ABSOLUTE
LIVE REAL ESTATE AUCTION

COVINGTON, KENTUCKY

with Internet Bidding Available Using the Multi Par Method

THURSDAY, JULY 14TH • 6PM

Held at the Radisson Hotel - 668 W 5th St, Covington, KY 41011

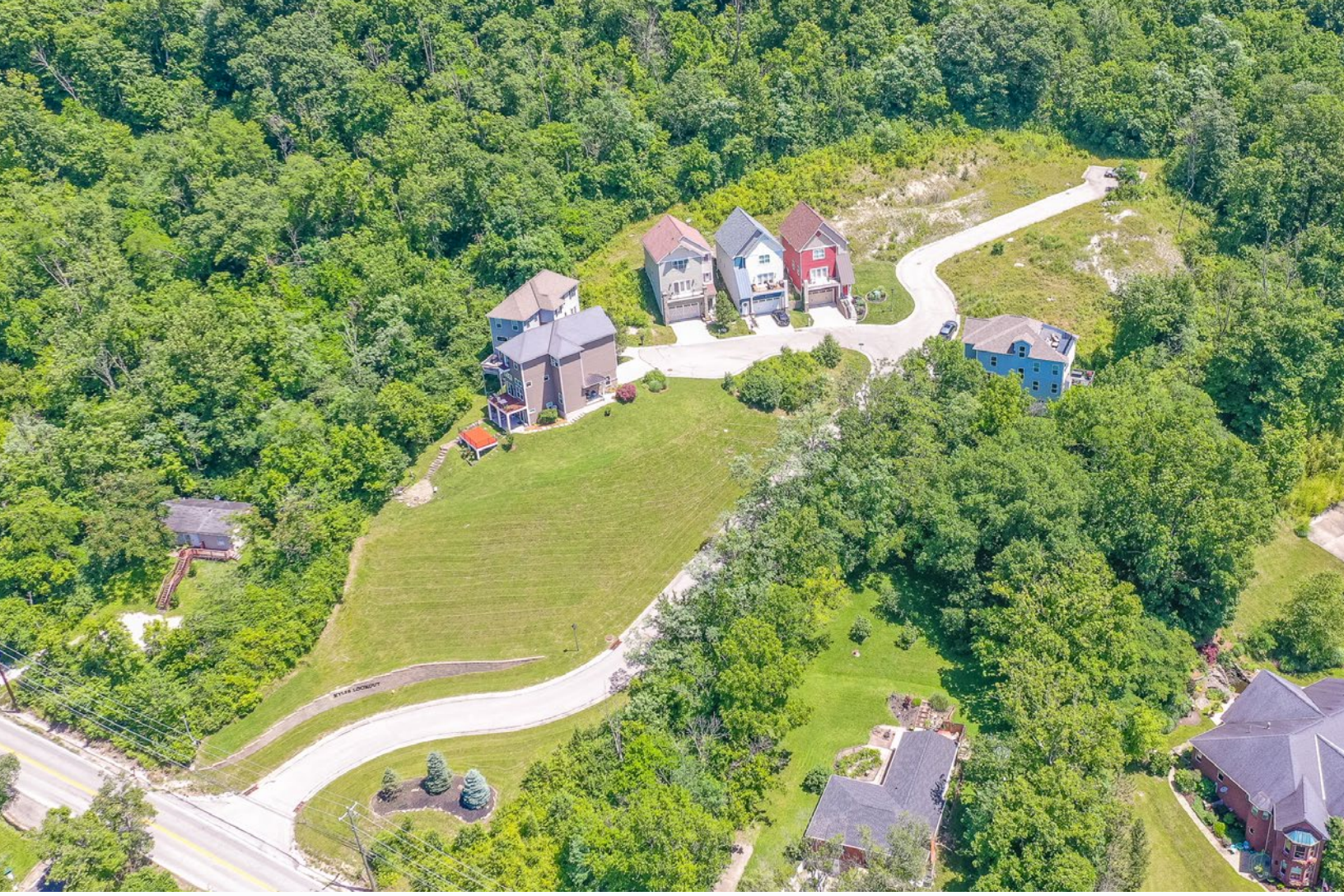
Online Bidding @ bid.noelauctioneers.com

Noel
AUCTIONEERS AND REAL ESTATE ADVISORS

Auction Manager: Jonathan Noel

859.612.9175 • info@noelauctioneers.com

www.NoelAuctioneers.com



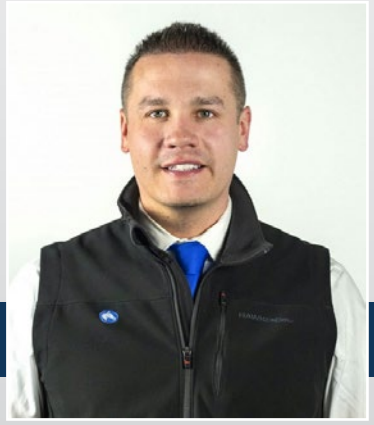
Noel Auctioneers is honored to offer Kyle's Lookout subdivision lots selling via live and online auction. These lots are ready for your new home construction. Located in the desirable Covington area, these lots are situated near Cincinnati, and the airport.

The live bidding will take place Thursday, July 14th at 6pm at the Radisson Hotel - 668 W. 5th St., Covington, KY 41011. Please reach out to me if you have any questions about the auction.

Jonathan Noel

Noel
AUCTIONEERS AND
REAL ESTATE ADVISORS

1478 Alton Road,
Lawrenceburg, KY 40342

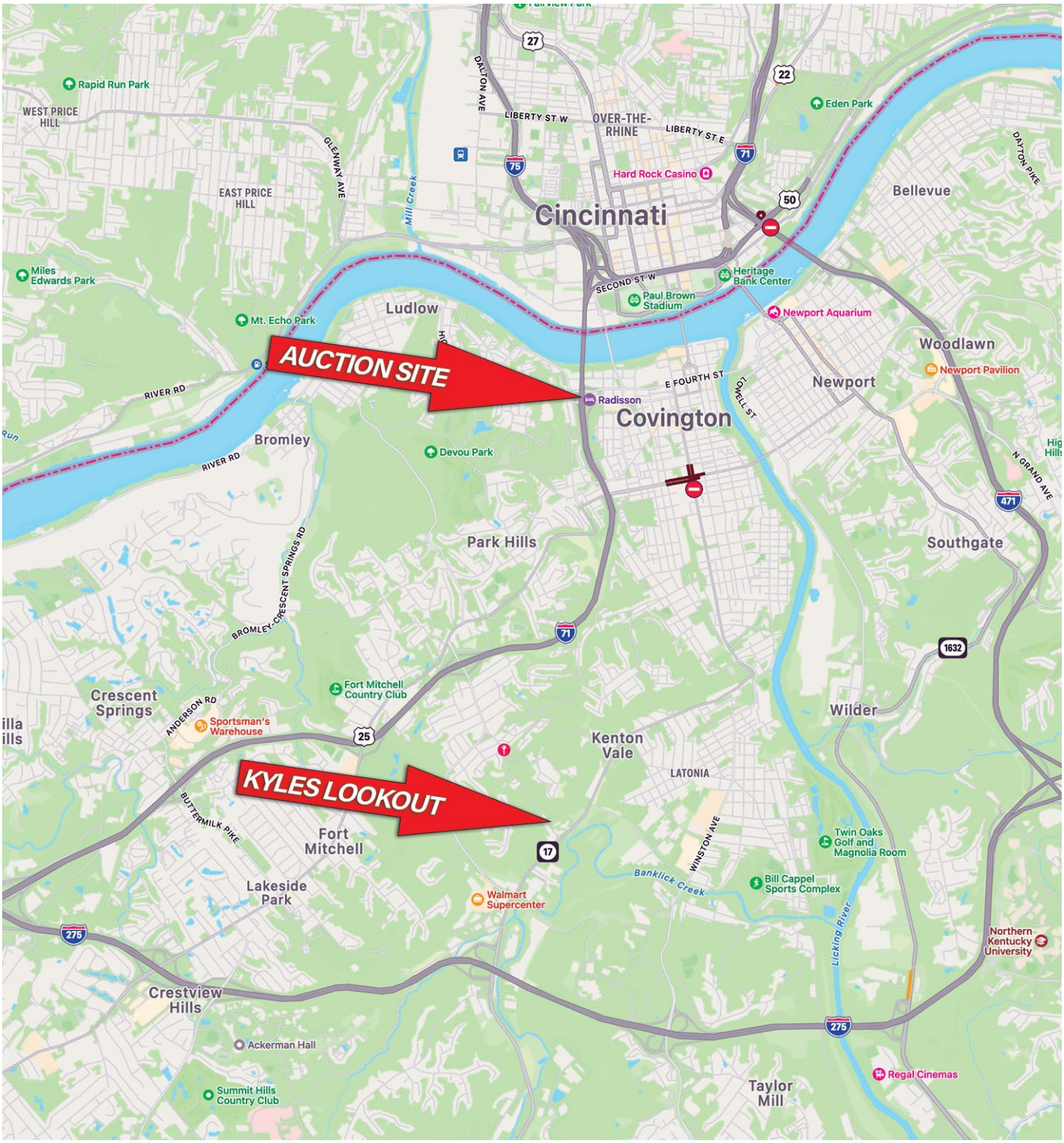


Jonathan Noel, Auction Manager
859.612.9175
info@noelauctioneers.com

BID ONLINE @ bid.noelauctioneers.com

PAGE INDEX

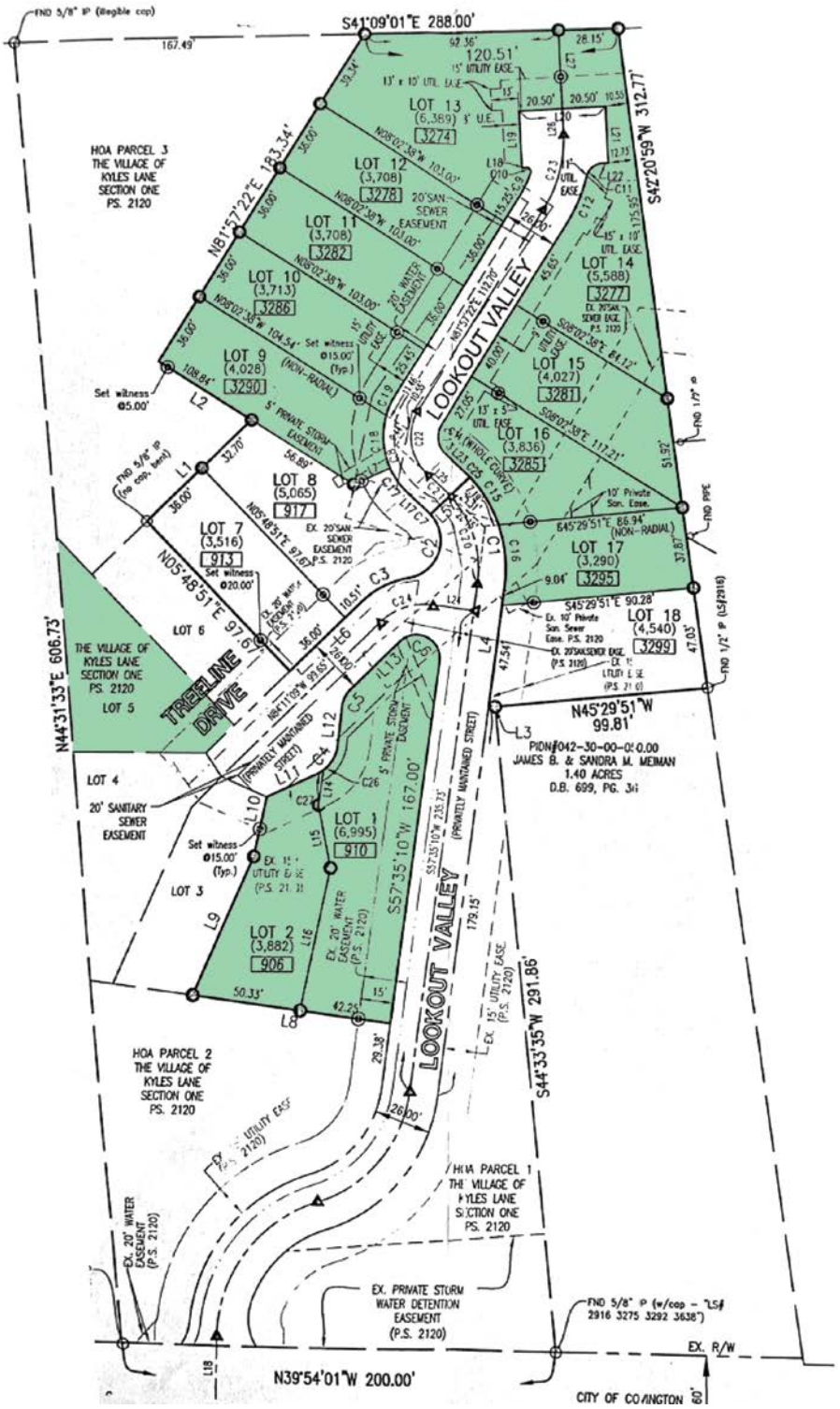
LOCATION MAP



SUBDIVISION MAP

LOT	ADDRESS	ACRES	PIDN
Lot 1	910 Treeline Dr, Covington, KY 41017	.163 Acres	042-30-01-001.00
Lot 2	906 Treeline Dr, Covington, KY 41017	.083 Acres	042-30-01-002.00
Lot 5	905 Treeline Dr, Covington, KY 41017	.093 Acres	042-30-01-005.00
Lot 9	3290 Lookout Valley, Covington, KY 41017	.093 Acres	042-30-01-009.00
Lot 10	3286 Lookout Valley, Covington, KY 41017	.083 Acres	042-30-01-010.00
Lot 11	3282 Lookout Valley, Covington, KY 41017	.083 Acres	042-30-01-011.00
Lot 12	3278 Lookout Valley, Covington, KY 41017	.083 Acres	042-30-01-012.00
Lot 13	3274 Lookout Valley, Covington, KY 41017	.143 Acres	042-30-01-013.00
Lot 14	3277 Lookout Valley, Covington, KY 41017	.123 Acres	042-30-01-014.00
Lot 15	3281 Lookout Valley, Covington, KY 41017	.093 Acres	042-30-01-015.00
Lot 16	3285 Lookout Valley, Covington, KY 41017	.083 Acres	042-30-01-016.00
Lot 17	3295 Lookout Valley, Covington, KY 41017	.073 Acres	042-30-01-017.00

PLAT MAP


S41°09'01"E 288.00'
S42°20'59"W 312.77'
N81°57'22"E 183.34'
N44°31'33"E 606.73'
S44°33'35"W 291.86'
N39°54'01"W 200.00'
N45°29'51"W 99.81'
S57°35'10"W 167.00'
LOOKOUT VALLEY
TREELINE DRIVE
LOT 1 (6,995) 910
LOT 2 (3,882) 906
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7 (3,516) 913
LOT 8 (5,065) 917
LOT 9 (4,028) 3290
LOT 10 (3,713) 3286
LOT 11 (3,708) 3282
LOT 12 (3,708) 3278
LOT 13 (6,389) 3274
LOT 14 (5,588) 3277
LOT 15 (4,027) 3281
LOT 16 (3,836) 3285
LOT 17 (3,290) 3295
LOT 18 (4,540) 3299
HOA PARCEL 1 THE VILLAGE OF KYLES LANE SECTION ONE PS. 2120
HOA PARCEL 2 THE VILLAGE OF KYLES LANE SECTION ONE PS. 2120
HOA PARCEL 3 THE VILLAGE OF KYLES LANE SECTION ONE PS. 2120
THE VILLAGE OF KYLES LANE SECTION ONE PS. 2120
JAMES B. & SANDRA M. MEIMAN
1.40 ACRES
D.B. 699, PG. 34
EX. PRIVATE STORM WATER DETENTION EASEMENT (P.S. 2120)
EX. 20' WATER EASEMENT (P.S. 2120)
EX. 15' UTILITY EASE (P.S. 2120)
20' SANITARY SEWER EASEMENT
5' PRIVATE STORM EASEMENT
CITY OF COVINGTON
EX. R/W

PROPERTY PHOTOS

DEED RESTRICTIONS

4
40
RR

KENTON COUNTY CLERK $118.00
06/07/2021 09:59:05 AM 66576
SUPPLEMENT TO DECLARATION
CHERYL RUST 21060705900087
KC 95 906-909 4

This instrument prepared by
Ziegler & Schneider, P.S.C.,
Attorneys at Law,
541 Buttermilk Pike, Suite 500,
P.O. Box 175710,
Covington, Kentucky 41017-5710
(859) 426-1300
mduncan@zslaw.com

by _____ Attorney.
MICHAEL A. DUNCAN

KENTON GROUP NOS. 5352 and 5409
LIST OF PIDNS ON ATTACHED ON EXHIBIT A

FIRST SUPPLEMENT TO DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS, AND RESERVATION OF EASEMENTS FOR THE VILLAGE OF KYLES LANE LOOKOUT VALLEY

This First Supplement to Declaration Of Covenants, Conditions and Restrictions and Reservation of Easements ("First Supplement") for The Village Of Kyles Lane (a/k/a Lookout Valley) subdivision is made this 3rd day of June, 2021 by R & R INVESTMENT LLC, a Kentucky limited liability company (the "Declarant"), and is approved and certified as follows:

WHEREAS: Declarant is the successor and assign to SURA PROPERTIES, LLC, a Kentucky limited liability company ("Sura"), the original developer of The Village of Kyles Lane subdivision (a/k/a Lookout Valley), having acquired ownership of all of SURA's remaining Lots by Deed recorded at KC Book 62, page 38 of the Kenton County Clerk's records at Covington, Kentucky ; and

WHEREAS: R & R INVESTMENT LLC signs below to signify its approval of the amendment made in this First Supplement to the Declaration of Covenants, Conditions and Restrictions and Reservation of Easements (Declaration") recorded at Book C 6086, page 018 of the aforesaid Kenton County Clerk's Records as as the Owner of at least sixty-seven percent (67%) of all Lots subject to the Declaration; and

WHEREAS: The President of The Village Of Kyles Lane Homeowners Association, Inc, a Kentucky non-profit corporation (the "Association"), signs below to signify its certification that the Owners of at least sixty-seven percent (67%) of all Lots subject to the Declaration have approved such amendment evidenced by this First Supplement.

NOW, THEREFORE, pursuant to Section 16.2 of the Declaration, Declarant hereby amends Section 4.1(b) of the Declaration by deleting the original language of said Section 4.1(b) and replacing it with the following:

> (b) Notwithstanding any provision of this Declaration, the Articles of Incorporation or Bylaws to the contrary, Declarant and any owner of any recorded "unoccupied" Lot shall be required to pay only a one-fourth (1/4) Base Assessment for any such "unoccupied" Lot which it owns (not including HOA Parcels 1, 2 or 3 or the Streets Parcel for which no assessment shall be applicable). A full Base Assessment shall be paid by the owner for each Lot upon the construction and occupancy of a home on that Lot pursuant to the remaining provisions of this Declaration.

*
**

The rest of the Declaration shall remain unamended.

IN WITNESS WHEREOF, Declarant has caused this First Supplement to Declaration of Covenants, Conditions and Restrictions and Reservation of Easements for The Village Of Kyles Lane to be executed by its duly authorized member as of the day and year first above written.

DECLARANT:
R & R INVESTMENT LLC,
a Kentucky limited liability company

By: _____
Name: Rachid Ahmed
Title: Authorized Member

STATE OF Kentucky)
) : SS
COUNTY OF Kenton)

The foregoing was acknowledged before me this 3rd day of June, 2021 by Rachid Ahmed as authorized member of R & R INVESTMENT LLC, a Kentucky limited liability company, on behalf of the company.

MICHAEL A. DUNCAN NOTARY PUBLIC REG # 635850 MY COMMISSION EXPIRES 12/20/2023 STATE AT LARGE

_____
Notary Public
My commission expires: 12/20/2023
My Jurisdiction Is: Kentucky at Large
My Notary ID # Is: 635850

[DOCUMENT CONTINUES ON FOLOWING PAGES]

APPROVAL OF AMENDMENT BY THE OWNER OF AT LEAST SIXTY-SEVEN PERCENT (67%) OF ALL LOTS SUBJECT TO THE DECLARATION:

R & R INVESTMENT LLC,
a Kentucky limited liability company

By: _____
Name: Rahic Ahmed
Title: Authorized Member

STATE OF Kentucky)
) : SS
COUNTY OF Kenton)

The foregoing was acknowledged before me this 3rd day of June, 2021 by Rashid Ahmed as authorized member of R & R INVESTMENT LLC, a Kentucky limited liability company, on behalf of the company.

