or modified)

Planning Commission
April 27, 2015

Bur Oaks
Site Development Plan

CC: Aimee Nassif, Planning and Development Services Director

Attachments: Site Development Plan
Landscape Plan
Tree Preservation Plan
Tree Stand Delineation
Architectural Exhibits

RECEIVED
City of Chesterfield
APR 20 2015
Department of Public Services









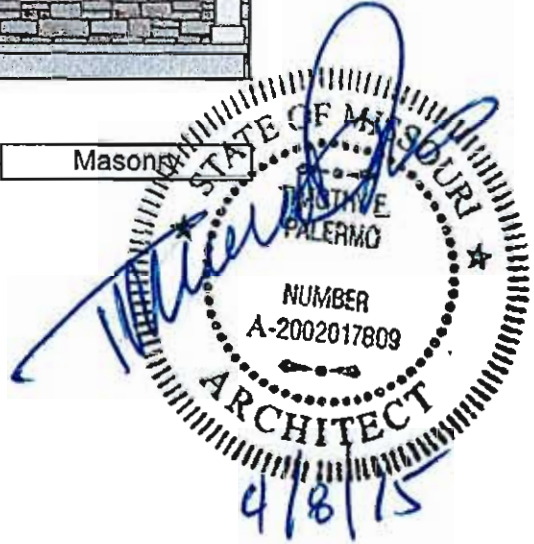


Skyview Front Elevation



LP Smart Trim

Masonry



Skyview Left Elevation

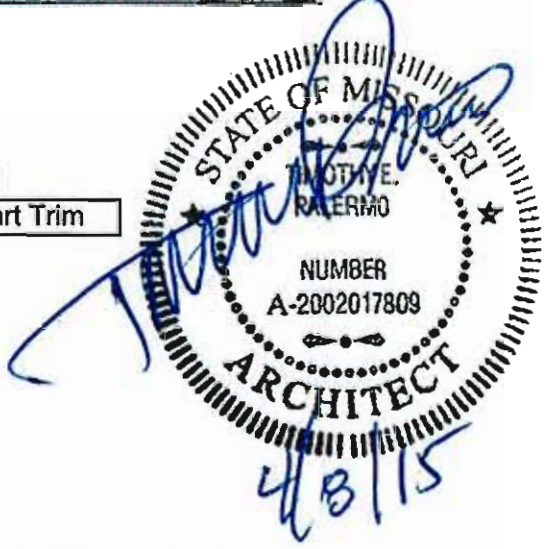


Fiber Cement Siding

Architectural Shingles

Masonry

LP Smart Trim



Skyview Right Elevation



Fiber Cement Siding

Architectural Shingles

Masonry

LP Smart Trim

STATE OF MISSOURI
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4/8/15

Skyview Rear Elevation

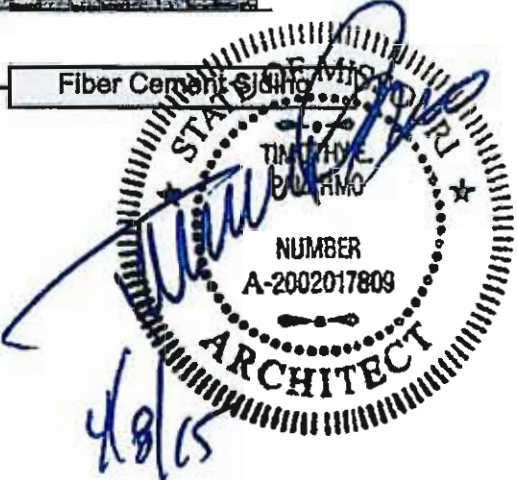


Architectural Shingles

LP Smart Trim

Masonry

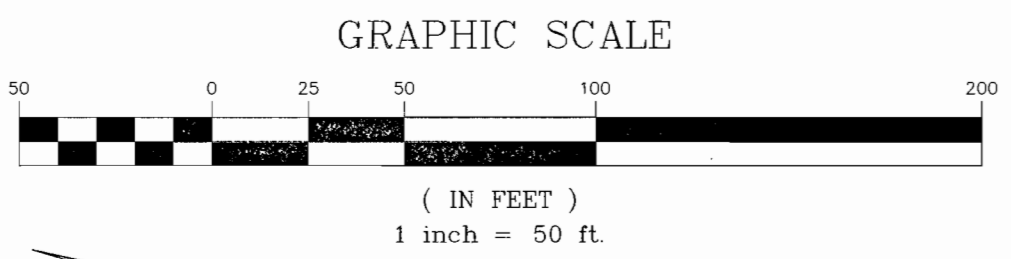
Fiber Cement Siding



BUR OAKS SUBDIVISION

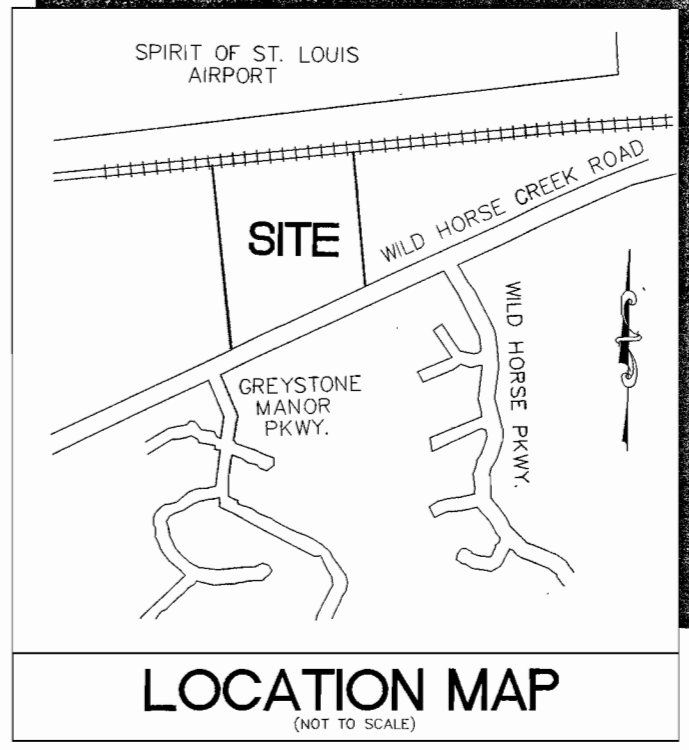
A tract of land being part of Lot 1 of Mary Schaeffer Estates Subdivision in Plat Book 17, Page 4 of the St. Louis County Records and part of the partition of the Estate of Mearns A. Stevens, also being part of Lot 24 of R.H. Stevens Farm Subdivision and located in U.S. Survey 122, Township 45 North, Range 3 East of the First Principal Meridian City of Chesterfield, St. Louis County, Missouri

SITE DEVELOPMENT PLAN CHESTERFIELD ORDINANCE NO. 2831 ZONED "E 1/2 ACRE WITH WILDHORSE CREEK ROAD OVERLAY"



PERTINENT DATA

OWNER	= ETHEL WILLIAMS FAMILY LTD. PARTNERSHIP
SITE ADDRESS	= 17751 WILD HORSE CREEK ROAD CHESTERFIELD, MISSOURI 63005
LOCATOR NO.	= 18V510105
WATER SHED	= BONHOMME CREEK
PREVIOUS ZONING:	= NU - NON-URBAN DISTRICT
NEW 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 = 589.08
 PL 55 FEMA PANEL 120 "STANDARD TABLET" STAMPED
 29 JUL 1975 SET IN SOUTH END OF WEST HEADWALL OF
 PRIVATE DRIVE ALONG WILD HORSE CREEK ROAD 108 METERS
 WEST OF THE CHESTERFIELD SCHOOL, ALSO 200 FEET WEST
 OF STEEPL HILL DRIVE PRIVATE [27' SOUTH OF THE
 CENTERLINE OF WILD HORSE CREEK ROAD AND 49' EAST
 OF THE CENTERLINE OF KEYSTONE TRAIL DRIVE]

GENERAL NOTES:

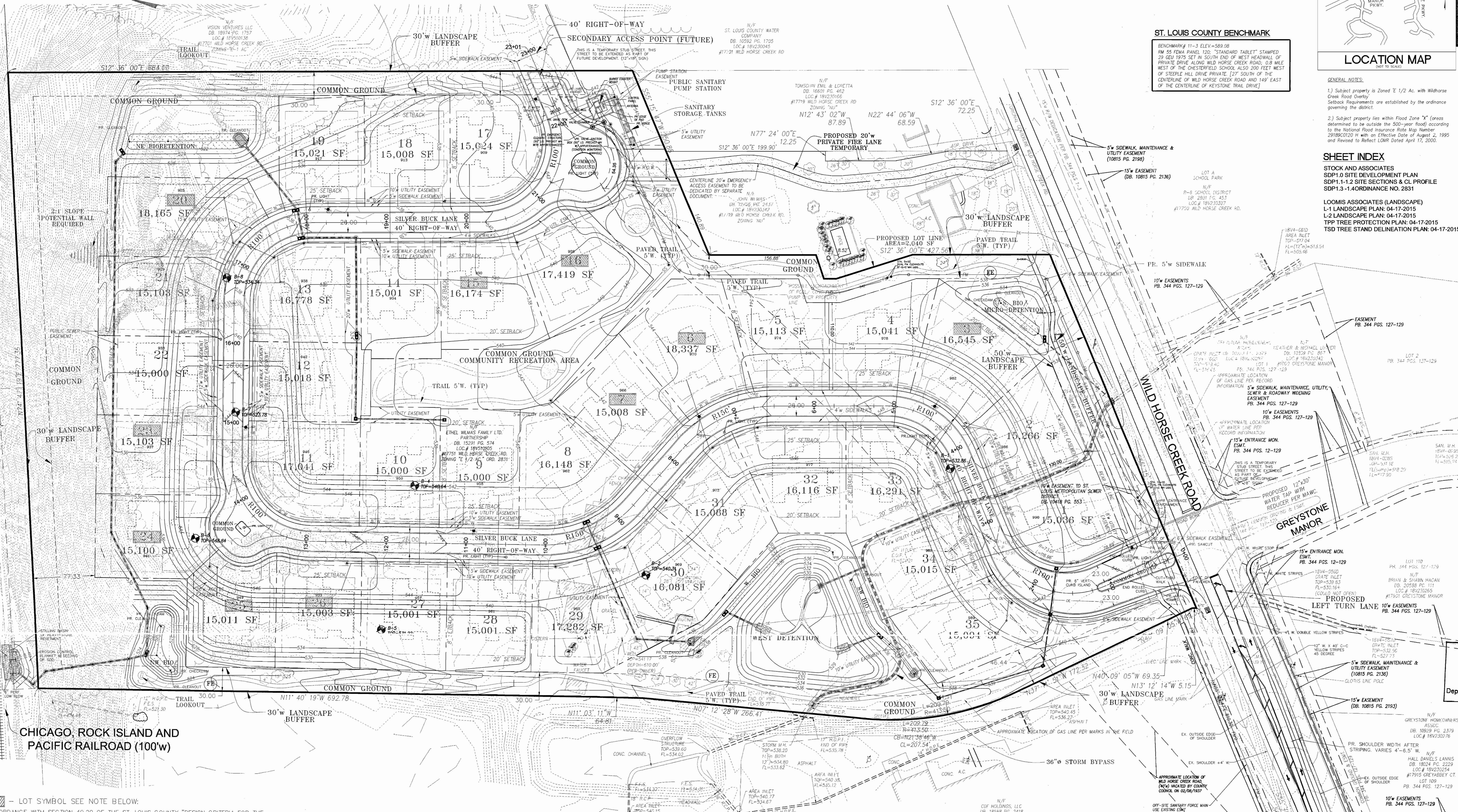
- 1) Subject property is Zoned E 1/2 Ac. with Wildhorse Creek Road Overlay. Setback Requirements are established by the ordinance governing the district.
- 2) Subject property lies within Flood Zone "X" (areas determined to be outside the 500-year flood) according to the National Flood Insurance Rate Map Number 2918R0212D with an Effective Date of August 2, 1995 and Revised to Reflect FEMA Data dated April 17, 2000.

SHEET INDEX

STOCK AND ASSOCIATES
 SDP1.0 SITE DEVELOPMENT PLAN
 SDP1.1-1.2 SITE SECTIONS & CL PROFILE
 SDP1.3-1.4 ORDINANCE NO. 2831

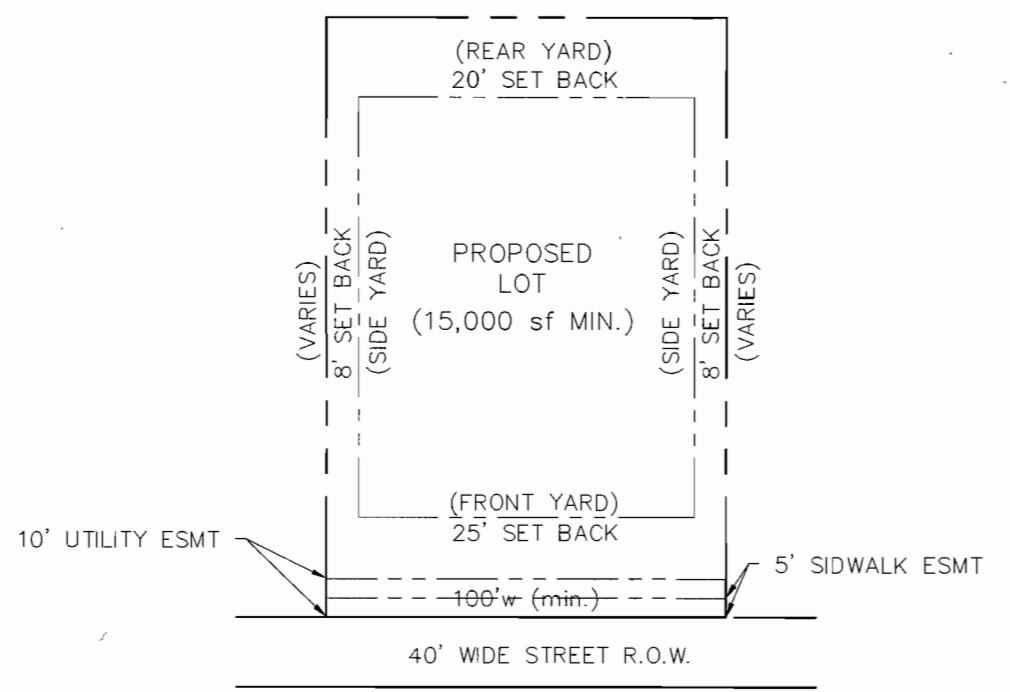
LOOMIS ASSOCIATES (LANDSCAPE)

L-1 LANDSCAPE PLAN: 04-17-2015
 L-2 LANDSCAPE PLAN: 04-17-2015
 TTP TREE PROTECTION PLAN: 04-17-2015
 TSD TREE STAND DELINEATION PLAN: 04-17-2015



- 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. 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.
 4. ALL IMPROVEMENTS SHOWN ARE SUBJECT TO CHANGE PENDING FINAL ENGINEERING AND APPROVALS OF GOVERNING AGENCIES AND UTILITY COMPANIES.

