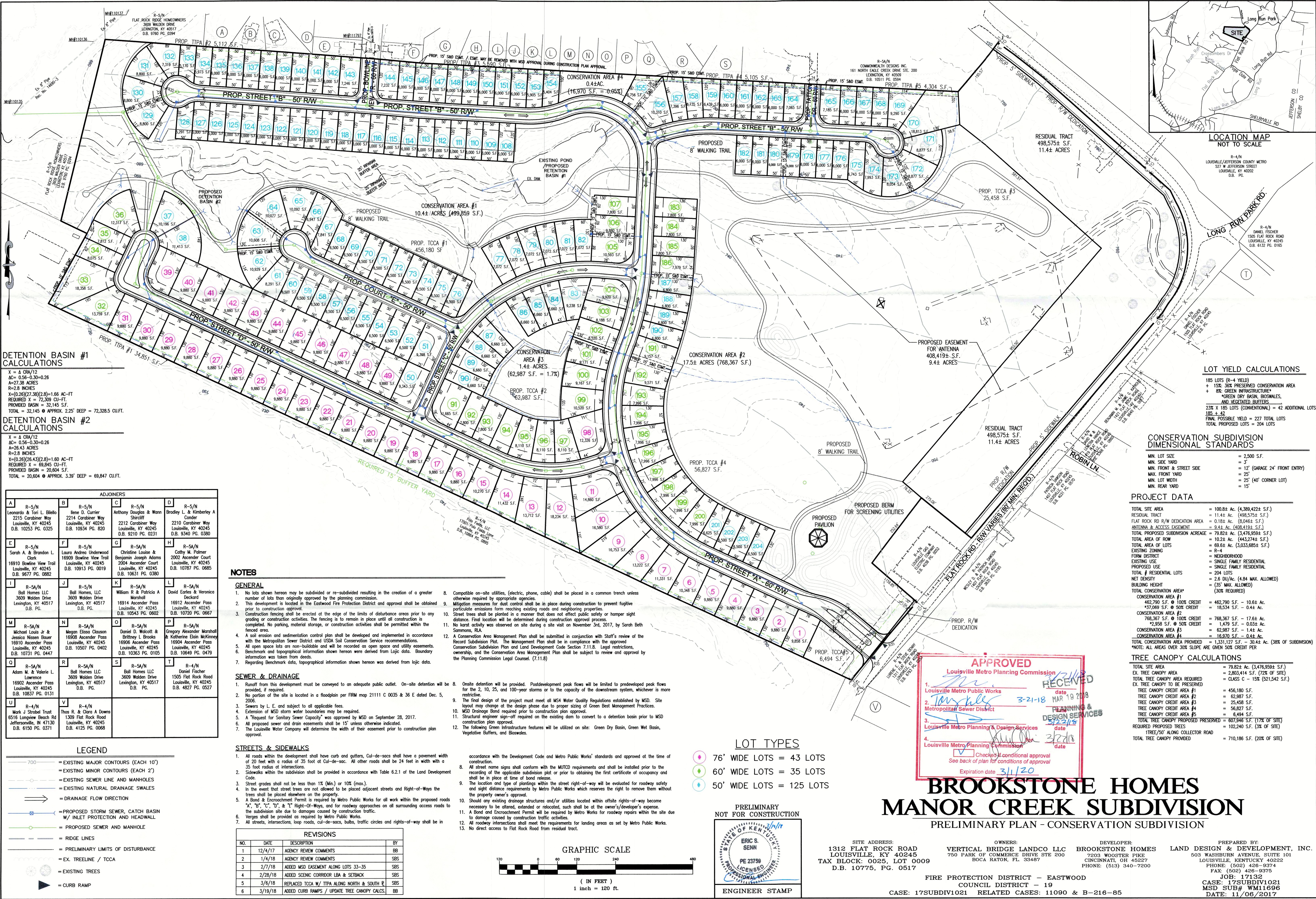




DETENTION BASIN #1
CALCULATIONS

X = A CWA/12
AC = 0.56-0.30-0.28
A=27.38 ACRES
R=2.8 INCHES
X=(0.26)(27.38)(2.8)=1.66 AC-FT
REQUIRED X = 72,309 CU-FT
PROVIDED BASIN = 32,145 S.F.
TOTAL = 32,145 @ APPROX. 2.25' DEEP = 72,328.5 CU.FT.