MICHAEL A. DUNCAN NOTARY PUBLIC REG # 635850 MY COMMISSION EXPIRES 12/20/2023 STATE AT LARGE, KY

_____
Notary Public
My commission expires: 12/20/2023
My Jurisdiction Is: Kentucky at Large
My Notary ID # Is: 635850

CERTIFICATE OF THE PRESIDENT OF THE ASSOCIATION THAT R & R INVESTMENT LLC IS THE OWNER OF AT LEAST SIXTY-SEVEN PERCENT (67%) OF ALL LOTS SUBJECT TO THE DECLARATION:

THE VILLAGE OF KYLES LANE HOMEOWNERS ASSOCIATION, INC
a Kentucky non-profit corporation

By: _____
Name: Rashid Ahmed
Title: President

STATE OF Kentucky)
) : SS
COUNTY OF Kenton)

The foregoing was acknowledged before me this 3rd day of June, 2021 by Rashid Ahmed as President of The Village Of Kyles Lane Homeowners Association, Inc, a Kentucky non-profit corporation, on behalf of the Association.

MICHAEL A. DUNCAN NOTARY PUBLIC REG # 635850 MY COMMISSION EXPIRES 12/20/2023 STATE AT LARGE, KY

_____
Notary Public
My commission expires: 12/20/2023
My Jurisdiction Is: Kentucky at Large
My Notary ID # Is: 635850

EXHIBIT A

Subdivision	Section	Lot	PIDN
VILLAGE OF KYLES LN	1	5	042-30-01-005.00
VILLAGE OF KYLES LN	1	HOA 1	042-30-00-049.01
VILLAGE OF KYLES LN	1	HOA 2	042-30-00-049.02
VILLAGE OF KYLES LN	1	HOA 3	042-30-00-049.03
VILLAGE OF KYLES LN	1 & 2	STREETS	042-30-00-049.00
VILLAGE OF KYLES LN	2	1	042-30-01-001.00
VILLAGE OF KYLES LN	2	2	042-30-01-002.00
VILLAGE OF KYLES LN	2	7	042-30-01-007.00
VILLAGE OF KYLES LN	2	8	042-30-01-008.00
VILLAGE OF KYLES LN	2	9	042-30-01-009.00
VILLAGE OF KYLES LN	2	10	042-30-01-010.00
VILLAGE OF KYLES LN	2	11	042-30-01-011.00
VILLAGE OF KYLES LN	2	12	042-30-01-012.00
VILLAGE OF KYLES LN	2	13	042-30-01-013.00
VILLAGE OF KYLES LN	2	14	042-30-01-014.00
VILLAGE OF KYLES LN	2	15	042-30-01-015.00
VILLAGE OF KYLES LN	2	16	042-30-01-016.00
VILLAGE OF KYLES LN	2	17	042-30-01-017.00
VILLAGE OF KYLES LN	2	18	042-30-01-018.00

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

This instrument prepared by
Ziegler & Schneider, P.S.C.,
Attorneys at Law,
541 Buttermilk Pike, Suite 500,
P.O. Box 175710,
Covington, Kentucky 41017-5710
(859) 426-1300
mduncan@zslaw.com

by _____, Attorney.
MICHAEL A. DUNCAN

KENTON GROUP NOS. 5352 and 5409
LIST OF PIDNS ATTACHED ON EXHIBIT

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS, AND RESERVATION OF EASEMENTS FOR THE VILLAGE OF KYLES LANE LOOKOUT VALLEY

This Declaration Of Covenants, Conditions And Restrictions And Reservation Of Easements ("Declaration") for The Village Of Kyles Lane (a/k/a Lookout Valley) subdivision is made this 30 day of JANUARY, 2017 by SURA PROPERTIES, LLC, a Kentucky limited liability company (the "Declarant"), under the following circumstances:

A. Declarant is the developer of The Village of Kyles Lane subdivision (a/k/a Lookout Valley), and is the owner in fee simple of certain real property located in the City of Covington, in Kenton County, Kentucky, more particularly described in Exhibit A attached hereto (the "Property") and desires to create a residential community consisting of single family detached homes with permanent Common Elements (as hereinafter defined) for the benefit of said community; and

B. Declarant desires to provide for the preservation of the values and amenities in said community and for the maintenance of said Common Elements; and to this end, desires to subject the Property to the covenants, conditions, restrictions, easements, charges and liens, hereinafter set forth, each and all of which is and are for the benefit of said Property and the subsequent Owners thereof; and

C. Declarant has deemed it desirable, for the efficient preservation of the values and amenities in said community, to create an Association to which should be delegated and assigned the powers and duties of maintaining and administering the Common Elements and administering and enforcing the within covenants and restrictions and disbursing the charges and assessments hereinafter created; and

D. Declarant has caused to be formed the THE VILLAGE OF KYLES LANE HOMEOWNERS ASSOCIATION, INC., a Kentucky non-profit corporation (the "Association"), which shall be responsible for the maintenance, management and control of the Common Elements on the Property.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

NOW, THEREFORE, Declarant hereby declares that all of the Property described in Exhibit A and such Additional Property as may be subjected to the provisions hereof, shall be held, sold and conveyed, subject to the covenants, conditions, restrictions, easements, charges and liens set forth in this Declaration, and any subdivision plat which includes the Property, which are for the purpose of protecting the value and desirability of, and which shall run with, the real property and be binding on all parties having any right, title, or interest in the Property or any part thereof, their heirs, successors and assigns, and shall inure to the benefit of each Owner thereof.

SECTION 1
DEFINITIONS

The words in this Declaration which begin with capital letters, other than words which would be normally capitalized, unless the context otherwise requires, shall have the meanings set forth in this Section 1.

1.1 Additional Property. "Additional Property" means other real property in the vicinity of the Property which is or has been owned and/or acquired by Declarant, which may be annexed to the Property in accordance with Section 10 below.

1.2 Architectural Guidelines. "Architectural Guidelines" as defined in Subsection 5.4 of this Declaration.

1.3 Areas of Common Responsibility. "Areas of Common Responsibility" shall mean and refer to the Common Elements, together with those areas, if any, which by the terms of this Declaration or by contract or agreement become the responsibility of the Association. The office of any property manager employed by or contracting with the Association, if located on the Property, or any public rights-of-way within or adjacent to the Property or regional detention basins adjacent to the Property, may be part of the Areas of Common Responsibility.

1.4 Articles and Articles of Incorporation. "Articles" and "Articles of Incorporation" mean those articles, filed with the Secretary of State of Kentucky, incorporating THE VILLAGE OF KYLES LANE HOMEOWNERS ASSOCIATION, INC., as a non-profit corporation under the provisions of Kentucky Revised Statutes Chapter 273B, as the same may be amended from time to time.

1.5 Assessments. "Assessments" means Base Assessment, Special Assessment and Individual Assessment.

1.6 Association. "Association" means THE VILLAGE OF KYLES LANE HOMEOWNERS ASSOCIATION, INC., a Kentucky not-for-profit corporation, which owns, operates and/or maintains the Common Elements, and any successor organization which owns, operates and/or maintains the Common Elements.

1.7 Base Assessment. "Base Assessment" means the charge established by Subsection 4.2 of this Declaration.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

1.8 Board of Directors. "Board of Directors" means the Board of Directors of the Association established pursuant to its Articles of Incorporation, Bylaws and this Declaration.

1.9 Builder(s). "Builder(s)" means such persons and entities as may acquire one or more Lots from Declarant for the purpose of constructing Dwelling Unit(s) thereon for resale.

1.10 Bylaws. "Bylaws" means the Bylaws of the Association, as the same may be amended from time to time, pursuant to the Bylaws and the Kentucky Revised Statutes Chapter 273, a copy of which is attached hereto as Exhibit B and made a part hereof.

1.11 Class A Members or Class A Membership. "Class A Members" or "Class A Membership" means those members of the Association consisting of all Owners except, during the Control Period, Declarant.

1.12 Class B Member or Class B Membership. "Class B Member" or "Class B Membership" means, during the Control Period, Declarant, as a member of the Association.

1.13 Common Elements. "Common Elements" shall mean and refer to all real property, or any interest therein, together with improvements located thereon, owned by, leased to the Association or granted as an easement to the Association, for the benefit, use and enjoyment of its Members, including without limitation HOA Parcels 1, 2 and 3; and the streets named Lookout Valley and Treeline Drive; all as shown on the Plats of The Village of Kyles Lane subdivision recorded at Plats Nos. 2120 (Section One) and 2182 (Section Two) in the Kenton County Clerk's records at Covington, Kentucky

1.14 Common Expenses. "Common Expenses" shall mean as defined in Subsection 4.2 of this Declaration.

1.15 Community-Wide Standard. "Community-Wide Standard" shall mean the standard of conduct, maintenance, or other activity generally prevailing throughout the Property. Such standard may be more specifically determined by the Board of Directors and Declarant.

1.16 Constituent Documents. "Constituent Documents" mean the Declaration, the Record Plat, the Bylaws, the Articles of Incorporation, the rules and regulations, if any, the management agreement, if any, entered into between the Association and any professional manager of the Property, and any other basic documents used to create and govern the Property.

1.17 Control Period. "Control Period" means the period commencing on the date on which this Declaration is recorded in the Kenton County, Kentucky Clerk's Office and terminating on the earlier to occur of (i) within thirty (30) days following the date when seventy-five percent (75%) of the Dwelling Units which may be built on the

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

Property have been deeded by either Declarant and/or any Builder to a third party purchaser; or (ii) thirty (30) years from the date of recording of the Declaration.

1.18 Declarant. "Declarant" means SURA PROPERTIES, LLC, a Kentucky limited liability company, its successors and assigns.

1.19 Declaration. "Declaration" means this Declaration of Covenants, Conditions and Restrictions and Reservation of Easements for THE VILLAGE OF KYLES LANE, as the same may from time to time be amended or supplemented in the manner prescribed herein.

1.20 Default. "Default" means any violation or breach of, or any failure to comply with, the Restrictions, this Declaration or any other Constituent Documents.

1.21 Development Period. "Development Period " means the period commencing on the date on which this Declaration is recorded in the Kenton County, Kentucky Clerk's Office and terminating on the earlier to occur of (i) within thirty (30) days following the date when one hundred percent (100%) of the Dwelling Units which may be built on the Property have been deeded by either Declarant and/or any Builder to a third party purchaser; or (ii) thirty (30) years from the date of recording of the Declaration.

1.22 Dwelling Unit. "Dwelling Unit" means any building or portion of a building situated upon the Property designed and intended for use and occupancy as a residence by a single person, a family or family-sized group of persons.

1.23 Individual Assessment. "Individual Assessment" means the charge established in Subsection 4.5 of this Declaration.

1.24 Landscape and Signage Easements. "Landscape and Signage Easements" shall mean as defined in Subsection 8.8 of this Declaration.

1.25 Lot(s). "Lot(s)" means each of the parcels of land shown as such upon the Record Plats of the Property.

1.26 Maintenance Standards. "Maintenance Standards" mean those standards adopted by Declarant and/or the Board pursuant to Section 7 of the Declaration as the same may from time to time be amended.

1.27 Members. "Members" means all Class A Members and the Class B Member.

1.28 Occupant. "Occupant" means any person in possession of a Lot or Dwelling Unit whether or not such possession is lawful and shall include but not be limited to, an Owner's family members, guests, invitees, Tenants and lessees.

1.29 Owner. "Owner" means, with respect to any Lot, the owner of record from time to time, whether one or more persons or entities, of an interest in fee simple,

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

reversion, remainder or leasehold estate of 99 years or more, but shall not include the Association. Such term shall include contract sellers except those having an interest merely as security for the performance of an obligation.

1.30 Private Storm Sewer Easements. "Private Storm Sewer Easements" shall mean and refer to any easements shown on any Record Plat to provide surface drainage. These areas are for the benefit of all Lot Owners and any agency of Kenton County, Kentucky having jurisdiction over drainage control.

1.31 Property. "Property" means that certain land in Kenton County, Kentucky, more particularly described in Exhibit A to this Declaration. When portions of the Additional Property are subjected to this Declaration pursuant to Section 10 herein, those portions shall then be deemed part of the Property.

1.32 Record Plats. "Record Plats" means the plats of THE VILLAGE OF KYLES LANE subdivision as recorded in the Kenton County, Kentucky Clerk's records at Plats Nos. 2120 (Section One) and 2182 (Section Two), including any subsequent plats or replats.

1.33 Restrictions. "Restrictions" means all covenants, conditions, restrictions, easements, charges, liens and other obligations provided for in this Declaration, including, without limitation, the Maintenance Standards and all notices, rules and regulations issued in accordance with this Declaration.

1.34 Retention and Detention Areas. "Retention and Detention Areas" shall mean and refer to any area designated on any Record Plat as such, which shall be used or designated to retain or temporarily detain surface drainage which Declarant, its successors and assigns have been required to construct or make use of in connection with surface drainage by any official agency of Kenton County, Kentucky in connection with the development of the Property and the Additional Property.

1.35 Special Assessment. "Special Assessment" means the charge established by Subsection 4.4 of this Declaration.

1.36 Structure. "Structure" means:

(a) any thing or object (other than trees, shrubbery, landscaping and hedges which are less than two feet high) the placement of which upon any part of the Property may affect the appearance of the Property, including, without limitation, porch, shed, barn, storage facility, covered or uncovered patio, fence, curbing, paving, wall, signboard or any other temporary or permanent improvement; and

(b) any excavation, fill, ditch, dam or other thing or device which affects or alters the natural flow of surface waters from, upon or across any part of the Property, or which affects or alters the flow of any waters in any natural or artificial stream, wash or drainage channel from, upon or across any part of the Property.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

1.37 Subdivision. "Subdivision" means all phases or sections of THE VILLAGE OF KYLES LANE, a subdivision in Kenton County, Kentucky, and consisting of all the Property from time to time made subject to the provisions of this Declaration.

1.38 Supplemental Declaration. "Supplemental Declaration" shall mean an amendment or supplement to this Declaration executed by or consented to by Declarant which subjects all or any portion of the Additional Property to this Declaration; imposes, expressly or by reference, additional restrictions and obligations on the land subject to this Declaration.

1.39 Tenant. "Tenant" means any person occupying any Lot pursuant to a written or oral lease agreement with the Owner thereof or with any other person or entity claiming under the Owner.

SECTION 2
PROPERTY SUBJECT TO THIS DECLARATION

The Property, each portion thereof, and all Dwelling Units thereon shall be held, transferred, sold, conveyed, leased, mortgaged and occupied subject to the terms, provisions, covenants and conditions of this Declaration.

SECTION 3
ASSOCIATION MEMBERSHIP, MEETINGS AND BOARD

3.1 Formation of the Association. The Declarant has caused to be chartered in accordance with Kentucky Revised Statute Chapter 273, a nonprofit corporation to be known as THE VILLAGE OF KYLES LANE HOMEOWNERS ASSOCIATION, INC., a Kentucky non-profit corporation. The purpose of the Association is to provide for the administrative governance, maintenance, management and upkeep of the Property and to promote the general health and welfare of the Owners and Occupants of the Property.

3.2 Board of Directors. Until the third Annual Meeting, the initial Board shall consist of three (3) persons appointed by the Declarant who shall serve until their respective successors are elected or appointed and qualified. Directors appointed by the Declarant need not be Members of the Association. However, a Director elected by Class A Members shall be a Lot Owner or a spouse of a Lot Owner, except that if a Lot Owner is a corporation, partnership, joint venturer, or other entity, the Lot Owner may elect as a Director an officer, partner, joint venturer, or like individual affiliated with this Lot Owner.

At the third Annual Meeting, the Declarant shall appoint two (2) Directors for a three (3) year term each; and the Class A Members shall elect one (1) Director for a three (3) year term. Thereafter, at each tri-annual meeting, the the Declarant shall appoint two (2) Directors for a three (3) year term each; and the Class A Members shall elect one (1) Director for a three (3) year term, until the Control Period Special Meeting (as hereinafter defined). At the expiration of the terms of such Directors, until such time as the Declarant shall transfer control of the Board to the Class A Members, the Class A

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

Members shall, at the respective Annual Meeting, elect successor Directors for a three (3) year term.

Within ninety (90) days after the expiration of the Control Period, the President of the Association shall call a special membership meeting ("Control Period Special Meeting"). At the Control Period Special Meeting, all Declarant appointed Directors shall be deemed removed from office, and the Class A Members, including the Declarant if it is then an Owner, shall elect a Director to fill each vacancy on the Board. The terms of said elected Directors shall be from one (1) to three (3) years, as determined by the Board, so that in any one (1) year thereafter, the terms of no more than one (1) Director shall expire. The Director with the most votes shall be the Director who shall serve the three-year term; The Director with the next most votes shall be the Director who shall serve the two-year term; and the Director with the least votes shall be the Director who shall serve the one-year term. Additionally, after the Control Period Special Meeting, all Directors, and their successors, shall be elected by Class A Members and shall be elected for a three (3) year term, and shall continue the staggerd terms as established.

Notwithstanding anything above to the contrary, the Declarant may, by written notice to the Board, at or before any Annual Meeting, relinquish to the Class A Members, the Declarant's right to appoint one or more Directors at such Annual Meeting pursuant to this Section.

3.3 Membership. The membership of the Association shall at all times consist exclusively of Owners. All Owners shall be Members, with one (1) vote per Lot. Membership shall be appurtenant to and may not be separated from such ownership.

3.4 Members Rights and Duties. Each Member shall have the rights, duties and obligations set forth in this Declaration and all amendments duly made hereto in accordance with the terms herein.

3.5 Professional Management Contracts. The Association may delegate all or any portion of its authority to discharge its responsibilities herein to a manager or managing agent. Any management agreement shall not exceed three (3) years and shall provide for termination by either party without cause and without payment of a termination fee on ninety (90) days or less written notice.

SECTION 4
ASSESSMENTS

4.1 Creation of Assessments. There are hereby created Assessments for Association expenses as may from time to time specifically be authorized by the Board of Directors, to be commenced at the time and in the manner set forth in this Section. There shall be three (3) types of Assessments which are as follows: (1) Base Assessment to fund Common Expenses for the benefit of all Members of the Association as described in Subsections 4.4 below; (2) Special Assessment as described in Subsection 4.4 below; and (3) Individual Assessment as described in Subsection 4.5 below. Each Owner, by acceptance of a deed or recorded contract of sale for any portion of the Property, is deemed to covenant and agree to pay these Assessments.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

(a) No Owner may waive or otherwise exempt himself from liability for the Assessments provided for herein, including, by way of illustration and not limitation, by non-use of Common Elements or abandonment of the Dwelling Unit. The obligation to pay Assessments is a separate and independent covenant on the part of each Owner. No diminution or abatement of Assessments or set-off shall be claimed or allowed by reason of any alleged failure of the Association or Board to take some action or perform some function required to be taken or performed by the Association or Board under this Declaration or the Bylaws, or for inconvenience or discomfort arising from the making of repairs or improvements which are the responsibility of the Association, or from any action taken to comply with any law, ordinance, or with any order or directive of any municipal or other governmental authority.

(b) Notwithstanding any provision of this Declaration, the Articles of Incorporation or Bylaws to the contrary, Declarant shall be required to pay a full Base Assessment for all recorded "unoccupied" Lots which it owns until a total of fifteen (15) lots have been sold (not including HOA Parcels 1, 2 or 3 or the Streets Parcel), and thereafter only a one-fourth (1/4) Base Assessment for any remaining "unoccupied" Lot which it owns thereafter (not including HOA Parcels 1, 2 or 3 or the Streets Parcel).

4.2 Base Assessment. The Base Assessment shall be levied by the Association against the Owner of each Dwelling Unit, as provided in Subsection 4.3 below, to be used currently, and to provide an adequate reserve fund for future use, for the improvement, expansion and maintenance of the Common Elements, including, but not limited to, the payment of real estate taxes on those portions of the Common Elements to which the Association is the record owner; casualty and liability insurance for the Common Elements to which the Association is the record owner and fidelity bonds; the cost of repairing and maintaining the pavement and landscaping in the Common Elements; the cost of snow removal of the streets in the Common Elements; the the costs of operation, maintenance, improvement, and replacement of the Open Spaces, Retention and Detention Areas; the cost of reasonable reserves for contingencies, replacements and working capital; management fees; organizational costs; legal costs, and othe expenses for the enforcement of liens and covenants in this Declaration and all other costs incurred by Declarant or the Board in the exercise of its powers and duties pursuant to this Declaration (collectively "Common Expenses"). The Base Assessment shall be estimated initially in accordance with Subsection 4.3 of this Declaration. The obligation to pay the Base Assessment shall not in any manner be dependent on or discharged, or otherwise affected by the use or non-use of the Common Elements or Recreational Facilities, or the actual occupancy of any Lot or Dwelling Unit of the Property.

4.3 Computation of Base Assessment. It shall be the duty of the Board, prior to the beginning of each fiscal year, to prepare a budget covering the estimated Common Expenses of the Association during the coming year. The budget shall include a capital reserve account for the capital replacement, as needed.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

(a) The Base Assessment for a Dwelling Unit shall commence on the first day of the month following the conveyance of the first Dwelling Unit on a Lot from either Declarant or a builder to an individual Owner of a Dwelling Unit; or on the first day of the month following the addition of any Additional Property to be subjected to this Declaration pursuant to Section 10, below.