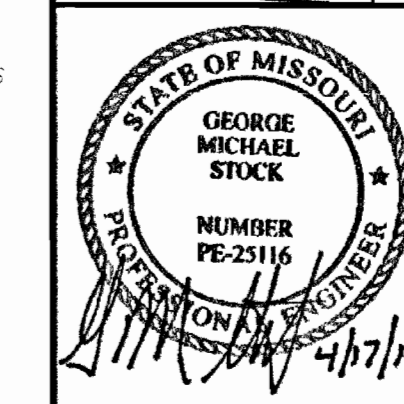
- NOTES:**
1. BOUNDARY AND TOPOGRAPHIC SURVEY BY STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC.
 2. SITE INFO:
 NEW ZONING: E-1/2 ACRE WITH WILD HORSE OVERLAY
 PROPOSED LOT: DESIGN DEPTH - 150' MIN.
 DESIGN WIDTH - 100' MIN.
 FRONT SETBACK - 25'
 SIDE SETBACK - "PER SITE SPECIFIC ORDINANCE"
 REAR SETBACK - 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 GEOTECH RECOMMENDATIONS. SEE GEO TECHNICAL REPORT PREPARED BY SCI 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 = 952,958 s.f. (21.876 Ac.)
 PER OUTBOUNDARY SURVEY SUBMITTED 6/12/14 TO CITY
 TOTAL COMMON GROUND = 299,683 s.f. (31.45% OF NET SITE AREA)
 9. MAXIMUM STRUCTURE HEIGHT PER WILD HORSE CREEK OVERLAY DISTRICT = 50 FEET
 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.
 10. STEP 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 = 15.89%
 11. PERMIT REQUIRED FOR ALL WORK WITHIN MDDOT RIGHT-OF-WAY. ALL WORK SHALL BE IN ACCORDANCE WITH MDDOT STANDARDS, SPECIFICATIONS AND ACCESS MANAGEMENT GUIDELINES.
 12. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.
 13. SIGNAGE APPROVAL IS A SEPARATE PROCESS.
 14. FOR ADA COMPLIANCE, 5'x5' PASSING ZONES ARE REQUIRED EVERY 200' FOR THE PROPOSED 4' WIDE SIDEWALK. RESIDENTIAL DRIVEWAYS MAY MEET THIS REQUIREMENT.



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

SITE DEVELOPMENT PLAN FOR:
BUR OAKS SUBDIVISION
 17751 WILD HORSE CREEK RD.

RECEIVED
 City of Chesterfield
 APR 20 2015
 Department of Public Services



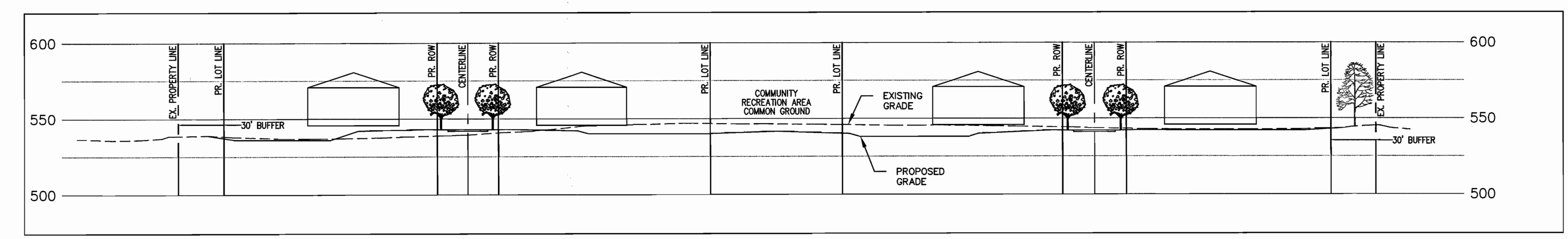
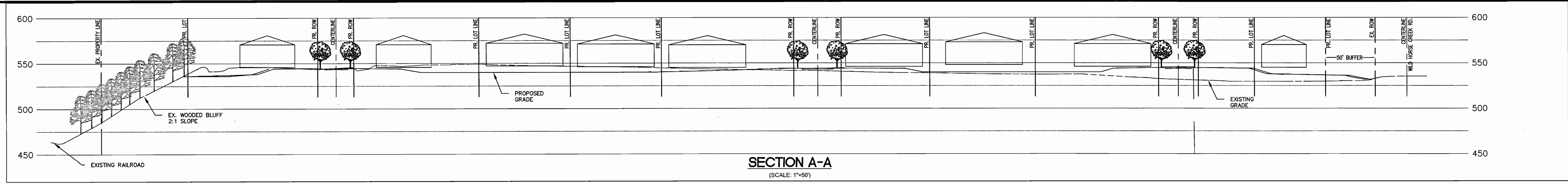
REVISIONS:

1	2-10-2015	"CITY SDP SUBMITTAL"
2	3-10-2015	"CITY SDP SUBMITTAL"
3	3-20-2015	"CITY SDP SUBMITTAL"
4	3-23-2015	"CITY SDP SUBMITTAL"
5	4-01-2015	"CITY SDP SUBMITTAL"
6	4-09-2015	SDP1.0
7	4-17-2015	CITY SUBMITTAL

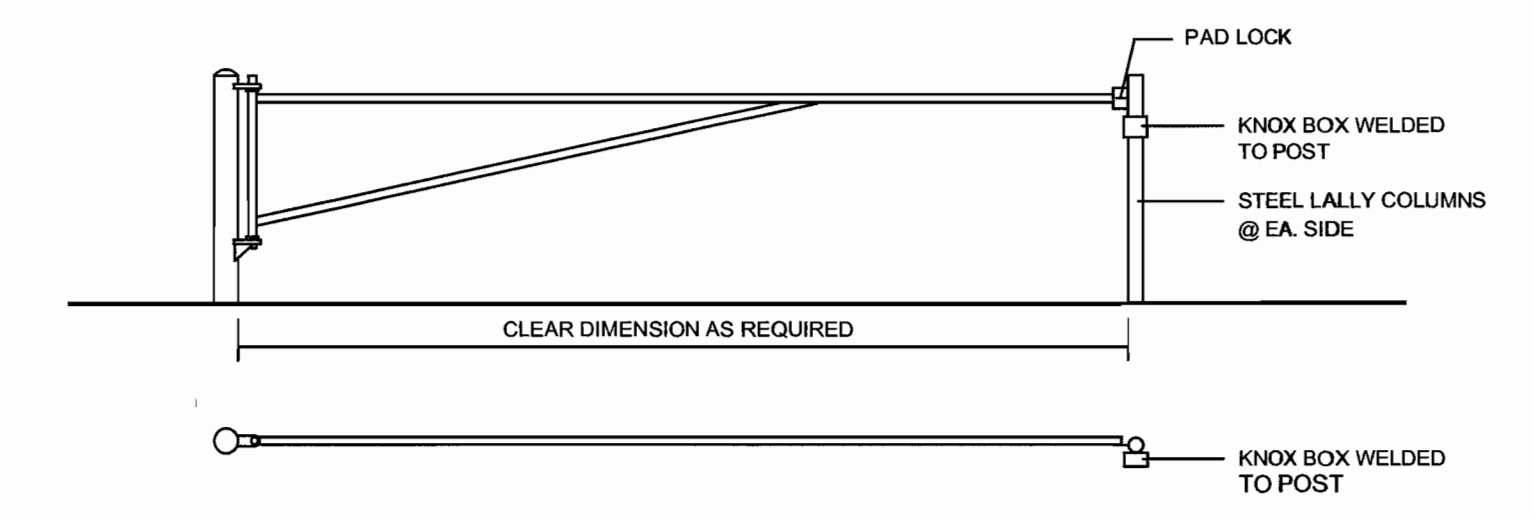
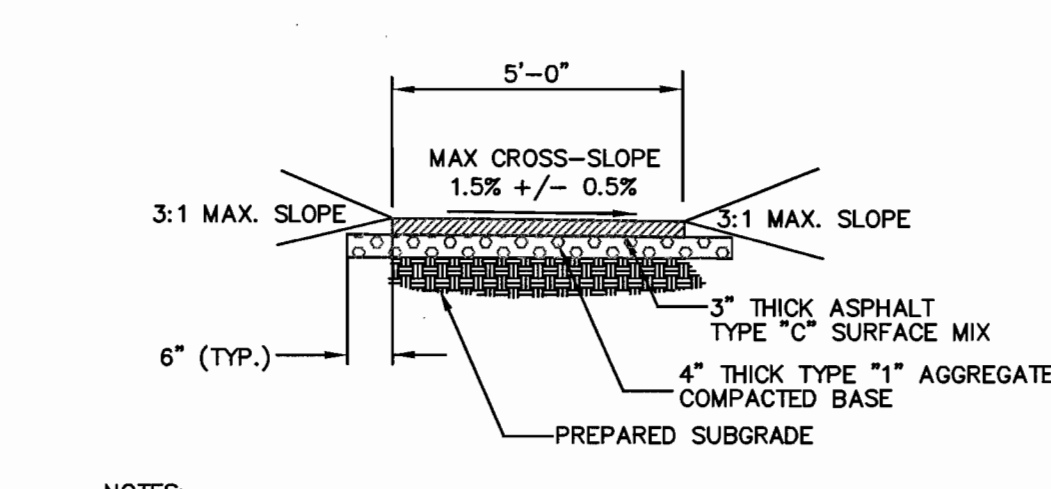
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 CHECKED BY: G.M.S.
 DATE: 12/24/2014
 M.S.D. P.P. # 213-5241
 P-00000000-00 18-V

W.D.K. # MO-
 SHEET TITLE: SITE DEVELOPMENT PLAN
 SHEET NO.: SDP1.0

DRAWING FILE: O:\DRAWINGS\2015\1158am PLOTTED: Apr 20, 2015 - 11:58am PLOTTED BY: kate.abock

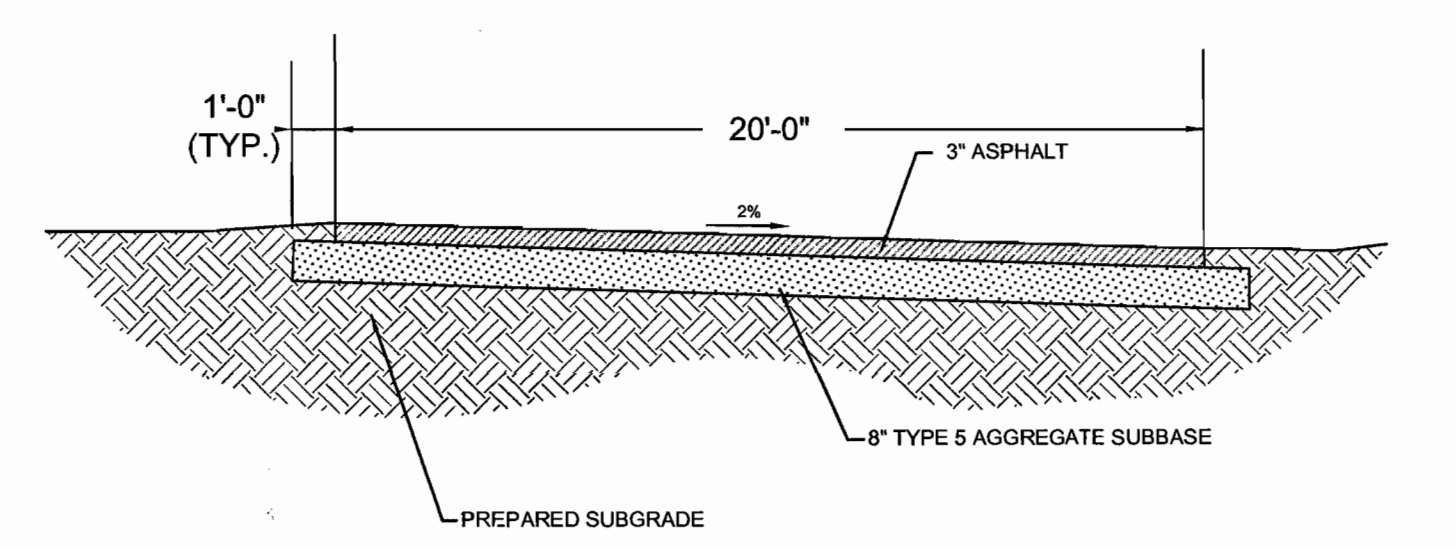


NOTE: MAXIMUM STRUCTURE HEIGHT PER WILD HORSE CREEK OVERLAY DISTRICT = 50 FEET



FIRE LANE GATE

ON-SITE PEDESTRIAN WALKING TRAIL DETAIL
(N.T.S.)