DETENTION BASIN #2
CALCULATIONS

X = A CWA/12
AC = 0.56-0.30-0.28
A=26.43 ACRES
R=2.8 INCHES
X=(0.26)(26.43)(2.8)=1.80 AC-FT
REQUIRED X = 69,845 CU-FT
PROVIDED BASIN = 20,604 S.F.
TOTAL = 20,604 @ APPROX. 3.39' DEEP = 69,847 CU.FT.

ADJOINERS			
A	R-5/N Leonardo & Tori L. Biallo 2215 Carabineer Way Louisville, KY 40245 D.B. 10253 PG. 0325	B	R-5/N Irene D. Currier 2214 Carabineer Way Louisville, KY 40245 D.B. 10934 PG. 820
C	R-5/N Anthony Douglas & Wann Shardiff 2212 Carabineer Way Louisville, KY 40245 D.B. 9210 PG. 0231	D	R-5/N Bradley L. & Kimberley A Cander 2210 Carabineer Way Louisville, KY 40245 D.B. 9340 PG. 0380
E	R-5/N Sarah A. & Brandon L. Clark 16910 Bowline View Trail Louisville, KY 40245 D.B. 9677 PG. 0882	F	R-5/N Laura Andrea Underwood 16909 Bowline View Trail Louisville, KY 40245 D.B. 10913 PG. 0019
G	R-5/N Christine Louise & Benjamin Joseph Adams 2004 Ascender Court Louisville, KY 40245 D.B. 10631 PG. 0380	H	R-5/N Cathy M. Palmer 2002 Ascender Court Louisville, KY 40245 D.B. 10787 PG. 0685
I	R-5/N Ball Homes LLC 3609 Walden Drive Lexington, KY 40517 D.B. PG.	J	R-5/N Ball Homes, LLC 3609 Walden Drive Lexington, KY 40517 D.B. PG.
K	R-5/N William R. & Patricia A Marshall 16914 Ascender Pass Louisville, KY 40245 D.B. 10543 PG. 0602	L	R-5/N David Earle & Veronica Deckard 16912 Ascender Pass Louisville, KY 40245 D.B. 10720 PG. 0667
M	R-5/N Michael Louis Jr. & Jessica Nissen Bauer 16910 Ascender Pass Louisville, KY 40245 D.B. 10731 PG. 0447	N	R-5/N Megan Elissa Clauson 16908 Ascender Pass Louisville, KY 40245 D.B. 10507 PG. 0402
O	R-5/N Daniel D. Walcott & Brittney L. Brooks 16906 Ascender Pass Louisville, KY 40245 D.B. 10363 PG. 0105	P	R-5/N Gregory Alexander Marshall & Katherine Elain McKinney 16904 Ascender Pass Louisville, KY 40245 D.B. 10649 PG. 0479
Q	R-5/N Adam W. & Valerie L. Lawrence 16902 Ascender Pass Louisville, KY 40245 D.B. 10837 PG. 0131	R	R-5/N Ball Homes LLC 3609 Walden Drive Lexington, KY 40517 D.B. PG.
S	R-5/N Ball Homes LLC 3609 Walden Drive Lexington, KY 40517 D.B. PG.	T	R-4/N Daniel Fischer 1505 Flat Rock Road Louisville, KY 40245 D.B. 4827 PG. 0527
U	R-4/N Mark J Strobel Trust 6516 Longview Beach Rd Jeffersonville, IN 47130 D.B. 6150 PG. 0371	V	R-4/N Thos R. & Clara A Downs 1309 Flat Rock Road Louisville, KY 40245 D.B. 4125 PG. 0068

LEGEND	
	= EXISTING MAJOR CONTOURS (EACH 10')
	= EXISTING MINOR CONTOURS (EACH 2')
	= EXISTING SEWER LINE AND MANHOLES
	= EXISTING NATURAL DRAINAGE SWALES
	= DRAINAGE FLOW DIRECTION
	= PROPOSED STORM SEWER, CATCH BASIN W/ INLET PROTECTION AND HEADWALL
	= PROPOSED SEWER AND MANHOLE
	= RIDGE LINES
	= PRELIMINARY LIMITS OF DISTURBANCE
	= EX. TREELINE / TOCA
	= EXISTING TREES
	= CURB RAMP