(b) The Base Assessment to be levied against each Dwelling Unit for the coming year shall be determined by multiplying the total budgeted Common Expenses, including reserves, by a fraction, the numerator of which is the number "1," and the denominator of which is the total number of Dwelling Units subject to Assessment under Subsection 4.3(a) above (and accounting for the "unoccupied Lots in accordance to Subsection 4.1(b), above).

(c) Notwithstanding the above, the Board may, in its sole discretion, reduce the Base Assessment determined pursuant to the above formula by taking into account.

(i) other sources of funds available to the Association; and

(ii) Assessments to be levied upon additional Dwelling Units reasonably anticipated to become subject to full Base Assessments during the fiscal year.

(d) The Board shall cause a copy of the Common Expense budget and notice of the amount of the Base Assessment to be levied against each Dwelling Unit for the following year to be delivered to each Owner at least fifteen (15) days prior to the beginning of the fiscal year. If, in the event the Board fails for any reason so to determine the budget for any year, then and until such time as a budget shall have been determined by the Board, the budget in effect for the immediately preceding year shall continue.

4.4 Special Assessment. In addition to the other Assessments authorized herein, and to the extent that the reserve fund is insufficient, the Association may levy Special Assessments for the following reasons:

(a) The amount of any operating deficit incurred in any calendar year may be paid by means of a Special Assessment sufficient in an amount so as to allow the Association to satisfy such deficit in part or in whole, provided that any such Special Assessment shall have been approved in accordance with Subsection 4.4(c) below.

(b) To the extent that the capital budget is insufficient, the Association may levy Special Assessments to construct, structurally alter, or replace capital improvements which are a part of the Common Elements in any fiscal year.

(c) So long as the total amount of Special Assessments allocable to each Lot or Dwelling Unit does not exceed One Hundred Percent (100%) of the Base Assessment for that fiscal year, the Board may impose the Special Assessment.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

Any Special Assessments which would cause the amount of Special Assessments allocable to any Lot or Dwelling Unit to exceed this limitation shall be effective only if approved by a majority vote of the Members present and voting at a meeting duly called for such purpose. Special Assessments shall be paid as determined by the Board, and the Board may permit Special Assessments to be paid in installments extending beyond the fiscal year in which the Special Assessments is imposed.

4.5 Individual Assessment. The Association after approval by a majority of the members of the Board shall have the right to assess an individual Lot or Dwelling Unit for any of the following ("Individual Assessment"):

(a) any costs incurred for maintenance or repair caused through the willful or negligent act of an Owner or Occupant or their family, tenants, guests or invitees, including attorney fees, court costs and other expenses incurred; and/or

(b) any costs associated with the enforcement of this Declaration or the Rules and Regulations, if any, of the Association, including, but not limited to attorneys fees, witness fees and costs, and court costs.

4.6 Common Surplus. If the Base Assessment collected in any given year is in excess of the actual Common Expenses for that year, the Board may, at its sole discretion (a) return each Owner's share of the Common Surplus; (b) credit each Owner's share of the Common Surplus to each Owner's payment as for the Base Assessment for the following year; (c) apply the Common Surplus to the reserve; or (d) repay any loan obtained by the Board, on behalf of the Association, used to fund any prior years operating deficit as provided for in Subsection 4.7 below.

4.7 Payment. Unless otherwise established by the Board, the Base Assessment shall be paid in advance not more than ten (10) days after the due dates established by the Board. The Board shall have the power at any time to adopt such billing, collection and payment procedures and payment time schedules as it shall deem appropriate; and may allow the Assessments to be paid in installments. Additionally, any Special Assessment or Individual Assessment imposed by the Board shall become due upon the date designated in the notice, but not less than thirty (30) days after the mailing of the notice to the Owner by United States mail.

4.8 Operating Deficit. If during the Development Period the Association incurs an operating deficit, Declarant may, at its option, loan funds to the Association to fund the deficit. In the event that Declarant elects to fund the deficit, the Association shall execute a loan agreement and promissory note for the benefit of Declarant. The Association shall be obligated to repay to the Declarant any and all monies lent by the Declarant to the Association in accordance with this Section in order to fund any deficit. Such repayment of monies shall be in accordance with the terms and conditions of said loan agreement and promissory note.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

4.9 Books and Records of the Association. The Association shall keep full and correct books of account. The Association shall make available to all Lot Owners and the holders of all first mortgages on Lots, current copies of the books, records and financial statements of the Association upon reasonable request during normal business hours. All funds collected by the Association shall be held and expended solely for the purposes designated by this Declaration and shall be deemed to be held for the use, benefit and account of the Association and all of the Lot Owners.

4.10 Penalty for Late Payment. For each Lot as to which any installment of any Assessments are not paid within a period of ten (10) days from its due date, unless otherwise modified by the Board, there shall be added to the installment a penalty of ten percent (10%) thereof, and interest at the rate of twelve percent (12%) per annum, or such other amount established by the Board (or, if less, the maximum rate allowable by law) from the due date on the amount of such installment plus penalty until paid.

4.11 Creation of Lien and Personal Obligation of Assessment. All Assessments shall be a charge and lien on each Lot to the extent and for the period provided in Subsection 4.122 below, and shall also be the personal obligation of the Owner of each Lot against which they are made.

4.12 Liens. If any Assessment on a Lot is not paid within the period established by the Board pursuant to Subsection 4.77 herein, the amount thereof together with any interest, costs, penalties and reasonable attorneys' fees thereon shall constitute a lien on such Lot in favor of the Association prior to all other liens and encumbrances whatsoever, excepting real estate taxes and assessments and liens of record in favor of the United States of America, the Commonwealth of Kentucky, and all other political subdivisions or governmental instrumentalities of the Commonwealth of Kentucky to the extent made superior by applicable law, and all bona fide recorded first mortgages and the rights of any first mortgagee who comes into possession of a Lot pursuant to mortgage foreclosure or by deed in lieu thereof. Assessments shall become a lien on a Lot on the date the Board mails written notice of any such Assessment to the Owners of any Lot subject thereto. The Association may perfect the lien by recording a notice of lien with the Kenton County, Kentucky Clerk's Office, in any legally recordable form. Nonpayment of any Assessment on a Lot shall be deemed and is hereby declared to be the happening of a condition or event that creates an interest in real estate.

4.13 Evidence of Payment. Upon the request of the Owner or any mortgagee or Tenant of any Lot or any prospective purchaser, mortgagee, or Tenant thereof, the Board or its designated representative shall furnish written evidence of the amount of the Assessments with respect to such Lot for the current year and the amount of any unpaid Assessments, penalty and interest, if any. Such evidence may be conclusively relied upon by any such party and by anyone furnishing any title evidence or opinion with respect to such Lot. The Board may impose a reasonable charge for furnishing such written evidence.

4.14 Enforcement of Lien. Any lien established under this Declaration may be enforced by the Association in the same manner and to the same extent (including appointment of a receiver, foreclosure sale and deficiency judgment) and subject to the

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

same procedures as in the case of foreclosure of a real property mortgage under the laws of the Commonwealth of Kentucky. In any such enforcement proceeding, the amount which may be recovered by the Association shall include all costs of such proceeding, including reasonable attorneys' fees. In any such foreclosure sale, the Association may become the purchaser.

SECTION 5
ARCHITECTURAL REVIEW

5.1 Approval of Plans by Declarant. Notwithstanding anything to the contrary in this Section 5, during the Development Period, the plans and specifications for the initial construction of a Dwelling Unit shall be subject only to Declarant's approval and do not need to be approved by the Board.

5.2 Construction, Remodeling, Alteration of Dwelling Unit and Structures. Except for initial construction of Dwelling Units, accessory Structures and Common Elements by either Declarant and/or a builder, no building, fence, wall, deck or other Structure shall be commenced, constructed, erected, placed, moved onto or permitted to remain on any Lot, nor shall any Dwelling Unit and/or Structure on any Lot be remodeled, painted or altered or expanded in any way which changes the exterior appearance thereof, unless detailed plans and specifications therefor shall have been submitted to and approved in writing by the Board. Such plans and specifications shall be in such form and shall contain such information as the Board may reasonably require, including but not limited to any or all of the following: a site plan; patio and walkway locations; description of materials; location of lighting; architectural plans including cross-sections, floor plans and elevations; and evidence of conformity with building codes. The Board shall either approve the plans and specifications, disapprove them, or approve them with conditions or qualifications.

5.3 Approval of Plans and Specifications. The Board shall approve plans and specifications submitted to it with respect to any Lot (or subdivision of Lots) if it finds that they comply with the requirements of Subsection 5.2 above, will further the purposes outlined in this Declaration and meets Architectural Guidelines adopted by the Board. Upon final approval thereof, a certified copy of the detailed plans and specifications shall be deposited for permanent record with the Board and a copy bearing the written approval of the Board shall be returned to the applicant. Approval by the Board of plans and specifications with respect to any Lot shall not impair the Board's right subsequently to approve a requested amendment of such plans and specifications relating to such Lot (subject to the requirements of this Section). The Board's approval of any plans and specifications shall not constitute a representation or warranty as to the quality of the plans and specifications or their compliance with applicable laws and codes.

5.4 Architectural Guidelines. The Board may adopt reasonable architectural guidelines and rules relating to the construction, erection and placement of buildings, fences, walls and structures in order to fulfill its obligations under Section 5. Such guidelines and specifications may include but not be limited to building materials,

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

minimum or maximum sizes, dimensions or heights, color schemes, material finishes, locations, setbacks or other reasonable requirements.

5.5 Disapproval of Plans and Specifications. If plans and specifications (whether schematic, preliminary or detailed) submitted to the Board with respect to any Lot do not comply with the Architectural Guidelines, if any, and the requirements of Subsection 5.1 as to the information required to be included in the plans and specifications, the Board shall either disapprove such plans and specifications or approve them subject to such conditions and qualifications as the Board may deem necessary to achieve compliance.

5.6 Failure of the Board to Act. If the Board shall fail to act upon any plans and specifications submitted to it within ninety (90) days after submission thereof, such plans and specifications shall be deemed to have been approved as submitted, and no further action by the Board shall be required. If construction of a Structure is not commenced on a Lot on or before six (6) months from the date of submission of plans and specifications, then such "deemed approval" shall be automatically canceled and a new submission shall be required.

5.7 Violations. If any Dwelling Unit and/or Structure situated upon any Lot shall have been constructed, erected, placed, remodeled or altered other than in accordance with the approved plans and specifications, the Board shall give notice of a Default to the Owner of the Lot involved, provided, however, that the Board may, upon such conditions as it may determine, waive any such Default if it finds that such Default does not substantially conflict with the policies of the Board.

5.8 Enforcement. In the event of a violation of the provisions of this Section 5, the Association shall have the right to enforce this Section by any proceedings authorized in this Declaration, Bylaws or rules and regulations, if any, as well as any other relief available at law or in equity.

5.9 Right of Entry. The Board through its authorized officers, employees, and agents, shall have the right to enter upon any Lot at all reasonable times for the purpose of ascertaining whether such Lot or the construction, erection, placement, remodeling, or alteration of any Dwelling Unit and/or Structure thereon is in compliance with the provisions of this Section, without the Board or such officer, employee or agent being deemed to have committed a trespass or wrongful act solely by reason of such action or actions.

5.10 Fees. The Board may charge reasonable fees for the processing of plans and specifications. Such fees may cover the cost of such processing, including inspection costs. Such fees shall be payable at the time of submission of the respective item for approval and shall be paid to the Association.

SECTION 6
COVENANTS AND RESTRICTIONS OF USE AND OCCUPANCY

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

6.1 Purposes. In order to promote the health, safety and welfare of all Owners, Members and Occupants, and to preserve, beatify and maintain the Property and all Structures thereon as a subdivision of high quality and to preserve and promote a good environmental quality, the following covenants, restrictions and limitations as to use and occupancy are hereby adopted, declared and established. These covenants and restrictions shall hereinafter burden and benefit all Lots on the Property, shall run with the land, be binding on current and successor Lot Owners, for the benefit of all Lot Owners and all Lots on the Property.

6.2 Covenants and Restrictions. The following are the covenants and restrictions and limitations as to use and occupancy to which the Property is hereby subjected:

(a) Land Use. Except as otherwise provided in this Declaration, no part of the Property other than Common Elements shall be used for other than residential housing and any Dwelling Unit constructed on a Lot shall be used only as a residence for a single family. To the extent permitted by law, an Owner of a Lot may use a portion of a Dwelling Unit located thereon for his office or studio provided that the activities therein shall not interfere with the quiet enjoyment or comfort of any other Owner or Occupant; and provided further that such activities do not increase the normal flow of traffic or individuals in and out of the Property or in and out of said Owner's Lot. The foregoing notwithstanding, Declarant, its successors, assigns and affiliates, and any Builder may use Lots and Dwelling Units for construction offices, sales purposes (i.e. model homes), and as offices to meet with prospective purchasers of Dwelling Units.

(b) Other Structures. No structures other than a Dwelling Unit, such as a shack, shed, storage, garage, trailer, poolhouse, barn or other outbuilding shall be placed, constructed, erected, built, maintained or used or on any Lot in the Subdivision.

(c) Parking. No parking spaces, streets or driveways nor any other part of the Common Elements nor any Lot upon which a Dwelling Unit is constructed shall be used for parking of any trailer, truck, boat, or anything other than operative automobiles, motorcycles or scooters, except while loading, unloading or cleaning which shall not exceed twenty four (24) hours. Any of such vehicles may, however, be stored or parked in an enclosed garage provided such garage door is completely closed at all times when such a vehicle is parked therein. The word "trailer" shall include trailer coach, RV, recreational vehicle, house trailer, mobile home, automobile trailer, boat trailer, campcar, camper or any other vehicle, whether or not self-propelled, constructed or existing in such a manner as would permit the use and occupancy thereof for human habitation, for storage, or the conveyance of machinery, tools or equipment, whether resting on wheels, jacks, tires or other foundation. The word "truck" shall include and mean every type of motor vehicle other than passenger cars and other than any non-commercial pick-up truck (no ladder racks, advertising, etc.), sports utility vehicle or van which is used as a principal vehicle by an Owner of a Dwelling Unit

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

or his/her family. Notwithstanding the restrictions in this Section, vehicles being used for the purpose of construction, delivery or repair work to or upon any Lot or Dwelling Unit may be permitted to be parked on any Lot and street in the Subdivision.

(d) Nuisances. No noxious or offensive activity shall be carried on upon any Lot, nor shall anything be done thereon which may be or become an annoyance or nuisance to the neighborhood. No Lot Owner shall permit anything to be done or kept in a Dwelling Unit or other approved Structure on any Lot that would be in violation of any law. No waste shall be committed in or to any of the Common Elements.

(e) Oil and Mining Operations. No oil drilling, quarrying, or mining operations shall be permitted on any Lot.

(f) Garbage and Refuse Disposal. All trash, garbage or other rubbish shall be kept at all times in each Owner's garage, except on the days which the trash, garbage or other rubbish is collected by the local waste removal authorities or as otherwise directed and instructed by the Association. Any trash containers placed outside by the Dwelling Unit Owners to be collected by the local waste removal authorities shall only remain outside for a period not to exceed twenty-four (24) hours and may not be placed at the curb any earlier than 6:00 p.m. the day before the trash is scheduled to be removed. Yard waste may be composted in approved containers. No Lot shall be used or maintained as a dumping ground for rubbish, trash, garbage, or other waste.

(g) Signs. No permanent sign shall be placed, permitted or maintained by any owner on any lot, building, common area or right of way within the Subdivision. An Owner of a dwelling unit is permitted to place and maintain one (1) standard "For Sale" or "For Rent" sign on his lot; provided, however, it is of a typical size within the industry. This sign restriction shall not apply to signs used by Declarant and/or a builder or their assigns, while Declarant and/or a builder are selling Dwelling Units in the Subdivision, or to traffic, street names, Common Elements or subdivision identification signs.

(h) Animals. No animals of any kind shall be raised, bred, or kept on any Lot including the Common Elements, except that dogs or other household pets not totaling more than three (3) in number, may be kept on a Lot, subject to the Restrictions, provided that it is not kept, bred or maintained for any commercial purpose, and provided that it is kept subject to the rules and regulations, if any, of the Association, including, but not limited to, rules regarding weight limitations for certain types of pets. Any such pet or pets causing or creating a nuisance or unreasonable disturbance shall be permanently removed from the Property upon seven (7) days written notice from the Board. No such pets may be allowed to run unattended. Dogs, cats, or other household pets must be kept within the confines of the Owner's Lot except when being held on hand leash by the person attending the animal. A Lot Owner shall be responsible for cleaning up after his/her household pet. Notwithstanding the

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

foregoing, the Association shall have the right to promulgate rules and regulations pertaining to size, number and type of such household pets and the right to levy fines and enforcement charges against persons who do not clean up after their pet.

(i) Laundry or Rubbish. No clothes, sheets, blankets, laundry of any kind or other articles shall be hung out or exposed on any part of the Property. No clotheslines shall be located on any Lot. The Property shall be kept free and clear of rubbish, debris and other unsightly materials.

(j) Rental of Dwelling Units. The Owners of the respective Dwelling Units or any first mortgagees in possession thereof shall have the right to lease the same subject to the covenants and restrictions in the Declaration and the Bylaws and rules and regulations, if any. However, neither a Unit Owner nor any first mortgagee in possession shall lease less than an entire Dwelling Unit nor shall any Dwelling Unit be leased for a term of less than six (6) months. The respective Dwelling Unit shall not be rented for transient or hotel purposes, which shall be defined as (i) rental for any period less than ninety (90), or (ii) any rental if the occupants of the Dwelling Units are provided customary hotel service such as room service or food and beverage, maid service and furnishing of laundry and linen. All leases of any Dwelling Unit shall be in writing. All such leases shall provide that they are subject to all the provisions of the Declaration, the Bylaws and the rules and regulations, if any, and that any failure of the lessee to comply with any such provision shall constitute a default under the lease. A copy of each such lease shall be given to the Association immediately after it is executed.

(k) Swimming Pools, Hot Tubs and Spas. No above-ground swimming pools shall be constructed, erected, placed or permitted to remain upon any Lot. The definition of "above-ground swimming pools" shall not include portable wading pools used by small children not more than one foot six inches (1'6") in height. Wading pools are to be placed in the rear yard of the Dwelling Unit. In-ground swimming pools, hot tubs and spas are permitted provided it is approved by the Board in accordance with Section 5 above. Hot tubs and spas shall be permitted on any Lot but must be in-ground or if above ground be incorporated into a deck and shall not be visible from the street or any neighboring Lot. This Section shall not prohibit the construction, erection or placement of a diving board, slide or other equipment appurtenant to an otherwise conforming swimming pool.

(l) Fencing. No fences shall be placed, constructed, erected, built, maintained or used or on any Lot in the Subdivision. Entrance designations, Recreational Facilities, fences and any other Structure erected by Declarant and/or the Association are exempt from this Restriction.

(m) Swing Sets, Trampolines and Play Areas. Swing sets, trampolines and other play areas may be erected directly behind the rear of the Dwelling Unit, provided that they do not extend past the side edges of the Dwelling Unit in a

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

manner and fashion such that they are visible from the street in front of the Dwelling Unit.

(n) Building Setbacks. No building shall be located nearer to any street than the building setback line shown in the Record Plat of the Subdivision, or as regulated by any applicable ordinance, regulation or law.

(o) Lawns. No excessive weeds, underbrush or unsightly growths or objects of any kind shall be permitted to remain on any Lot within the Subdivision. All mulched landscaped areas shall remain mulched and remain free of weeds and dead plants. All lawn areas shall be maintained in a neat and orderly manner and shall be mowed on a regular basis. Lot areas left in a naturalized state by the Builder may be left in such naturalized state by the Lot Owner.

(p) Obligation to Keep Dwelling Unit in Good Condition. Each Lot Owner or Occupant shall keep each his/her Dwelling Unit and all Structures located on his/her Lot in good order, condition and repair and such maintenance, repair, appearance and condition shall comply with the provisions of this Declaration and applicable laws and ordinances.

(q) Mailboxes. Declarant or Builder reserves the right to establish a standard design for mailboxes for use by all Lot Owners. The decision of the type of material and design for the mailboxes shall be at sole discretion of Declarant. Lot Owners shall be responsible for maintenance of their individual mailboxes. Declarant may however, waive this right or establish the use of cluster mailboxes.

(r) Additional Restrictions. As the Additional Property is annexed to the Property by means of a Supplemental Declaration, Dwelling Units or Lots within specific phases may be subject to additional covenants, rules and regulations established by Declarant at such time as such Dwelling Units or Lots are annexed to the Property.

