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Planning Commission Staff Report

Project Type: Site Development Plan

Meeting Date: July 11, 2016

From: Justin Wyse

Senior Planner

Location: 16300 Lydia Road

Applicant: Watermark Residential

Description: Chesterfield Village Mall (Watermark at Chesterfield Village) SDP:

A Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for a 12.96 acre tract of land zoned "R-8" Residence District with a Planned Environment Unit (PEU) procedure located southeast of the intersection of Chesterfield Parkway West and Lydia Hill Road.

PROPOSAL SUMMARY

The request is for construction of three (3), four-story multi-family buildings. The subject site is zoned "R-8" Residence District with a Planned Environment Unit (PEU) procedure. The site is bisected by two future land use designations; multi-family and urban core. The property is governed under the terms and conditions of City of Chesterfield Ordinance 2021.

LAND USE AND ZONING HISTORY OF THE SUBJECT SITE

This site is located within the Southwest Quadrant of the Chesterfield Village, specifically parcel C207. The Southwest Quadrant of Olive/Clarkson and I-64 was included in the original presentation to the St. Louis County Planning Commission in 1971 to initiate development of Chesterfield Village. The proposal for the residential development of the southwest quadrant of Chesterfield Village was included in four petitions that authorized residential density within each of the petition areas. The subject site is located within the original petition area for PC 165-71.

St. Louis County Ordinance 6,816 was approved in 1973 which authorized and gave approval to four Planned Environment Unit plans for the residential areas of the southwest quadrant of the Chesterfield Village. These areas are shown below.

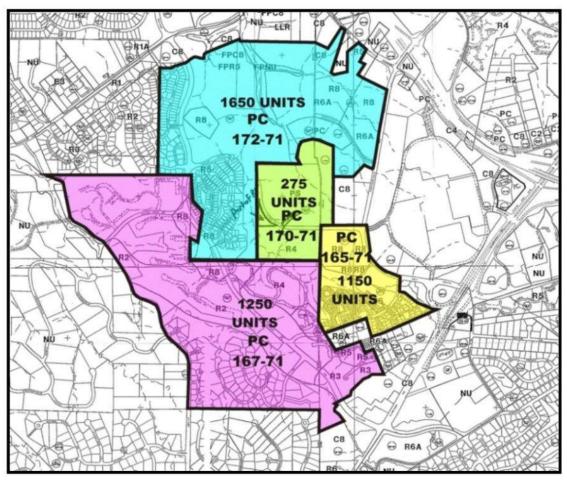


Figure 1: PEU Boundaries and Approved Density for Original Zoning Petitions

A Final Development Plan for the southwest quadrant was submitted and approved by St. Louis County in February of 1974. The Final Development Plan showed the planned roadway system and allocated residential densities within the PEU to specific parcels covered under the governing ordinance.

The original Final Development Plan approved a total of 528 units on parcel C207. The Final Development Plan was amended in July of 1979 and modified the density on parcel C207, among other changes, to include a maximum of 608 units. The current site development plan proposes 345 units.

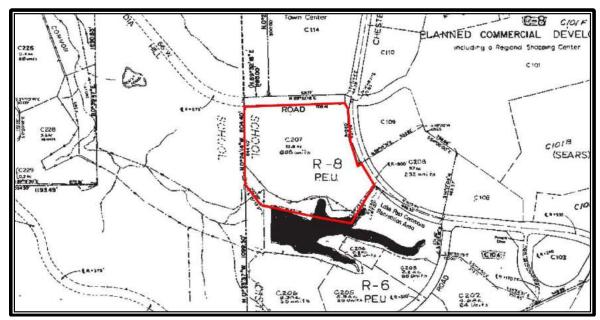


Figure 2: Subject Site on 1979 Final Development Plan

The original ordinance for the site has been modified several times over the years. The most recent change was approved by the City of Chesterfield via Ordinance 2021 which is the current governing ordinance for the site.

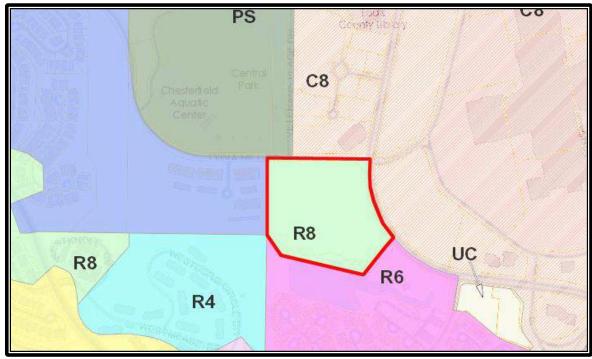


Figure 3: Zoning Map

Land Use and Zoning of Surrounding Properties

Direction	Land Use	Zoning
North	Office / Park	C-8 and PS
South	Residential	R-6
East	Vacant / Chesterfield Mall	C-8
West	Residential	R-5



Figure 4: Aerial Photo

STAFF ANALYSIS

Zoning

The subject site is currently zoned R-8 with a Planned Environment Unit under the terms and conditions of City of Chesterfield Ordinance Number 2021. This development, covered under the original petitions, covers over 365 acres of land in the southwest quadrant of I-64 / MO 340 (Olive Boulevard and Clarkson Road). Ordinance 2021 authorized 1,150 units. The current Final Development Plan authorizes a maximum of 608 units on the subject site. As proposed, the subject site would utilize 56.7% of the approved density for the site.

The submittal was reviewed against the requirements of *the Planned District Ordinance* and all applicable Zoning Ordinance requirements and the proposed development adheres to the applicable requirements.

Density

PC 165-71 authorized a Planned Environment Unit procedure on approximately 55 acres within the southwest quadrant (see below). Ordinance 2021 approved a maximum of 1,150 units within this area; however, significantly less dense development has occurred. The area covered by this petition (PC 165-71) includes Oak, Sycamore, Justus Pointe, Lake Post Commons, and the subject site. The table on the next page details constructed units within each of these areas and details that the area is significantly less dense than permitted.



Figure 5: Boundary of PC 165-71

<u>Subdivision</u>	<u>Zoning</u>	Units Constructed
Oak	R-6 PEU	103
Sycamore	R-6 PEU	46
Justus Pointe	R-6 PEU	23
Lake Post Commons	R-6 PEU	n/a (common ground)
Subject Site (C207)	R-8 PEU	345 (proposed)

Traffic Access and Circulation

The original entitlement and approval of Final Development Plans was based on the approved density for the projects. As such, Chesterfield Parkway and other roadways servicing developments within this area were constructed to accommodate these densities and significant contribution by the property owner was made in constructing these improvements. As the site is developing at less than 60% of the approved density, contributions to roadway improvements have been made.

The applicant has provided information from a traffic engineer, which was reviewed by Staff for compliance with all City of Chesterfield requirements. The plans were also forwarded to the St. Louis County Department of Transportation, who did not have any comments on the proposed Site Development Plan. The assessment by the traffic engineer confirmed and City Staff has agreed, that the proposed site plan meets and generally exceeds all standards (e.g. corner clearance, throat depth) of the City and St. Louis County.

Primary access to the site will be from Lydia Hill Rd. Additionally, a right-in, right-out only access point is proposed on Chesterfield Parkway. One defined pedestrian route is shown from the Pathway on the Parkway (along Chesterfield Parkway) into the site. The site plan, as proposed, complies with all City of Chesterfield and St. Louis County standards and provides reasonable site circulation for both vehicles and pedestrians.

Connections are provided from the buildings on the site to the sidewalks along the perimeter of the site, including the Pathway on the Parkway. The proposal includes connecting the eight foot sidewalk along Lydia Hill Dr. from the western property line with Monarch Trace to Chesterfield Parkway (tying in with the Pathway on the Parkway). The proposal also relocates the existing trail on the site to the western side of the site to maintain this connection between Central Park and the riparian trail. Two trailhead locations are shown on the plans which are areas where the applicant intends to install improvements to incorporate art features into the development and to emphasize the trail connection between Central Park and the riparian trail. This trail connection will be

formally granted within an easement to the City of Chesterfield, thus preserving the future of the connection.

Parking and Loading Requirements

Parking is spread around the site to reduce and eliminate large expanses of parking areas. The northeast portion of the site is the high point on the site and grades decrease as you move south / southwest across the site. The proposal seeks to take advantage of this grade change by including structured parking under two of the buildings (i.e. cutting the parking into the slope). The proposal shows 184 of the required parking spaces (~43%) in parking structures under Buildings 1 and 3 on the site. Section 04-01.C.2. of the Unified Development Code encourages rear and side parking areas and the proposal is consistent with this standard. While the proposal does include some parking along the frontage of Chesterfield Parkway and Lydia Hill Rd., parking fields along these high visibility areas are minimized with the use of structured parking (under the building) and a parking lot in the rear. A minimum 30 foot landscape buffer is also provided along these frontages to mitigate the aesthetics of the parking field from the public right-of-way.



Figure 6: Site Plan on Aerial Photography

Open Space

Ordinance 2021 requires a minimum of 10.0 acres of open space within the boundaries of PC 165-71 (see Figure 5). In order to comply with this requirement, Lake Posts Commons was established which provides 10.28 acres.

In addition to the open space within the petition area, the proposal complies with the R-8 District regulation which requires a minimum common open space provision of 40% for multifamily developments. As proposed, the site provides 49.4% (6.27 acres) open space. This open space is spread throughout the development and provides numerous functions including buffering (along perimeter and roadway frontages), common amenities (pool area), and tree preservation (focused along riparian trail).

Screening, Landscaping, and Tree Preservation

A combination of deciduous, coniferous and shrubs/bushes have been utilized throughout the site in conjunction with other screening to provide both functional and aesthetic improvements to the site.

Landscape Plan

The submitted landscape plan meets and generally exceeds all requirements of Section 04-02 of the City of Chesterfield Unified Development Code. The proposal includes installation of 26 street trees, 221 trees, and numerous shrubs and flowers. This landscaping will supplement preservation areas on the site and will also be supplemented by mitigation plantings.

Article 4 requires landscape buffers that apply to the development. The subject site is required to provide thirty (30) foot landscape buffers along Chesterfield Parkway and Lydia Hill Dr., which are both classified as collectors or arterials on the City's Street Classification Map. A twenty (20) foot landscape buffer is also required between residential developments so an additional buffer is also required along the western property line between the subject site and Monarch Trace. All required buffers meet and generally exceed the buffer requirements and include a variety of plantings.

Tree Preservation

Tree protection is focused on the southern end of the site. This will minimize the visual impact of the development from the riparian trail and assist in maintaining this trail as a natural area within the Chesterfield Village area.

The typical Tree Preservation and Landscape Requirements are not applicable as the site specifically meets the criteria for Special Conditions. The site is part of the larger Chesterfield Village planned development that was approved under a planned district and Final Development Plan. This scenario was expressly discussed in the creation of landscape regulations codified most recently in the Unified Development Code.

Section 04-02.N.1 of the City of Chesterfield Unified Development Cod states, in part, that the following sites qualify for Special Conditions:

- An ordinance, detailing development requirements, has been in existence as a result either by the City of Chesterfield or St. Louis County (prior to the City's incorporation, and;
- 2. A valid Site Development Concept Plan, Site Development Plan, Site Development Section Plan or a Final Development Plan has been approved prior to the adoption of the original Tree Ordinance Number 1345 enacted on November 17, 1997.

The site was originally zoned by St. Louis County Ordinance 6,816 which was approved on July 12, 1973, satisfying the first requirement. Additionally, a Final Development Plan was approved on February 11, 1974. The approval of the zoning and the Final Development Plan clearly illustrate compliance with Section 04-02.N of the Unified Development Code for Special Conditions.

According to the Tree Stand Delineation, there are 358,263 square feet (8.22 acres) of tree canopy coverage on the 12.94 acre site. Based on the requirement to preserve 30% of the existing vegetation, 107,479 square feet of canopy area is required to be retained.

The applicant has worked with Staff to preserve trees in key areas on the site. Primary preservation areas are along the southern portion of the subject site, along the riparian trail. Total tree preservation is less than the required 30%. The proposal includes preservation of 55,633 square feet of existing canopy, resulting in required mitigation for the 51,846 square feet of mitigation plantings under the formula provided in the Unified Development Code.