NOTES

- GENERAL
1. No lots shown herein may be subdivided or re-subdivided resulting in the creation of a greater number of lots than originally approved by the planning commission.
2. This development is located in the Eastwood Fire Protection District and approval shall be obtained prior to construction approval.
3. Construction fencing shall be erected at the edge of the limits of disturbance areas prior to any grading or construction activities. The fencing is to remain in place until all construction is completed. No parking, material storage, or construction activities shall be permitted within the fenced area.
4. A soil erosion and sedimentation control plan shall be developed and implemented in accordance with the Metropolitan Sewer District and USDA Soil Conservation Service recommendations.
5. All open space lots are non-buildable and will be recorded as open space and utility easements.
6. Benchmark and topographical information shown herein were derived from Logic data. Boundary information was taken from deeds.
7. Regarding Benchmark data, topographical information shown herein was derived from logic data.

SEWER & DRAINAGE

1. Runoff from this development must be conveyed to an adequate public outlet. On-site detention will be provided, if required.
2. No portion of the site is located in a floodplain per FRM map 21111 C 0035 & 36 E dated Dec. 5, 2008.
3. Sewers by L. E. and subject to all applicable fees.
4. Extension of MSD storm water boundaries may be required.
5. A "Request for Sanitary Sewer Capacity" was approved by MSD on September 28, 2017.
6. All proposed sewer and drain easements shall be 15' unless otherwise indicated.
7. The Louisville Water Company will determine the width of their easement prior to construction plan approval.

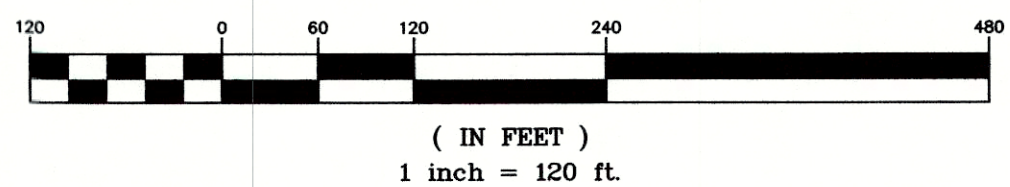
STREETS & SIDEWALKS

1. All roads within the development shall have curb and gutters, Cul-de-sacs shall have a pavement width of 20 feet with a radius of 35 feet at Cul-de-sac. All other roads shall be 24 feet in width with a 35 foot radius at intersections.
2. Sidewalks within the subdivision shall be provided in accordance with Table 6.2.1 of the Land Development Code.
3. Street grades shall not be less than 1% (Min.) or 10% (max.).
4. In the event that street trees are not allowed to be placed adjacent streets and Right-of-Ways the trees shall be placed elsewhere on the property.
5. A Bond & Encroachment Permit is required by Metro Public Works for all work within the proposed roads "A", "B", "C", "D", & "E" Right-Of-Ways, and for roadway approaches on all surrounding access roads to the subdivision site due to damages caused by construction traffic.
6. Verges shall be provided as required by Metro Public Works.
7. All streets, intersections, loop roads, cul-de-sacs, bulbs, traffic circles and rights-of-way shall be in accordance with the Development Code and Metro Public Works' standards and approved at the time of construction.

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	12/4/17	AGENCY REVIEW COMMENTS	BB
2	1/4/18	AGENCY REVIEW COMMENTS	SBS
3	2/7/18	ADDED MSD EASEMENT ALONG LOTS 33-35	SBS
4	2/28/18	ADDED SCENIC CORRIDOR LBA & SETBACK	SBS
5	3/6/18	REPLACED TOCA W/ TPA ALONG NORTH & SOUTH R	SBS
6	3/19/18	ADDED CURB RAMPS / UPDATE TREE CANOPY CALCS	BB

8. Onsite detention will be provided. Postdevelopment peak flows will be limited to predeveloped peak flows for the 2, 10, 25, and 100-year storms or to the capacity of the downstream system, whichever is more restrictive.
9. The final design of the project must meet all MS4 Water Quality Regulations established by MSD. Site layout may change at the design phase due to proper sizing of Green Best Management Practices.
10. MSD Drainage Bond required prior to construction plan approval.
11. Structural engineer sign-off required on the existing dam to convert to a detention basin prior to MSD construction plan approval.
12. The following Green Infrastructure features will be utilized on site: Green Dry Basin, Green Wet Basin, Vegetative Buffers, and Bioswales.