(s) Lot Grading. Neither the Owner nor anyone claiming under the Owner shall alter elevations and grades established by Declarant for any building Lot without the prior written approval of Declarant and/or Declarant's designee during the Development Period; and, the prior written approval of the Board after the Development Period in accordance with Section 5 above. The purpose of this Restriction is to insure that the surface drainage plan originally established by Declarant for sheet surface drainage and drainage swales over the yard areas of building Lots is not altered or impeded. Landscaping or plantings shall not be installed or maintained in such a manner as to impede sheet surface drainage or swale drainage.

SECTION 7
MAINTENANCE STANDARDS

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

7.1 Adoption and Amendment. Declarant during the Development Period, and after the Development Period, the Board shall have the right to adopt, and may from time to time amend, Maintenance Standards pertaining to the maintenance, repair and appearance of all Lots, and the exterior of all Dwelling Units and Structures thereon. If any provision of any applicable building inspection, or similar maintenance statute, ordinance, resolution, regulation or order of the Commonwealth of Kentucky, any other political subdivision or governmental instrumentality of the Commonwealth of Kentucky, or the Board, is more stringent with regard to a Lot than a comparable provision of the Maintenance Standards, such more stringent provision shall be deemed incorporated in the Maintenance Standards. The Maintenance Standards shall provide, among other things, that:

(a) except as otherwise hereinafter provided, the Association shall be responsible for maintenance, repair and replacement of the Common Elements and all Structures thereon;

(b) except as otherwise hereinafter provided or those area classified by the Association as "No Maintenance Zones", thereby leaving the area(s) in its/their natural state to grow wild, the Association shall be responsible for the maintenance and general upkeep of all lawns and landscaping in the Common Elements owned in fee simple by the Association, which shall include, but not limited to, mulching the landscaping beds, cutting the grass and keeping all lawns and landscaping beds in a neat and orderly manner, the cost of which shall be a Common Expense of the Association;

(c) each Owner shall maintain, repair and replace at his expense all portions of the Common Elements which may be damaged or destroyed by reason of his/her own intentional or negligent act or omission or by the intentional or negligent act or omission of any invitee, lessee, licensee, employee, agent, family member, guest, and/or pet(s) of such Owner;

(d) the obligation of the Association and of the Owners to repair, maintain and replace the portions of the Property for which they are respectively responsible shall not be limited, discharged or postponed by reason of the fact that any maintenance, repair or replacement may be necessary to cure any latent or patent defects in material or workmanship in the construction of the Property;

(e) notwithstanding the fact that the Association and/or any Owner may be entitled to the benefit of any guarantee of material and workmanship furnished by any construction trade responsible for any construction defects, or to benefits under any policies of insurance providing coverage for loss or damage for which they are respectively responsible, the existence of any construction guarantee or insurance coverage shall not excuse any delay by the Association or by any Owner in performing its or his obligation hereunder; and

(f) except as otherwise provided above in this Subsection 7.1, each Owner shall maintain, repair and replace at his/her expense all portions of each Dwelling Unit and Structure located on each Lot owned by him/her and all

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

internal and external installations of such Lot such as appliances, heating, plumbing, electrical and air conditioning fixtures or installations, and any portion of any other utility service facilities located within the boundaries of or serving the Lot.

Notwithstanding the foregoing to the contrary, the Association shall have the right to classify Common Elements as "No Maintenance Zones", thereby leaving the area(s) in its/their natural state to grow wild.

7.2 Obligation to Keep Premises in Good Repair. Each Owner during his/her period of ownership and, during his/her tenancy, each Tenant leasing a Lot, shall keep each Lot, Dwelling Unit and all Structures thereon owned or leased by him/her in such maintenance, repair and appearance as shall comply with the Maintenance Standards.

7.3 Periodic Inspection. Periodically as needed, the Association may inspect each Lot and the exterior of the Dwelling Unit and all Structures thereon to determine whether each complies with the Maintenance Standards. After each such inspection, the Association shall, if any defects are found, issue an inspection report to the Owner with a copy to the Tenant, if applicable, listing such defects, if any, and the reasonable time within which they may be corrected. Such Owner shall correct such defects or cause them to be corrected within such reasonable period as is stated in the inspection report.

7.4 Drainage Swales. Neither the Owner nor anyone claiming under the Owner shall, except in an emergency, alter the location or grade of any open storm water drainage way on any Lot without the prior written consent of the Association.

7.5 Landscaping and Yard Drainage. The rule of thumb is to plant any tree a distance away from the residence equal to the mature height of the tree. Further, planting of large shrubs close to the footer on slab homes and walk out basements should be avoided by all Owners. Each Lot Owner shall maintain positive drainage (i.e. no puddling of water around foundation of residence).

7.6 Right of Entry. Declarant and the Association, through its authorized officers, employees, and agents, shall have the right to enter upon any Lot and/or Structure at all reasonable times and upon reasonable advance notice for the purpose of making inspections required by this Section without Declarant or the Association or such officer, employee or agent being deemed to have committed a trespass or wrongful act solely by reason of such entry or such action or actions. Any bona fide utility company, through its authorized officers, employees, and agents, shall have the right to enter upon the Common Elements or upon any utility easements located on any Lots, for the purpose of installing, repairing or servicing any of its equipment, or for reading meters, without Board approval; provided, however, that if any such activities by the utility require alteration to or displacement of any waterscaping, landscaping, grass, sidewalks, fences, garages, or other Structures, then the prior approval of the Board shall be required.

7.7 Failure to Comply. Failure to comply with the Maintenance Standards or to correct the defects listed in any inspection report issued by the Association or to pay

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

any fee hereunder shall constitute a Default, in which event Declarant or the Board shall have the right to enforce this Section by any proceedings authorized in this Declaration, Bylaws or rules and regulations, if any.

SECTION 8
COMMON ELEMENTS AND EASEMENTS

8.1 Description of Common Elements. The Common Elements in the Subdivision shall include, but not be limited to: the HOA Parcels; Streets; Open Spaces; Landscape and Signage Easements; Private Storm Sewer Easements; Retention and Detention Areas and any other easements for open space, green space, landscaping areas and mounding, water retention/detention basins, common area utility easements, storm sewer and surface water drainage easements, water main easements, sanitary sewer easements, preservation areas, and private drainage easements; all as are or may be located, described and shown on the Record Plats (collectively, the "Common Elements"). Declarant may also create other Common Elements not now in existence but that might in the future be added, located and shown on any subsequent Record Plat to be recorded and creating additional Lots to be subjected to this Declaration.

8.2 Rights of Enjoyment in Common Elements. Except as herein otherwise provided, each Owner shall have a right and nonexclusive easement for use and enjoyment of the Common Elements, and such right and easement shall be appurtenant to, and shall pass with the title to his/her Lot. Each Tenant shall have a nontransferable right to use and enjoy the Common Elements, if any, which right shall terminate when such person ceases to have the status of a Tenant. Such rights and privileges shall be subject, however, to the following:

(a) Except for the Promissory Note of Declarant as provided in Subsection 4.7 above, the right of the Board, with the approval of sixty-seven percent (67%) of the Class A Members, and the Class B Member, to borrow money for the purpose of constructing, equipping, improving and maintaining the Common Elements and in aid thereof to mortgage the Common Elements.

(b) The right of the Board to adopt and enforce and from time to time amend reasonable limitations upon use and Rules and Regulations pertaining to the use of the Common Elements, including regulations limiting guests of Owners and Tenants who may use the Common Elements at any one time.

(c) Until such time as the Declarant transfers fee simple title in all or any portion of the Common Elements to the Association, the Declarant reserves the right to grade, alter and/or make any other modifications which its desires to the Common Elements.

(d) The right of the Board to suspend the right of any Owner or the privilege of any Occupant to use such of the Common Elements that are recreational in nature as determined by the Board for any infraction of the Rules and Regulations relating to the Common Elements for a period not to exceed sixty (60) days for each such infraction, or for nonpayment or delinquency of the

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

Assessments against such Owner's Lot for a period not to exceed the period of such nonpayment or delinquency.

(e) Such rights as the Board may have to grant easements or rights of way to any public utility corporation or public agency.

(f) All applicable provisions of valid agreements of the Association relating to the Common Elements.

(g) Such rights as the Board may have under the Declaration to convey or lease all or any part of the Common Elements.

(h) All other easements, restrictions and rights to which the Property is subject.

(i) The right of the Association to grant permits, licenses, and easements over the Common Elements for utilities, roads and other purposes reasonably necessary or useful for the proper maintenance or operation of the Property.

8.3 Subordination to Mortgage or Other Lien. The rights and privileges provided in this Section shall be subordinate to any mortgage or other lien given by the Association for the purposes of acquiring, improving or maintaining the Common Elements.

8.4 Additional Common Elements. Declarant may from time to time, during the Development Period, convey to the Association for nominal or other appropriate consideration and the Association may accept conveyance of any land owned by Declarant along with any Structure, improvement or other facility including related fixtures, equipment and furnishings located thereon.

8.5 Conveyance or Lease of Common Elements. Upon authorization by the Board and upon the approval of sixty-seven percent (67%) of Class A Members and the Class B Member, the Association may at any time convey or lease all or a part of the Common Elements to any public agency, authority, or utility or to any private entity, upon such terms and conditions as shall be agreed upon by the other party and Board, including, without limitation, terms and conditions providing for the use of such Common Elements by the public in general and terms and conditions pertaining to the maintenance and repair of such Common Elements and the assessments of Owners and/or Tenants for the costs of such maintenance and repair.

8.6 Use of Common Elements by Declarant and Builders. Declarant and any builder and its affiliates and associates shall have the same rights of use and enjoyment of the Common Elements as the Class A Members during the Development Period, and shall have the right to use the Common Elements for promotional, sales and similar purposes until all of the Dwelling Units have been sold.

8.7 Easements.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

(a) The Association may hereafter grant easements for utility purposes for the benefit of the Property, including the right to install, lay, use, maintain, repair and replace water mains and pipes, sewer lines, gas mains, telephone wires and equipment, and electrical conduits and wires over, under, along and on any portion of the Common Elements, and each Owner hereby grants the Association an irrevocable power of attorney to execute, acknowledge, deliver and record, for and in the name of such Owner, such instruments as may be necessary to effectuate the foregoing.

(b) Declarant hereby reserves easements and the right to grant easements on, over and across certain Lots for open space, landscaping mounding and monument areas and for the installation, maintenance, use, repair and replacement of underground utilities, public utilities, water detention basins, storm sewer, sanitary sewer and surface water drainage easements, water mains, preservation areas and private drainage easements, and building setbacks, specifically as shown on the Record Plats now or hereinafter recorded for the Subdivision, and to cut and grade slopes in and along Lot boundaries at streets and drives built within the Property. The foregoing easements shall not be used for recreational purposes but are reserved for such aesthetic or utility purposes as indicated by the nature of the easement.

(c) All easements and rights described in the Declaration are easements appurtenant, running with the land, perpetually in full force and effect, and at all times shall inure to the benefit of and be binding on Declarant, its successors and assigns, and any Owner, purchaser, mortgagee and other party now or hereafter having an interest in the Property, or any part or portion thereof. After the Development Period, the Association shall be deemed to be the successor of Declarant and, as such, shall be deemed to be the grantee of said easements provided in this Section, and shall hold such easements for the use, benefit and enjoyment of all Lot Owners in the Subdivision. All notes on the Record Plat that are pertinent to the specific easements set forth herein are incorporated herein by reference.

8.8 Landscape and Signage Easement. A non-exclusive and irrevocable easement is hereby created, for the benefit of the Association or its designees, on, over and across the Common Elements for the sole purpose of installing, maintaining and replacing any and all landscaping, monuments, and signage located on the Common Elements in order to identify the Subdivision.

SECTION 9
MAINTENANCE

9.1 Association's Responsibility. The Association shall maintain and keep in good repair the Areas of Common Responsibility, such maintenance to be funded as hereinafter provided. The Areas of Common Responsibility shall include, but need not be limited to entry, landscaping and signage easements; water retention/detention basins; common area utility easements, storm sewer and surface water drainage easements; preservation areas; all landscaping and other flora, structures, and

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

improvements, including any private streets, situated upon the Common Elements; landscaped medians within public right-of-way throughout the Property; the Recreational Facilities; and such portions of any Additional Property included within the Areas of Common Responsibility as may be dictated by this Declaration, any Supplemental Declaration, or by a contract or agreement for maintenance thereof by the Association. The Association may maintain other property which it does not own or share in the maintenance of Property it does not own, including, without limitation, property dedicated to the public or property owned by another homeowners' association, if the Board of Directors determines that such maintenance is necessary or desirable to maintain the Community-Wide Standard.

(a) There are hereby reserved to the Association blanket easements over the Property as necessary to enable the Association to fulfill responsibilities under this Section.

(b) Except as otherwise specifically provided herein, all costs associated with maintenance, repair and replacement of the Areas of Common Responsibility shall be a Common Expense to be allocated among all Units as part of the Base Assessment, subject to the right of the Association to seek reimbursement from the Owner(s) of, or other persons responsible for, certain portions of the Areas of Common Responsibility pursuant to this Declaration, other recorded covenants, or agreements with the Owner(s) thereof.

9.2 Owner's Responsibility. Each Owner shall maintain his or her Dwelling Unit and all Structures, and other improvements comprising the Dwelling Unit. Owners of Dwelling Units adjacent to any roadway within the Property shall maintain driveways serving their respective Dwelling Units, whether or not lying within the Dwelling Unit boundaries, and shall maintain and irrigate landscaping on that portion of the Common Element, if any, or right-of-way between the Dwelling Unit boundary and the back-of-curb of the adjacent street.

All maintenance required by this Subsection 9.2 shall be performed in a manner consistent with the Community-Wide Standard and all applicable covenants. In addition to any other enforcement rights available to the Association, if any Owner fails properly to perform his or her maintenance responsibility, the Association may enter such Owner's property and perform the required maintenance. The costs and expense of such maintenance shall be charged to the Owner thereof as an Individual Assessment in accordance with Subsection 4.5; provided, however, except when entry is required due to an emergency situation, the Association shall afford the Owner reasonable notice and an opportunity to cure the problem prior to entry.

9.3 Professional Management Contracts. The Association may delegate all or any portion of its authority, subject to the Board of Directors supervision, to discharge its responsibilities herein to a manager or managing agent. Any management agreement shall not exceed three (3) years and shall provide for termination by either party without cause and without payment of a termination fee on ninety (90) days or less written notice.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

SECTION 10
COVENANT FOR ADDITIONAL PROPERTY

10.1 Additional Property. Declarant reserves the right at any time to make subject to or annex any portion of the Additional Property to this Declaration without the consent of the Members of the Association. However, Declarant is not bound to annex any of the Additional Property to this Declaration, and until such time as any of the Additional Property is annexed, the same shall not be subject to the provisions of this Declaration.

10.2 Total Dwelling Units. The total number of Dwelling Units or Lots for the Property and the Additional Property shall not exceed the total number of Dwelling Units and Lots authorized by the zoning authority having jurisdiction over the development of the Property.

10.3 Supplemental Declaration for Additional Property. Any annexations made pursuant to this Section 10, or otherwise, shall be made by recording a supplement to this Declaration with the Kenton County, Kentucky Clerk's Office, which supplementary Declaration shall extend this Declaration to such annexed property. The supplementary Declaration may either waive some of the existing covenants, conditions and restrictions or contain additional covenants, conditions, restrictions, easements and liens with respect to that Additional Property being annexed therein as either Declarant shall deem appropriate. Owners of Lots subject to such supplemental Declaration shall be Owners as defined by this Declaration.

SECTION 11
ENFORCEMENT

11.1 Curing Defaults; Lien. In the event of any Default with respect to any Lot under this Declaration, the Board shall give written notice to the Owner thereof, with a copy of such notice to each Tenant in Default and a copy to any first mortgagee of the Lot who has requested to receive such notices, setting forth with reasonable particularity the nature of such Default, and the specific action or actions required to remedy the Default. If the Owner or Tenant shall fail to take the specific action or actions within thirty (30) days after the mailing of the notice, the Board may, but shall not be required to exercise any or all of its rights hereunder. The Board may exercise without notice any of its rights hereunder with respect to any Default if it determines that an emergency exists requiring immediate action.

Costs incurred by the Association in exercising any of its rights with respect to any Lot shall be a binding personal obligation of the Owner thereof which shall be payable on demand. If the Owner fails to pay such costs within thirty (30) days after demand, the Association shall enter the amount of the obligation, the name of the Owner as it appears on its records and the description of the Lot in a lien record book to be maintained by the Board at its main office, together with the date of such entry. The Association shall have a prior lien on such Lot for such amount until paid and such lien shall have priority from the date of such entry over all other liens and encumbrances thereon whatsoever, excepting real estate taxes and assessments, liens of record as of

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

the date of such entry and liens of the United States of America, the Commonwealth of Kentucky, and all other political subdivisions or governmental instrumentalities of the Commonwealth of Kentucky to the extent made superior by applicable law, all bona fide recorded first mortgages and the lien of any first mortgagee who comes into possession of a Lot pursuant to mortgage foreclosure or by deed in lieu thereof. The lien provided in this Section shall be recordable and shall be enforceable as provided in Section 4 hereof.

11.2 Remedies. Nothing contained in this Section 11 shall be deemed to affect or limit the rights of Declarant, the Association, any Owner, Occupant, or their legal representatives, heirs, devisees, successors or assigns, by appropriate judicial proceedings, to enforce the restrictions, or recover damages for any Default. It is hereby declared that irreparable harm will result to beneficiaries of this Declaration by reason of a Default, and, therefore, each beneficiary shall be entitled to relief by way of injunction or specific performance to enforce the provisions of this Declaration, as well as any other relief available at law or in equity.

11.3 Right and Easement of Entry. The Association, through its authorized officers, employees, and agents, shall have the right and easement to enter upon any Lot at all reasonable times and to do anything thereon necessary to perform the action or actions specified in the notice to the Owner to abate, remedy, extinguish, remove or repair a Default, without the Association or such officer, employee or agent being deemed to have committed a trespass or wrongful act solely by reason of each entry or such action or actions as are carried out in accordance with the provisions of this Section 11, provided that no summary abatement or similar procedure may be utilized through non-judicial means to alter or demolish items of construction.

11.4 No Waiver. The failure of Declarant, the Association, any Owner, Tenant, or their legal representatives, heirs, devisees, successors or assigns, in any one or more instances, to insist upon compliance with any of the Restrictions, or to exercise any right or privilege conferred in this Declaration, shall not constitute or be construed as the waiver of such or any similar restriction, right or privilege, including the right to cure Default, but the same shall continue and remain in full force and effect as if no such forbearance had occurred.

11.5 Rules and Regulations. The Board may adopt and enforce, and from time to time amend, reasonable rules and regulations regarding the administration, interpretation and enforcement of the Restrictions (the "Rules and Regulations"). Each such rule and regulation shall be consistent with and designed to further the purposes outlined in this Declaration.

SECTION 12
REAL ESTATE TAXES AND ASSESSMENTS

12.1 Real Estate Taxes. The Owner of a Lot shall be responsible for and shall pay all taxes and assessments, general and special, levied or imposed upon the Lot and its improvements.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

12.2 Common Elements. Taxes and assessments, general and special, charged against the Common Elements which are owned in fee simple by the Association shall be deemed a Common Expense. Assessments, charged against the Subdivision shall be paid by the Owners as set forth in Section 4 hereof.

SECTION 13
INSURANCE

13.1 Liability, Extended Coverage and Standard "All Risks" Insurance. The Association shall insure the Common Elements, and may maintain insurance for all other structures and improvements now or hereinafter constructed on the Common Elements against any loss or damage by such hazards as are ordinarily insured by a comprehensive, extended coverage and "all-risks" policies issued in the amounts at all times sufficient to prevent the Association from becoming co-insurers under the terms of any applicable coinsurance clause or provision and in no event less than the actual replacement cost of such improvements, as determined from time to time by the insurer.

Any such insurance shall be obtained from a fire and casualty insurance company authorized to write such insurance in the Commonwealth of Kentucky which has a general policy holder rating of no less than A, as determined by the then latest edition of the Best's Insurance Reports or its successor guide, and shall be written in the name of the Association for the use and benefit of the Lot Owners and their mortgagees as their interests may appear. The Board of Directors and/or its authorized representatives shall have the exclusive right to negotiate and adjust all loss claims. Unless the Board of Directors determines otherwise, all such insurance shall contain a waiver of subrogation of rights by the carrier as to the Association, its officers or Directors, and all Lot Owners and occupants.

13.2 Use of Fire Insurance Proceeds. Unless at least sixty-seven percent (67%) of the first mortgagees (based upon one vote for each first mortgage owned) or Owners (other than Declarant) of the individual lots have given their prior written approval, the Association shall not be entitled to use hazard insurance proceeds for losses to the Common Elements for other than the repair, replacement or reconstruction of such Common Elements.