The UDC details that the mitigation plan be approved after the approval of the landscape plan and that mitigation trees are not to fill requirements for required landscaping. A copy of an illustrative mitigation plan is attached to provide an idea of total landscaping that will be installed on the final product. Staff will review the final mitigation plan following approval of the landscape plan in compliance with the requirements of the UDC.

Mitigation of Existing Woodlands

As required by the modification process, the applicant also submitted a Mitigation Plan which is under review by Staff. A Mitigation Plan is required to show how the proposed tree loss will be mitigated with plantings above and beyond required landscaping. In this case, the developer was able to preserve 15.5% of the existing canopy and is therefore required to plant an additional landscaping for the trees not able to be preserved. Once a Landscape Plan is approved, Staff will then complete its review of the Mitigation Plan.

The applicant has provided the Mitigation Plan for informational purposes which is attached. This exhibit includes the required mitigation trees that will supplement the proposed landscaping of the site. The applicant has worked with Staff to focus mitigation plantings along the trail connection between the riparian trail and access to Lydia Hill Dr. No action is required by the Planning Commission on this plan itself. The Unified Development Code includes a formula to determine the amount of trees that are required. The proposal includes an additional 173 trees comprised of a mix of species including deciduous, evergreen, and ornamental plantings on the site.

Retaining Walls

Retaining walls are proposed with this development. A Redi-Rock retaining wall system is proposed along the perimeter of the development. These engineered walls are designed to provide a natural look while providing structural requirements with minimal reinforcement necessary.



Figure 7: Redi-Rock Retaining Wall

These walls have been situated to preserve as much tree canopy as possible while providing functional areas for the development of the site. Additionally, a retaining wall section is proposed on the western side of the site along the relocated trail section. This wall is necessary under the proposed design to allow for grading of an accessible trail section through this portion of the site. The wall is designed to provide a decorative and natural look to blend in with and enhance the area.

Lighting

The proposed lighting for the development includes street lighting along Lydia Hill Dr. Fixtures have been selected from Ameren approved fixtures. Additionally, the design of the fixtures was selected to match the existing fixtures along Lydia Hill Dr. west of the subject site

(adjacent to the Monarch Trace development). Site lighting consists of utilitarian fixtures that comply with Section 04-03 of the Unified Development Code.

Architectural Elevations

Article 4 of the UDC states that multi-family developments should utilize material, color, and plane changes to express individual living units within the structures and that monotonous designs be avoided. Building materials include brick and hardie board (lap / panel) on the units to provide this variation in materials. Building offsets and changes in roofline height and canopies are included in the design.

The Architectural Review Board (ARB) reviewed the project at their May 12, 2016 meeting. The Board unanimously (5-0) recommended approval of the project as presented. Following the meeting, the applicant has proposed changes to the elevations to strengthen the project in light of the discussion from ARB. The changes include:

- Adding additional brick on the ends (both sides) of each building extending three floors:
- Addition of canopy on the front elevations of buildings 1 and 3; and
- Shift of hardie materials and colors based on the increased brick area.

Staff believes these changes are consistent with the original proposal and that the changes improve the project that was already recommended for approval.

Comprehensive Plan

The Comprehensive Plan designates this property partially as Residential, Multi-Family and Urban Core.

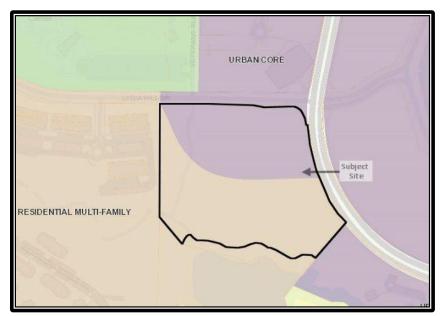


Figure 8: Future Land Use Designation

The City of Chesterfield Comprehensive Plan, among other items, includes policies for residential development. Below are policies that pertain to the site development plan for the property.

<u>3.6.5 Chesterfield Village</u> - Chesterfield Village constitutes a significant portion of the Urban Core. Development in Chesterfield Village should incorporate the vision of high density, mixed-use residential and non-residential development with pedestrian amenities.

The site was zoned as part of the larger Chesterfield Village concept originally proposed by Sachs Properties in the 1970's. While changes have occurred over the years (e.g. number of units, street alignment), the concept for the Chesterfield Village remains intact and desirable. The project is not mixed use in and of itself; however, as part of the plan for the area, the proposal fills an element of multi-family residential within a diverse area. Residential properties are located to the south and west. The first office building as part of Downtown Chesterfield is located to the north along with Central Park. The regional retail center (Chesterfield Mall) is located to the east.

3.6.7 Parking Structures - The use of parking structures in the Urban Core is encouraged.

The site integrates parking structures under two of the buildings. This reduces the parking at grade

10.2.3 Trail System - A trail system should be developed utilizing existing street right-of-ways, common ground when available, utility easements, flood plain areas, and additional property acquisition or private easements. Consideration should be given to cooperating with neighboring municipalities in developing portions of the trail system. Trail systems could include walking, jogging, bicycle, and equestrian trails. This system should be fully integrated with and connected to the transportation network.

DEPARTMENT INPUT

Staff has reviewed the Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design and has found the application to be in conformance with the site specific ordinance and all other applicable Zoning Ordinance 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:

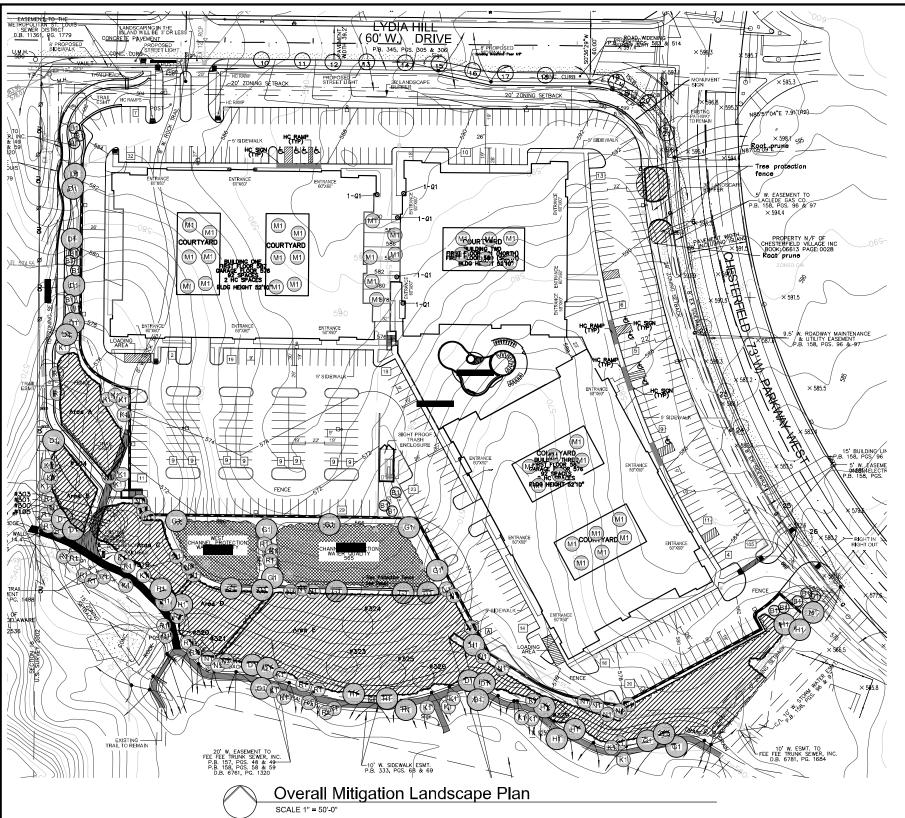
- 1) "I move to approve (or deny) the Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design for_Chesterfield Village Mall (Watermark at Chesterfield Village) SDP.
- 2) "I move to approve the Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design for Chesterfield Village Mall (Watermark at Chesterfield Village) SDP with the following conditions..." (Conditions may be added, eliminated, altered or modified)

cc: Aimee Nassif, Planning and Development Services Director

Attachments: Site Development Plan

Landscape Plan Mitigation Plan Lighting Plan

Architect's Statement of Design Architectural Elevations



GENERAL NOTES GENERAL NOTES:

Watermark Residential 101 West Ohio Street, Suite 2000 Indianapolis, IN 46204 (317) 454-8100

3/25/2016

WATERMARK AT CHESTERFIELD VILLAGE Lydia Hill Drive Chesterfield, Missouri 63017

Date Description
6/25/16 City Comments Checked: DAD

d-	
Sheet Title:	MITIGATION LANDSCAPE PLAN
Sheet No:	L-1
Date: Job #:	3/25/2016 150.001

1. VERIFY SITE INFORMATION, INCLUDING PROPERTY LINES, EASEMENTS, BUILDINGS, ROADWAY CURB AND GUTTERS, UTILITIES AND OTHER INFORMATION AFFECTING THE SCOPE OF WORK INCLUDED ON THESE DRAWINGS. MORE SPECIFIC UTILITY INFORMATION IS INDICATED ON THE OTHER CONSULTANTS DRAWINGS, THE CIVIL DRAWINGS AND SITE RECORD DRAWINGS AVAILABLE FROM THE OWNER. THE CONTRACTOR SHALL CONTACT THE OWNER AND THE LANDSCAPE ARCHITECT FOR DIRECTION ON HOW TO PROCEED IF ACTUAL SITE CONDITIONS VARY FROM WHAT IS SHOWN ON THE CIVIL ENGINEERS OR LANDSCAPE ARCHITECTS PLANS.

- 2. THE CONTRACTOR SHALL NOTIFY LOCAL AUTHORITIES AND THE GENERAL CONTRACTOR FOR LOCATION OF EXISTING UNDERGROUND UTILITIES. EXCAVATE AS NECESSARY TO CONFIRM LOCATIONS PRIOR TO EXCAVATION
- 3. EXCAVATION IN THE VICINITY OF UTILITIES SHALL BE UNDERTAKEN WITH CARE. THE CONTRACTOR BEARS FULL RESPONSIBILITY FOR THIS WORK. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL SITE UTILITIES PRIOR TO BEGINNING EXCAVATION. ANY DAMAGE TO UTILITIES THAT ARE TO REMAIN CAUSED BY ANY PERSON, VEHICLE, EQUIPMENT, OR TOOL RELATED TO THE EXECUTION OF THE CONTRACT SHALL BE REPAIRED IMMEDIATELY AT NO EXPENSE TO THE OWNER.
- 4. CONTRACTOR TO VERIFY CONSTRUCTION COMPLIANCE WITH AMERICANS WITH DISABIILITIES ACT (ADA) OF 1990, AS AMENDED AND THE ADA ACCESSIBILITY GUIDELINES (ADAAG) OF 2004, AS AMENDED. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
- 5. CONTRACTOR TO PROVIDE NECESSARY EROSION CONTROL MEASURES AS NEEDED.
- 6. ALL CONSTRUCTION WILL CONFORM TO THESE PLANS AND SPECIFICATIONS OR TO CITY OF CHESTERFIELD, MISSOURI STANDARDS AND SPECIFICATIONS WHERE REFERENCED.