TEMPORARY FIRE LANE
(NOT TO SCALE; FOLLOW DIMENSIONS)

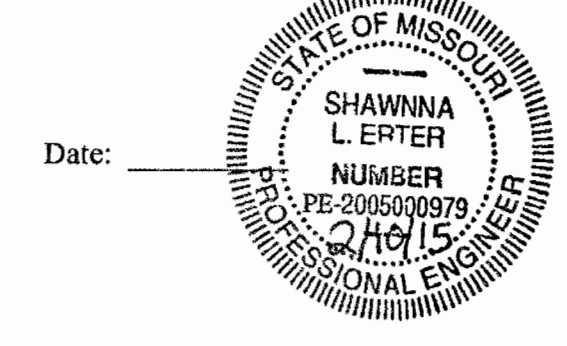
GEOTECHNICAL ENGINEER'S NOTE

Neither SCI Engineering, Inc. (SCI) nor the undersigned has prepared any part of these plans. The signature and seal are intended to confirm our review and professional opinion that these plans and revisions, through the date given below, comply with the *Geotechnical Report* dated May 2014 for the project, and are compatible with the soil and geologic conditions at the site, as anticipated from the exploration data.

Conditions may vary from those encountered during the exploration or can change due to construction activities, weather, or other conditions. Therefore, SCI must be involved during the construction of this project to observe the actual subsurface conditions and implementation of our recommendations relative to construction. Construction means and methods shall be left to the Contractor.

SCI ENGINEERING, INC.

Shawanna L. Ertter
 Shawanna Ertter, P.E.



SURVEYOR'S CERTIFICATION

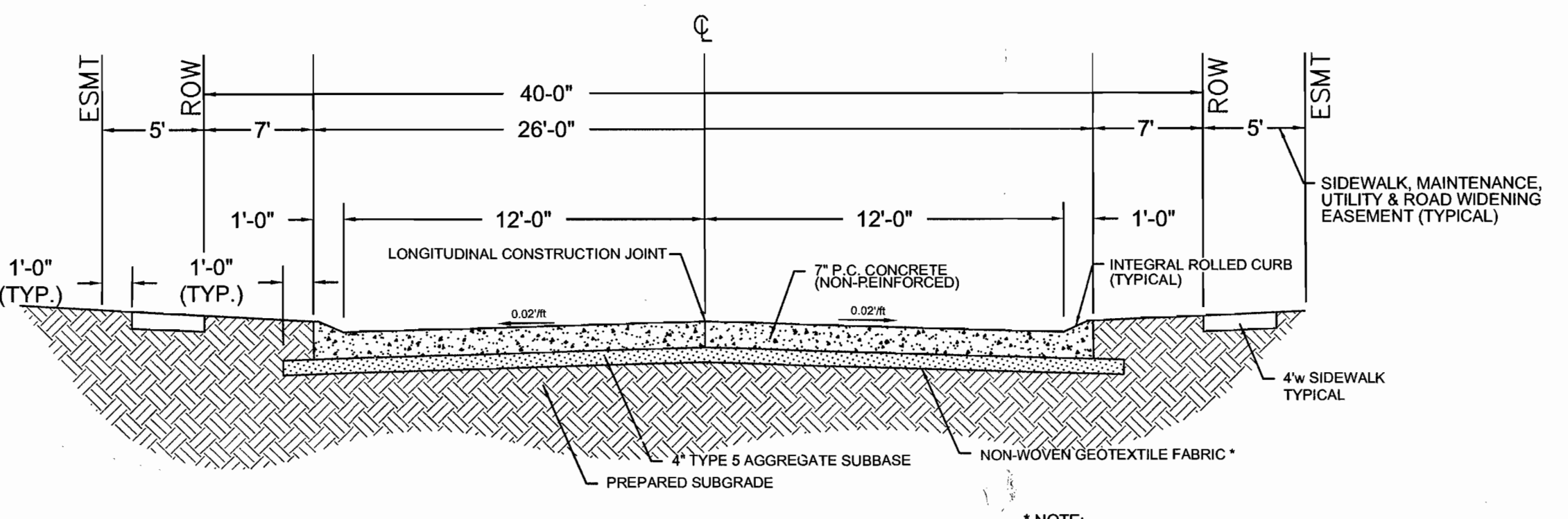
This plan has been prepared from record and survey information and represents the current and proposed land subdivision. This plan does not represent an actual Property Boundary Survey.

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

By: _____
 Daniel Ehimonn, Missouri P.L.S. No. 2215

Zoning Land Description

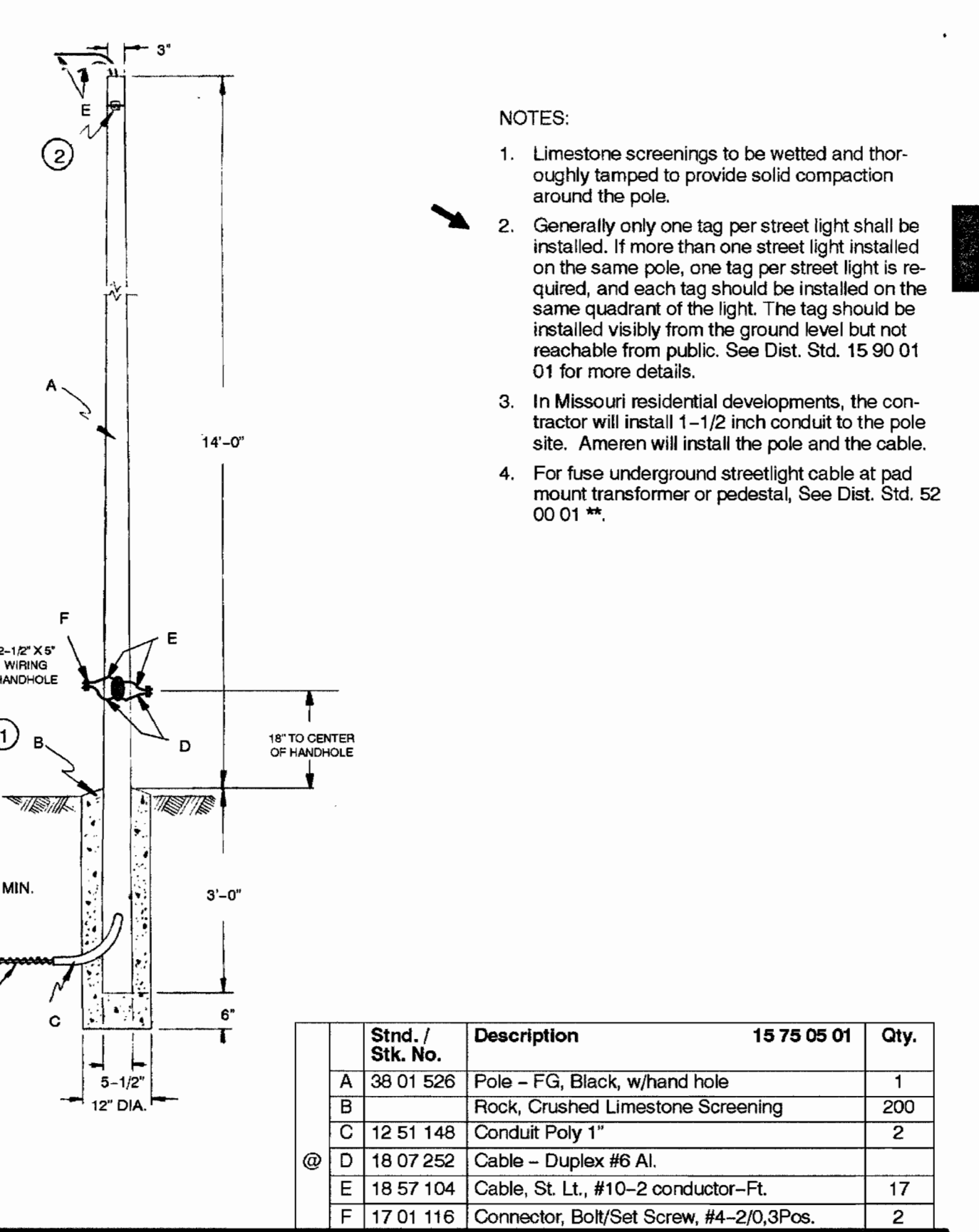
A tract of land being Part of Lot 1 of Mary Schaeffer Estates Subdivision, as recorded in Plat Book 17, Page 4 of the St. Louis County Records and part of Share 6 of the Partition of the Estate of Missouri A. Stevens, also part of Lot 24 of R.H. Stevens Farm Subdivision, located in U.S. Survey 122, Township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



INTERIOR STREET
 Typical Section (Public)
 (NOT TO SCALE; FOLLOW DIMENSIONS)

*NOTE:
 FABRIC UNDER STREET MUST COMPLY WITH AASHTO M288-98 FOR SEPARATION PURPOSES.
 NON-WOVEN FABRICS, WITH SURVIVABILITY CLASS TWO (2) AND A MINIMUM PERMITTIVITY OF 0.02, SUCH AS AMOCO 4552, TYPAR3501, CARTHAGE MILLS FX-60-HS, MIRAFI 160N OR PRE-APPROVED EQUAL.

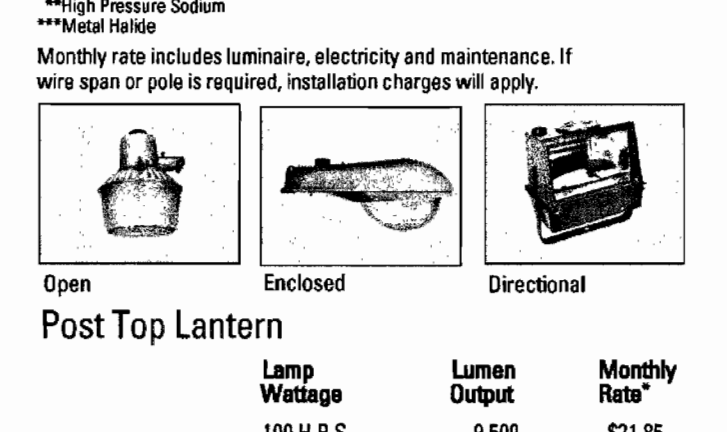
OUTDOOR LIGHTING
 Post Top Installation Fiberglass Pole
 14 Foot Mounting Height
 15 75 05 01
 Sheet 1 of 1



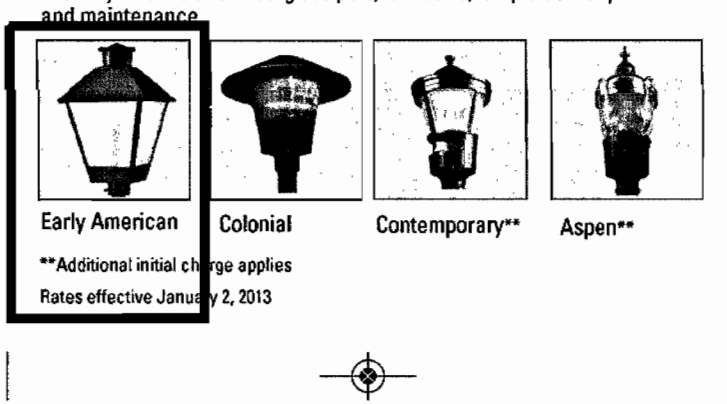
- NOTES:
1. Limestone screenings to be wetted and thoroughly tamped to provide solid compaction around the pole.
 2. Generally only one tag per street light shall be installed. If more than one street light is installed on the same pole, one tag per street light is required, and each tag should be installed on the same quadrant of the light. The tag should be installed visibly from the ground level but not reachable from public. See Dist. Std. 15.90 01 01 for more details.
 3. In Missouri residential developments, the contractor will install 1-1/2 inch conduit to the pole site. Ameren will install the pole and the cable.
 4. For fuse underground streetlight cable at pad mount transformer or pedestal, See Dist. Std. 52 00 01 **.

Ameren Missouri
 Dusk-To-Dawn
 Outdoor Lighting

Type of Luminaire	Lamp Wattage	Lumen Output	Monthly Rate*
Open	70 H.P.S.**	5,800	\$ 9.25
Open	100 H.P.S.	9,500	\$10.43
Enclosed	100 H.P.S.	9,500	\$11.70
Enclosed	250 H.P.S.	25,500	\$17.04
Enclosed	400 H.P.S.	50,000	\$30.38
Directional	250 H.P.S.	25,500	\$21.83
Directional	400 H.P.S.	50,000	\$34.21
Directional	400 M.H.***	34,000	\$21.83
Directional	1000 M.H.	100,000	\$68.39