13.3 Liability Insurance. The Association shall obtain and maintain a comprehensive policy of public liability insurance covering all Common Elements, and other areas for which the Association is responsible, and insuring the Association, the Directors, and the Lot Owners and members of their respective families, tenants and occupants, in an amount of not less than One Million Dollars ($1,000,000.00) per occurrence for personal injury and/or property. This insurance shall include protection against liability for risks arising out of the maintenance of the Areas of Common Responsibility and such other risks as are customarily covered with respect to developments similar in construction, location and use, as determined by the Board. This insurance shall contain a "severability of interest" endorsement which shall preclude the insurer from denying the claim for a Lot Owner, tenant or occupant

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

because of negligent acts of the Association, the Board, or other Lot Owners, tenants, or occupants.

13.4 Other Insurance. In addition, the Board may purchase and maintain contractual liability insurance, Directors' and officers' liability insurance, and such other insurance as the Board may deem desirable from time to time.

13.5 Insufficient Insurance. In the event the improvements forming a part of the Common Elements or any other area for which the Association is responsible, or any portion thereof, shall suffer damage or destruction from any cause or peril which is not insured against, or, if insured against, the insurance proceeds from which shall not be sufficient to pay the cost of repair, restoration or reconstruction, then, the Association shall advance such costs in excess of available insurance proceeds. The amount so advanced by the Association shall become a Special Assessment against all of the Lots, and such Assessments shall have the same force and effect, and, if not paid, may be enforced in the same manner as herein provided for the non-payment of Assessments. The action required to be taken by the Association under this Section shall not require any vote of the Members of the Association.

13.6 Fidelity Bonds. The Board may obtain as a Common Expense to the Association fidelity bond coverage with respect to any person who either handles or is responsible for funds held or administered by the Association, in an amount no less than the maximum funds that will be in the custody of the Association or its management agent at any time while the bond is in force; provided, however, the fidelity bond coverage must at least equal the sum of three months' Assessments on all Dwelling Units on the Property, plus the Association's reserve funds. A management agent handling funds for the Association shall also be covered by its own fidelity bond, naming the Association as an additional obligee, at the sole cost of said agent.

SECTION 14
RIGHT TO CURE, MEDIATION AND ARBITRATION OF ALLEGED DEFECTS

In order to provide an efficient procedure for resolving certain types of claims, as defined in this Section, the Association and all Owners shall be subject to the dispute resolution procedure set forth in this Section.

The Association and/or any Owner must provide Declarant with notice and reasonable opportunity to cure any claim by the Association or Owner arising out of or in any way relating to alleged defects by Declarant in developing the Property. If the claim is not resolved to the Association's and/or any Owner's reasonable satisfaction, any such claim, shall be settled by mediation. If within thirty (30) days after service by the Association and/or Owner upon Declarant of a written demand for mediation, the mediation does not result in complete settlement of the dispute, then any unresolved claim shall be settled by binding arbitration. Judgment on the arbitration award rendered by the arbitrators may be entered in any court having jurisdiction thereof and shall be binding and conclusive as to all parties and no appeal may be taken by any party.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

SECTION 15
FORUM SELECTION; WAIVER OF JURY TRIAL

The Association and/or any Owner shall be entitled to bring a lawsuit against Declarant for any claim not within the scope of Section 14. However, any such lawsuit brought by the Association and/or any Owner against Declarant shall be filed in either a state or federal court situated in the Commonwealth of Kentucky and the Association and/or any Owner by acceptance of delivery of a deed to a Unit expressly consent to the jurisdiction and venue of such court.

In addition to the foregoing, the Association and each Owner by acceptance of delivery of a deed to a Dwelling Unit, hereby waive the right to a trial by jury and acknowledge that all issues raised in any lawsuit filed pursuant to this Section 15 shall be decided by the judge presiding over the lawsuit.

SECTION 16
DURATION, AMENDMENT AND TERMINATION

16.1 Duration. The Restrictions shall be covenants running with the land and shall bind the Property and every part thereof, and shall (regardless of whether any such beneficiary owns an interest in any Lot) inure to the benefit of and be enforceable by, the Board and each Owner and Tenant and their legal representatives, heirs, devisees, successors and assigns, and shall continue in full force and effect for twenty (20) years from the date on which this Declaration is recorded in the Kenton County, Kentucky Clerk's Office. Thereafter the Restrictions shall be automatically renewed for successive ten-year periods unless amended or terminated as provided in this Section 16.

16.2 Amendment or Termination. Prior to the end of the Development Period, any provision of this Declaration may be amended in whole or in part or terminated by a recorded instrument executed by Declarant and approved by the Owners of at least sixty-seven percent (67%) of all Lots located in the Property. After the end of the Development Period, any provision of this Declaration may be amended in whole or in part or terminated by a recorded instrument approved by the Owners of at least sixty-seven percent (67%) of all Lots located in the Property.

The President of the Board shall determine whether the persons who have approved of any amendments or termination of this Declaration constitute Owners of at least sixty-seven percent (67%) of all Lots. Promptly after the approval of any amendment or termination of any part of this Declaration, the President of the Board shall cause to be recorded the written instrument of amendment or termination executed in properly recordable form by the President of the Association and Declarant, if during the Development Period, and the certificate of the President of the Association that the Owners of at least sixty-seven percent (67%) of all Lots have approved such instrument.

The Board shall maintain such copies filed with it by the President as a permanent record and shall make copies thereof available to any Owner at a reasonable cost.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

Notwithstanding anything above to the contrary, this Declaration may be amended at any time during the Development Period without the vote of Owners by a written instrument executed by Declarant for the purpose of eliminating or correcting any typographical or other inadvertent error herein; eliminating or resolving any ambiguity herein; making nominal changes; clarifying Declarant's original intent; making any changes necessary or desirable to meet the requirements of any institutional lender, Federal National Mortgage Association, or other agency which may insure loans on a Lot; provided, however, that no such amendment shall materially affect any Owner's interest in the Association or right, if any, to use the Common Elements. Each Owner and his or her mortgagees, by acceptance of a deed to a Lot or a mortgage encumbering such Lot, shall be deemed to have consented to and approved of the provisions of this paragraph and the amendment of this Declaration by Declarant as provided in the immediately preceding sentence. All such Owners and their mortgagees, upon request of Declarant, shall execute and deliver from time to time all such instruments and perform all such acts as may be deemed by Declarant to be necessary or proper to effectuate the provisions of this paragraph.

SECTION 17
MISCELLANEOUS

17.1 No Reverter. No covenant, condition, restriction or reservation or easement contained in this Declaration is intended to create, or shall be construed as creating, a condition subsequent or a possibility of reverter.

17.2 Notices. Any notice required or permitted to be given to an Owner or Tenant by the Board pursuant to the provisions of this Declaration shall be deemed given when mailed by United States mail, postage prepaid, addressed to his or her last address as it appears on the records of the Association.

17.3 Construction. The Board shall have the right to construe the provisions of this Declaration, and, in the absence of an adjudication by a court of competent jurisdiction to the contrary, such construction shall be final and binding as to all persons and entities benefited or bound by the provisions of this Declaration.

17.4 Invalidity. The determination by a court of competent jurisdiction that any provision of this Declaration is invalid for any reason shall not affect the validity of any other provision hereof.

17.5 Headings. The headings of the Sections are for convenience only and shall not affect the meaning or construction of the contents of this Declaration.

17.6 Gender. Throughout this Declaration, the masculine gender shall be deemed to include the feminine and neuter, and the singular the plural, and vice versa.

17.7 Conflict. If there are conflicts or inconsistencies between the provisions of the laws of the Commonwealth of Kentucky, the Articles of Incorporation, this Declaration, the Bylaws, Architectural Guidelines and the Rules and Regulations, it shall be agreed that the provisions of the laws of the Commonwealth of Kentucky, this

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

Declaration, the Articles of Incorporation, the Bylaws, the Architectural Guidelines and the Rules and Regulations (in that order) shall prevail.

17.8 Covenants Running with Land. This Declaration and all amendments hereto shall be, and shall be construed as, covenants running with the land, shall be binding upon Declarant, any mortgagee, the Association, its Members, each Owner, each Occupant and all claiming under each Owner or Occupant, and shall (regardless of whether or not any such beneficiary owns an interest in any Lot) inure to the benefit of and be enforceable by (i) Declarant, (ii) the Association, and (iii) each Owner and all claiming under each Owner.

17.9 Availability of Documents. The Association shall make available to Members, Owners, and lenders, and to holders, insurers, or guarantors of any first mortgage, current copies of the Declaration, rules and regulations, if any, and other rules concerning the Property. "Available" means available for inspection, upon request, during normal business hours or under other reasonable circumstances.

17.10 Right of Entry. The Association shall have a reasonable right of entry upon any Lot to make emergency repairs and to do other work reasonably necessary for the proper maintenance or operation of the Property.

17.11 Condemnation. In the event any Lot or any portion thereof, is made the subject matter of any condemnation or eminent domain proceeding or is otherwise sought to be acquired by a condemning authority, the net proceeds of any award or settlement shall be the property of the Owner and the holder of the first mortgage, to the extent of their respective interests. Each Owner shall give the holder of a first mortgage on the Owner's Lot timely written notice of such proceeding or proposed acquisition.

In the event the Common Elements or any portion thereof is made the subject matter of any condemnation or eminent domain proceedings or other sought to be acquired by a condemning authority, the proceeds of any award or settlement shall be distributed to the Association for the common benefit of the Owners and their mortgagees, as their interests appear.

Authentisign ID: A76AE9AA-AF9D-406B-B684-D4C8C8DF3945

IN WITNESS WHEREOF, Declarant has caused this Declaration of Covenants, Conditions and Restrictions and Reservation of Easements for THE VILLAGE OF KYLES LANE to be executed by its duly authorized officer as of the day and year first above written.

SURA PROPERTIES, LLC,
a Kentucky limited liability company

By: _____
Name: KEVIN R. BAUER
Title: Managing Member

STATE OF Colorado)
) : SS
COUNTY OF Denver)

The foregoing was acknowledged before me this 30 day of January, 2017 by KEVIN R. BAUER as Managing Member of SURA PROPERTIES, LLC, a Kentucky limited liability company, as Member of the limited liability company, on behalf of the limited liability company.

_____
Notary Public

BRANDY J. DE LUNA
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20124026500
MY COMMISSION EXPIRES MAY 18, 2021

GEOTECHNICAL EXPLORATION

GEOTECHNICAL EXPLORATION

PROPOSED KYLES LOOKOUT

COVINGTON, KENTUCKY

Prepared for: **SURA Properties, LLC**

Thelen Project No.: **140659E**

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408

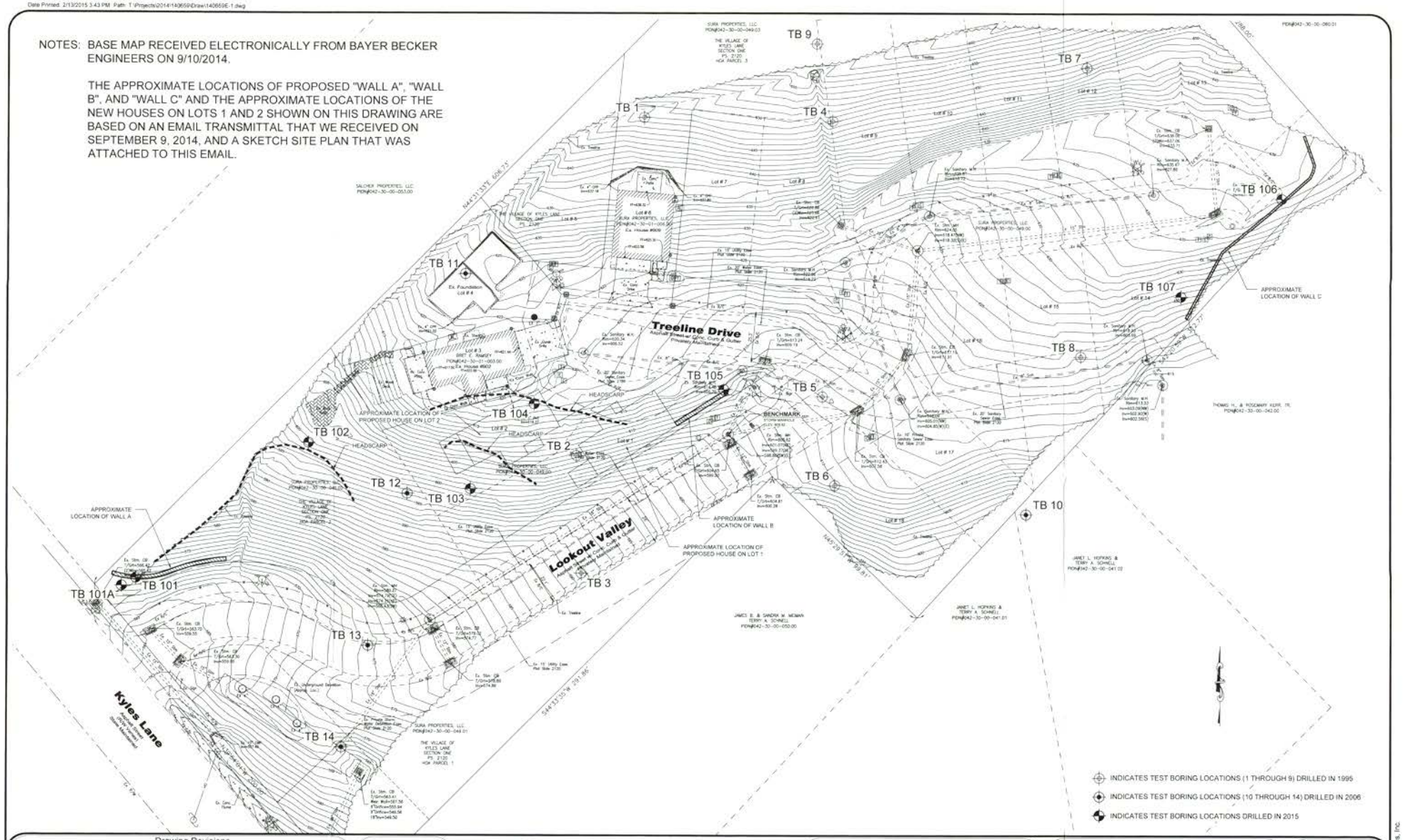
www.thelenassoc.com

Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

Date Printed: 2/13/2015 3:43 PM Path: T:\Projects\2014\140659\Draw\140659E-1.dwg

NOTES: BASE MAP RECEIVED ELECTRONICALLY FROM BAYER BECKER ENGINEERS ON 9/10/2014.

THE APPROXIMATE LOCATIONS OF PROPOSED "WALL A", "WALL B", AND "WALL C" AND THE APPROXIMATE LOCATIONS OF THE NEW HOUSES ON LOTS 1 AND 2 SHOWN ON THIS DRAWING ARE BASED ON AN EMAIL TRANSMITTAL THAT WE RECEIVED ON SEPTEMBER 9, 2014, AND A SKETCH SITE PLAN THAT WAS ATTACHED TO THIS EMAIL.



Drawing Revisions

Date:	Description:

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
1398 Cox Avenue, Erlanger, Kentucky 41018 / 859-746-9400
Lexington, Kentucky • Cincinnati, Ohio • Dayton, Ohio

Title:	BORING PLAN
Client:	SURA Properties, LLC
Project:	Geotechnical Exploration Proposed Kyles Lookout
Location:	Covington, Kentucky
Scale:	1" = 20'
Date	2/9/2015
Drawing No.	140659E-1

© 2015 Thelen Associates, Inc.

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408

www.thelenassoc.com
Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

© 2015 Thelen Associates, Inc.

February 13, 2015

SURA Properties, LLC
2270 Madeira Lane
Buffalo Grove, Illinois 60089

Attn: Mr. Kevin R. Bauer

Re: Geotechnical Exploration
Proposed Kyles Lookout
Covington, Kentucky

Ladies and Gentlemen:

Presented herein are the findings of our geotechnical exploration conducted at the site of the proposed Kyles Lookout Housing Complex to be located on the east side of Kyles Lane, approximately a few hundred feet north of its intersection with Madison Pike (Route 17), in Covington, Kentucky. The geotechnical work included test borings, laboratory testing and engineering services performed in accordance with our Proposal-Agreement No. K14670, dated October 24, 2014, which was authorized on January 9, 2015.

1.0 SCOPE

The purpose of the geotechnical exploration was to determine the general subsurface profile at the project site and to relate the engineering properties of the soils and bedrock, that is, their classification, strength and compressibility characteristics, to the foundation design of the proposed new retaining walls, and to the remedial operations of an existing landslide at the project site. The proposed retaining walls are identified in this report as Wall A, Wall B and Wall C.

2.0 BACKGROUND INFORMATION

It is understood that the footprints of the proposed Kyles Lookout Housing Complex will be as shown on a Site Plan entitled as "Kyles Lookout-Lookout Valley and Treeline Drive, City of Covington, Kenton County, Kentucky", dated September 4, 2014. This drawing, which was used as a basis for our Boring Plan (Drawing 140659E-1). For ease of reference, our Boring Plan included with this report can be used to appreciate the site conditions. Based on this plan, it is understood that the site of the proposed Kyles Lookout Housing Complex has eighteen lots identified as 1 through 18. The footprints of the subject lots and the footprints of the houses on Lots 3, 4 and 6 are shown on this drawing. Of these three lots with house footprints, the houses on Lots 3 and 6 already exist. The house on Lot 4 is under construction as of the writing of this report. Also presented in this drawing are the approximate locations of future proposed houses on Lots 1 and 2. As will be indicated in the following sections of this report, information pertaining to these future houses were obtained from a sketch plan that was sent to us on September 9, 2014.

This geotechnical study was carried out for developing design criteria for three proposed new retaining walls identified in this report as Wall A, Wall B and Wall C. As of this writing, the exact locations and heights of these walls have not yet been finalized. Based on an email transmittal that we received on September 9, 2014, and a Sketch Site Plan that was attached to this email, it is presumed that the proposed new walls will be constructed at locations as shown on the above-mentioned Sketch Site Plan.

We have served as Geotechnical Engineers at different time periods between 1995 and the present time for various then-proposed new developments for apartments and/or townhomes at this particular project site. The following is a brief summary of our services and highlights of our observations that we made in the past.

We had conducted a geotechnical exploration in this project site in November 1995 for a then-proposed development for new apartments. The subsurface conditions were explored in 1995 with nine (9) test borings. The findings of this initial study had been presented in a report entitled "Geotechnical Exploration, Proposed Apartments, Kyles Lane Site, Covington, Kentucky," dated November 6, 1995. Later in 2006, we provided

geotechnical consulting services for the then-proposed Villages of Kyles Lane Townhouses and drilled five additional tests borings identified as Test Borings 10 through 14. The findings of the study that we conducted in September 2006 were presented in a report entitled "Geotechnical Exploration, Proposed Villages of Kyles Lane Townhomes, Kyles Lane, Covington, Kentucky", dated September 25, 2006.

Based on the above-mentioned initial geotechnical consulting study, it was our opinion that the existing hillside on this site had a hummocky appearance. Hummocky topography was an indication of past ground movements. In this regard, the existing overburden on-site soils (colluvium) above the bedrock were considered to be in a tenuous state of stability. Therefore, it was recommended that the proposed cuts through the overburden be retained or buttressed in order to prevent the overburden upslope from landsliding down onto the cuts. Similarly, it was recommended that fills be initiated from bedrock benches to minimize the potential for the fill embankments landsliding dosnslope.

In 2007, the site plan of the then-proposed Villages of Kyles Lane Townhomes was revised. Based on this new concept, it was then proposed that a total of four buildings, numbered as Building No. 1, Building No. 2, Building No. 4 and Building No. 5 be constructed. It was also a design concept at that time that a future building (Building No. 6) was to be constructed in the southwestern portion of the property. Per this the then-proposed revised design concept, we provided an Addendum (Addendum I) to our original Geotechnical Report. This addendum was issued in a report, entitled "Addendum I, Geotechnical Exploration, Proposed Villages of Kyles Lane Townhomes, Kyles Lane, Covington, Kentucky", dated May 9, 2007. Per this Addendum report, we remained of our opinion that in all cut areas, the proposed cuts through the overburden soils should be retained or buttressed in order to prevent the overburden upslope from landsliding. In this regard, we recommended that the then-proposed new cut and fill slopes to be located on the north side of the Lookout Valley driveway from near its intersection with Kyles Lane to a distance some 300 feet east of this intersection, including those to be located on the north sides of the then-proposed Building Nos. 1, 2 and 4 (Lots 1 through 13 per the current study) and in the southwestern portion of the project site (Lot 18 of this new study) be constructed in such a way that the existing fill

and overburden soils are removed in their entirety along these new slopes so that the earth buttressing can then be initiated from bedrock benches. The construction of the earth buttressing was recommended to be carried out as indicated in our report of September 25, 2006. The proposed cut slopes through the soil overburden were to be constructed not steeper than 2.5 horizontal to 1 vertical. In the area of the proposed cut slope to be located on the north side of the existing driveway at a location as indicated above, we recommended that at least two underdrain systems be installed, one at the upslope side of the earth buttress and another near the middle of the bedrock benches, each where the buttress fill was to be placed against the bedrock. The locations of the underdrains were recommended to be field determined during the earthwork phase of the construction. The construction of the fill and the cut slopes in these portions of the site were not made in accordance with these recommendations. The then-proposed drains had not been placed either.