TREE PRESERVATIONS CALCULATIONS

Total Site Area: 12.7 Ac or 553,212 sf

Total Existing Canopy: 8.22 Ac or 358,263 sq. ft. Tree Canopy Proposed to be Removed: 302,630 sf (84.5%) Tree Canopy Proposed for Preservation: 55,633 sf (15.5%)

358,263 sf x.30 = 107,479 sf of tree canopy preservation required.-55,633 sf of tree canoy provided 51,846 s.f. of mitigation tree canopy required

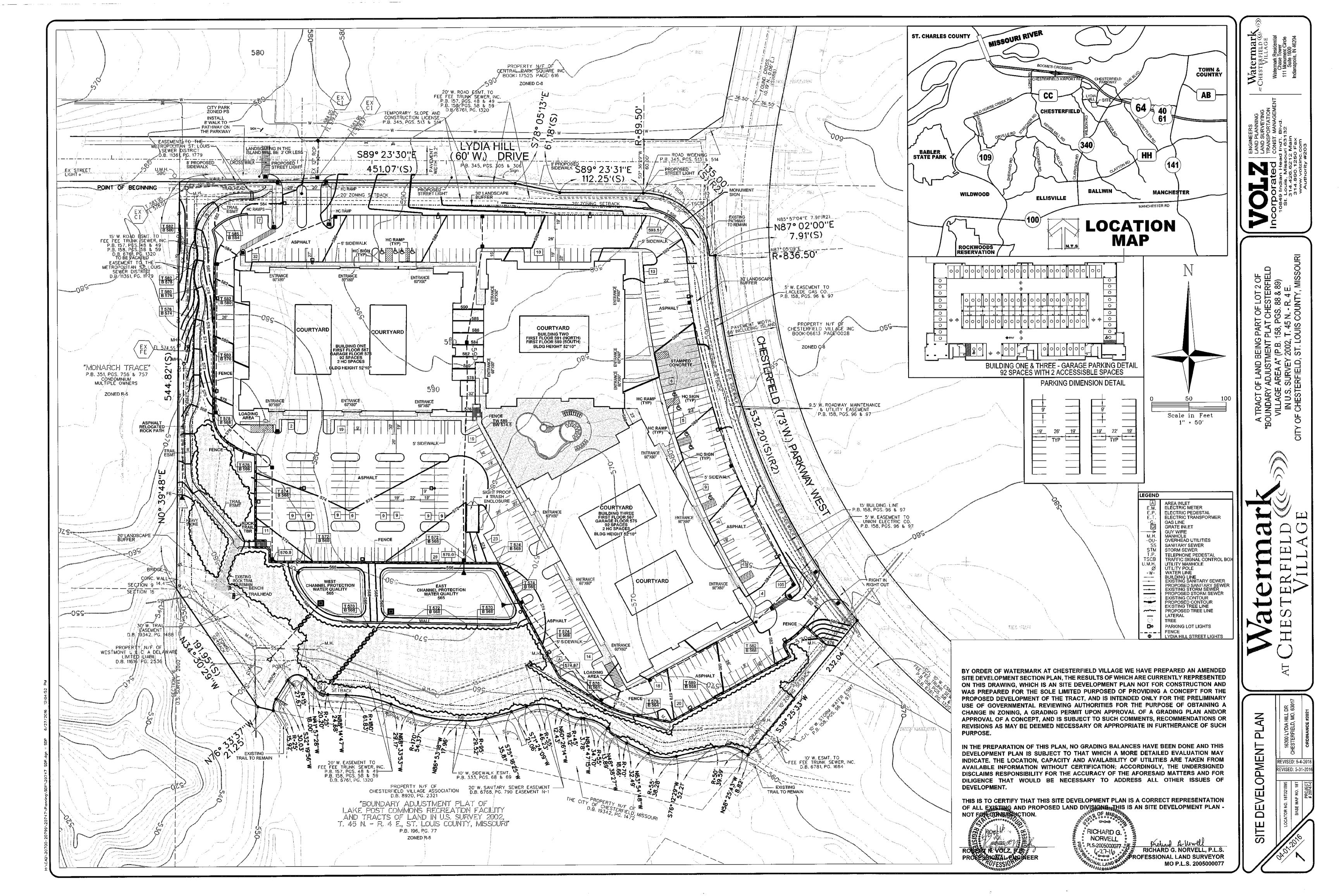
Mitigation plantings Provided:

58 large trees @400 sf each = 23,200 sf 57 Medium trees @ 300 sf each = 17,100 sf 58 Small Trees @ 200 sf each = <u>11,600 sf</u>

× 966.5	51,900 sf Tota
× 56.8	
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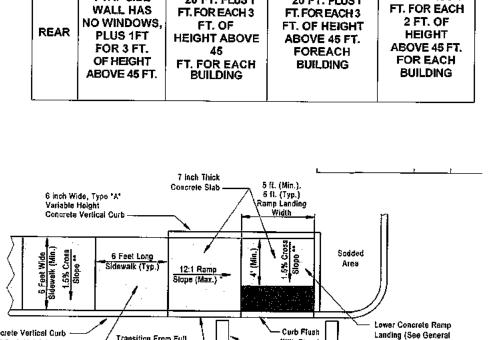
		14110411011	BUILDOLL			
BOL.	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	MATURE HEIGHT	TYPE / NOTES
31	16	Pinue resinosa	Red Pine	გ'	45'+	Large/Med. Growing
21	15	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	2.5"	45'+	Large/Fast Growing
9 1	14	Taxodium distichum	Bald Cypress	2.5"	45'+	Large/Med. Growing
11	13	Quercus bicolor	Swamp White Oak	2.5"	45'+	Large/Med. Growing
<1	27	Amelanchier laevis 'Cumulus'	Cumulus Serviceberry	2.5"	25'+	Med./Slow Growing
M 1	36	Cornus florida	Dogwood	2.5"	25'+	Small/Slow Growing
V1	22	Crataegus virdis 'Winter King'	Winter King Hawthorn	2.5"	25'+	Small/Med. Growing
21	5	Juniperus chinensis 'Spartan'	Spartan Juniper	6'	15'+	Med./Med. Growing
₹1	25	Cercis canadensis	Redbud	2.5"	25'+	Med./Fast Growing

MITIGATION PLANTING SCHEDULE



(4) SETBACK BETWEEN BUILDINGS. NO WALL OF ANY SEPARATE (DETACHED) STRUCTURE, OTHER THAN A SINGLE-

FAMILY OR ITS ACCESSORY STRUCTURE, SHALL BE LOCATED CLOSER TO ANY WALL OF ANOTHER STRUCTURE THAN AS SET FORTH IN THE FOLLOWING TABLE: DETACHED ACCESSORY WALL FRONT BUILDING WALL 10 FT. PLUS 1 F 30 FT. EXCEPT FOR EACH FT. IF SIDE 20 FT. IF SIDE PLUS 1 FT. 2 FT. OF WALL HAS WALL HAS NO FRONT FOR EACH NO WINDOWS **HEIGHT ABOVE** WINDOW, PLUS 3 2 FT. ABOVE PLUS 1FT FT.OF HEIGHT 45 FT. FOR EACH FOR 3 FT. ABOVE 45 FT FOR BUILDING OF HEIGHT EACH BUILDING ABOVE 45 FT. FT. IF SIDE 10 FT. PLUS 1 20 FT. PLUS 1 20 FT. PLUS1 WALL HAS FT. FOR EACH 3 FT. FOR EACH 3 2 FT. OF IO WINDOWS FT. OF PLUS 1FT HEIGHT HEIGHT ABOVE | HEIGHT ABOVE 45



ncrete Vertical Curb Landing (See General Notes on C608.40) Transition From Full (Full Curb Height) With Street Curb Height to Flush

ABOVE 45 FT. FT. FOR EACH OF HEIGHT FOR EACH BUILDING FT. FOR EACH BUILDING **ABOVE 45 FT** BUILDING FT. IF SIDE 20 FT. PLUS 1 20 FT. PLUS1

1 Foot Wide White Crosswal Line - Typical on ARS & CRS Roads (See Std. Dwg. C608.49 for Details) Type "4" Curb Ramp (Parallel Changing Direction)

6 inch Wide, Type "A" Variable Height Concrete Vertical Curb -

JFACTURER SPECIFICATIONS

ACHIEVE PROPER SLOPE INT

ELEV 596

CHESTERFIELD

PARKWAY

Type "3" Curb Ramp (Sidewalk Back of Vertical Curb)

PER ADA REQUIREMENTS,

FORCE TO OPERATE.

HE DOOR TO THE TRASH COMPACT

T NOT REQUIRE MORE THAN 5 LBS

LEFT ELEVATION

RIGHT ELEVATION

MEET FAR HOUSING STANDARDS.

| Meet 1 dec 2 dec

SPLIT FACE CMU TO

SPLIT FACE CMU TO

CAST STONE CAP -

MATCH COLOR P3 = SW 7506 LOGGIA

4"x4"x1/4" STEEL PLATE & ANCHOR SYSTEM, SEE NOTES - EXTEND POST INTO FOOTING, TYP. 1. GRIND ALL WELDS SMOOTH

GENERAL NOTES:

THIS SITE IN THE FOLLOWING DISTRICTS: METROPOLITIAN ST. LOUIS SEWER DISTRICT

THIS SITE IS IN THE FOLLOWING UTILITY SERVICE AREAS:

GRADING SHALL BE PER CITY OF CHESTERFIELD STANDARDS

TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES ON THE SITE.

HOUSING CLUBHOUSE, FITNESS AND LEASING SPACE.

(D) WALKING TRAIL CONNECTION TO THE EXISTING LAKE TRAIL.

FACILTY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMO.

ISLAND LANDSCAPING WILL BE MAINTAINED AT A HEIGHT OF 3' OR LESS.

OUTDOOR GRILL AND ENTERTAINMENT AREA.

SANITARY SEWER CONNECTIONS SHALL BE AS APPROVED BY THE METROPOLITIAN ST. LOUIS SEWER

STORMWATER MANAGEMENT SHALL BE DESIGNED PURSUANT TO THE CITY OF CHESTERFIELD AND

METROPOLTIAN ST. LOUIS SEWER DISTRICT REQUIREMENTS AND DISCHARGED AT AN ADEQUATE

THE LOCATION OF STORM AND SANITARY SEWER IMPROVEMENTS ARE APPROXIMATE ONLY. ACTUAL

CONDITIONS AND SHALL BE INDICATED ON THE LOCATION SHALL BE DETERMINED BY FIELD

BE ADVISED, A GRADING PERMIT OR IMPROVEMENT PLAN APPROVAL WILL NEED TO BE OBTAINED PRIOR

(B) ONE BUILDING OF FOUR (4) STORIES OF APARTMENTS ON A PARTIAL GROUND BASEMENT LEVEL

(C) ANCILLARY PARKING AND RESORT-STYLE AMENITIES SUCH AS POOL, POOL SIDE CABANAS,

THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND DO

NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION

OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN AND SHALL BE LOCATED IN

EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS IN THE FIELD PRIOR TO ANY GRADING. THESE

PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND

PRELIMINARY STORM WATER DESIGN HAS BEEN PREPARED BASED ON THE CHESTERFIELD VILLAGE

STORM WATER MANAGEMENT PLAN (2007) AND SUBMITTED TO MSD FOR REVIEW. MSD HAS INDICATED THE

"APPROACH IS ACCEPTABLE" ALTHOUGH FINAL DESIGNPLANS WILL BE REVIEWED IN DETAIL WITH THE

MSD HAS INDICATED THAT THERE ARE "NO KNOWN DOWN STREAM CAPACITY ISSUES" ASSOCIATED WITH

+-- TOP OF FENCE TO BE LEVE

1 1/2" TUB STL TOP RAIL

(SPACING NOT TO EXCEED 4" 0.C.)

--- 1 1/2" TUB STL BOTTOM RAI

Wheelchair

Accessible

Vehicles

THE SANITARY SEWER SYSTEM. FURTHER ANALYSIS WILL BE DONE WITH THE IMPROVEMENT PLANS

(A) TWO BUILDINGS CONSISTING OF FOUR (4) STORIES OF APARTMENTS ON A PARKING DECK.

MONARCH FIRE PROTECTION DISTRICT

MISSOURI AMERICAN WATER COMPANY

CHARTER COMMUNICATION (CABLE TV)

SOUTHWESTERN BELL TELEPHONE COMPANY

PROJECT PROPOSES THE CONSTRUCTION OF:

PARKWAY SCHOOL DISTRICT

LACLEDE GAS COMPANY

NATURAL DISCHARGE POINT.

IMPROVEMENT PLANS.