GRAPHIC SCALE



LOT TYPES

- 76' WIDE LOTS = 43 LOTS
- 60' WIDE LOTS = 35 LOTS
- 50' WIDE LOTS = 125 LOTS

PRELIMINARY
NOT FOR CONSTRUCTION

ERIC S. SENN
PE 23759
LICENSED PROFESSIONAL ENGINEER

ENGINEER STAMP

SITE ADDRESS:
1312 FLAT ROCK ROAD
LOUISVILLE, KY 40245
TAX BLOCK: 00025 LOT: 0009
D.B. 10775, PG. 0517

OWNERS:
VERTICAL BRIDGE LANDCO LLC
750 PARK OF COMMERCE DRIVE STE 200
BOCA RATON, FL 33487

DEVELOPER:
BROOKSTONE HOMES
7203 WOOSTER PIKE
CINCINNATI, OH 45227
PHONE: (513) 340-7200

PREPARED BY:
LAND DESIGN & DEVELOPMENT, INC.
503 WASHINGTON AVENUE, SUITE 101
LOUISVILLE, KENTUCKY 40202
PHONE: (502) 426-9374
FAX: (502) 426-9375
JOB: 1732
CASE: 17SUBDIV1021
MSD SUB# WM11696
DATE: 11/06/2017

BROOKSTONE HOMES
MANOR CREEK SUBDIVISION
PRELIMINARY PLAN - CONSERVATION SUBDIVISION

FIRE PROTECTION DISTRICT - EASTWOOD
COUNCIL DISTRICT - 19
CASE: 17SUBDIV1021 RELATED CASES: 11090 & B-216-85

CONSERVATION SUBDIVISION DIMENSIONAL STANDARDS	
MIN. LOT SIZE	= 2,500 S.F.
MIN. SIDE YARD	= 3'
MIN. FRONT & STREET SIDE	= 12' (GARAGE 24' FRONT ENTRY)
MAX. FRONT YARD	= 25'
MIN. LOT WIDTH	= 25' (40' CORNER LOT)
MIN. REAR YARD	= 15'