In 2007, we provided a conceptual plan and associated cross sections depicting the areas of the then-proposed bedrock benching in different portions of the then-proposed construction. The plan and the associated cross sections were submitted in a letter report entitled "Addendum II, Geotechnical Exploration, Proposed Villages of Kyles Lane Townhomes, Kyles Lane, Covington, Kentucky", dated May 10, 2007.

Later, as an alternate to the above mentioned then-proposed earthwork operations north of the then-proposed Building No. 3 and Building No. 4, we provided a conceptual plan for two drilled shaft walls to be located some 10 feet north of the then-proposed buildings. This plan was submitted in a letter report entitled "Addendum III, Consulting Services, Proposed Villages of Kyles Lane Townhomes, Kyles Lane, Covington, Kentucky", dated May 18, 2007. Per that letter, these then-proposed drilled shaft walls were estimated to be about 136 feet and 192 feet long for Building No. 3 and No. 4, respectively.

In 2007, we were retained by Tanner Custom Homes to provide construction review services for the construction of the driveway (Lookout Valley Drive) that makes access from the existing roadway (Kyles Lane) to the subject development. Our construction review services at that time consisted of monitoring the earthwork operations relative to

the fill procedures, performing the appropriate field tests to determine the percent of compaction, and reporting our findings and test results to our Client. We have reviewed our old records pertaining to a Grading Plan, prepared by Bayer Becker Engineers, drawing dated April 25, 2007. Based on this Grading Plan, our previous construction review services were carried out along the entire length of the driveway connecting the site of the proposed development to Kyles Lane, in the area of the above-mentioned then-proposed future Building No. 6, and in a proposed detention basin area situated south of the western portion of the driveway. No cut slopes buttressing was accomplished during this phase of construction.

In 2009, we were informed that the proposed development had another new concept, which included eighteen individual single-family lots, same as the concept presented in the above mentioned site plan entitled as "Kyles Lookout-Lookout Valley and Treeline Drive, City of Covington, Kenton County, Kentucky", dated September 4, 2014. At that time we conducted a consulting services study and submitted a report entitled as "Consulting Services Lots 3 and 4, Kyles Lookout, Kyles Lane, Covington, Kentucky", dated August 25, 2009. Per that development plan, each lot would house a residential building. Lots 3 and 4, which were the subject of our consulting services study in 2009 were located within the footprint of the then-proposed Building No. 1 of the above-mentioned then-proposed Kyles Lane Townhomes. For the purposes of the report that we issued in 2009, it was assumed that the longer dimensions of the proposed houses on Lots 3 and 4 extended in an east-west direction.

The above mentioned August 25, 2009 report indicated that, assuming that the existing pavement near the subject dwelling on Lot 3 was near El. 620.0, the garage and the basement floor levels of the then-proposed house on Lot 3 could then be estimated to be near El. 622.0 and El. 617.5, respectively. Conversely, it was estimated that the garage and the basement levels of the then-proposed house on Lot 4 would be near El. 626.0 and 621.5, respectively. We were informed at that time that both of the basement and the garage floor slabs of the then-proposed new houses on Lots 3 and 4 would be structurally supported. Based on the recently proposed site plan entitled as "Kyles Lookout-Lookout Valley and Treeline Drive, City of Covington, Kenton County, Kentucky", dated September 4, 2014, the garage level of the existing house on Lot 3 is

at El. 621.4. The basement level of the same house is at El. 617.5. As indicated previously, the subject house on Lot 4 is presently under construction.

On his site visit of August 21, 2009, the writer had noted that some of the excavated soils had been pushed over the existing hillside to the west and to the southwest of the then-proposed house on Lot 3. The crest of the new fill slope measured some 15 to 20 feet to the west and to the southwest of the then-proposed house on Lot 3. It was estimated that near the southwest corner of the subject dwelling on this lot, the thickness of the fills placed in connection with the earthwork operations carried out during the construction of the house was about 1 foot. Further to the west and the southwest of this subject dwelling, the thicknesses of the fills generated as a result of pushing the excavated soils over the existing hillside was estimated to be as much as 7 feet. It was the writer's judgment that fills of as much as 4 feet in thickness had been placed in the area of the then-proposed house on Lot 3 during some earlier phase of construction.

Later, on his site visit on August 25, 2009, the writer noted that an excavation was made in the area of the proposed house on Lot 4. In the basement portion of the subject house on this lot, the bottom of the excavation did not expose bedrock and was estimated to be approximately 4 feet above the basement subgrade level of the then-proposed house on Lot 3. On this basis, assuming that the existing basement subgrade level on Lot 3 was near El. 616.5 (assumed one foot below finished basement floor elevation), it was estimated that the bottom of the basement excavation on Lot 4 was near approximate El. 620.5. An excavation had also been made along the northern, the eastern and the southern sides of the garage portion of the then-proposed house on Lot 4. The bottoms of the excavations in the garage portion of the house on Lot 4 were estimated to be near approximate El. 625.0. The writer noted that in the northeastern portion of the excavations made in the garage portion of the house on this lot, the excavations exposed bedrock. Assuming that the bottom of the excavation in the garage portion of the house on Lot 4 was near El. 622.5, the upper boundary of the bedrock was estimated to be near El. 624.0.

On his site visit of August 25, 2009, the writer noted that some of the excavated soils had also been pushed over the existing hillside to the west of the then-proposed house

on Lot 4. The crest of the new fill slope in this area measured some 20 feet to the west of the proposed house on this lot. The writer estimated that near the northwest corner of the subject dwelling on Lot 4, minor amount of fills of about 1 foot in thickness were placed in connection with the earthwork operations carried out during the construction of the house on this lot. Further to the west and the southwest of this subject dwelling, the thickness of the fills generated as a result of pushing the excavated soils over the existing hillside was estimated to be as much as 8 feet.

We recommended that the then-proposed houses on Lots 3 and 4 be supported entirely on the bedrock. The then-proposed garage portions of the dwellings were also recommended to be supported on spread footings bearing in the bedrock, the interbedded shale and limestone, proportioning the footings for a maximum net allowable bearing capacity of 6000 pounds per square foot. Foundation walls of the garages were recommended to be designed against lateral loads. In the basement portions of the then-proposed houses, the foundation walls were recommended to be supported on piers designed also against lateral loads.

Per the above-mentioned August 25, 2009 report, it was estimated that at the northeastern, the northwestern, the southeastern, and the southwestern corners of the basement portion of the then-proposed house on Lot 3, the upper boundary of the stable grounds (the upper boundary of the weathered bedrock) was approximately 4.5, 8.5, 6.5 and 10.5 feet below the basement floor subgrade level, i.e., at approximate El. 612.0, El. 608.0, El. 610.0, and El. 606.0, respectively. Conversely at the northeastern and the southeastern corners of the garage portion of the same house, the upper boundary of the weathered bedrock was estimated at approximately 3.5 and 4 feet below the bottom of the existing footing excavation, i.e., at approximate El. 613.5 and El. 612.5, respectively.

Insofar as the then-proposed dwelling on Lot 4 was concerned, it was estimated that at the northeastern, the northwestern, the southeastern and the southwestern corners of the basement portion of this house, the upper boundary of the weathered bedrock was approximately 1.5, 7.5, 3.5 and 7.5 feet below the basement floor subgrade level, i.e., at approximate El. 619.0, El. 613.0, El. 617.0, and El. 613.0, respectively. As indicated previously, at the northeastern corner of the garage portion of the same house, the

upper boundary of the weathered bedrock was noted to be near approximate El. 624.0. It was estimated that near the southeastern corner of the garage, the upper boundary of the weathered bedrock was about 2.5 feet below the bottom of the footing excavation in that area, i.e., near approximate El. 620.0.

It was recommended that the then-proposed below-grade foundation walls be designed as restrained retaining walls. That is, they were to have a sufficient amount of reinforcement in them to sustain lateral loads.

On the basis of the above, it was recommended that, in the design of the north and the east sides of the proposed house on Lot 4, the upper portions of these walls above the upper boundary of the weathered bedrock below the exterior grades was subjected to a rectangular lateral load of 120 x H pounds per square foot, where H was the elevation difference between the exterior grades immediately adjacent to these walls and the top of the bedrock. Below the bedrock surface, a lateral earth pressure of 35 pounds per cubic foot as an equivalent fluid weight was recommended to be considered in the design.

It was recommended that, in the design of the subject houses, it be considered that as the ground west of the then-proposed house on Lot 4 and west and south of the then-proposed house on Lot 3 may creep downwardly to the west and south, the below-grade foundation walls below the ground floor levels to be provided along the south and the west sides of the house on Lot 3 and along the west side of the house on Lot 4 would then resist a rectangular lateral pressure of 45 x H pounds per square foot, where H was the elevation difference between the proposed ground floor surface and the top of the bedrock.

Insofar as the then-proposed foundation walls along the north and the east sides of the then-proposed house on Lot 3 and the south side of the then-proposed house on Lot 4 were concerned, it was our recommendation that these walls be designed to resist to rectangular lateral loads of 45 x H pounds per square foot, where H was the elevation difference between the exterior grades immediately adjacent to these walls and to the ground floor levels of the proposed dwellings.

As indicated in the above mentioned August 25, 2009 report, at the southeastern and the northeastern corners of the garage and at the northwestern and the southwestern corners of the basement portion of the then-proposed house on Lot 4, the upper boundary of the bedrock was estimated to be near El. 620.0, El. 624.0, El. 613.0, and El. 613.0, respectively. At the northwestern and the southwestern corners of the proposed house on Lot 4, the bedrock surface was estimated to be as much as 7.5 feet below the basement subgrade level. Conversely, at the southeastern and the northeastern corners of the garage, and at the northwestern and the southwestern corners of the basement portion of the house on Lot 3, the upper boundary of the bedrock was estimated to be approximately 4.0, 3.5, 8.5 and 10.5 feet below the basement subgrade level, i.e., near El. 612.5, El. 613.5, El. 608.0, and El. 606.0, respectively.

On the basis of the above, since the surface of the stable ground, i.e., the surface of the bedrock was as much as 7.5 feet and 10.5 feet below the basement subgrade levels on Lots 4 and 3, respectively, the above mentioned August 25, 2009 report recommended that the northern, the western and the southern foundation walls of the basement portions of the then-proposed houses on Lots 3 and 4 be supported on piers designed against the above-indicated lateral loads. For the end bearing, an allowable bearing capacity of 6000 pounds per square foot, full dead and full live loads, was recommended for the piers.

When designing a given pier against lateral loads, it was recommended that passive resistance be considered in effect in a section of the pier below the bedrock only. For the bedrock, the passive pressures were estimated on the basis of an ultimate passive earth pressure of 6000 pounds per square foot of contact area. In the design of the retaining foundation walls on spread footings, an ultimate base friction coefficient of 0.3 was recommended to be used in the design.

A total of twelve and ten drilled shafts were then installed in the areas of the then-proposed houses on Lots 3 and 4, respectively, between September 10 and 14, 2009. We provided construction review services during the installation of these drilled shafts and confirmed that they were installed in accordance with our recommendations. We

also provided construction review services during the foundation construction of these houses.

For the subject house on Lot 3, nine 30-inch and three 24-inch-diameter drilled shafts were drilled around the basement and the patio perimeter of the subject house, respectively. The lengths of the 30-inch-diameter shafts varied from about 14.0 to 19.5 feet. The socket depths of the 30-inch-diameter piers into the bedrock were 7 feet. The three 24-inch-diameter piers provided along the west side of the patio were 15.7 to 17.0 feet in depth. They were socketed into the bedrock of about 4.3 to 4.7 feet. The 24-inch-diameter piers were reinforced with 8 # 5 vertical bars and #4 circular ties at 16 inches on center. The 30-inch-diameter piers were reinforced with 12 # 7 vertical bars and #4 circular ties at 12 inches on center. The 30-inch-diameter piers included 4 # 5 dowels extended 5 feet up into the footing/foundation walls.

For the subject house on Lot 4, eight 30-inch and two 24-inch-diameter drilled shafts were drilled around the basement and the patio perimeter of the subject house, respectively. The lengths of the 30-inch-diameter shaft varied from about 12.0 to 14.5 feet. The socket depths of the 30-inch-diameter piers into the bedrock were 7 feet. The two 24-inch-diameter piers provided along the west side of the patio were 13 and 14 feet in depth. They were socketed into the bedrock of about 4.0 and 4.5 feet. The 24-inch-diameter piers were reinforced with 8 # 5 vertical bars and #4 circular ties at 16 inches on center. The 30-inch-diameter piers were reinforced with 12 # 7 vertical bars and #4 circular ties at 12 inches on center. The 30-inch-diameter piers included 4 # 5 dowels extended 5 feet up into the footing/foundation walls. Per a note on the foundation plans for Lots 3 and 4 by the Structural Engineer for the project, the basement and garage floor slabs of the houses on Lots 3 and 4 were to be 4 inches in thickness and not supported structurally, but supported on-grade.

Presently, the construction of the house on Lot 3 is complete and the subject house is occupied. Insofar as the new house on Lot 4, is concerned, as part of this contract, the existing conditions together with the recently constructed foundation walls in the area of Lot 4 of the subject development were to be reviewed by us to make an engineering judgment as to whether or not the existing conditions in the subject area may be considered favorable to continue with the construction of a new structure since the

original foundation was constructed over five years ago. For this assessment, we were to review our records particularly for this lot. It is understood that the existing conditions and this particular lot were reviewed by others, who already concluded that the existing conditions were favorable and that the construction on the lot could resume. As of this writing, a structure of a house is already being erected on this particular lot. From our review, we see no reason to take exception to this process.

It is understood that the existing on-site soils situated to the south and the southwest of Lot 3 slipped downslope towards the existing driveway situated further to the south, and the topography developed a somewhat hummocky appearance in localized areas. As part of this study, the approximate limits of the landslide were determined by surveying. As shown on our Drawing 140659E-1, the subject landslide has at least three headscarps indicating that the hillside to the south and the southwest of Lot 3 is in a state of instability. It is estimated that the affected area by the slide begins near the intersection of Lookout Valley Drive with Kyles Lane and extends some 300 feet to the east. The toe of the landslide is estimated to be near the northern curb line of the existing Lookout Valley Drive. Presently, the subject landslide adversely affected the southerly located existing sidewalk of the existing house on Lot 3. Specifically, this sidewalk is noted to have moved a few inches away from the existing house towards the south.

The approximate locations of Wall A, Wall B and Wall C together with the approximate locations of the proposed new houses on Lots 1 and 2 are shown for reference purposes on Drawing 140659E-1 in the Appendix to this report. It should be noted that these additional data pertaining to these proposed structures were obtained from a Sketch Site Plan that was attached to an email that was received from the Client on September 9, 2014.

It is understood that Wall A will possibly be 60 feet in length. It is our understanding that it will be provided in an area of a recently made cut for the wall to retain the existing cut slope north of this proposed wall. Based on our recent site reconnaissance visit, the cuts made in the proximity of Wall A generally expose bedrock consisting of interbedded shale and limestone. This means that the toe of the slope has had the overburden

removed from supporting the adjacent property to the north. The proposed height of Wall A is estimated at less than 5 feet above the existing ground surface.

Wall B is estimated to be some 30 feet in length. It may be as much as 12.5 feet in height to retain the proposed driveway for the house to be constructed on Lot 1. Wall C is estimated to be 110 feet in length. Approximately 10 feet south of Wall C, the existing grades of the adjacent property are some 5 to 6 feet below the existing grades near the proximity of the proposed wall C. Further to the south from the east end of the entrance drive, the existing grades at the low grounds in the adjacent property are some 10 to 15 feet below the existing grades on the high ground, representing a relatively steep slope. The top of Wall C is estimated to be near the existing ground surface or a few feet above the existing ground surface.

3.0 SUBSURFACE EXPLORATION

Initially, a review was made of information available in our records, which included test borings drilled at the project site. Specifically, as indicated previously, we had conducted a geotechnical exploration at this project site in November 1995 for a then-proposed new development for apartments. In connection with that study, three cross sections had been drawn. The subsurface conditions had been explored at that time with nine (9) test borings, numbered as 1 through 9. Later, a supplementary geotechnical study was conducted at this particular project site on August 2, 2006 and a total of five more test borings, numbered as Test Borings 10 through 14, were drilled.

The field exploration for this most recent project was carried out between January 16 and 23, 2015. A total of eight test borings, numbered as Test Borings 101 through 107 and 101A, were drilled at the locations selected by us relative to features shown on a site plan prepared by Bayer Becker Engineers, which was made electronically available to us. This site plan is included in the Appendix to this report and referred to as the Thelen Associates, Inc. (Thelen) Boring Plan, Drawing 140659E-1. The test borings were staked in the field by the writer. The elevations of the test borings were surveyed in the field by us using the rim elevation of an existing storm manhole as a benchmark, El. 605.62. This benchmark location is shown on Drawing 140659E-1 in the Appendix to this report. Due to problems associated with access, Test Boring 101 was originally

drilled at an alternate location identified as Test Boring 101A. Later Test Boring 101 was drilled at its originally planned location.

The test borings were made with a track-mounted drill rig advancing continuous flight augers. Standard split spoon and thin-walled Shelby tube sampling were accomplished ahead of the augers following the procedures outlined in ASTM D1586 and ASTM D1587. Observations for groundwater were made in the borings during drilling and after their completion.

4.0 LABORATORY TESTING AND REVIEW

The samples from the test borings were reviewed and visually classified in the laboratory by the Project Geotechnical Engineer. Representative samples were selected for moisture content tests, Atterberg limits tests, gradation tests, and an unconfined compression test. The moisture content, classification and strength test results are included on the Tabulation of Laboratory Tests in the Appendix along with the gradation analyses and unconfined compression test forms.

Final test boring logs were prepared by the Project Geotechnical Engineer on the basis of the visual classification in the laboratory, the laboratory test results and the field logs kept by the Drilling Technician. Copies of the final test boring logs are included in the Appendix along with a Soil Classification Sheet which describes the terms and symbols used on the test boring logs. In addition, for ease of reference, the logs of previous Test Borings 1 through 9 drilled by Thelen (formerly G. J. Thelen & Associates, Inc.) at the proposed development in 1995, and Test Borings 10 through 14 also drilled by Thelen in 2006 are also presented in the Appendix.

The lines identifying the changes between soil and/or bedrock types on the boring logs were determined by interpolation between samples and should be considered approximate. Only a change which occurs within a sample can be precisely determined. The transition between soil and bedrock types may be abrupt or gradual.

5.0 SUBSURFACE CONDITIONS

The subsurface profile depicted by our previous Test Borings 1 through 14 consist of mostly soft to very stiff fills overlaying colluvial and residual silty clays or clays, all over

bedrock, interbedded shale and limestone. In our recent Test Borings 101 through 107 and 101A, the ground surface is also underlain beneath the thin surficial topsoil by fill and colluvial soils over the bedrock.

Our current Test Borings 101 through 107 encountered a layer of fill (Stratum I) of about 3.5, 7.0, 7.0, 7.0, 7.0, 12.0, and 7.0 feet in thickness, respectively. The fill encountered in these test borings consisted generally of brown moist medium stiff silty clays with trace limestone fragments and/or floaters and trace roots. In test Boring 103, the upper portion of the fill with a thickness of 5.0 feet was soft in consistency. Conversely, in Test Borings 104 and 106, the lower portions of the fill between depths of 2.0 and 7.0 feet and between depths of 4.0 and 12.0 feet below the existing ground surface was stiff to very stiff in consistency. Four representative samples of the fill deposit classified CL according to the Unified Soil Classification System (USCS) with liquid limits of 46, 43, 43 and 47 percent and plasticity indices of about 21, 20, 20 and 22 percent, respectively. The gradation characteristics of one sample of this deposit are reflected by a grain size curve presented in the Appendix. Fifteen moisture content tests conducted on samples obtained from the fill stratum gave moisture content values varying from 18 to 25 percent, averaging 21 percent.

Our current Test Boring 105 encountered a 1.5-foot-thick wet very loose fine to coarse sand layer with trace of gravel at a depth of 7.0 feet below the existing ground surface. This granular fill layer is believed to have been placed as backfill for a nearby utility line within the proximity of this test boring.

Our previous Test Borings 2, 3, 5, 6, 8, 10, 12, 13 and 14 also encountered a layer of fill (Stratum I) of about 7.0, 2.0, 6.0, 3.2, 4.5, 2.0, 4.5, 2.0 and 2.0 feet in thickness, respectively. The fill encountered in those previous test borings consisted of soft to very stiff silty clays and clays with shale fragments, limestone floaters, topsoil and organic matter. The soft zones of the fill stratum were encountered in Test Borings 2, 5, 6 and 8 in the upper portions of the profile. In Test Boring 6, the approximately 2-foot-thick soft fill layer was noted to have been underlain by an about 1.2-foot-thick dark brown moist stiff topsoil layer. In Test Boring 8, the approximately 2-foot-thick soft fill layer was noted to have been underlain by an about 2.5-foot-thick moist medium stiff to stiff topsoil

layer with hairlike roots. In Test Borings 5, 12 and 13, the upper portion of the fill of about 4.0, 2.0 and 2.0 feet in thickness was medium stiff to stiff in consistency.