AMEREN COMPANY

BONHOMME CREEK WATERSHED

 10" DIA CONC, FOOTING SHAPE TOP TO SHED WATER AWAY FROM POST 2. ALL METAL PIECES TO RECEIVE SHOP PRIMER & FIELD PAINTED FINISH 3. FINISM COLOR TO BE BLACK SEMI-GLOSS PER WATERMARK STANDARDS 4. STEEL PLATES TO BE WELDED TO THE POST WITH A CONTINUOUS 1/4" WELD GROUND SMOOTH AND ALL PRIMED/PAINTED TO MATCH THE FENCE. ANCHOR SYSTEM TO BE RED HEAD TRU-BOLT WEDGE ANCHOR 1/4" X 21/8" WW304S.S (OR APPROVED EQUAL). **SKY PLANE EXPOSURE** BUILDING LYDIA HILL FF 587 115' +/-**ELEV 584**

112' +/-

SKY PLANE **EXPOSURE** BUILDING 2 FF 591 SIGN LOCATION ----SKY PLANE **EXPOSURE** BUILDING 3 ACCESSIBLE PARKING DETAIL (SEE PLAN)

ONE SIGN TO BE PLACED AT EACH HANDICAPPED PARKING SPACE. 7' - 2 LB, STEEL CHANNEL SIGN POST GROUND LINE ACCESSIBLE PARKING SIGN

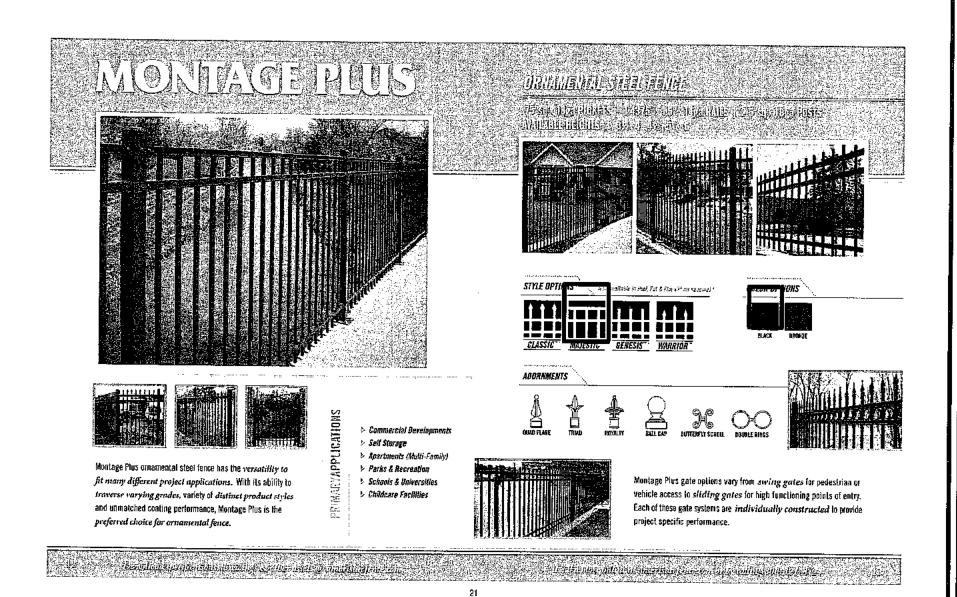
6' HIGH

THIS IS TO CERTIFY THAT THIS SITE DEVELOPMENT PLAN IS A CORRECT REPRESENTATION OF ALLE END PROPOSED LAND DIVISIONS. THIS IS AN SITE DEVELOPMENT PLAN -

PICHARD G

Typical Reinforced Wall Section LEDGESTONE One degree or zero degree batter angle Non-woven geotextile fabric walls are available using blocks with 7 1/2" (190 mm) or 6 3/4" (171 mm) knobs Grade to drain surface water away from wall Setback = 1 %" (41 mm) 12" (305 mm) wide strip of geogrid wrapped through block (5° batter angle on wall) and extending full length (L) back into reinforced fill zone Length of geogrid strip - Typical) – Non-woven geotextile fabric (If specified by Engineer) (Height varies with Move blocks forward during installation to engage shear knobs Fill vertical core slot and wedge between adjacent blocks with drainage aggregate 28" (710 mm) PC Middle block (Typical) Only use strips of Mirafi geogri-- Drain (As specified by Engineer) that have been factory out a are certified for width and Leveling pad (As specified by Engineer) strength by TenCate Miraff, is drawing is for reference only. Determination of the sultability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site. Typical Reinforced Wall Section JRJ

2 Typical Gravity Wall Section 031716.dwg



BY ORDER OF WATERMARK AT CHESTERFIELD VILLAGE WE HAVE PREPARED AN AMENDED SITE DEVELOPMENT SECTION PLAN, THE RESULTS OF WHICH ARE CURRENTLY REPRESENTED ON THIS DRAWING, WHICH IS AN SITE DEVELOPMENT PLAN NOT FOR CONSTRUCTION AND WAS PREPARED FOR THE SOLE LIMITED PURPOSED OF PROVIDING A CONCEPT FOR THE PROPOSED DEVELOPMENT OF THE TRACT, AND IS INTENDED ONLY FOR THE PRELIMINARY USE OF GOVERNMENTAL REVIEWING AUTHORITIES FOR THE PURPOSE OF OBTAINING A CHANGE IN ZONING, A GRADING PERMIT UPON APPROVAL OF A GRADING PLAN AND/OR APPROVAL OF A CONCEPT, AND IS SUBJECT TO SUCH COMMENTS, RECOMMENDATIONS OR REVISIONS AS MAY BE DEEMED NECESSARY OR APPROPRIATE IN FURTHERANCE OF SUCH DEVELOPMENT.

17MAR2016

1 of 1

IN THE PREPARATION OF THIS PLAN, NO GRADING BALANCES HAVE BEEN DONE AND THIS DEVELOPMENT PLAN IS SUBJECT TO THAT WHICH A MORE DETAILED EVALUATION MAY INDICATE. THE LOCATION, CAPACITY AND AVAILABILITY OF UTILITIES ARE TAKEN FROM AVAILABLE INFORMATION WITHOUT CERTIFICATION; ACCORDINGLY, THE UNDERSIGNED DISCLAIMS RESPONSIBILITY FOR THE ACCURACY OF THE AFORESAID MATTERS AND FOR DILIGENCE THAT WOULD BE NECESSARY TO ADDRESS ALL OTHER ISSUES OF

05481 US 31 SOUTH, CHARLEVOIX, MI 497

ROBERT : 1 VOL16/2

PLS-2005000077 & RICHARD G. NORVELL, P.L.S.

RROFESSIONAL LAND SURVEYOR

MO P.L.S. 2005000077

[] AN REVISED: 4-21-20 OPIM REVISED: 5-31-201

DEVEL

SITE

H

PRESENCE OF CENTRAL PARK, INCLUDING AN OUTDOOR AMPHITHEATER AND OTHER OUTDOOR EVENTS.

TRASH

STL. TUBE GATE FRAME V W/ CAP FILL LENGTH OF 3 PAIR OF 6" HINGES- PAI TO MATCH ENCLOSURE DRILLED IN CONCRETE FOR THE OPEN AND TURNBUCKLE TENSION TROOS

FRONT ELEVATION

ENCLOSURE MATCH COLOR P3 SW 7506 LOGGIA

REAR ELEVATION

FF 587 110' +/-

BEGINNING AT THE INTERSECTION OF THE WEST LINE OF SAID U.S. SURVEY 2002 WITH THE SOUTH LINE OF LYDIA HILL DRIVE, 60 FEET WIDE, AS DEDICATED BY "LYDIA HILL DRIVE ROAD DEDICATION PLAT", ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 345, PAGES 305 AND 306 OF THE ST. LOUIS COUNTY RECORDS, SAID POINT BEING ALSO THE NORTHWEST CORNER OF PROPERTY DESCRIBED IN PARCEL C-207 OF DEED TO CHESTERFIELD VILLAGE, INC. RECORDED IN BOOK 7768, PAGE 1382 OF THE ST. LOUIS COUNTY RECORDS; THENCE EASTWARDLY ALONG SAID SOUTH LINE OF LYDIA HILL DRIVE, 60 FEET WIDE. BEING ALSO THE NORTH LINE OF SAID CHESTERFIELD VILLAGE, INC. PROPERTY, SOUTH 89 DEGREES 23 MINUTES 30 SECONDS EAST 451.07 FEET TO THE WESTERNMOST CORNER OF A ROAD WIDENING STRIP, AS DEDICATED BY "LYDIA HILL DRIVE ROAD DEDICATION AND EASEMENT PLAT TWO", ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 345, PAGES 513 AND 514 OF THE ST. LOUIS COUNTY RECORDS: THENCE ALONG SAID ROAD WIDENING STRIP THE FOLLOWING COURSES AND DISTANCES: SOUTH 78 DEGREES 05 MINUTES 13 SECONDS EAST 61.18 FEET, SOUTH 89 DEGREES 23 MINUTES 31 SECONDS EAST 112.25 FEET, ALONG A CURVE TO THE RIGHT WHOSE RADIUS POINT BEARS SOUTH 0 DEGREES 36 MINUTES 29 SECONDS WEST 89,50 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 135.00 FEET AND NORTH 87 DEGREES 02 MINUTES 00 SECONDS EAST 7.91 FEET TO A POINT IN THE WEST LINE OF CHESTERFIELD PARKWAY WEST, 73 FEET WIDE; THENCE SOUTHWARDLY ALONG SAID WEST LINE OF CHESTERFIELD PARKWAY WEST, 73 FEET WIDE, ALONG A CURVE TO THE LEFT WHOSE RADIUS POINT BEARS NORTH 87 DEGREES 05 MINUTES 09 SECONDS EAST 836.50 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 532.20 FEET TO A NORTHERN CORNER OF "BOUNDARY ADJUSTMENT PLAT OF LAKE POST COMMONS RECREATION FACILITY AND TRACTS OF LAND IN U.S. SURVEY 2002, T. 45 N. - R. 4 E., ST. LOUIS COUNTY, MISSOURI", ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 196, PAGE 77 OF THE ST. LOUIS COUNTY RECORDS; THENCE SOUTHWESTWARDLY ALONG THE NORTHWEST LINE OF SAID LAST MENTIONED BOUNDARY ADJUSTMENT PLAT, SOUTH 39 DEGREES 25 MINUTES 33 SECONDS WEST 232.04 FEET TO A POINT IN THE NORTH LINE OF A TEN FOOT WIDE SIDEWALK EASEMENT AS ESTABLISHED ON THE "LAKE POST COMMONS RECREATION FACILITY EASEMENT PLAT", ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 333, PAGES 68 AND 69 OF THE ST. LOUIS COUNTY RECORDS; THENCE WESTWARDLY AND SOUTHWARDLY ALONG THE NORTH AND WEST LINES OF SAID TEN FOOT WIDE SIDEWALK EASEMENT THE FOLLOWING COURSES AND DISTANCES: NORTH 58 DEGREES 25 MINUTES 43 SECONDS WEST 8.82 FEET. ALONG A CURVE TO THE LEFT WHOSE RADIUS POINT BEARS SOUTH 31 DEGREES 34 MINUTES 17 SECONDS WEST 50.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 39.59 FEET, SOUTH 76 DEGREES 12 MINUTES 29 SECONDS WEST 52.21 FEET, ALONG A CURVE TO THE RIGHT WHOSE RADIUS POINT BEARS NORTH 13 DEGREES 47 MINUTES 31 SECONDS WEST 55.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 38.28 FEET, NORTH 63 DEGREES 54 MINUTES 48 SECONDS WEST 32.49 FEET, ALONG A CURVE TO THE RIGHT WHOSE RADIUS POINT BEARS NORTH 26 DEGREES 05 MINUTES 12 SECONDS EAST 70.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 18.66 FEET, NORTH 48 DEGREES 38 MINUTES 27 SECONDS WEST 13.89 FEET, ALONG A CURVE TO THE LEFT WHOSE RADIUS POINT BEARS SOUTH 41 DEGREES 21 MINUTES 33 SECONDS WEST 55.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 34.70 FEET, NORTH 84 DEGREES 47 MINUTES 15 SECONDS WEST 3.78 FEET, ALONG A CURVE TO THE RIGHT WHOSE RADIUS POINT BEARS NORTH 5 DEGREES 12 MINUTES 45 SECONDS EAST 45.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 19.12 FEET, NORTH 60 DEGREES 26 MINUTES 14 SECONDS WEST 12.43 FEET, ALONG A CURVE TO THE LEFT WHOSE RADIUS POINT BEARS SOUTH 29 DEGREES 33 MINUTES 46 SECONDS WEST 55.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 46.23 FEET, SOUTH 71 DEGREES 24 MINUTES 09 SECONDS WEST 21.06 FEET, SOUTH 75 DEGREES 18 MINUTES 25 SECONDS WEST 35.81 FEET, ALONG A CURVE TO THE RIGHT WHOSE RADIUS POINT BEARS NORTH 14 DEGREES 41 MINUTES 35 SECONDS WEST 95.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 29.52 FEET, NORTH 86 DEGREES 53 MINUTES 18 SECONDS WEST 17.96 FEET, ALONG A CURVE TO THE RIGHT WHOSE RADIUS POINT BEARS NORTH 3 DEGREES 06 MINUTES 42 SECONDS EAST 170.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 54.37 FEET. NORTH 68 DEGREES 33 MINUTES 53 SECONDS WEST 29.17 FEET, ALONG A CURVE TO THE LEFT WHOSE RADIUS POINT BEARS SOUTH 21 DEGREES 26 MINUTES 07 SECONDS WEST 180.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 61.83 FEET, NORTH 88 DEGREES 14 MINUTES 47 SECONDS WEST 24.68 FEET, ALONG A CURVE TO THE RIGHT WHOSE RADIUS POINT BEARS NORTH 1 DEGREE 45 MINUTES 13 SECONDS EAST 25.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 20.20 FEET, NORTH 41 DEGREES 57 MINUTES 28 SECONDS WEST 18.00 FEET, ALONG A CURVE TO THE LEFT WHOSE RADIUS POINT BEARS SOUTH 48 DEGREES 02 MINUTES 32 SECONDS WEST 15.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 27.67 FEET; SOUTH 32 DEGREES 19 MINUTES 56 SECONDS WEST 30.03 FEET AND ALONG A CURVE TO THE LEFT WHOSE RADIUS POINT BEARS SOUTH 57 DEGREES 40 MINUTES 04 SECONDS EAST 25.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 15.92 FEET TO A POINT IN THE NORTH LINE OF AFORESAID "BOUNDARY ADJUSTMEN" PLAT OF LAKE POST COMMONS RECREATION FACILITY AND TRACTS OF LAND IN U.S. SURVEY 2002, T. 45 N. - R. 4 E., ST. LOUIS COUNTY, MISSOURI"; THENCE ALONG THE BOUNDARY LINES OF SAID LAST MENTIONED BOUNDARY ADJUSTMENT PLAT NORTH 76 DEGREES 33 MINUTES 37 SECONDS WEST 21.25 FEET AND NORTH 34 DEGREES 30 MINUTES 29 SECONDS WEST 191.95 FEET TO A POINT IN THE AFORESAID WEST LINE OF U.S. SURVEY 2002: THENCE NORTHWARDLY ALONG SAID WEST LINE OF U.S. SURVEY 2002, NORTH 0 DEGREES 39 MINUTES 48 SECONDS EAST 544.82 FEET TO THE POINT OF BEGINNING AND CONTAINING 12.691 ACRES ACCORDING TO A SURVEY BY VOLZ INCORPORATED DURING AUGUST AND SEPTEMBER, 2015, ORDER NO. 20747.