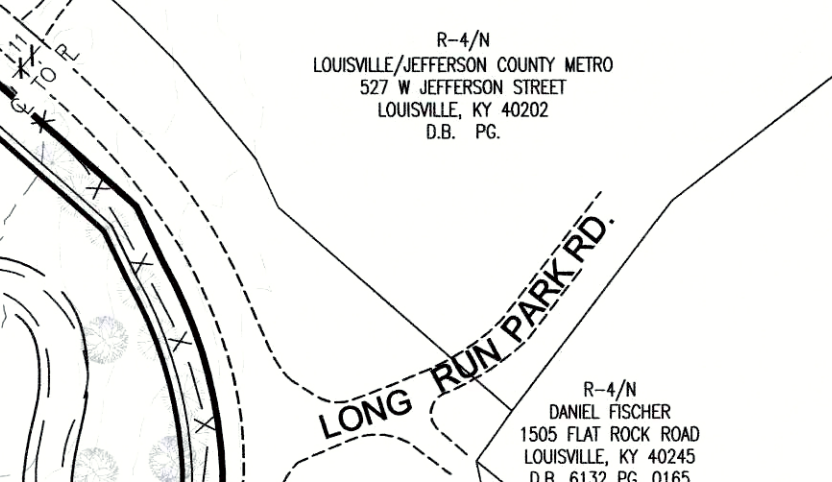
PROJECT DATA

TOTAL SITE AREA	= 100.8± AC. (4,389,422± S.F.)
RESIDUAL TRACT	= 11.4± AC. (498,575± S.F.)
FLAT ROCK RD R/W DEDICATION AREA	= 0.18± AC. (8,046± S.F.)
ANTENNA & ACCESS EASEMENT	= 9.4± AC. (408,519± S.F.)
TOTAL PROPOSED SUBDIVISION ACREAGE	= 79.82± AC. (3,476,958± S.F.)
TOTAL AREA OF ROW	= 10.2± AC. (443,274± S.F.)
TOTAL AREA OF LOTS	= 69.6± AC. (3,033,685± S.F.)
EXISTING ZONING	= R-4
FORM DISTRICT	= NEIGHBORHOOD
EXISTING USE	= SINGLE FAMILY RESIDENTIAL
PROPOSED USE	= SINGLE FAMILY RESIDENTIAL
TOTAL # RESIDENTIAL LOTS	= 204 LOTS
NET DENSITY	= 2.6 DU/AC. (4.84 MAX. ALLOWED)
BUILDING HEIGHT	= (35' MAX. ALLOWED)
TOTAL CONSERVATION AREA*	(30% REQUIRED)
CONSERVATION AREA #1	= 482,790 S.F. - 10.6± AC.
CONSERVATION AREA #2	= 18,534 S.F. - 0.4± AC.
CONSERVATION AREA #3	= 768,367 S.F. - 17.6± AC.
CONSERVATION AREA #4	= 2,958 S.F. - 0.07± AC.
CONSERVATION AREA #5	= 62,987 S.F. - 1.4± AC.
TOTAL CONSERVATION AREA PROVIDED	= 1,331,127 S.F. - 30.4± AC. (38% OF SUBDIVISION)
*NOTE: ALL AREAS OVER 30% SLOPE ARE GIVEN 50% CREDIT PER	

TREE CANOPY CALCULATIONS

TOTAL SITE AREA	= 79,822 AC. (3,476,958± S.F.)
EX. TREE CANOPY AREA	= 2,803,414 S.F. (72% OF SITE)
TOTAL TREE CANOPY AREA REQUIRED	= CLASS C - 15% (521,542 S.F.)
EX. TREE CANOPY TO BE PRESERVED	
TREE CANOPY CREDIT AREA #1	= 456,180 S.F.
TREE CANOPY CREDIT AREA #2	= 62,987 S.F.
TREE CANOPY CREDIT AREA #3	= 25,458 S.F.
TREE CANOPY CREDIT AREA #4	= 56,927 S.F.
TREE CANOPY CREDIT AREA #5	= 6,494 S.F.
TOTAL TREE CANOPY PROPOSED PRESERVED	= 607,946 S.F. (17% OF SITE)
REQUIRED PROPOSED TREES	= 102,240 S.F. (3% OF SITE)
1 TREE/50' ALONG COLLECTOR ROAD	
TOTAL TREE CANOPY PROVIDED	= 710,186 S.F. (20% OF SITE)

LOCATION MAP
NOT TO SCALE



LOT YIELD CALCULATIONS

185 LOTS (R-4 YIELD)
+ 15% 36% PRESERVED CONSERVATION AREA
+ 8% GREEN INFRASTRUCTURE*
= 23% X 185 LOTS (CONVENTIONAL) = 42 ADDITIONAL LOTS
185 + 42
FINAL POSSIBLE YIELD = 227 TOTAL LOTS
TOTAL PROPOSED LOTS = 204 LOTS