Our current Test Borings 102, 104 and 106 encountered an about 2.5, 2.5, and 5.0-foot-thick colluvial deposit (Stratum II) below the fill layer, consisting of brown moist stiff to very stiff silty clays. The moisture content tests conducted on samples obtained from the colluvium stratum gave moisture content values varying from 15 to 20 percent.

Our previous Test Borings 1 through 9, 11, 13 and 14 encountered an about 4.5, 1.3, 2.5, 4.5, 1.0, 1.3, 0.9, 3.8, 4.0, 4.5, 2.7 and 2.5-foot-thick colluvial deposit (Stratum II) below the fill and/or the thin surficial topsoil layer, consisting of brown moist stiff to very stiff silty clay or clay with trace roots.

Our previous Test Borings 6, 10, 12 and 14 encountered an about 2.3, 2.5, 2.5, and 2.5-foot-thick residual soil layer (Stratum III) consisting of brown moist stiff to very stiff silty clay with limestone floaters and trace bedding planes.

Our previous and current test borings revealed the presence of the bedrock formation consisting of interbedded shale and limestone underlying the fill and the colluvial deposits and the residual soils. In general, the uppermost zone of the bedrock is characterized as a highly weathered shale and limestone (Stratum V-A) wherein the shale is brown and has almost weathered to clay, yet the bedding planes can still be seen. This zone was encountered in all of our current and previous test borings except Test Borings 101, 101A, 103, 1, 4, 6, 10 and 12. In Test Borings 102, 105, 7, 11, 13 and 14, where this stratum was fully penetrated, the thickness of this zone was about 2.5, 0.5, 3.6, 3.5, 2.8 and 2.5 feet, respectively. The remaining test borings were terminated in this deposit. Three (3) moisture content tests from representative samples of this zone obtained from our current test borings gave moisture content values of about 14 to 16 percent.

The intermediate zone, which was encountered in Test Borings 101, 102, 103, 1, 4, 6, 7, 10, 11, 13 and 14 is interbedded brown and olive brown soft weathered shale and limestone (Stratum V-B). In Test Borings 101, 1, 6, 10 and 11, where this stratum was

fully penetrated, the thickness of this stratum was about 5.5, 5.0, 2.5, 7.9 and 2.0 feet, respectively.

The parent bedrock, which was encountered in Test Borings 101, 105, 1, 6, 10, 11 and 12, is interbedded gray shale and limestone (Stratum V-C). In these test borings, the upper boundary of the interbedded gray shale and limestone was encountered at depths of approximately 9.0, 9.0, 9.5, 9.5, 12.5, 10 and 7 feet below the existing grades, respectively.

6.0 GROUNDWATER CONDITIONS

All of our previous and current test borings were noted to be dry within the depths penetrated upon completion of the drilling. Long-term groundwater level readings of our previous Test Borings 1 and 7 had revealed that the groundwater lies at depths of about 1.0 and 5.5 feet below the existing ground surface. Notations relative to the groundwater are indicated at the bottoms of the test boring logs. In general, experience has found that groundwater may be encountered as seepage along limestone layers in the bedrock profile. Groundwater can also be expected as seepage from the soil/bedrock interface, particularly where previous or existing drainage patterns are concentrated.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 General

Based upon our engineering reconnaissance of the site, the test borings, a visual examination of the samples, the laboratory tests, our understanding of the proposed construction, and our experience as Consulting Soil and Foundation Engineers in the Northern Kentucky Area, we have reached the following conclusions and make the following recommendations.

The conclusions and recommendations of this report have been derived by relating the general principles of the discipline of Geotechnical Engineering to the conditions of the subject slope south and southwest of the existing house on Lot 3 and the proposed new retaining walls of the subject new development outlined by the Background Information section of this report. Because changes in surface, subsurface, climatic, and economic

conditions can occur with time and location, we recommend for our mutual interest that the use of this report be restricted to this specific phase of the project.

Our understanding of the proposed design and construction is based on the documents provided to us at the time this report was prepared and which is referenced in the Background Information section of this report. We recommend that our office be retained to review the final design documents, plans and specifications to assess any impact changes, additions or revisions in these documents may have on the conclusions and recommendations of this Geotechnical Report. Any changes or modifications which are made in the field during the construction phase which alter site grading, structure locations, infrastructure or other related site work should also be reviewed by our office prior to their implementation.

If conditions are encountered in the field during construction which varies from the facts of this report, we recommend that our office be contacted immediately to review the changed conditions in the field and make appropriate recommendations.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, bedrock, surface water, groundwater or air, on or below or around this site. We have performed the test borings and laboratory tests for our evaluation of the site conditions and for the formulation of the conclusions and recommendations of this report. We assume no responsibility for the interpretation or extrapolation of the data by others.

The earthwork recommendations of this report presume that the earthwork will be monitored continuously by an Engineering Technician under the direction of a Registered Professional Geotechnical Engineer. We recommend that the Owner contract these services directly with Thelen Associates, Inc.

7.2 Stability of the Existing Slope to the South and the Southwest of the Existing House on Lot 3

The specific findings of the test borings completed as part of our subsurface exploration of this site indicate that in the area of the existing landslide to the south and the

southwest of the existing house on Lot 3, the thickness of the overburden material above the bedrock is on the order of 0.7 to 9.5 feet. Specifically, in our current Test Borings 101 through 105, and in our previous Test Borings 2 and 12 drilled in/or within the proximity of the subject landslide, the upper boundary of the bedrock was encountered at approximate El. 568.0, 590.1, 593.5, 608.7, 605.5, 604.8 and 590.6, i.e., at depths of about 3.5, 9.5, 7.0, 9.5, 8.5, 0.7 and 5.4 feet below the existing ground surface, respectively. The on-site overburden soils are relatively less plastic with liquid limits varying from 43 to 47 percent, averaging 45 percent, and plasticity indices varying from 20 to 22 percent, averaging 21 percent. Their clay-size fraction is estimated to be near 50 percent.

The existing cut-slope south and southwest of existing house on Lot 3 is understood to have been constructed with a gradient of 2 to 2.5 horizontal to 1 vertical. As indicated above, this cut-slope was not constructed in accordance to our initial recommendations.

It is known that all overconsolidated clays experience significant degradation with time. The two long-term drained shear strengths that are considered in the analyses of slopes are the residual and fully-softened shear strengths. The drained fully-softened shear strength of cohesive soils is an important parameter in evaluating the stability of slopes that have not undergone previous sliding (first time slides). Softening of an overconsolidated clay reduces the effective cohesion component of the Mohr-Coulomb shear strength parameters, but does not cause reorientation of clay particles or a reduction in the friction angle. Consequently, it is our opinion that the long-term shear strength available in an overconsolidated clay that has not undergone previous sliding corresponds to the fully-softened condition. The fully-softened condition corresponds to the condition after which the overconsolidated clay has absorbed as much water as it desires and has reached equilibrium at a particular site (Stark-2005). The fully-softened shear strength is reportedly numerically equal to the drained peak strength of a normally consolidated specimen. On this basis, when determining the fully-softened strength characteristics of all overconsolidated clays, we considered that the value of cohesion be considered as zero.

The residual shear strength values represent those soil strengths along pre-existing failure planes. The existing landslide contains failure planes. In the subject cut slope,

the failure plane is considered along the interface between the bedrock and the overburden soils above the bedrock.

Based on the above-mentioned document, the fully-softened and residual strength parameters of cohesive soils can be empirically determined. Specifically, based on the above-mentioned index properties, we estimated that the fully-softened and residual drained shear strength parameters of the existing on-site overburden soils in this particular project site would be as shown below.

Table 1: Shear strength properties of the on-site soils used in the stability analyses.

Soil Type	Fully-Softened Friction Angle (Φ)	Residual Friction Angle (Φ)
Overburden Soils	28.9	20.7

The bedrock materials, because of their strength and horizontal stratification, are not prone to landsliding. Therefore, it is our opinion that the existing landslide has shallow movements. That is, the shear planes of the landslide are along the interface between the bedrock and the overburden soils above the bedrock.

Based on our assessment, it will be feasible, from an engineering viewpoint, that the existing landslide may be stabilized by an excavate-refill method provided that the final reconstructed slope has a gradient which is not steeper than 2.5 horizontal to 1 vertical. As indicated in our earlier report of September 25, 2006, for stability purposes, it will be essential that excavations be made into the face of the existing hillside in the landslide area so that the newly constructed slope with a gradient not greater than 2.5 horizontal to 1 vertical has an earth buttressing in order to prevent the overburden upslope from landsliding. In this operation, it will be necessary that excavation depths be such that all fill, colluvial and residual soils affected by the existing sliding be removed, so that the earth buttressing can be initiated from bedrock benches. The earth buttressing (keyway) to be provided as part of these operations should be embedded into the bedrock to a depth of approximately 1 foot. We recommend that the northern limit of

the earth buttressing operation on bedrock benches be located at a distance some 10 feet south of the existing house on Lot 3 and some 10 feet north of the westerly located head scarp of the existing landslide near our Test Boring 102. We recommend that the individual bedrock bench widths be no less than 10 feet wide.

It is our opinion that the excavated soils from the benches can be reused as compacted backfill. As with most of the Northern Kentucky Area profiles, the limitation on use of soils for compacted fills will be governed by the moisture content at the time of compaction. Clayey soils and shales are moisture dependent and it will be necessary to have the moisture content of these materials near optimum moisture content at the time of compaction in order to attain the recommended degree of compaction. Experience has found that the optimum season of the year for earthwork in the Northern Kentucky Area is during the months of May through October because of the historically more favorable weather conditions during that period. It is recommended that any excavations required for the earth buttressing operations be refilled within 24 hours of initial excavation, unless temporarily buttressed by the Earthwork Contractor.

We recommend that the earthwork of the excavate-refill operation be completed prior to initiating construction of the proposed houses on Lots 1 and 2.

In connection with the above mentioned remedial work, it will be essential that the construction of the proposed earth buttressing at the toe be performed in sections not greater than 30 feet long so as to minimize the risks of the overall stability of the existing hillside being jeopardized. Utmost care and precautions need to be taken if the proposed earthwork operations are performed outside the above specified favorable months of the year to minimize any impact that unfavorable weather conditions may have on the stability of the existing steep slope.

We recommend that the excavate-refill operation be carried out from the approximate toe of the instability to at least five feet upslope of the existing headscarp with the exception of the area below the house on Lot 3. We recommend that the earthwork progress no nearer than 15 feet from that house.

The earth buttressing should be constructed of approved on-site clayey soils placed in maximum 6- to 8-inch thick lifts and compacted with an appropriate type of compaction equipment to not less than 98 percent of the standard Proctor maximum dry density, ASTM D698. We also recommend that at least two underdrain systems be installed at the upslope side of the earth buttress where the buttress fill is placed against the bedrock. The locations of the underdrains should be field determined during the earthwork phase of the construction. The underdrain should be at least 2 feet wide and the tops of the drains should be at least 2 feet above the surface of the bedrock. They should penetrate at least 3 feet into the bedrock. The drain systems should consist of compacted pea gravel wrapped with a geotextile fabric. The granular backfill should be compacted to at least 75 percent relative density in 8-inch-lifts with vibratory equipment. The trenches for the drain system should slope at a minimum of 2 percent gradient towards suitable outlet locations. The geotextile frabric should be Mirifi 140N, or equivalent.

It is anticipated that the proposed foundation elevations of the proposed new houses on Lots 1 and 2 will be similar to those of the existing foundations, on Lots 3 and 4, that is, the surface of the bedrock within the footprints of these houses are located at relatively deep depths below the anticipated basement subgrade levels such that it will also necessitate supporting these houses on piers designed against lateral loads. In this regard, the proposed piers to be provided for the support of the proposed houses on these lots will help stabilize the existing landslide in areas upslope of the proposed piers. We recommend, however, that the above-mentioned remedial method involving an excavate-refill operation extend into the areas of the subject houses on Lots 1 and 2, as recommended above. Furthermore, as a precaution, we recommend that the foundation design of these new houses on Lots 1 and 2 include resistance to lateral loads similar to that which were recommended for the houses on Lots 3 and 4.

7.3 Design Criteria for Proposed Wall A, Wall B and Wall C

It is our recommendation that the proposed walls identified in this project as Wall A, Wall B and Wall C consist of drilled shafts. Retaining structures consisting of drilled shafts require very little excavations during their construction, which is an important consideration for this particular project. It should be kept in mind that other types of

retaining structures, such as conventional concrete retaining walls or geogrid segmental walls, may require significant amounts of excavations for foundation construction. Excessive excavations should be avoided in this particular project due to their potential adverse effect on the stability of the hillside.

The approximate locations of the walls are shown on Drawing 140659E-1. We offer the following design criteria for these walls.

As indicated on the above-mentioned drawing, Wall A is anticipated to be some 60 feet long. Near the proximity of the northern curb line of the entrance drive, i.e., Lookout Valley Drive, the cuts made in the proximity of Wall A are noted to have generally exposed bedrock consisting of interbedded shale and gray limestone, meaning that the toe of the slope has had the overburden removed from supporting the overburden on the adjacent property. This wall is understood to be provided to protect the sloping hillside north of this wall in the project property and in the adjacent property. It should be considered in the design of Wall A that along this wall, the upper boundary of the stable ground, i.e., the upper boundary of the bedrock is located 4 feet below the existing ground surface, and that the upper segment of the wall between the top of the wall and the upper boundary of the bedrock will resist a lateral load of 4 kips per linear foot along the east-west direction. An allowable passive resistance of 6,000 pounds per square foot (psf) may be used in the bedrock.

Wall B is anticipated to be some 30 feet long. As indicated previously, the top of this wall at its east and west ends will be at El. 614.5 and El. 616.5, respectively. Test Boring 105 was drilled within the proximity of this wall. Per the findings of this test boring, it may be estimated that in the area of the wall, the upper boundary of the bedrock is at approximate El. 603. In the design of this wall, we recommend that passive resistance be considered in effect in a section of the piers starting at a level 1 foot below the upper boundary of the bedrock, i.e., at El. 602. In this regard, the proposed drilled shafts for Wall B should be proportioned based on an equivalent fluid weight for backfill of 60 pcf for the overburdened material above the bedrock plus the sloping terrain and any additional surcharge loads (such as from the driveway). An allowable passive resistance of 6,000 psf may be used in the bedrock.

The kind of wall and the appearance of the wall have not yet been defined by the Developer. This information is required prior to designing the retaining walls.

It is preliminarily considered that the proposed Drilled Shaft Wall A and Wall B may consist of 24 to 30-inch-diameter piers spaced some 6 to 8 feet on center. These proposed drilled shafts could incorporate a continuous concrete wall or precast concrete lagging depending on the desired wall appearance. The continuous section of wall between individual piers need to remain the ground between the top of bedrock and the proposed exterior grades north of these walls. For the pier reinforcement, either steel cages or steel H-sections may be considered. Wall A is anticipated to consist of drilled shafts sockets some 7 feet into the bedrock, whereas the drilled shafts to be installed for Wall B are anticipated to be socketed on the order of 9 feet into the bedrock.

Insofar as Wall C is concerned, it is understood that it will be provided to protect the structural integrity of the east end of Lookout Valley Drive. It is our opinion that the sloping terrain south of the eastern portions of Lookout Drive is also in a tenuous state of stability. It should be kept in mind that the proposed drilled shaft wall (Wall C) will stabilize the existing ground north of this wall. Based on the findings of Test Borings 106 and 107, it is anticipated that the thickness of the overburden material to be considered in the design of the proposed drilled shafts for this wall is on the order of 12 feet. We recommend that the top 1-foot of the bedrock not be used as passive resistance. An allowable passive resistance of 6,000 psf may be used in the bedrock. It is preliminarily estimated that reinforced 24-inch-diameter shafts of this wall would be used for this wall which will be spaced some 3.5 feet center to center. It is preliminarily estimated that the reinforced 24-inch-diameter shafts would be on the order of 20 feet long. Intermediate 24-inch-diameter, unreinforced plug shafts should be installed tangent to, between, and upslope of the reinforced drilled shafts to serve as lagging. The plug piers can be terminated at the overburden-bedrock interface. They are anticipated to be on the order of 12 feet long.

We recommend that the final design of the above-mentioned proposed walls be conducted by Thelen Associates, Inc., based on the final locations and the geometry of the walls to be determined by the Civil Engineer for the project. The final details of the

remedial operations to correct the above-mentioned landslide should also be carried out by Thelen Associates, Inc.

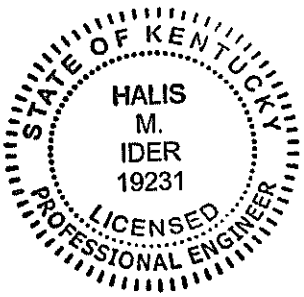
We recommend that the drilled shaft walls be installed under the review of the Project Geotechnical Engineer or his representative in order to verify that the design penetration into the bedrock and reinforcement details are in conformance with the criteria outlined in this report and on the construction plans. It is recommended that all earthwork operations be also carried out in the full-time presence of a representative of the Project Geotechnical Engineer.

8.0 CLOSURE

We have included in the Appendix to this report a reprint of "Important Information About Your Geotechnical Engineering Report" published by ASFE, Professional Firms Practicing in the Geosciences, which our firm would like to introduce to you at this time.

We appreciate the opportunity of being of service to you on this project. Should you have any questions concerning the contents of this report, please do not hesitate to contact us. We look forward to being of additional service to you during the installation of the drilled shafts and the earthwork phase of this report.

Respectfully submitted,
THELEN ASSOCIATES, INC.



Halis M. Ider, P.E.
Senior Geotechnical Engineer

HMI:tmk
140659E

Copies submitted: SURA Properties, LLC (email / 1 mail)

APPENDIX

ASFE Information

Tabulation of Laboratory Tests

Laboratory Test Forms

Test Boring Logs

Soil Classification Sheet

Boring Plan, Drawing No. 140659E-1 (In Pocket)

Important Information about Your

Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you —* should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

Rely, on Your ASFE-Member Geotechncial Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.

ASFE THE GEOPROFESSIONAL BUSINESS ASSOCIATION

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@asfe.org www.asfe.org

Copyright 2012 by ASFE, Inc. Duplication, reproduction, or copying of this document, in whole or in part, by any means whatsoever, is strictly prohibited, except with ASFE's specific written permission. Excerpting, quoting, or otherwise extracting wording from this document is permitted only with the express written permission of ASFE, and only for purposes of scholarly research or book review. Only members of ASFE may use this document as a complement to or as an element of a geotechnical engineering report. Any other firm, individual, or other entity that so uses this document without being an ASFE member could be commiting negligent or intentional (fraudulent) misrepresentation.