ST. LOUIS COUNTY BENCHMARK:

12048 <u>557.67 NAVD88 (SLC2011A)</u> -- "SQ" ON TOP OF CURB AT END OF ROUNDING ALONG THE NORTH CURB LINE [OF THE EASTERLY EXTENSION OF BURKHARDT PLACEI ON THE EAST SIDE OF CHESTERFIELD VILLAGE PARKWAY; 0.2 MILE NORTH OF LYDIA HILLS DRIVE.

SITE BENCHMARK:

OLD CROSS #536 - ELEV. 596.81 - CROSS IN TRIANGULAR CONCRETE TRAFFIC SIGNAL ISLAND AT THE SOUTHWEST CORNER OF THE INTERSECTION OF LYDIA HILL DRIVE, CHESTERFIELD PARKWAY WEST AND MALL ENTRANCE. CROSS IS 7.6 FEET WEST OF A TRAFFIC SIGNAL AND 45 FEET NORTHEAST OF THE CENTER OF A TRAFFIC SIGNAL CONTROL BOX CABINET.

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 December 2015 and the Geotechnical Report Addendum dated May 17, 2016 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.

In concept, the retaining walls indicated appear feasible; however, global stability must be analyzed once the walls are designed.

Date: 6-10-16

BY ORDER OF WATERMARK AT CHESTERFIELD VILLAGE WE HAVE PREPARED AN AMENDED SITE DEVELOPMENT SECTION PLAN. THE RESULTS OF WHICH ARE CURRENTLY REPRESENTED ON THIS DRAWING, WHICH IS AN SITE DEVELOPMENT PLAN NOT FOR CONSTRUCTION AND WAS PREPARED FOR THE SOLE LIMITED PURPOSED OF PROVIDING A CONCEPT FOR THE PROPOSED DEVELOPMENT OF THE TRACT, AND IS INTENDED ONLY FOR THE PRELIMINARY

USE OF GOVERNMENTAL REVIEWING AUTHORITIES FOR THE PURPOSE OF OBTAINING A

CHANGE IN ZONING, A GRADING PERMIT UPON APPROVAL OF A GRADING PLAN AND/OR

APPROVAL OF A CONCEPT, AND IS SUBJECT TO SUCH COMMENTS, RECOMMENDATIONS OR

REVISIONS AS MAY BE DEEMED NECESSARY OR APPROPRIATE IN FURTHERANCE OF SUCH

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THIS IS TO CERTIFY THAT THIS SITE DEVELOPMENT PLAN IS A CORRECT REPRESENTATION OF ALL EXISTING AND PROPOSED LAND DIVISIONS THIS IS AN SITE DEVELOPMENT PLAN -NOT FOR CONSTRUCTION !!

IMOTHY U. MEYER, P.E **PROFESSIONAL ENGINEER**

PURPOSE.

RICHARD G. NORVELL RICHARD G. NORVELL, P.L.S. 33 AROPESSIONAL LAND SURVEYOR MO P.L.S. 2005000077

L.L.C. CONSIDERATION OF BEING GRANTED APPROVAL OF SAID PLAN TO DEVELOP PROPERTY UNDER THE PROVISIONS OF SECTION 1003.125, "R-8" PLANNED RESDENTIAL OF CITY OF 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.

C.	<u> </u>	
		PRESIDE

STATE OF MISSOURI COUNTY OF CLAY

DAY OF , A.D., 2015, BEFORE ME PERSONALLY APPEARED

, TO ME KNOWN, WHO, BEING BY ME SWORN IN, DID SAY THAT HE IS THE PRESIDENT OF L.L.C. A MISSOURI LIMITED LIABILITY COMPANY IN THE STATE OF MISSOURI. AND THAT THE SAID INSTRUMENT WAS SIGNED ON BEHALF OF SAID COMPANY BY AUTHORITY OF ITS BOARD OF DIRECTORS, AND THE SAID PRESIDENT. ACKNOWLEDGED SAID INSTRUMENT TO BE THE FREE ACT AND DEED OF SAID COMPANY.

<u> </u>	
NOTARY PUBLIC	
NOTART FUBLIC	

NAME

MY COMMISSION EXPIRES:

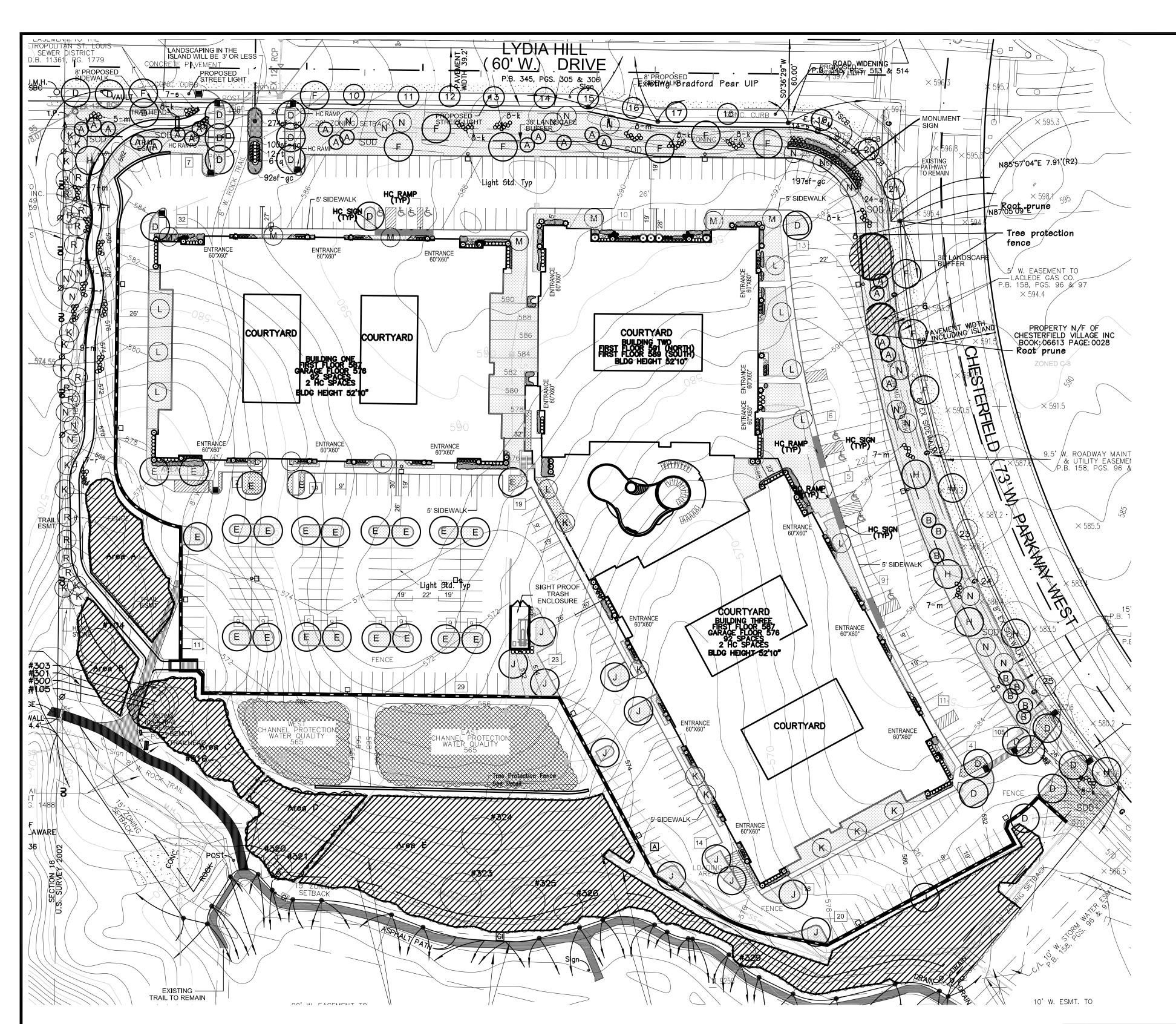
THIS SITE DEVELOPMENT PLAN WAS APPROVED BY THE CITY OF CHESTERFIELD PLANNING COMMISSION AND DULY VERIFIED ON THE ___ _, 2015 , BY THE CHAIRPERSON OF SAID COMMISSION. AUTHORIZING THE RECORDING OF THIS AMENDED SITE DEVELOPMENT PLAN PURSUANT TO CHESTERFIELD ORDINANCE NUMBER 200, AS ATTESTED TO BY THE PLANNING AND DEVELOPMENT SERVICES DIRECTOR AND THE CITY CLERK.