Conditions of Approval

1. The development shall be in accordance with the approved Residential Development Preliminary Plan. No further subdivision of the land into a greater number of lots than originally approved will occur without approval of the Planning Commission.
2. The applicant shall submit a plan for approval by Planning Commission staff showing trees/tree masses to be preserved prior to beginning any construction procedure (i.e. clearing, grading, demolition). Adjustments to the tree preservation plan which are requested by the applicant may be approved by Planning Commission staff if the revisions are in keeping with the intent of the approved tree preservation plan. The plan shall exhibit the following information:
 - a. Proposed site plan (showing buildings, edges of pavement, property/lot lines, easements, existing topography, and other significant site features (LOJIC topographic information is acceptable).
 - b. Preliminary drainage considerations (retention/detention, ditches/large swales, etc.).
 - c. Location of all existing trees/tree masses existing on the site as shown by aerial photo or LOJIC maps.
 - d. Location of construction fencing for each tree/tree mass designated to be preserved.
3. An original stamped copy of the approved Tree Preservation Plan shall be present on site during all clearing, grading, and construction activity and shall be made available to any DPDS inspector or enforcement officer upon request.
4. A note shall be placed on the preliminary plan, construction plan and the record plat that states, "Construction fencing shall be erected prior to any grading or construction activities - preventing compaction of root systems of trees to be preserved. The fencing shall enclose the area beneath the dripline of the tree canopy and shall remain in place until all construction is completed. No parking, material storage, or construction activities shall be permitted within the fenced area."
5. All street signs shall be installed by the Developer, and shall conform with the Manual on Uniform Traffic Control Devices (MUTCD) requirements. Street signs shall be installed prior to the recording of the subdivision record plat or occupancy of the first residence on the street, and shall be in place at the time of any required bond release. The address number shall be displayed on a structure prior to requesting a certificate of occupancy for that structure.
6. The applicant shall install signs, approved by the Metro Public Works Dept., which indicate the future extension of the public right of way for A and B Streets, as shown on the preliminary subdivision plan. Such signs shall be installed prior to release of bonds for the installation of the street infrastructure.
7. Open space/conservation lots shall not be further subdivided or developed for any other use and shall remain as open space in perpetuity. A note to this effect shall be placed on the record plat.
8. The developer shall be responsible for maintenance of all drainage facilities and undeveloped lots ensuring prevention of mosquito breeding, until such time as the drainage bond is released.
9. After release of the drainage bond, mosquito abatement on open space lots shall be the responsibility of the Homeowners Association. Accumulations of water in which mosquito larvae breed or have the potential to breed are required to be treated with a mosquito larvacide approved by the Louisville Metro Health Department. Larvacides shall be administered in accordance with the product's labeling. This language shall appear in the deed of restrictions for the subdivision.
10. Trees will be preserved and/or provided on site and maintained thereafter as required by Chapter 10, Part 1 of the Land Development Code and as indicated in the Tree Canopy Calculations on the

Preliminary Subdivision Plan. The applicant shall submit a landscape plan for approval by Planning Commission staff for any trees to be planted to meet the Tree Canopy requirements of Chapter 10, Part 1 of the Land Development Code. A tree preservation plan shall be submitted for review and approval for any trees to be preserved to meet the Tree Canopy requirements of Chapter 10.

11. The applicant shall submit a landscape plan for approval by Planning Commission staff showing plantings and/or other screening and buffering materials to comply with the Chapter 10 of the Land Development Code prior to recording the record plat. The applicant shall provide the landscape materials on the site as specified on the approved Landscape Plan prior to issuance of Certificates of Occupancy for the site.
12. Prior to the recording of the record plat, copies of the recorded documents listed below shall be filed with the Planning Commission.
 - a. Articles of Incorporation filed with the Secretary of State and recorded in the office of the Clerk of Jefferson County and the Certificate of Incorporation of the Homeowners Association.
 - b. A deed of restriction in a form approved by Counsel to the Planning Commission addressing responsibilities for the maintenance of common areas and open space, maintenance of noise barriers, maintenance of WPAs, TPAs and other issues required by these binding elements / conditions of approval.
 - c. A deed restriction in a form approved by Counsel to the Planning Commission shall permanently prohibit further subdivision or development of conservations areas.
 - d. Bylaws of the Homeowner's Association in a form approved by the Counsel for the Planning Commission.
 - e. The applicant shall submit a Conservation Area Management Plan detailing the entities responsible for maintaining various elements of the property, and describing management objectives and techniques for each part of the property.
13. At the time the developer turns control of the homeowners association over to the homeowners, the developer shall provide sufficient funds to ensure there is no less than \$3,000 cash in the homeowners association account. The subdivision performance bond may be required by the planning Commission to fulfill this funding requirement.
14. Any signature entrance shall be submitted to the Planning Commission staff for review and approval prior to recording the record plat.
15. When limits of disturbance are shown on the plan, a note shall be placed on the preliminary plan, construction plan and the record plat that states, "Construction fencing shall be erected at the edge of the limits of disturbance area, prior to any grading or construction activities. The fencing shall remain in place until all construction is completed. No parking, material storage, or construction activities shall be permitted within the fenced area."
16. In the event the party responsible for maintenance of the Conservation Areas fails to maintain all or any portion in reasonable order and condition according to the Management Plan, Louisville Metro Government may assume responsibility for its maintenance and may enter the premises and take corrective action, including provision of extended maintenance. The cost of maintenance may be charged to the Management Entity, or the individual property owners according to the pro-rata share based on the Management Plan. Costs may include administrative costs in taking such actions as well as penalties as provided under these regulations. Such costs shall become a lien on all subdivision properties.