Lamp Wattage	Lumen Output	Monthly Rate
100 H.P.S.	9,500	\$21.85

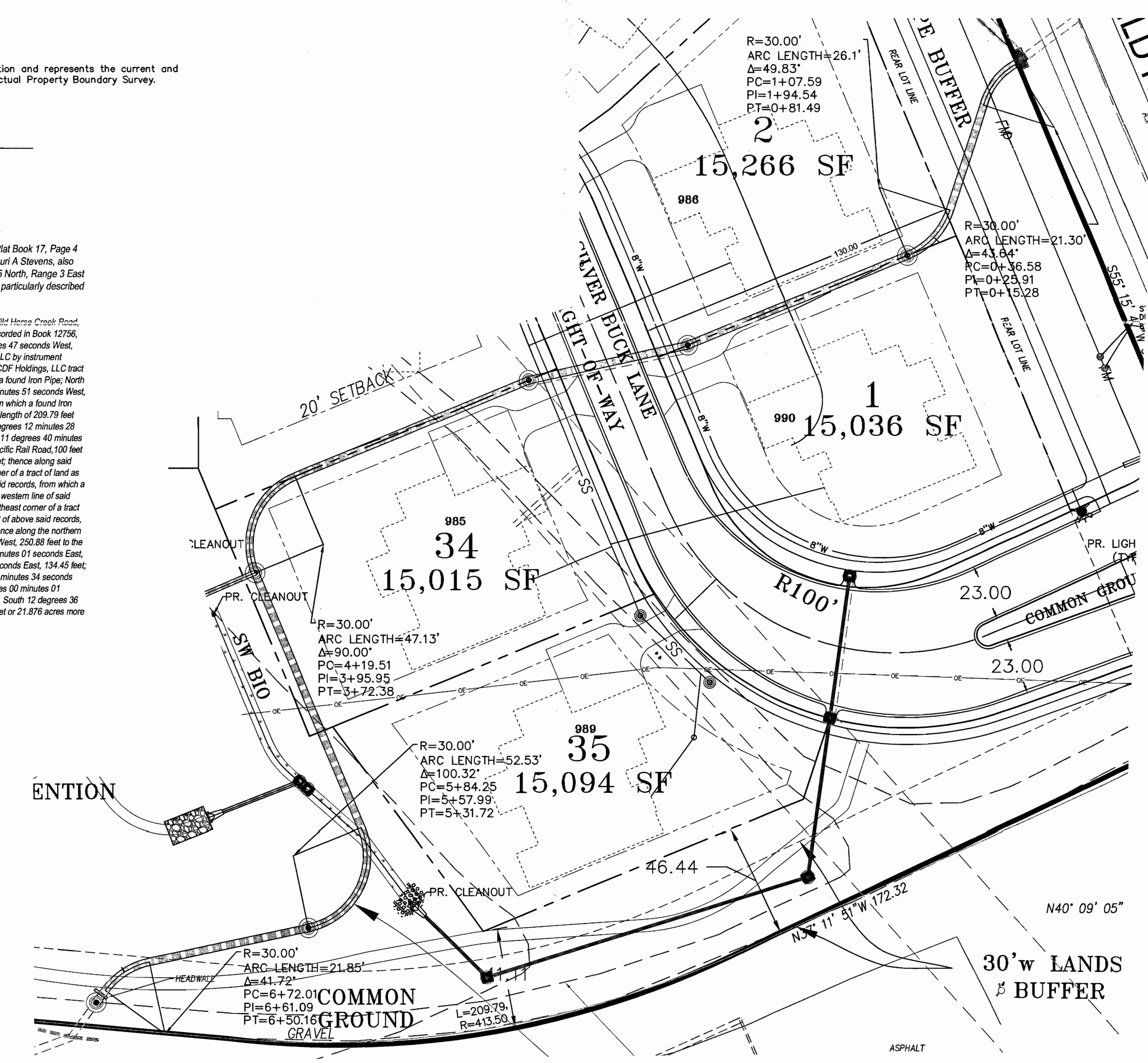


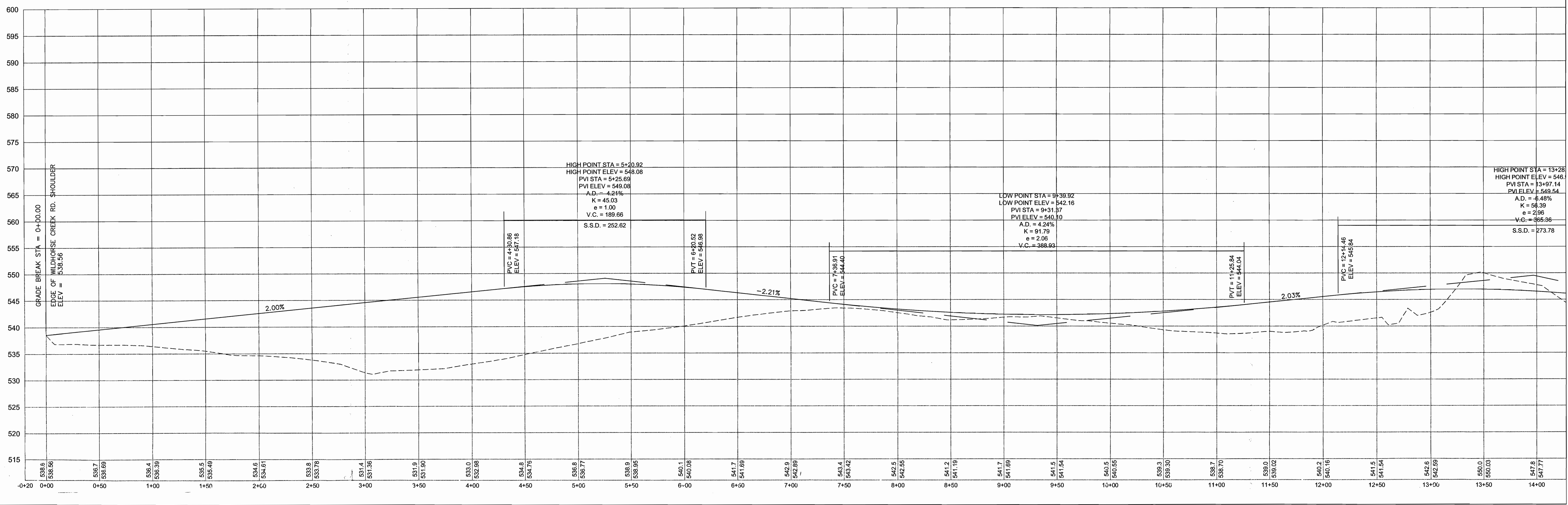
Std. / Sht. No.	Description	15 75 05 01	Qty.
A 156 01 526	Pole - FG, Black, w/hand hole		1
B	Rock, Crushed Limestone Screening		200
C 12 51 148	Conduit Poly 1"		2
D 18 07 252	Cable - Duplex #6 AL		2
E 18 57 104	Cable, St. L., #10-2 conductor-Fl.		17
F 17 01 116	Connector, Bolt/Set Screw, #4-20, 3Pos.		2

DISTRIBUTION CONSTRUCTION STANDARDS
 ENG.WYY
 REV. NO: 8
 REV. DATE: 01/21/10
 Page 15 - 31

PROPOSED LIGHT STANDARD DETAIL

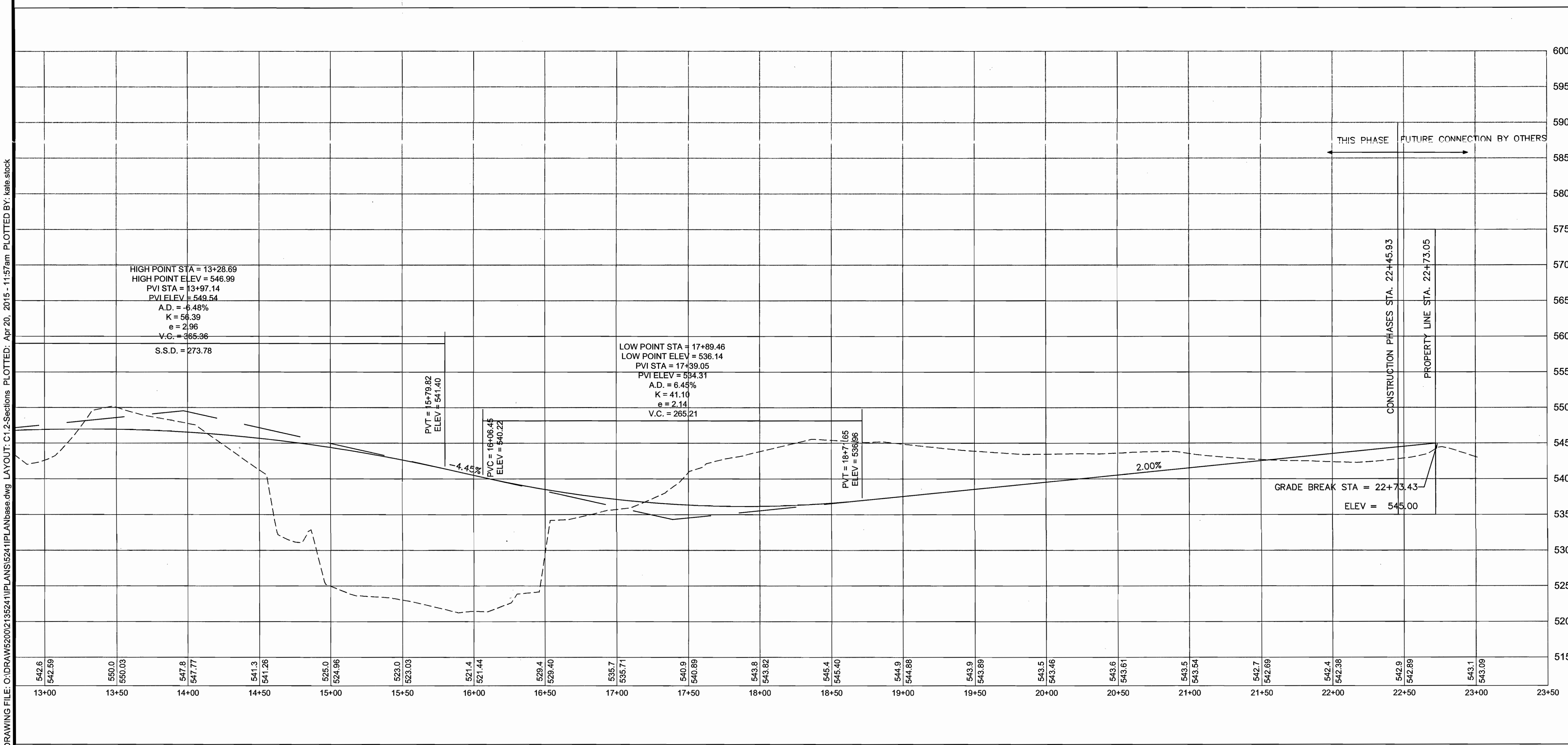
NOTE: PROPOSED LIGHT STANDARDS SHALL BE AMEREN MISSOURI'S "EARLY AMERICAN" STYLE AND THE LIGHT SHOULD NOT BE LESS THAN 16' ABOVE GRADE.



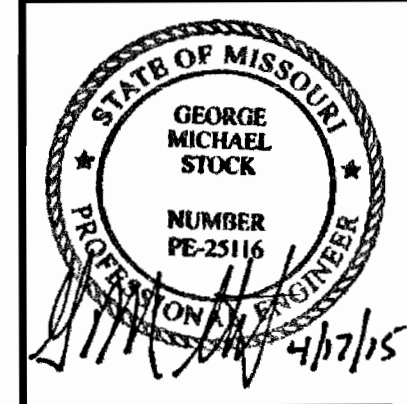


INTERIOR STREET - STREET PROFILE

SCALE: HORIZ: 1"=40'
VERT: 1"=10'



DRAWING FILE: C:\DRAWING\2015\21524\1\PLANS\524\1\PLAN\Nbase.dwg LAYOUT: C:\2\Sections PLOTTED: Apr 20, 2015 - 11:57am PLOTTED BY: kate.stock



GEORGE M. STOCK E-23116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

REVISIONS:

- 2-10-2015 "CITY SDP SUBMITTAL"
- 3-10-2015 "CITY SDP SUBMITTAL"
- 3-20-2015 "CITY SDP SUBMITTAL"
- 3-23-2015 "CITY SDP SUBMITTAL"
- 4-01-2015 "CITY SDP SUBMITTAL"
- 4-09-2015 SDP1.0
- 4-17-2015 CITY SUBMITTAL

DRAWN BY: K.M.S.	CHECKED BY: G.M.S.
DATE: 12/24/2014	JOB NO: 213-5241
M.S.D. P.#: P-00000000-00	BASE MAP #: 15-V
M.D.N.R. #: M.C.	
SHEET TITLE: SITE SECTIONS	
SHEET NO.: SDP1.2	

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).
2. Storm water quantity management, channel protection, and water quality improvements shall be provided as required by the Metropolitan St. Louis Sewer District (MSD)...

- 8. 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.
9. The drainage area tributary to each bio-retention cell should be limited to five (5) acres in order to preserve BMP performance and filter longevity.

- 15. The drainage area tributary to each bio-retention cell should be limited to five (5) acres in order to preserve BMP performance and filter longevity.
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.

- 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.

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.

- 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.

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:

Table with 2 columns: Type of Development, Required Contribution. Single Family: \$1,055.10/Parking Space.

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.

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.

Pulte Homes of St. Louis, LLC, the owner(s) of the property shown on this plan for and in consideration of being granted approval of said plan to develop property under the provisions of Section 03. _____, "E 1/4 Acre with Wildhorse Creek Road Overlay" of City of _____ (applicable subsection) (present zoning)

Chesterfield Unified Development Code, do hereby agree and declare that said property from the date of recording this plan shall be developed only as shown thereon, unless said plan is amended by the City of Chesterfield, or voided or vacated by order of ordinance of the City of Chesterfield Council.

(Signature) _____
(Name Typed) _____

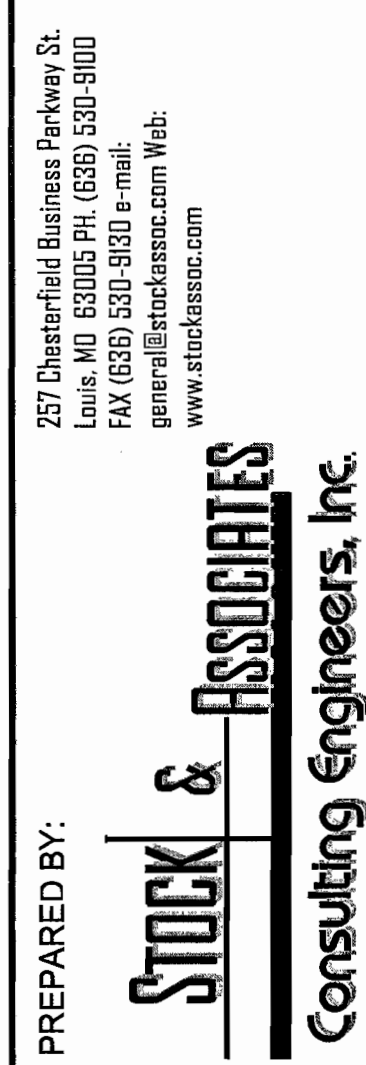
State of _____)
) SS.
County of _____)

On this _____ day of _____, A.D., 20____, before me personally appeared _____, to me known, who, being by me sworn in, did say that he/she is the _____ of Pulte Homes of St. Louis, LLC, a _____ (Title) (Name of Corporation) corporation in the State of _____, and that the seal affixed to the foregoing instruments in the captioned deed of said corporation, and that said instrument was signed on behalf of said corporation by authority of its Board of Directors, and the said _____ (Officer of Corporation) acknowledged said instrument to be the free act and deed of said corporation.