AIMEE NASSIF, AICP PLANNING AND DEVELOPMENT SERVICES DIRECTOR CITY OF CHESTERFIELD, MISSOURI

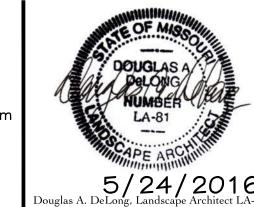
VICKIE HASS, CITY CLERK CITY OF CHESTERFIELD, MISSOURI

T)

7 VISED: 4-21-201 EVISED: 5-25-201



Watermark Residential 101 West Ohio Street. Suite 2000 Indianapolis, IN 46204 (317) 454-8100 watermark-residential.com



Consultants:

GENERAL NOTES **GENERAL NOTES:**

- 1. VERIFY SITE INFORMATION, INCLUDING PROPERTY LINES, EASEMENTS, BUILDINGS, ROADWAY CURB AND GUTTERS, UTILITIES AND OTHER INFORMATION AFFECTING THE SCOPE OF WORK INCLUDED ON THESE DRAWINGS. MORE SPECIFIC UTILITY INFORMATION IS INDICATED ON THE OTHER CONSULTANTS DRAWINGS, THE CIVIL DRAWINGS AND SITE RECORD DRAWINGS AVAILABLE FROM THE OWNER. THE CONTRACTOR SHALL CONTACT THE OWNER AND THE LANDSCAPE ARCHITECT FOR DIRECTION ON HOW TO PROCEED IF ACTUAL SITE CONDITIONS VARY FROM WHAT IS SHOWN ON THE CIVIL ENGINEERS OR LANDSCAPE ARCHITECTS PLANS.
- 2. THE CONTRACTOR SHALL NOTIFY LOCAL AUTHORITIES AND THE GENERAL CONTRACTOR FOR LOCATION OF EXISTING UNDERGROUND UTILITIES. EXCAVATE AS NECESSARY TO CONFIRM LOCATIONS PRIOR TO EXCAVATION.
- 3. EXCAVATION IN THE VICINITY OF UTILITIES SHALL BE UNDERTAKEN WITH CARE. THE CONTRACTOR BEARS FULL RESPONSIBILITY FOR THIS WORK THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL SITE UTILITIES PRIOR TO BEGINNING EXCAVATION. ANY DAMAGE TO UTILITIES THAT ARE TO REMAIN CAUSED BY ANY PERSON, VEHICLE, EQUIPMENT, OR TOOL RELATED TO THE EXECUTION OF THE CONTRACT SHALL BE REPAIRED IMMEDIATELY AT NO EXPENSE TO THE OWNER.
- 4. CONTRACTOR TO VERIFY CONSTRUCTION COMPLIANCE WITH AMERICANS WITH DISABIILITIES ACT (ADA) OF 1990, AS AMENDED AND THE ADA ACCESSIBILITY GUIDELINES (ADAAG) OF 2004, AS AMENDED. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
- 5. CONTRACTOR TO PROVIDE NECESSARY EROSION CONTROL MEASURES AS NEEDED.
- 6. ALL CONSTRUCTION WILL CONFORM TO THESE PLANS AND SPECIFICATIONS OR TO CITY OF CHESTERFIELD, MISSOURI STANDARDS AND SPECIFICATIONS WHERE REFERENCED.

TREE PRESERVATIONS CALCULATIONS

Total Site Area: 12.7 Ac or 553,212 sf Total Existing Canopy: 8.22 Ac or 358,263 sq. ft. Tree Canopy Proposed to be Removed: 302,630 sf (84.5%) Tree Canopy Proposed for Preservation: 55,633 sf (15.5%)

 $358,263 \text{ sf } \times .30 = 107,479 \text{ sf of tree canopy preservation required.}$ -55,633 sf of tree canoy preserved 51,846 s.f. of mitigation tree canopy required

Site - Landscape Plan

SCALE 1" = 50'-0"

GENERAL NOTES:

1) Openspace ratio is 49% = 273,095sf Open Space / 552,8206sf (12.69ac) Total Site 2) Street trees Req.

Lydia Hill Drive 759.5 lf/50 ft = 15.2 or 15 street trees 11 existing street trees + 4 new street trees = 15 Chesterfield Parkway 540.11 lf/50 = 10.8 or 11

5 existing stret trees + 6 new street trees = 11 3) All street trees will be located at least 3' from proposed curb.

4) All street trees will be located at least 25' from street lights and signs.

5) All street trees will be located at least 10' from all storm sewer structures.

6) All turf areas will be sodded unless noted otherwise. 7) An in-ground irrigation system will be provided.

			STR	STREET TREE SCHEDULE				
e	SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	MATURE HEIGHT	GROWTH RATE / PERCENT	
ĺ	-	12	Existing Street Tree	Bradford Pear	ප්	30-40'	Medium Growing/46%	
	-	4	Existing Street Tree	Green Ash	රි	45′+	Medium Growing/15%	
	D	2	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	2.5"	45′+	Fast Growing/8%	
	F	5	Tilia americana 'Redmond'	Redmond Linden	2.5"	45'+	Medium Growing/19%	
	Н	3	Quercus bicolor	Swamp White Oak	2.5"	45'+	Medium Growing/12%	

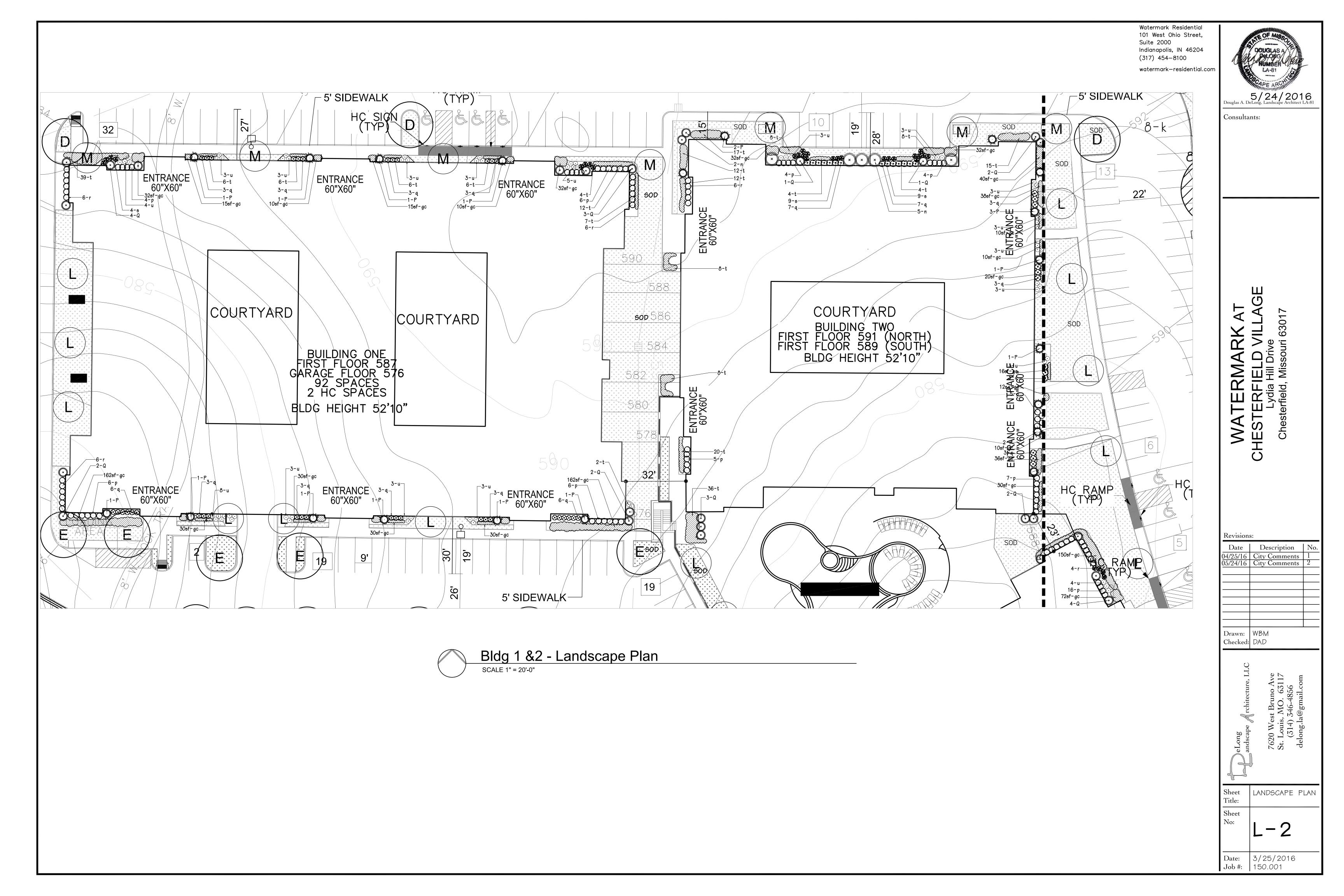
		PLANTING SCHEDULE				
YMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	MATURE HEIGHT	TYPE / NOTES
Α	21	Picea pungens	Colorado Spruce	გ'	30-40'	Medium Growing
В	8	Pinus resinosa	Red Pine	8'	45'+	Medium Growing
D	18	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	2.5"	45'+	Fast Growing
E	21	Gleditsia triancanthos inermis 'Shademaster'	Shadmaster Honeylocust	2.5"	45'+	Medium Growing
F	6	Tilia americana 'Redmond'	Redmond Linden	2.5"	45'+	Fast Growing
			Bald Cypress	2.5"	45'+	Medium Growing
Н	3	Quercus bicolor				
J	12	Tilia cordata 'Greenspire'	Greenspire Linden	2.5"	45'+	Slow Growing
K	18	Amelanchier laevis 'Cumulus'	Cumulus Serviceberry	2.5"	25'+	Slow Growing
L	13	Cercis canadensis	Redbud	2.5"	25'+	Fast Growing
М	7	Cornus florida	Dogwood	2.5"	25'+	Slow Growing
N	21	Crataegus virdis 'Winter King'	Winter King Hawthorn	2.5"	25'+	Medium Growing
Р	29	Juniperus virginiana 'Taylor'	Taylor Juniper	6'	15'+	Medium Growing
Q	30	Juniperus chinensis 'Spartan'	Spartan Juniper	6'	15'+	Medium Growing
R	14	Cercis canadensis	Redbud	2.5"	25'+	Fast Growing
k	56	llex verticillata 'Winter Red'	Winterberry	24-30"		PLANT AS SHOWN
m	59	Forsythia X intermedia 'Sunrise'	Sunrise Forsythia	24-30"		PLANT AS SHOWN
n	9	llex x meserveae 'Blue Princess'	Blue Holly	5'-6'		PLANT AS SHOWN
p	90	llex glabra 'Shamrock'	Shamrock Inkberry Holly	24-30"		PLANT AS SHOWN
a	121	Buxus sinica var. insularis 'Wintergreen'	Wintergreen Boxwood	24-30"		PLANT AS SHOWN
r	65	Rhus aromatica ' <i>G</i> ro-Low'	Gro-Low Fragrant Sumac	24-30"		PLANT AS SHOWN
5	49	Spirea japonica 'Lemon Princess'	Japanese Spirea	18-24"		PLANT AS SHOWN
t	252	Hakonechloa macra 'Aureola'	Japanese Forest Grass	1 GAL		PLANT 18" O.C.
u	105	Pennisetum alopecuroides 'Moudry'	Moudry Fountain Grass	1 QT		PLANT 18" O.C.
gc	1,989	Groundcover	Varies	4" Pots		SPACING VARIES

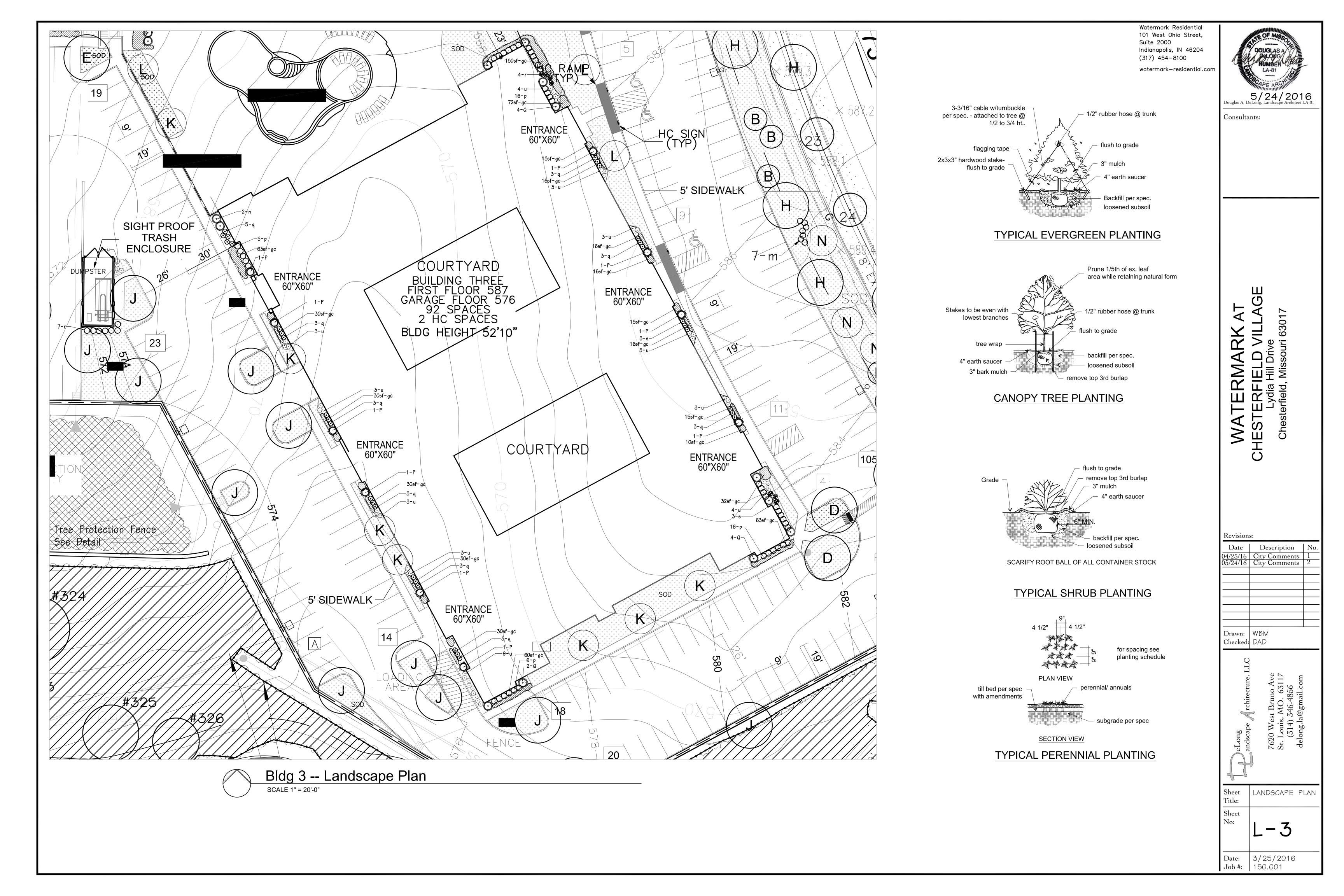
Revision	s:	
Date	Description	I
04/25/16	City Comments	1
05/24/16	City Comments	2

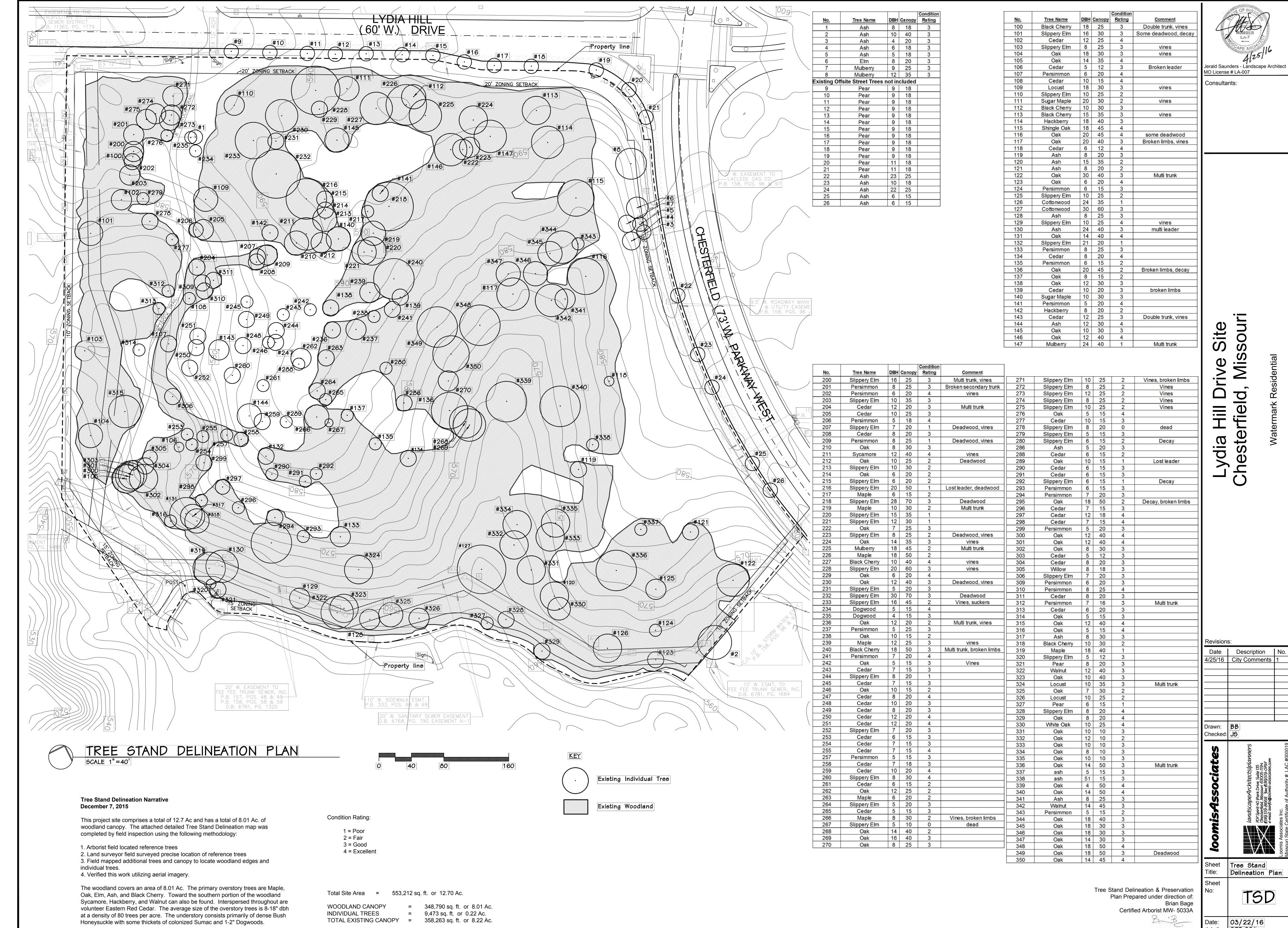
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Sheet Title:	LANDSCAPE PLAN
Sheet No:	L-1
Date:	3/25/2016

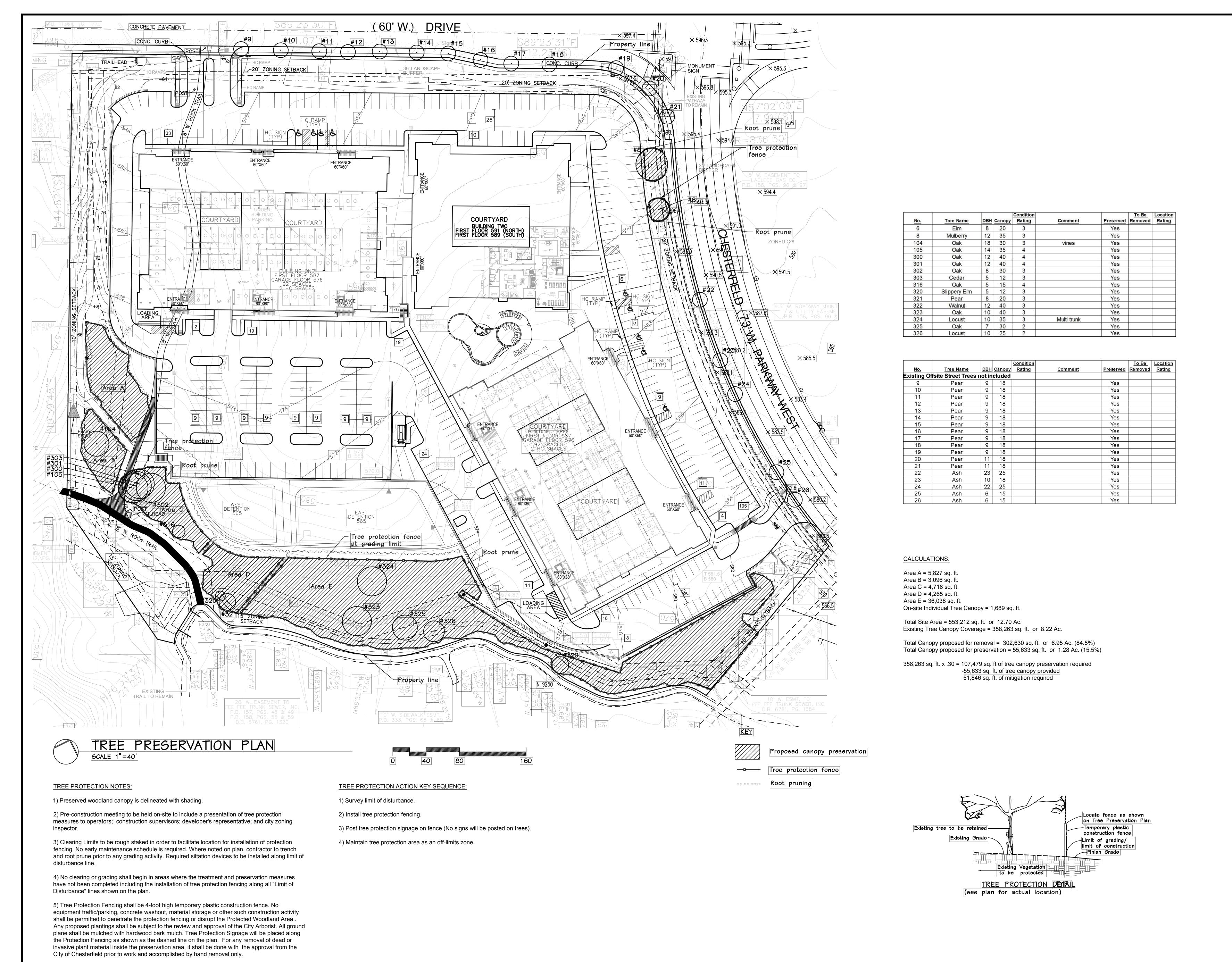
Job #: 150.001







973.001 Job #:



6) Tree protection measures to be maintained throughout construction sequence.

Jerald Saunders - Landscape Architect
MO License # LA-007

Consultants:

Lydia Hill Drive Site Chesterfield, Missouri

Revisions:

Date Description No. 4/25/16 City Comments 1. 5/18/16 City Comments 2.

rawn:
hecked: J5

OMISAISSOCIATES

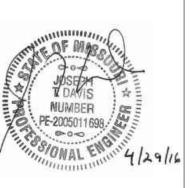
ap a an anal: lainfo@loomis-associates.com

Sheet Tree Presrvation Plan

Sheet No:

Date: 03/24/2016 Job #: 973.001





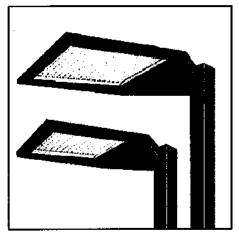
NO DATE DESCRIPTION 1 3-11-2016 ADDENDUM A

SITE PHOTOMETRIC

4-29-2016

ES2

LIGHTING SYSTEMS



DIMENSIONS CLXM 19-5/16 345/16 CLXS 27-11/16

SPECIFICATIONS

HOUSING - One-piece, die-formed aluminum housing contains factory prewired driver. Wiring access door (with safety lanyard) located underneath.