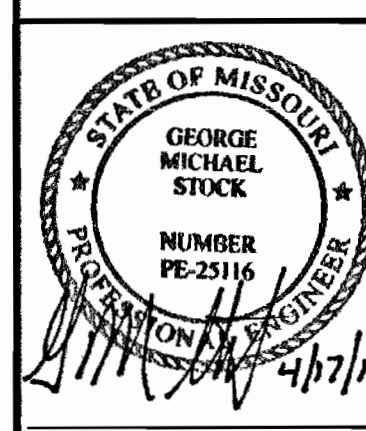
This Site Development Plan was approved by the City of Chesterfield Planning Commission and duly verified on the _____ day of _____, 20____, by the Chairperson of said Commission, authorizing the recording of this Site Development Plan pursuant to Chesterfield Ordinance Number 200, as attested to by the Planning and Development Services Director and the City Clerk.

Aimee Nasif, AICP
Planning and Development Services Director
City of Chesterfield, Missouri

Vickie Hines, City Clerk
City of Chesterfield, Missouri



SITE DEVELOPMENT PLAN FOR:
BUR OAKS SUBDIVISION
17751 WILD HORSE CREEK RD.

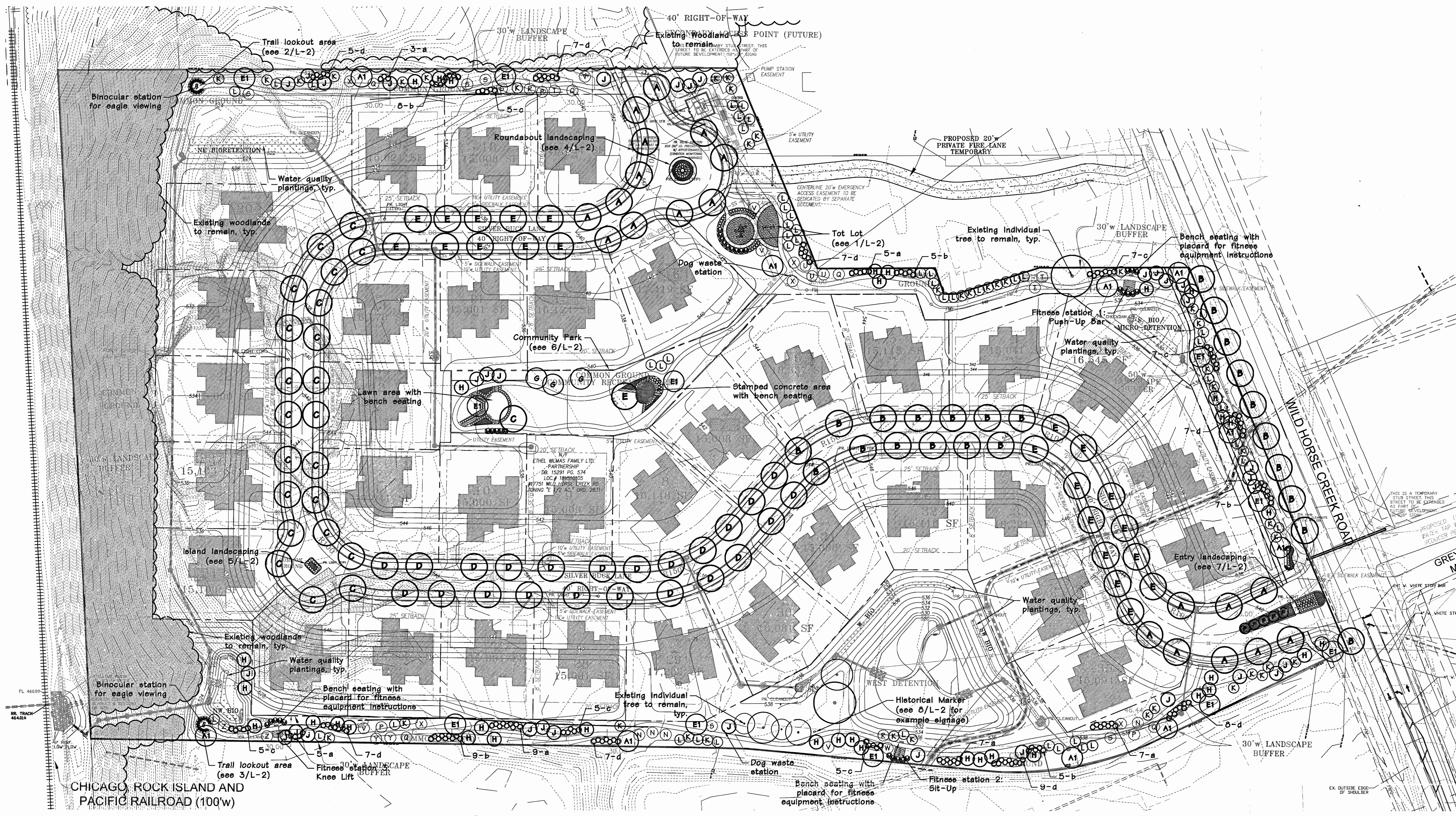


GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 00006

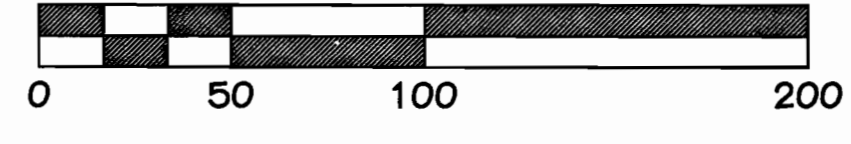
- REVISIONS:
1. 2-10-2015 CITY SFP SUBMITTAL
2. 3-10-2015 CITY SFP SUBMITTAL
3. 3-20-2015 CITY SFP SUBMITTAL
4. 3-23-2015 CITY SFP SUBMITTAL
5. 4-9-2015 CITY SFP SUBMITTAL
6. 4-9-2015 SFP1.0
7. 4-17-2015 CITY SFP1.0

DRAWN BY: K.M.S. CHECKED BY: G.M.S.
DATE: 1/22/2014 JOB NO: 213-0241
SCALE: P-0030030-00 BASE MAP # 18-V

M.D.N.R. # _____
NO. _____
SHEET TITLE:
ORDINANCE NO. 2831
SHEET NO.:
SDP1.4



LANDSCAPE PLAN
 SCALE 1" = 50'



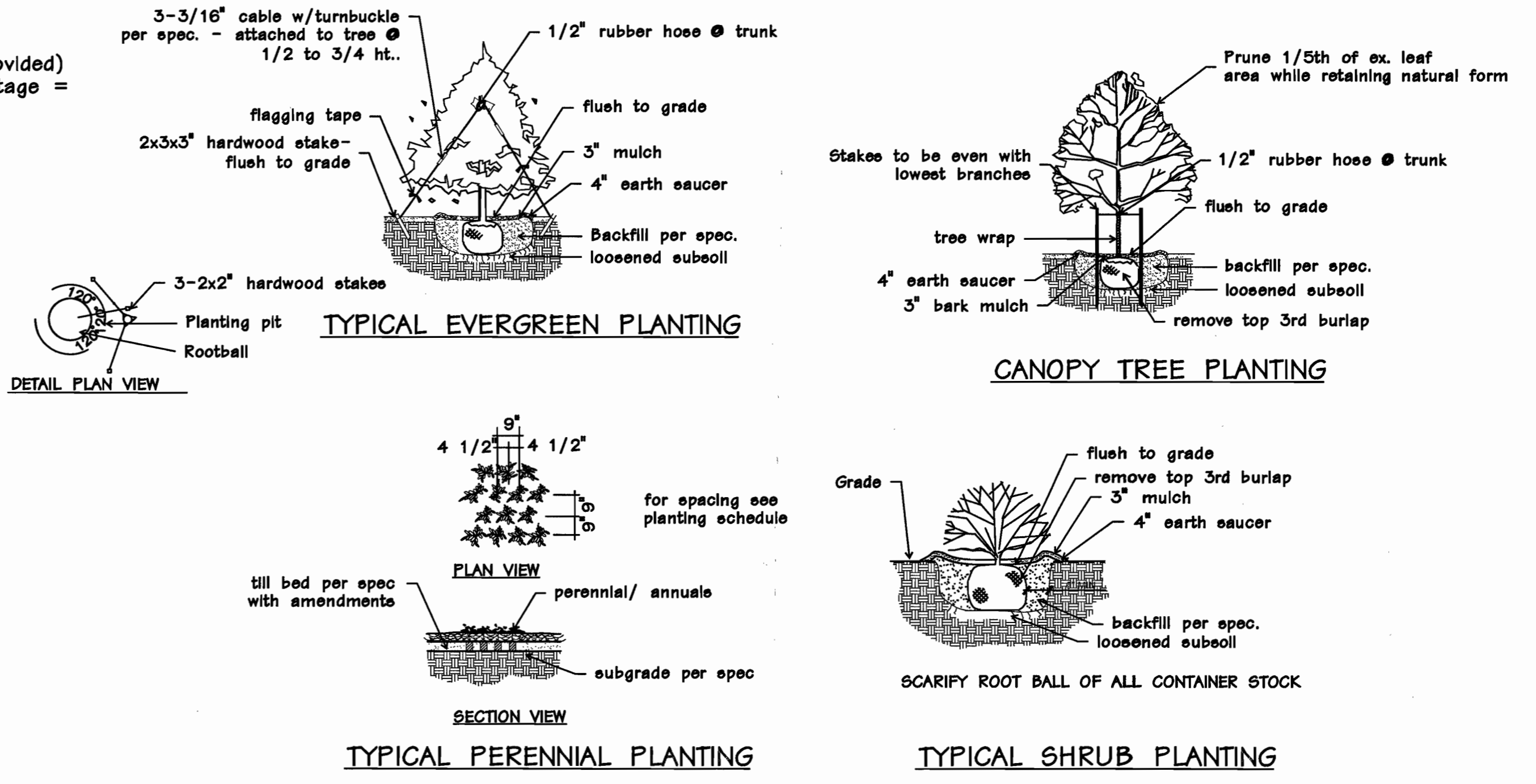
PLANTING SCHEDULE				
SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	TYPE
DECIDUOUS TREES				
A	20	Acer x freemanii 'Jefferson'	Autumn Blaze Maple	3" cal Deciduous
A1	10	Acer x freemanii 'Jefferson'	Autumn Blaze Maple	2.5" cal Deciduous
B	23	Quercus bicolor	Swamp White Oak	3" cal Deciduous
C	23	Quercus rubra	Northern Red Oak	3" cal Deciduous
D	23	Zelkova serrata 'Green Vase'	Green Vase Zelkova	3" cal Deciduous
E	23	Ginkgo biloba 'Autumn Gold' (male cultivar)	Autumn Gold Ginkgo	3" cal Deciduous
E1	11	Ginkgo biloba 'Autumn Gold' (male cultivar)	Autumn Gold Ginkgo	2.5" cal Deciduous
F	5	Taxodium distichum 'Mickelson'	Shawnee Brave Baldcypress	3" cal Deciduous
G	3	Betula nigra 'Cully'	Heritage River Birch (clump)	2.5" cal Deciduous
H	36	Cercia canadensis	Eastern Redbud	2.5" cal Ornamental
J	33	Cornus florida 'Cherokee Princess'	Cherokee Princess Flowering Dogwood	2.5" cal Ornamental
EVERGREEN TREES				
K	40	Pinus strobus	Eastern White Pine	0' ht Evergreen
L	47	Picea pungens	Colorado Blue Spruce	0' ht Evergreen
M	32	Thuja 'Green Giant'	Green Giant Arborvitae	0' ht Evergreen
NATIVE TREES FOR TRAIL (each tree to have identification marker)				
N	4	Aesculus pavia	Red Buckeye	whips or larger Deciduous
P	3	Aelmina triloba	Pawpaw	whips or larger Deciduous
Q	5	Carya ovata	Shagbark Hickory	whips or larger Deciduous
R	2	Chionanthus virginicus	Fringetree	whips or larger Deciduous
S	6	Cladraetia kentuckea (male)	Yellowwood	whips or larger Deciduous
T	3	Cornus drummondii	Roughleaf Dogwood	whips or larger Deciduous
U	3	Cotinus obovatus	American Smoketree	whips or larger Deciduous
V	5	Gymnocladus dioica	Kentucky Coffeetree	whips or larger Deciduous
W	1	Ilex decidua	Deciduous Holly (Possum Haw)	whips or larger Deciduous
X	5	Liquidambar styraciflua 'Happell' (fruitless)	Happidaze Sweetgum	whips or larger Deciduous
Y	2	Oxydendrum arboreum	Sourwood	whips or larger Deciduous
Z	2	Quercus macrocarpa	Bur Oak	whips or larger Deciduous
PARK SHRUBS				
-	-	Holly, Hydrangea, Boxwood, orn. grasses/perennials		Deciduous/Evg.
BUFFER SHRUBS				
a	36	Viburnum x burkwoodii	Burkwood Viburnum	24" Deciduous
b	34	Hamelia vernalis	Ozark Witchhazel	24" Deciduous
c	34	Ilex verticillata 'Nana' / Jim Dandy (9:1 ratio)	Red Sprite / Jim Dandy Winterberry Holly	24" Deciduous
d	57	Juniperus virginiana 'Grey Owl'	Grey Owl Juniper	24" Evergreen
Water Quality Plantings				

TOTAL SITE AREA: 952,956sf (21.876 Acres)
 TOTAL COMMON GROUND: 299,663sf (31.45% of net site area)
 TOTAL "OPEN SPACE": 297,726sf (31.24% of net site area)

STREET TREE CALCULATIONS:
 SILVER BUCK LANE: 4,180lf of lot frontage = 104 trees required (105 provided)
 WILDHORSE CREEK ROAD: 400lf - 80lf of intersection = 400lf of lot frontage = 10 trees required (10 provided)

TREE PERCENTAGE CALCULATIONS:
 TOTAL TREES (NOT INCLUDING NATIVE WHIPS) = 329 TREES
 DECIDUOUS CANOPY TREES = 141 TREES (43%)
 ORNAMENTAL TREES = 69 TREES (21%)
 EVERGREEN TREES = 119 TREES (36%)

NATIVE TREE PROPOSED IN ADDITION TO REQUIRED BUFFERING TO PROMOTE NATIVE REFORESTATION



Revisions:

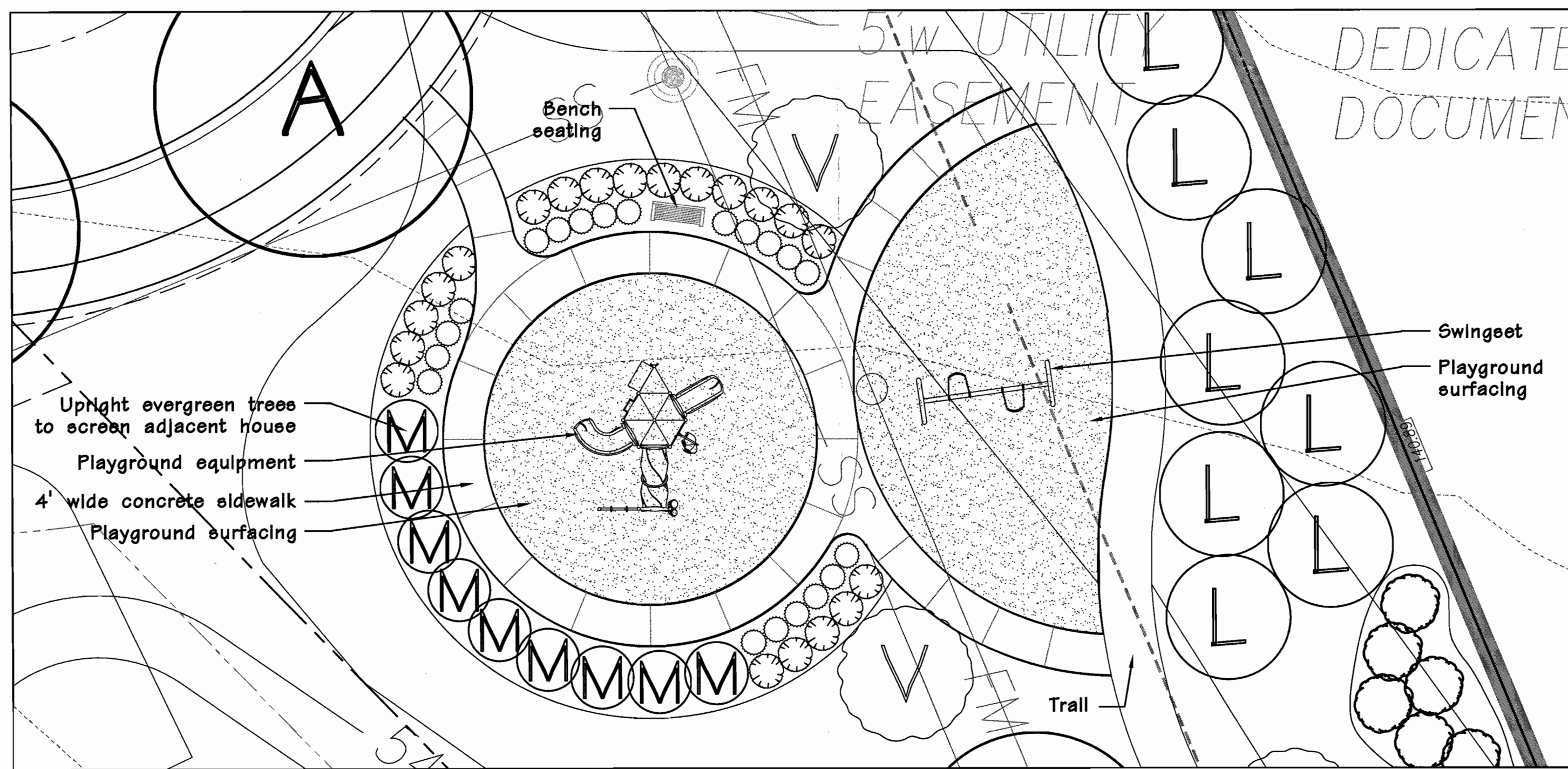
Date	Description	No.
4-29-14	Base Plan Revision	1
10-22-14	Base Plan Revision	2
1-21-15	Base Plan Revision	3
2-6-15	Landscaping Revisions	4
3-10-15	Base Plan Revision	5
4-1-15	City Comments	6
4-17-15	Base Plan Revision	7

Drawn: LWH
 Checked: JAS

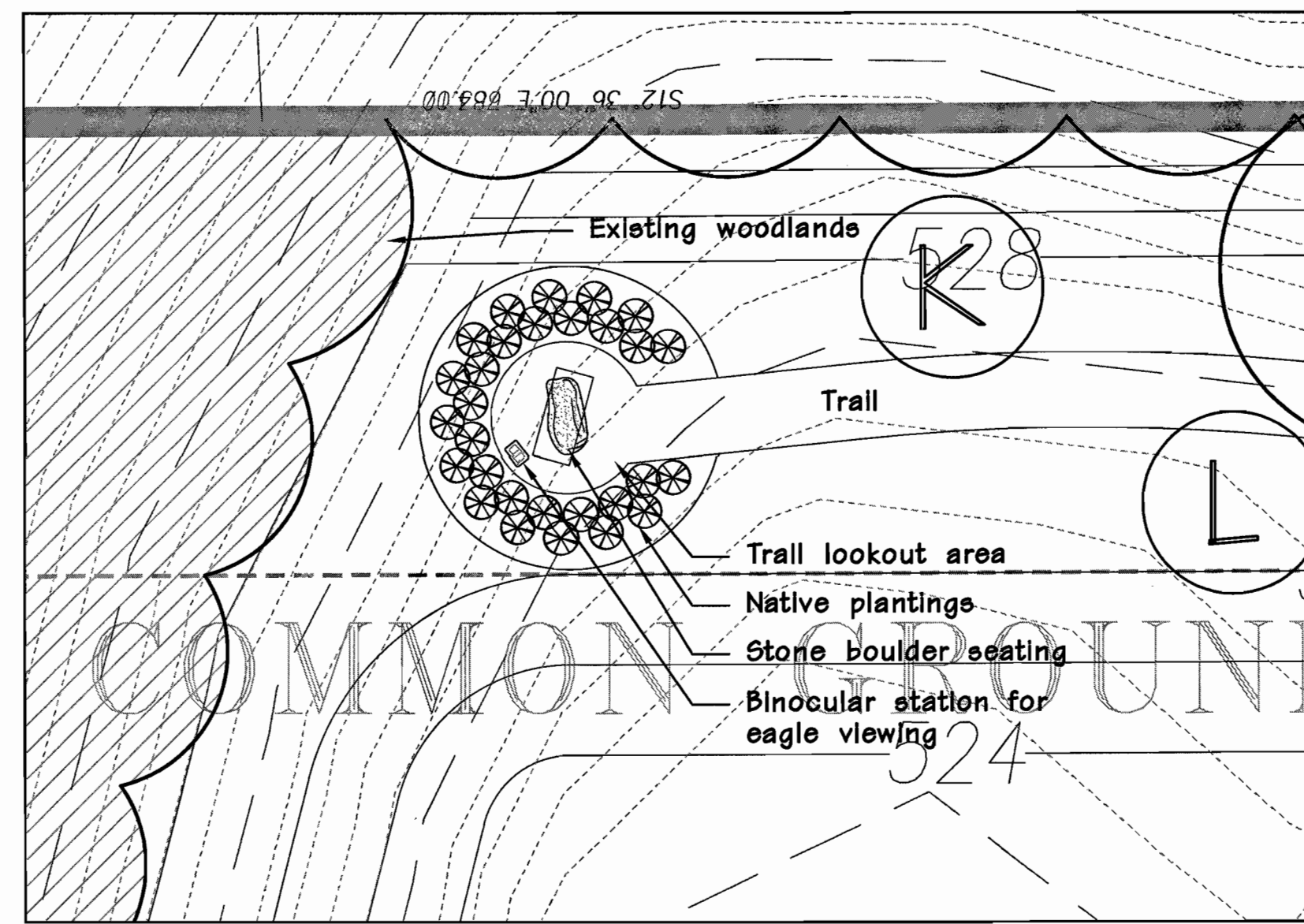
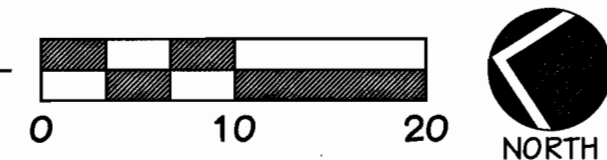
loomisAssociates
 Landscape Architects/planners
 707 S. 40th St., Suite 105
 Omaha, NE 68107
 Phone: 402.333.1000
 Fax: 402.333.1001
 Email: info@loomis-associates.com

Sheet Title: Landscape Plan
 Sheet No: L-1

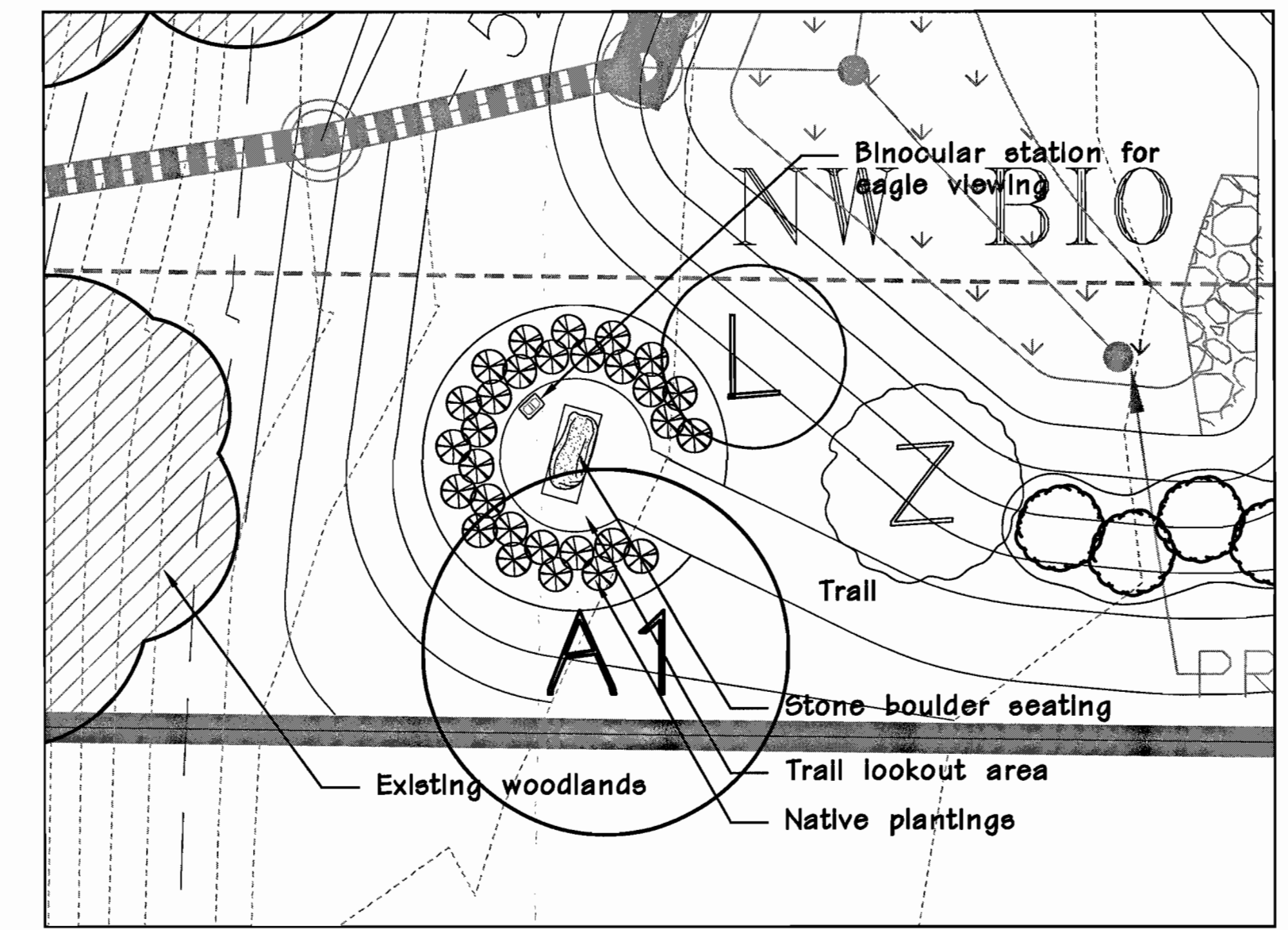
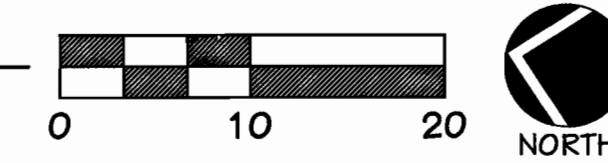
Date: 02/07/14
 Job #: 935.007



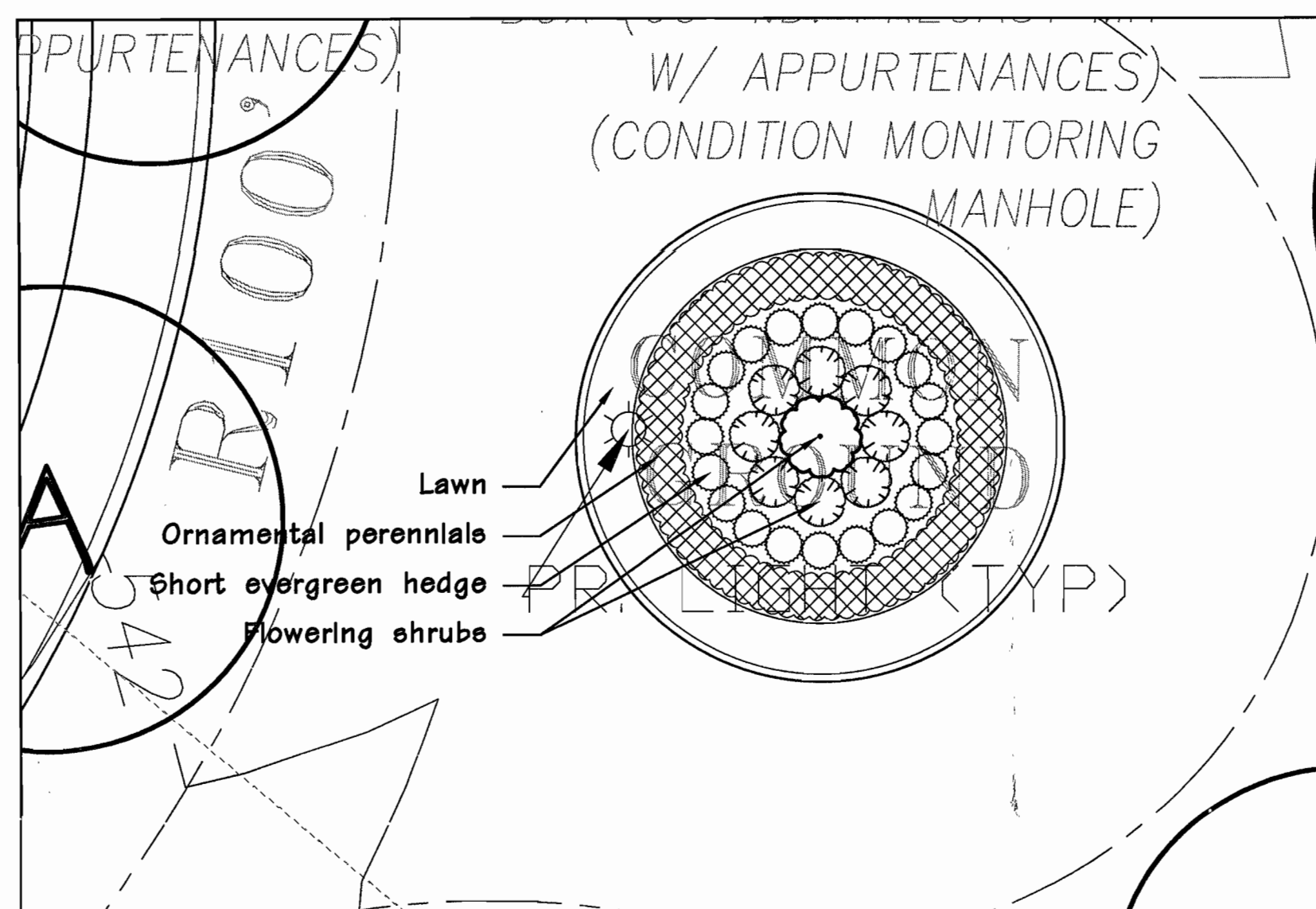
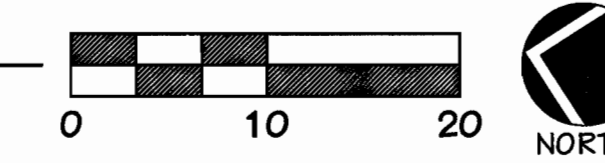
1 TOT LOT AREAS
L-2 SCALE 1" = 10'



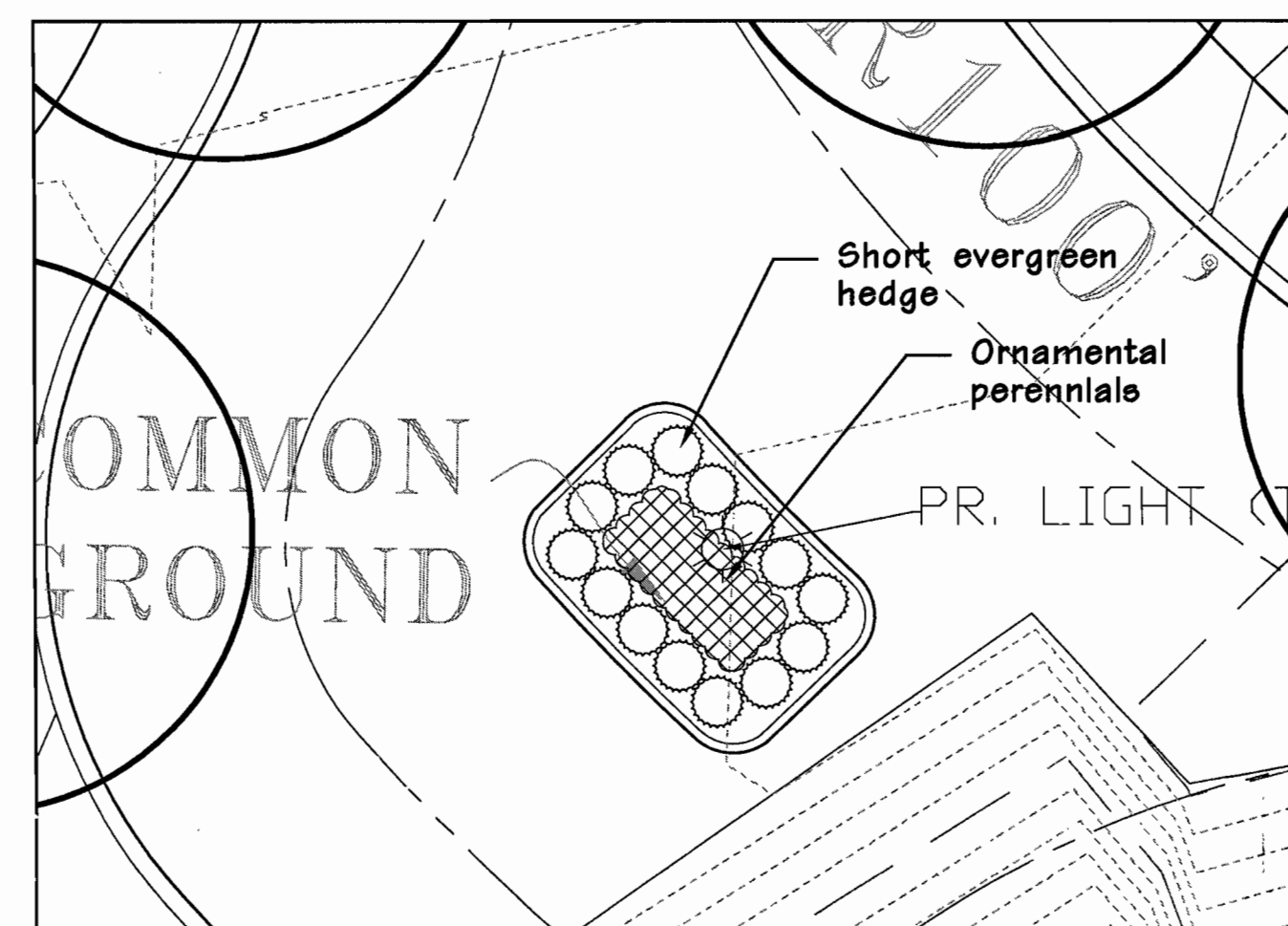
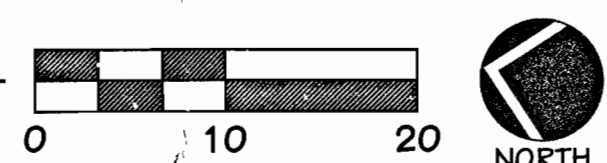
2 TRAIL LOOKOUT AREA 1
L-2 SCALE 1" = 10'



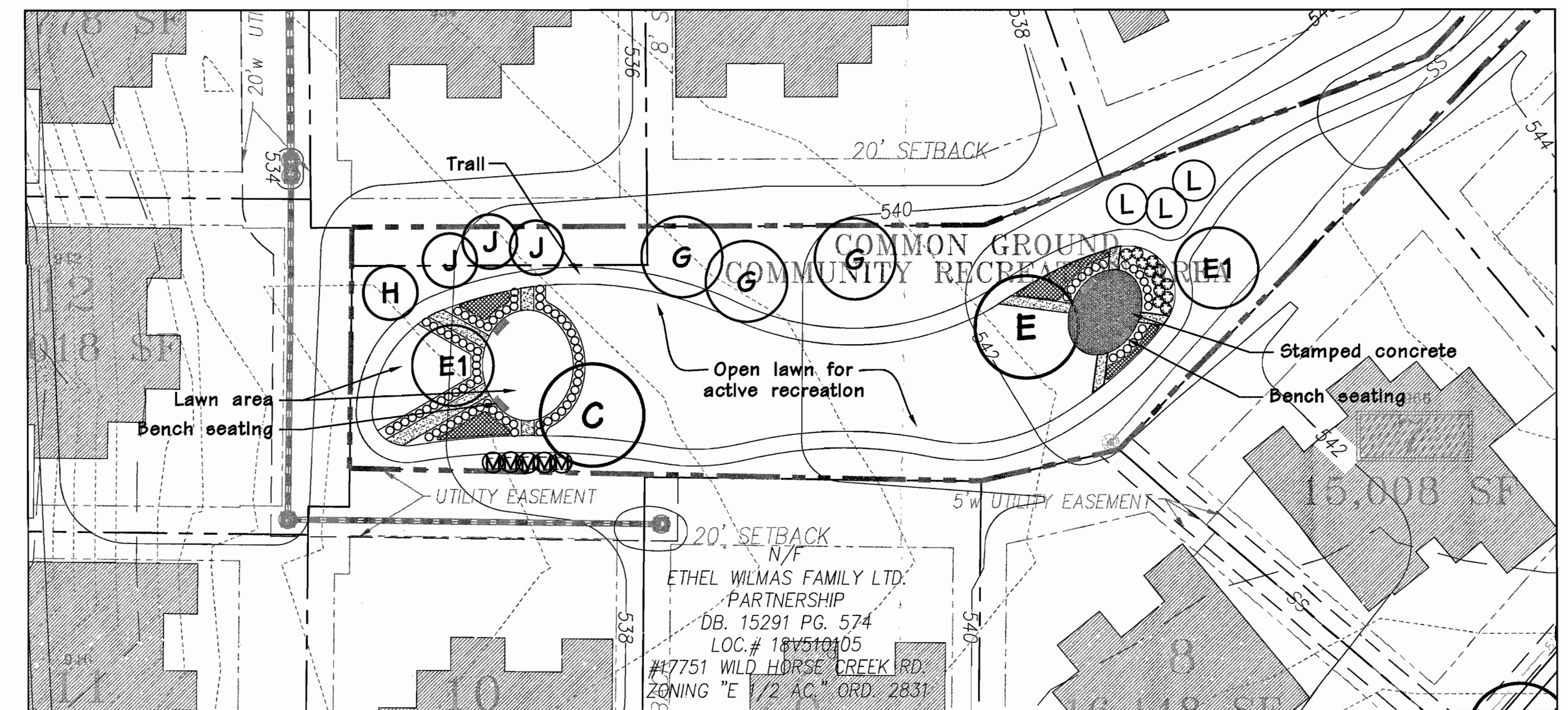
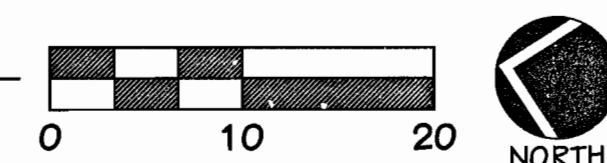
3 TRAIL LOOKOUT AREA 2
L-2 SCALE 1" = 10'



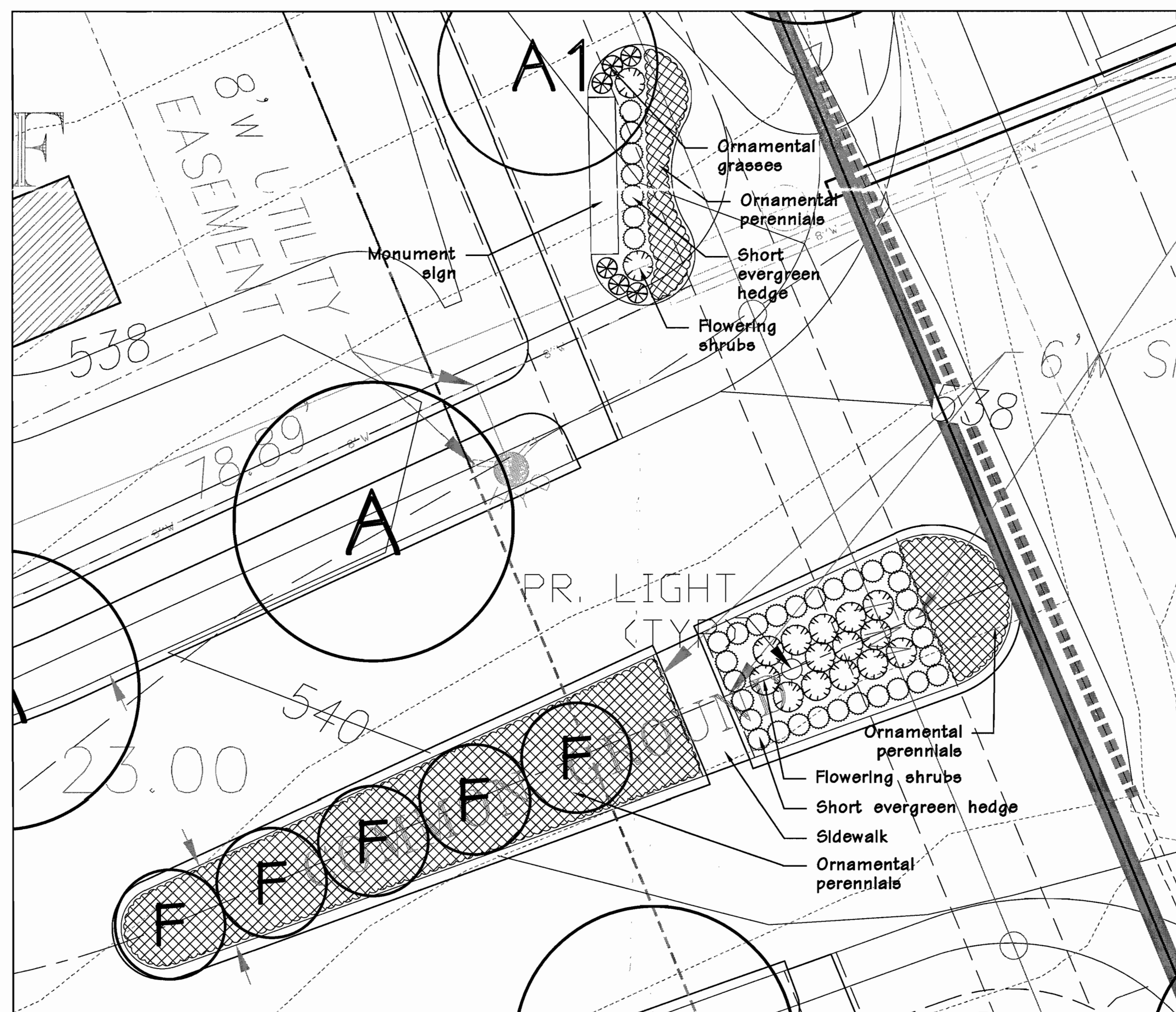
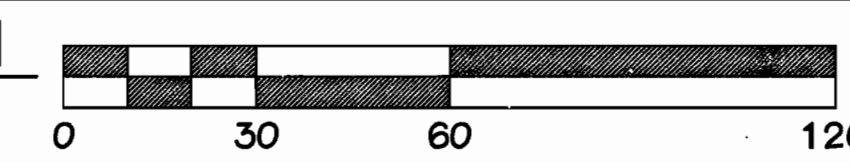
4 ROUNDABOUT LANDSCAPING
L-2 SCALE 1" = 10'