OPTICAL UNIT - Clear tempered flat glass lens permanently sealed to weather-tight aluminum optic frame creates an IP65 rated optical unit (includes pressure-stabilizing breather). Optic frame recessed into housing cavity and sealed to the housing with one piece EPDM gasket.

EXPECTED LIFE - Minimum 60.000 hours to 100.000 hours depending upon the ambient temperature of the installation location.

LEDS - Select high-brightness LEDs in Cool White (5000K nominal), or Neutral White (4000K nominal) color temperature, 70 CRI (nominal).

DISTRIBUTION / PERFORMANCE - Types III, FT, 5 and enhanced 5E and FTE. Exceptional uniformity creates bright environment at lower levels. Internal Louver (IL) option available for improved backlight control without sacrificing street side performance for FT distribution.

ELECTRICAL - Two-stage surge protection (including separate surge protection built into electronic driver) meets Location Category C Low. Available with universal voltage power supply 120-277 VAC (50/60Hz input), and 347-480 VAC. Optional button-type photocells (PCI) are available in 120, 208, 240, 277 or 347 volt (supply voltage must be specified).

DRIVER - Available in SS (Super Saver) and HO (High Output) drive currents. Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards, Driver and key electronic components can easily be accessed.

MOUNTING - Use with 5" traditional drilling pattern. An extruded radius 8" arm is shipped standard and compatible with all fixture mounting configurations. The fixture may also be mounted to 3"-5" round poles using the round pole plate adaptor accessory (RPP), which must be ordered separately.

OPERATING TEMPERATURE - -40°C to +50°C (-40°F to +122°F)

FINISH - Fixtures are finished with WLS DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling, and is guaranteed for five full years.

WARRANTY - WLS LED fixtures carry a limited 5-year warranty.

LISTING - ETL listed to U.S. and Canadian safety standards. Suitable for wet locations.



Project Name: .

Date: _

WLS LIGHTING SYSTEMS

Consider the impact!

01 Rev. 1/16

Approved By: ..

Location: __

SERIES	DISTRIBUTION	LIGHT SOURCE	DRIVE CURRENT	COLOR TEMPERATURE	LINE VOLTAGE	LUMINAIRE FINISH	OPTIONS	ACCESSORIES
CLXS	3 - Type III 5 - Type V FP - Forward Throw 5E - Type V Enhanced FPE - Forward Throw Enhanced	LED	\$\$ - Super Saver H0 - High Output	CW - Cool White NW - Neutral White	UE - Universal Voltage (120-277) 347 - 480	BRZ - Bronze BLK - Black PLP - Platinum Plus BUF - Buff WHT - White SVØ - Satin Verde Green	PCR - Photoelectric Control Receptacle' NO - No Options	GS - Glare Shield PC - Photocell RPP - Round Pole Plate WM - Wall Mount Plate RA - Radius Arm
CLXM CLXL ²	5 - Type V FP - Forward Throw FPL - Forward Optic Rotated for D180 (left)					GPT - Graphite MSV - Metallic Silver CC - Custom Color		UB - Upsweep Brack for round or square poles SF - Single Fusing
	FPR - Forward Optic Rotated for D180(Right) SE - Type V Enhanced FPE - Forward Throw Enhanced							OF - Double Fusing NA - No Accessories

ORDER: WLS-CLX

FOOTNOTES:

- 1- Photocell must be ordered separately see Accessories.
- 2- SE and FPE not available in CLXL.

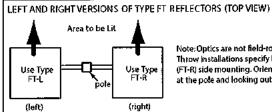
LUMINAIRE EPA CHART - CLXS				
- ■ Single	0.4			
■- D180°	0.8			
₹_ D90*	0.6			
■ T90°	1.4			
₩ TN120°	1.4			
■¥■ Q90°	1.6			
Note: House Side \$his	eld adds to fixture			

Note: House Side Shlekl adds	to fixture
EPA. Consult Factory.	

LUMINAIRE EPA C	HART - CLXM
- ■ Single	0.5
■ D180°	1.0
₹ D90°	0.8
*** 190°	1.7
** TN120°	1.7
■ C290°	1.9
i. T	41 14 - 6 -

Note: House	Side Shield adds to fixture
EPA. Consult	Factory.

LUMINA	IRE EPA C	HART - CLXL
-	Single	
計画	D180°	1.4
₹	D90°	1.1
	T90°	2.3
	TN120°	2.3
•}•	Q90°	2.6
		eld adds to fixture
FPA Con	suli Factory.	



Note: Optics are not field-rotatable. For D180 Forward Throw installations specify left (FT-L) and/or right (FT-R) side mounting. Orientation is based on standing at the pole and looking out at the area to be lit.

ЦG	HI	OUTPL	JT - CLXS	;			
		Туре 3	l Type FT	umens (N Type 5	lominal) Type5E	TypeFfE	Watts (Nominal)
~ હુ	S \$	10100	11400	11400	8200	7800	97
ပ§	но	10100 14000	15500	15700	11600	10600	140
Neutral White	SS	9700	10400	10800	7900	7500	97
ક્રિફે	HÔ	13400	14700	15200	11000	10500	140

LED Chips are frequently updated therefore values may increase.

LIG	HI	OUTPU	JT - CLXN	А			
		Type 3	l Type FT	umens (N Type 5		TypeFTE	Watts (Nominal)
Cool White	\$S	19900	22800	22900	15500	15800	193
ပိန္ခ	HÇ	27500	30900	31100	21200	21100	278
itral iite	55	19300 26700	20000	20600	15000	15000	193
žį	НО	26700	27800	28500	20100	20400	278

LED Chips are frequently updated therefore values may increase.

LIGHT	OUT	PUT-CLXL				
		Lui Type 3	mens (Nor Type FT		FTA	Watts (Nominal)
Cool	S\$	45800	49500	50700	C/F	435
ુ≨	но	53400	57300	59100	58900	542
Neutral White	55	45600	48600	49600	C/F	
활동	ю	52800	56300	57600	C/F	542

LED Chips are frequently update therefore values may increase.

Approved By:	Project Name:	•
ocation:	Date:	WLS LIGHTING SYSTEM

1919 Windsor Place a Fort Worth, TX 76110 a 800.633.8711 b Fax: 817.735.4824 www.wlslighting.com

Consider the Impact!



BLDG-1 FRONT ELEVATION

BLDG-3 FRONT ELEVATION (MIRROR IMAGE OF BLDG-1)



MATERIAL /COLOR KEY NOTES:

BRICK

	EUL.		And with	
HARDIE LAP MARCIE PANEL	-	#1 :	2M 1614	PEPPERCORN
HARDIE LAP/HARDIE PANEL		#2:	SW 7593	RUSTIC RED
HARDIE LAP/HARIDE PANEL	Eliza I	#3;	SW 6072	VERSATILE GRA
WETAL WESH:	MCNICHOLS	QUALITY 2	WESH SQUARE W	EAVE WIRE NES
METAL CANOPY:	LAWRENCE FABRIC S	TRUCTURE	COLOR-CHARG	OOAL GREY
O none of the second				

BLDG-1 RIGHT ELEVATION

BLDG-3 LEFT ELEVATION (MIRROR IMAGE OF BLDG-1)

SCALE: 1" = 10' - 0" (24"x36" SHEET)

WATERMARK CHESTERFIELD VILLAGE

CHESTERFIELD, MO WATERMARK RESIDENTIAL



COLOR ELEVATIONS



BLDG-1 REAR ELEVATION

BLDG-3 REAR ELEVATION (MIRROR IMAGE OF BLDG-1)



10'

20'

BLDG-1 LEFT ELEVATION

WATERMARK CHESTERFIELD VILLAGE CHESTERFIELD, MO
WATERMARK RESIDENTIAL



MATERIAL /COLOR KEY NOTES:

HARDE LAP HARDIE PANE HARDIE LAP / HARDIE PANE

HUMPHREYS & PARTNERS
ARCHITECTS, L.P.
8339 ALPHA ROAD - SUITE 300 - DALLAS, TEXAS 72240
MILLED - TANKES TON - SESSE FAX



COLOR ELEVATIONS



BLDG 2 FRONT ELEVATION



BLDG 2 RIGHT ELEVATION

WATERMARK CHESTERFIELD VILLAGE

CHESTERFIELD, MO
WATERMARK RESIDENTIAL





COLOR ELEVATIONS

SCALE: 1" = 10' - 0" (24"x36" SHEET)



BLDG-2 REAR ELEVATION



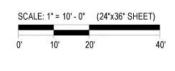
BLDG 2 LEFT ELEVATION

WATERMARK CHESTERFIELD VILLAGE CHESTERFIELD, MO WATERMARK RESIDENTIAL

MATERIAL /COLOR KEY NOTES:



COLOR ELEVATIONS



General Requirements for Site Design:

A. Site Relationships

The subject site is adjacent to existing residential uses; it is east of Monarch Trace Condominiums on Lydia Hill Drive, and north of Village Oak (separated by the lake platted as Lake Post Commons Recreation Area). However, unlike both of these projects, the proposed buildings are intended for rental homes, and reflect the current design trends, amenities and architecture found in upscale apartment communities elsewhere in the Midwest. Street art is proposed at two locations: on Lydia Hill Drive where an 8-ft. trail connects to the street sidewalks, and along the rear of the site where the 8-ft trail connects to the existing Riparian trail.

B. Circulation System and Access

The site proposes two curb-cuts. A full access curb cut is proposed on Lydia Hill Drive, which aligns with the existing curb cut serving the Abengoa/ HOK building to the north. On Chesterfield Parkway West, a right in-and-out curb cut is proposed, with no median break on the Parkway. Interior to the site, drive aisles will permit circulation access to both the front and rear of each of the three buildings, and to the parking areas strategically designed near the pedestrian entrances to each building.

C. Topography

The site has a high point near the intersection of Lydia Hill Drive and Chesterfield Parkway West and falls in relation to both streets towards the lake in the rear.

D. Retaining Walls

The proposal includes retaining walls integrated to the basement garage to reduce the fill and cut of the site. The varying height retaining walls on the site and walls along the pool area will include an architectural stone finish. Furthermore, modular brick walls are proposed in the exposed parking garage perimeters, with architectural grille at the window openings to provide light, ventilation and design aesthetic. A consideration in the selection of the proposed wall system is to minimize the footprint of the wall and foundation systems, to minimize impact to existing vegetation.

General Requirements for Building Design:

A. Scale

We are proposing three 4-story buildings on the site. Two of the buildings have underground parking accessible, and visible, only from the rear. The total building height is approximately 55 feet in height. The proposed height is harmonious with the Abengoa/ HOK office building heights north of Lydia Hill Drive. The proposed building elevations are articulated by setbacks, projections, balconies and recessed entry ways. We also break up the building massing by using 3 different colors and different texture of materials, such as brick, hardie panel and horizontal hardie siding. At the exposed sides of the basement level, brick walls ground the building and provide a visual break.

B. Design

The building is designed to link the interior and exterior spaces through the human scale entries that clearly dentified by protected awnings. All the buildings have four pedestrian entry ways at the ground level that connect to the sidewalks. These entry ways lead to the internal courtyards to create connections of public space and semi-public space. The design takes a contemporary route to reflect the technology and desire for today's modern living. It provides a contemporary colorful image and sets this project apart from the older developments.

C. Materials and Color

The building materials will be primarily comprised of vinyl windows (Low E glazing), stone, brick, hardie panels and horizontal hardie siding. These materials are proposed to provide a highly sustainable project while still providing expansive views, natural light exposure and integrating materials consistent with the natural woodlands setting. The hardie panels and sidings are in three tones to provide varieties and visual nterest.

). Landscape Design, Screening and Fencing

New plantings will consist of a combination of deciduous and coniferous trees, as well as decorative shrubs and bushes throughout the exterior of the buildings, parking areas and along the frontage roads; additionally, the two (2) water quality facilities will be landscaped in accordance with MSD requirements. Significant existing vegetation will be preserved, particularly along the south boundaries of the property. A proposed trash compactor is proposed in a central location of the rear parking area, to be enclosed in a tructure to be constructed of a design and masonry materials matching the proposed buildings. A 6-ft tall ence is proposed at all locations where a retaining wall is proposed along the disturbance limits of the lrive aisles and parking areas.