5 ISLAND LANDSCAPING
L-2 SCALE 1" = 10'



6 COMMUNITY PARK LANDSCAPE PLAN
L-2 SCALE 1" = 30'



7 ENTRY ISLAND AND SIGNAGE LANDSCAPING
L-2 SCALE 1" = 10'



8 HISTORICAL MARKER EXAMPLE
L-2 N.T.S.

STATE OF MISSOURI
JERALD SAUNDERS
LANDSCAPE ARCHITECT
NO. 11715
MO License # LA-007
Consultants:

Bar Oaks
17751 Wild Horse Creek Road
Chesterfield, MO

Revisions:

Date	Description	No.
4-29-14	Base Plan Revision	1
10-22-14	Base Plan Revision	2
1-21-15	Base Plan Revision	3
2-6-15	Landscape Revisions	4
3-10-15	Base Plan Revision	5
4-1-15	City Comments	6
4-17-15	Base Plan Revision	7

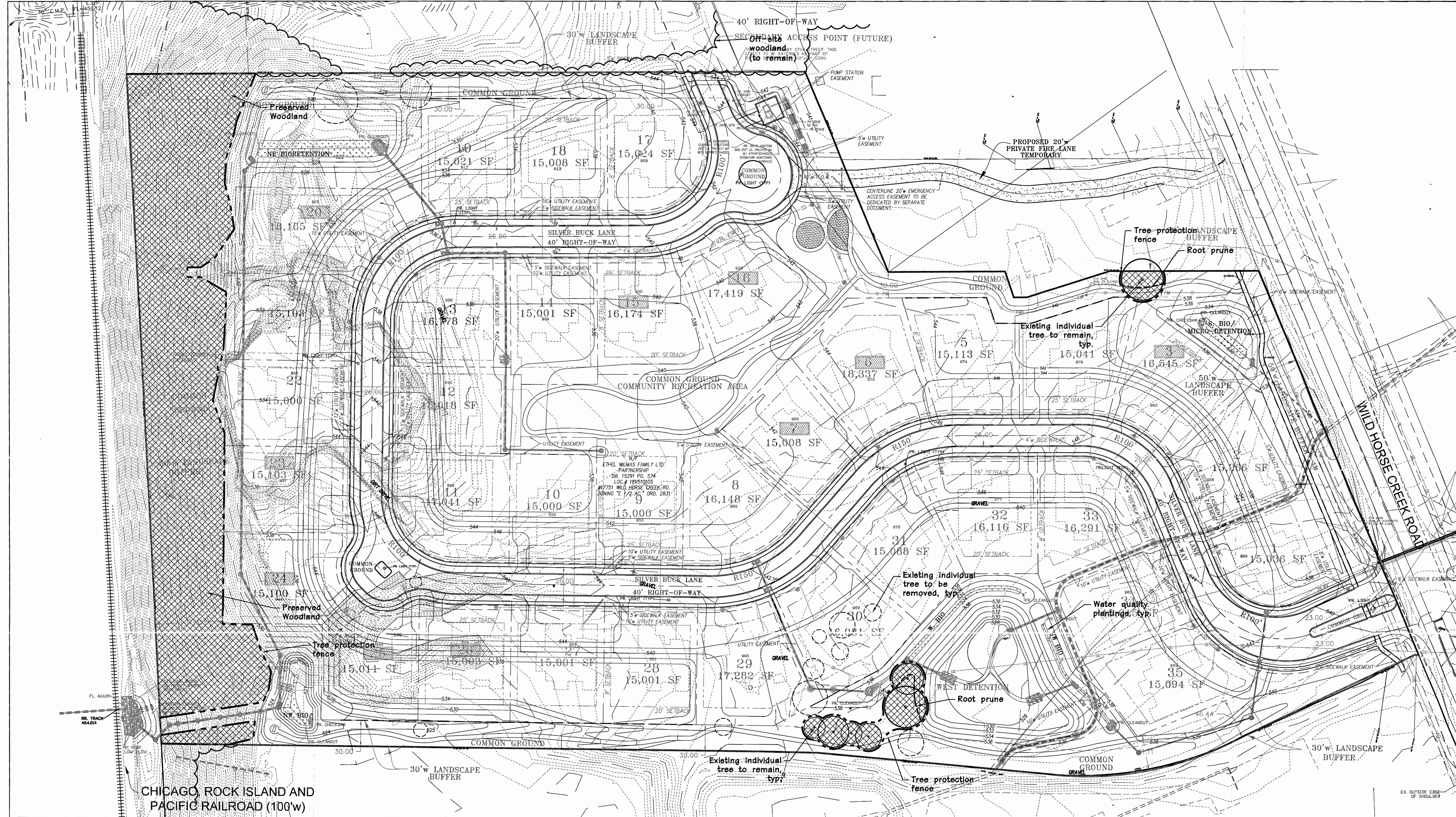
Drawn: LWH
Checked: JAS

loomisAssociates
Landscape Architects/Planners
20254-40 River Oaks, Suite 105
Chesterfield, Missouri 63005-1594
Phone: 636.863.1100
Email: info@loomisassociates.com

Sheet Title: Enlarged Landscape Plan

Sheet No: L-2

Date: 02/07/14
Job #: 935.007



TREE PRESERVATION PLAN
 SCALE 1" = 50'

LEGEND:

Symbol	Description
	Existing Individual Tree to remain
	Existing Woodland to remain
	Tree protection fence
	Existing Individual Tree to be removed

TOTAL SITE AREA: 21.876 Acres
 TOTAL EXISTING WOODLAND: 155,095 sq.ft.
 30% REQUIRED PRESERVATION: 56,429 sq.ft.
 ACTUAL PRESERVED WOODLAND: 81,829 sq.ft. (43.50%)
 TOTAL EXISTING CANOPY PROPOSED FOR REMOVAL: 106,269 sq.ft.

Pre-construction meeting to be held on-site to include a presentation of tree protection measures to operators; construction supervisors; developer's representative; and city zoning inspector.

Clearing Limits to be rough staked in order to facilitate location for installation of protection fencing. No early maintenance schedule is required. Required mitigation devices to be installed along limit of disturbance line.

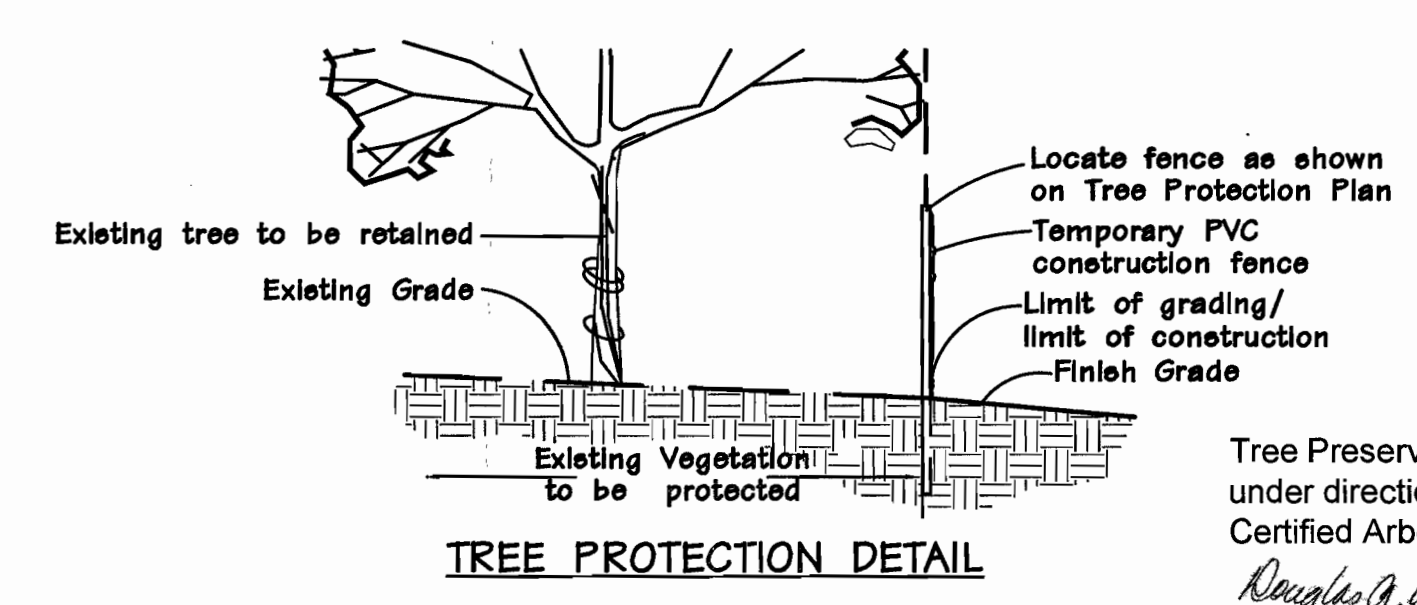
No clearing or grading shall begin in areas where the treatment and preservation measures have not been completed including the installation of tree protection fencing along all "Limit of Disturbance" lines shown on the map.

Tree Protection Fencing shall be 4-foot tall, plastic, orange fencing. No equipment traffic/parking, concrete washout, material storage or other such construction activity shall be permitted to penetrate the protection fencing or disrupt the Protected Woodland Area. Tree Protection Signage will be placed along the Protection Fencing as shown as the dashed line on the map.

Perform root pruning prior to any work in the critical root zone. Where root injury has occurred, the branches and the tops of the tree shall be cut or thinned to reduce the demand on the roots for moisture and minerals, and a low nitrogen, high phosphorous fertilizer shall be applied as determined by the Consulting Landscape Architect.

The trees most worthy of preservation are those located in the woodland A; a high quality woodland on the north facing slope of the property.

Tree Protection Action Key Sequence:
 1. Survey Limit of Disturbance 2. Install Tree Protection Fencing 3. Post Tree Protection Signage on Fence; no signs will be posted on any trees 4. Maintain Tree Protection Area as off-limits zone



Revisions:

Date	Description	No.
4-29-14	Base Plan Revision	1
1-21-15	City Resubmittal	3
3-10-15	Base Plan Revision	5
4-1-15	City Comments	6
4-17-15	Base Plan Revision	7

Drawn: LWH
 Checked: JAS

loomisAssociates
 Landscape Architects/Planners
 707 S. 40th Park Drive, Suite 105
 Chesterfield, MO 63005
 Phone: 636.865.1007
 Email: info@loomisassociates.com
 Missouri State Certificate of Authority # LAC #000019

Sheet Title:	Tree Preservation Plan
Sheet No.:	TPP
Date:	02/07/14
Job #:	935.007

Bur Oaks
 17751 Wild Horse Creek Road
 Chesterfield, MO

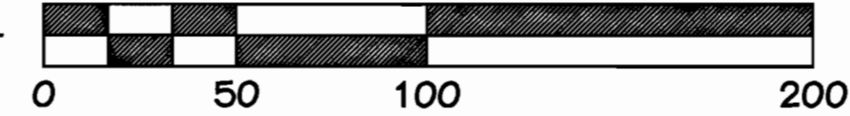
Bur Oaks Subdivision
17751 Wild Horse Creek Road
 Chesterfield, MO



CHICAGO, ROCK ISLAND AND
 PACIFIC RAILROAD (100'W)

Half-dead Pecan tree
 to be removed
 (canopy not included
 in calculations)

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: Specimen 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 cross) Existing Individual Tree
 - 10 (M in circle) Existing Monarch Tree
 - Existing Woodland "A" (stippled pattern)
 - Existing Woodland "B" (cross-hatched pattern)

WOODLAND "A" = 162,808 sq.ft.
 WOODLAND "B" = 15,197 sq.ft.
 INDIVIDUAL TREES OUTSIDE OF WOODLAND BOUNDARIES = 10,093 sq.ft.
 TOTAL SQ.FT. OF EXISTING CANOPY = 188,098 sq.ft. (4.318 acres)

- 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 understory is made up of small Sugar Maple and Honeysuckle.
 - Woodland B made up of 2-6" diameter Cottonwood.

ZONING DESIGNATION:
 Present Zoning: NU "Non-Urban"
 Total Site Area: 21.876 Acres±
 Floodplain Map Number: 29189C0120H

Revisions:

Date	Description	No.
8/11/14	Project Name Change	1
11/7/14	City Resubmittal	2
1/21/15	City Resubmittal	3
4/1/15	City Comments	6
4/17/15	City Comments	7

Drawn: LWH
 Checked: JAS

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 202 S. 40th Ave. Suite 155
 Chesterfield, Missouri 63075-1796
 Phone: 636.863.1100
 Email: info@loomisassociates.com

Missouri State Certificate of Authority # LAC #000018

Sheet Title:	Tree Stand Delineation
Sheet No.:	TSD
Date:	02/07/14
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