IIGER03135.0MRP

THELEN ASSOCIATES, INC.
1398 COX AVENUE
ERLANGER, KENTUCKY 41018-1002

GEOTECHNICAL EXPLORATION
PROPOSED KYLES LOOKOUT
COVINGTON, KENTUCKY
140659E

TABULATION OF LABORATORY TESTS

Boring Number	Sample Number	Depth, ft.		Moisture Content, %	Atterberg Limits, %			Gradation Analysis, %				Natural Dry Density, pcf	Unconfined Compressive Strength, psf	USCS Classification
		From	To		LL	PL	PI	Gravel	Sand	Silt	Clay			
101	1	0.0	1.5	23.1										
								0.8	6.8	30.3	62.1			
102	3	5.0	6.5											
104	1	0.0	1.5	22.4										CL
	2	2.5	4.0	23.5										
	3	5.0	6.5	20.1	46	25	21							
	4	7.5	9.0	17.8										
	5	10.0	11.5	16.0										
	6	12.5	14.0	17.1										
105	1	0.0	1.5	18.4										CL
	2	2.5	4.0	18.1	43	23	20							
	4B	8.5	9.0	14.5										
	5	10.0	11.5	11.8										
106	1	0.0	1.5	22.3										CL
	2	2.5	4.0	24.8	43	23	20					112.6	4,470	
	PT-3	4.8	5.3	20.8										
	4	6.0	7.5	21.8										
	5	7.5	9.0	21.8										
	6	10.0	11.5	20.1										
	7	12.5	14.0	13.9										
107	1	0.0	1.5	20.9										CL
	2	2.5	4.0	21.2										
	3	5.0	6.5	20.0	47	25	22							
	4	7.5	9.0	20.5										
	5	10.0	11.5	14.9										
	6	12.5	14.0	14.4										

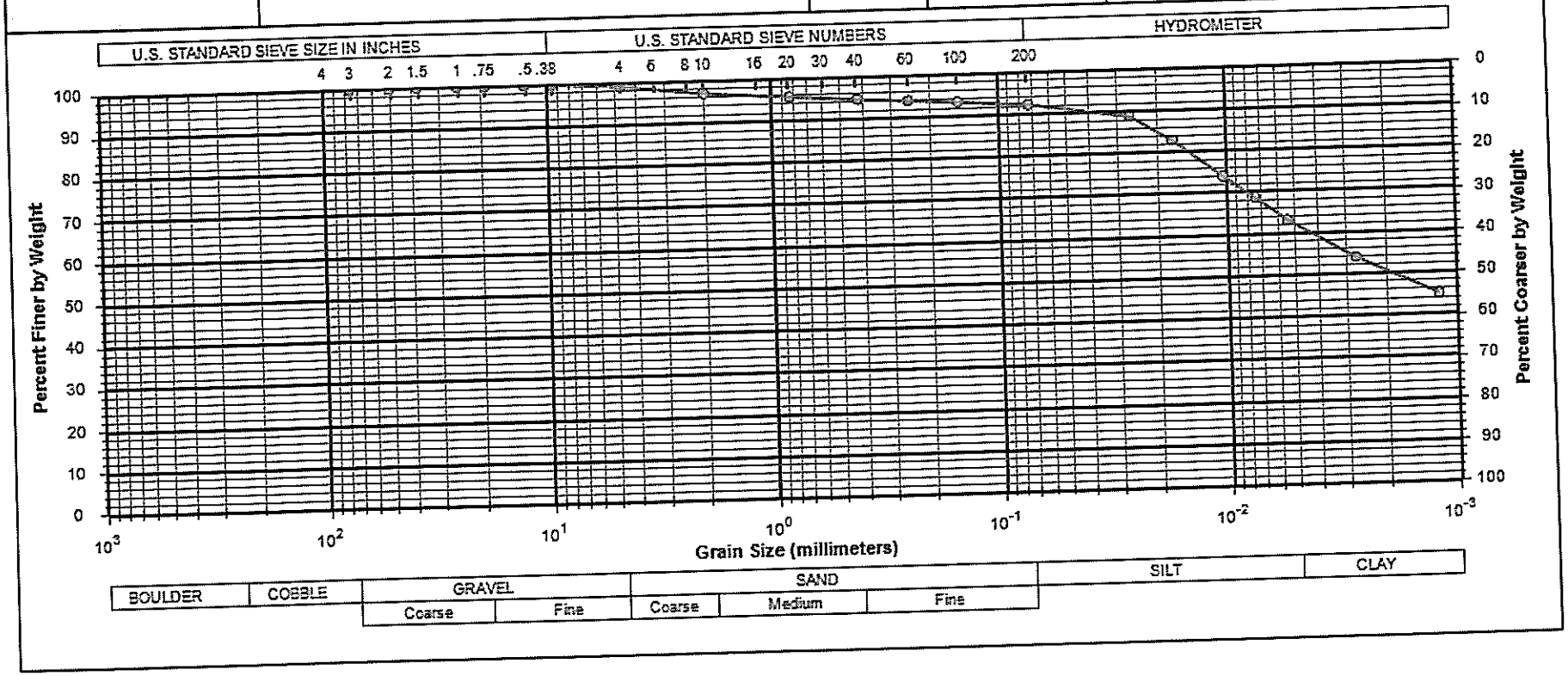
THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408

www.thelenassoc.com

Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

PARTICLE-SIZE ANALYSIS OF SOILS ASTM D-422

Client:	SURA Properties LLC								**Project No.:**	140659
Project:	Geotechnical Exploration, Proposed Kyles Lookout, Covington, Kentucky								**Date:**	02/03/2015
Boring No.:	102	**Sample No.:**	3	**Depth (ft.):**	5.0 - 6.5	**Gravel (%)**	**Sand (%)**	**Silt (%)**	**Clay (%)**	**USCS**
Sample Description:	Brown and olive brown moist medium stiff FILL, silty clay, trace shale fragments, trace organic matter					0.8	6.8	30.3	62.1	
						LL	**PL**	**PI**	**Group Index**	**WC (%)**



THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408
www.thelenassoc.co
Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

UNCONFINED COMPRESSIVE STRENGTH OF COHESIVE SOILS
ASTM D2166

DATE: 1/21/2015

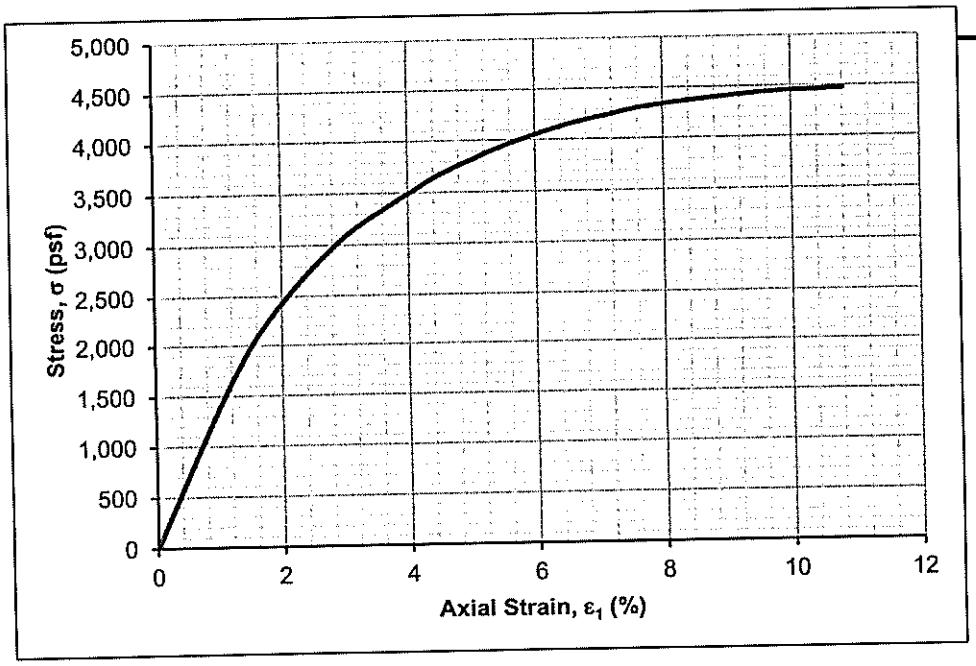
CLIENT : SURA Properties LLC
PROJECT NO.: 140659
PROJECT: Geotechnical Exploration, Proposed Kyles Lookout
LOCATION: Covington, KY

BORING NO.: 106 SAMPLE NO.: PT-3 DEPTH (ft.): 4.8-5.3
SAMPLE OBTAINED BY: Shelby Tube CONDITION: Undisturbed
SAMPLE DESCRIPTION: Olive brown moist very stiff FILL, silty clay, trace limestone fragments, trace pieces of wood

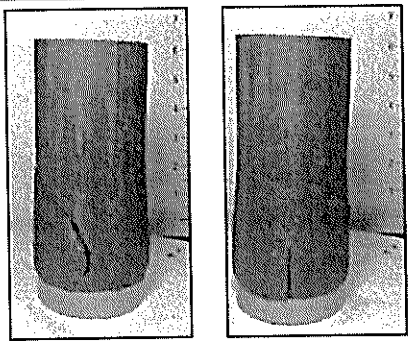
LIQUID LIMIT (%): PLASTIC LIMIT (%): PLASTICITY INDEX (%): USCS:
GRAVEL (%): SAND (%): SILT (%): CLAY (%):
SPECIFIC GRAVITY OF SOLIDS: 2.75 (Assumed) LOAD CELL NO.: 1059

SAMPLE DATA	
DIAMETER (in.):	2.81
HEIGHT (in.):	5.55
HEIGHT TO DIAMETER RATIO:	1.97
WET UNIT WEIGHT (pcf):	136.1
DRY UNIT WEIGHT (pcf):	112.6
VOID RATIO:	0.52
MOISTURE CONTENT (%)*:	20.8
DEGREE OF SATURATION (%):	100

FAILURE DATA	
AVERAGE RATE OF AXIAL STRAIN TO FAILURE (%/min.):	**1.1**
AXIAL STRAIN AT FAILURE (%):	**10.8**
TIME TO FAILURE (min.):	**11.7**
UNCONFINED COMPRESSIVE STRENGTH, q_u (psf):	**4,470**
UNDRAINED SHEAR STRENGTH, s_u (psf):	**2,235**
SENSITIVITY, S_t:	**-**
STRAIN AT 50% OF UCS, ε_{50} (%):	**#NAME?**



FAILURE SHAPES



FRONT VIEW SIDE VIEW

REMARKS :

*Moisture content determined after shear from entire sample.

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, KY 41018-1002 / 859-746-9400 / Fax 859-746-9408
www.thelenassoc.com
Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

LOG OF TEST BORING

CLIENT: SURA Properties LLC
PROJECT: Geotechnical Exploration, Proposed Kyles Lookout
Covington, Kentucky
LOCATION OF BORING: As shown on Boring Plan, Drawing No. 140659E-1

BORING #: 101
PROJECT #: 140659E
PAGE #: 1 of 1

ELEV.	COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS DESCRIPTION	Strata Depth (feet)	Depth Scale (feet)	Sample Condition	Sample Number	Sample Type	SPT* Blows/6" / Rock Core RQD (%)	Recovery (in.)	Recovery (%)
571.5	Ground Surface	0.0	0						
	Mixed brown and greenish brown moist medium stiff to stiff FILL, silty clay, trace shale fragments, trace limestone fragments.			I	1	DS	2-4-7	15	83
568.0		3.5		U	2	PT		6	50
	Olive brown trace gray moist very soft weathered SHALE and thinly bedded LIMESTONE (bedrock).		5	I	3	DS	16-11-12	18	100
				I	4	DS	10-12-11	18	100
				I	5	DS	17-24-28	6	33
			10	I	6	DS	22-34-50/6"	18	100
560.0		11.5							
	Bottom of test boring at 11.5 feet.		15						
			20						
			25						
			30						

Datum: Mean Sea Level
Surface Elevation: 571.5 ft.
Date Started: 1/23/2015
Date Completed: 1/23/2015

Hammer Weight: 140 lb.
Hammer Drop: 30 in.
Pipe Size: 2 in. O.D.

Hole Diameter: 7 in.
Rock Core Diameter: --
Boring Method: HSA-3.25

Drill Rig: CME-45C TD-1
Foreman: J. Franz
Engineer: H. Ider

BORING METHOD
HSA = Hollow Stem Augers
CFA = Continuous Flight Augers
DC = Driving Casing
MD = Mud Drilling

SAMPLE TYPE
PC = Pavement Core
CA = Continuous Flight Auger
DS = Driven Split Spoon
PT = Pressed Shelby Tube
RC = Rock Core

SAMPLE CONDITIONS
D = Disintegrated
I = Intact
U = Undisturbed
L = Lost

GROUNDWATER DEPTH
First Noted: None
At Completion: Dry
After: --
Backfilled: Immediately

* SPT = Standard Penetration Test - Driving 2" O.D. Sampler 18" with 140-Pound Hammer Falling 30"; Count Made at 6" Intervals

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, KY 41018-1002 / 859-746-9400 / Fax 859-746-9408
www.thelenassoc.com
Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

LOG OF TEST BORING

CLIENT: SURA Properties LLC
PROJECT: Geotechnical Exploration, Proposed Kyles Lookout
Covington, Kentucky
LOCATION OF BORING: As shown on Boring Plan, Drawing No. 140659E-1

BORING #: 101A
PROJECT #: 140659E
PAGE #: 1 of 1

ELEV.	COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS DESCRIPTION	Strata Depth (feet)	Depth Scale (feet)	Sample Condition	Sample Number	Sample Type	SPT* Blows/6" / Rock Core RQD (%)	Recovery (in.)	Recovery (%)
568.1	Ground Surface	0.0	0						
	Brown and olive brown moist medium stiff FILL, silty clay, trace limestone fragments.			I	1	DS	2-4-3	6	33
565.6		2.5							
	Bottom of test boring at 2.5 feet. Note: Test Boring 101A was drilled as an alternate to Test Boring 101 at a location 8 feet west of Test Boring 101. Test Boring 101 was later drilled at its planned location using a different all-terrain rig. A large limestone floater was encountered at a depth of 2.5 feet below the existing ground surface. Refusal to auger penetration at 2.5 feet.		5 10 15 20 25 30						

Datum: Mean Sea Level
Surface Elevation: 568.1 ft.
Date Started: 1/16/2015
Date Completed: 1/16/2015

Hammer Weight: 140 lb.
Hammer Drop: 30 in.
Pipe Size: 2 in. O.D.

Hole Diameter: 8 in.
Rock Core Diameter: --
Boring Method: HSA-3.25

Drill Rig: CME-55 TD-3
Foreman: V. Jones
Engineer: H. Ider

BORING METHOD
HSA = Hollow Stem Augers
CFA = Continuous Flight Augers
DC = Driving Casing
MD = Mud Drilling

SAMPLE TYPE
PC = Pavement Core
CA = Continuous Flight Auger
DS = Driven Split Spoon
PT = Pressed Shelby Tube
RC = Rock Core

SAMPLE CONDITIONS
D = Disintegrated
I = Intact
U = Undisturbed
L = Lost

GROUNDWATER DEPTH
First Noted: None
At Completion: Dry
After: --
Backfilled: Immediately

* SPT = Standard Penetration Test - Driving 2" O.D. Sampler 18" with 140-Pound Hammer Falling 30"; Count Made at 6" Intervals

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, KY 41018-1002 / 859-746-9400 / Fax 859-746-9408
www.thelenassoc.com
Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

LOG OF TEST BORING

CLIENT: SURA Properties LLC
PROJECT: Geotechnical Exploration, Proposed Kyles Lookout
Covington, Kentucky
LOCATION OF BORING: As shown on Boring Plan, Drawing No. 140659E-1

BORING #: 102
PROJECT #: 140659E
PAGE #: 1 of 1

ELEV.	COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS DESCRIPTION	Strata Depth (feet)	Depth Scale (feet)	Sample Condition	Sample Number	Sample Type	SPT* Blows/6" / Rock Core RQD (%)	Recovery (in.)	Recovery (%)
599.6	Ground Surface	0.0	0						
	Dark brown moist medium stiff FILL, silty clay, trace decomposed wood.			I	1	DS	1-2-3	18	100
595.6		4.0		U	2	PT		0	0
	Brown and olive brown moist medium stiff to stiff FILL, silty clay, trace shale fragments, trace organic matter.		5	I	3	DS	3-4-5	18	100
592.6		7.0							
	Brown and olive brown moist stiff SILTY CLAY, trace shale fragments (colluvium).			I	4	DS	3-3-4	18	100
590.1		9.5							
	Brown moist very soft highly weathered SHALE and thinly bedded LIMESTONE (bedrock).		10	I	5	DS	8-14-25	18	100
587.6		12.0							
585.6	Olive brown and gray moist very soft weathered SHALE and thinly bedded LIMESTONE (bedrock).	14.0		I	6	DS	18-25-36	18	100
	Bottom of test boring at 14.0 feet.		15						
	Note: An attempt was made to obtain a Shelby tube sample between 3 and 5 feet below the existing ground surface. No recovery in the tube between these depths due to pressure of a limestone floater at this depth.		20						
			25						
			30						

Datum: Mean Sea Level
Surface Elevation: 599.6 ft.
Date Started: 1/23/2015
Date Completed: 1/23/2015

Hammer Weight: 140 lb.
Hammer Drop: 30 in.
Pipe Size: 2 in. O.D.

Hole Diameter: 8 in.
Rock Core Diameter: --
Boring Method: HSA-3.25

Drill Rig: CME-55 TD-3
Foreman: V. Jones
Engineer: H. Ider

BORING METHOD
HSA = Hollow Stem Augers
CFA = Continuous Flight Augers
DC = Driving Casing
MD = Mud Drilling

SAMPLE TYPE
PC = Pavement Core
CA = Continuous Flight Auger
DS = Driven Split Spoon
PT = Pressed Shelby Tube
RC = Rock Core

SAMPLE CONDITIONS
D = Disintegrated
I = Intact
U = Undisturbed
L = Lost

GROUNDWATER DEPTH
First Noted: None
At Completion: Dry
After: --
Backfilled: Immediately

* SPT = Standard Penetration Test - Driving 2" O.D. Sampler 18" with 140-Pound Hammer Falling 30"; Count Made at 6" Intervals

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, KY 41018-1002 / 859-746-9400 / Fax 859-746-9408
www.thelenassoc.com
Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

LOG OF TEST BORING

CLIENT: SURA Properties LLC
PROJECT: Geotechnical Exploration, Proposed Kyles Lookout
Covington, Kentucky
LOCATION OF BORING: As shown on Boring Plan, Drawing No. 140659E-1

BORING #: 103
PROJECT #: 140659E
PAGE #: 1 of 1

ELEV.	COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS DESCRIPTION	Strata Depth (feet)	Depth Scale (feet)	Sample Condition	Sample Number	Sample Type	SPT* Blows/6" / Rock Core RQD (%)	Recovery (in.)	Recovery (%)
600.5	Ground Surface	0.0	0						
	Brown moist soft to medium stiff FILL, silty clay, trace roots, trace limestone fragments.			I	1	DS	2-2-2	8	44
				I	2	DS	2-2-2	9	50
595.5		5.0	5						
	Brown moist medium stiff to stiff FILL, silty clay, trace roots.			I	3	DS	3-4-7	10	56
593.5		7.0							
	Brown moist very soft weathered SHALE and thinly bedded LIMESTONE (bedrock).			I	4	DS	12-13-16	12	67
			10	I	5	DS	11-15-27	6	33
				I	6	DS	8-14-44	18	100
586.5		14.0							
	Bottom of test boring at 14.0 feet.		15						
			20						
			25						
			30						

Datum: Mean Sea Level
Surface Elevation: 600.5 ft.
Date Started: 1/23/2015
Date Completed: 1/23/2015

Hammer Weight: 140 lb.
Hammer Drop: 30 in.
Pipe Size: 2 in. O.D.

Hole Diameter: 8 in.
Rock Core Diameter: --
Boring Method: HSA-3.25

Drill Rig: CME-55 TD-3
Foreman: V. Jones
Engineer: H. Ider

BORING METHOD
HSA = Hollow Stem Augers
CFA = Continuous Flight Augers
DC = Driving Casing
MD = Mud Drilling

SAMPLE TYPE
PC = Pavement Core
CA = Continuous Flight Auger
DS = Driven Split Spoon
PT = Pressed Shelby Tube
RC = Rock Core

SAMPLE CONDITIONS
D = Disintegrated
I = Intact
U = Undisturbed
L = Lost

GROUNDWATER DEPTH
First Noted: None
At Completion: Dry
After: --
Backfilled: Immediately

* SPT = Standard Penetration Test - Driving 2" O.D. Sampler 18" with 140-Pound Hammer Falling 30"; Count Made at 6" Intervals

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, KY 41018-1002 / 859-746-9400 / Fax 859-746-9408
www.thelenassoc.com
Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

LOG OF TEST BORING

CLIENT: SURA Properties LLC
PROJECT: Geotechnical Exploration, Proposed Kyles Lookout
Covington, Kentucky
LOCATION OF BORING: As shown on Boring Plan, Drawing No. 140659E-1

BORING #: 104
PROJECT #: 140659E
PAGE #: 1 of 1

ELEV.	COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS DESCRIPTION	Strata Depth (feet)	Depth Scale (feet)	Sample Condition	Sample Number	Sample Type	SPT* Blows/6" / Rock Core RQD (%)	Recovery (in.)	Recovery (%)
618.2	Ground Surface	0.0	0						
	Mixed brown and greenish brown moist medium stiff FILL, clay, trace root matter.	2.0		I	1	DS	1-1-1	10	56
616.2	Greenish brown moist stiff FILL, silty clay and clay, trace shale fragments and limestone floaters, trace organic matter (CL).			I	2	DS	2-2-2	18	100
			5	I	3	DS	3-3-2	10	56
611.2	Brown moist very stiff SILTY CLAY with trace shale and limestone fragments (colluvium).	7.0		I	4	DS	3-7-8	13	72
608.7	Brown and olive brown, trace gray moist very soft highly weathered SHALE and thinly bedded LIMESTONE (bedrock).	9.5	10	I	5	DS	7-31-15	14	78
				I	6	DS	12-10-19	9	50
			15	L	7	DS	22-25-31	0	0
601.7	Bottom of test boring at 16.5 feet.	16.5	20						
			25						
			30						

Datum: Mean Sea Level
Surface Elevation: 618.2 ft.
Date Started: 1/16/2015
Date Completed: 1/16/2015

Hammer Weight: 140 lb.
Hammer Drop: 30 in.
Pipe Size: 2 in. O.D.

Hole Diameter: 8 in.
Rock Core Diameter: --
Boring Method: HSA-3.25

Drill Rig: CME-55 TD-3
Foreman: V. Jones
Engineer: H. Ider

BORING METHOD
HSA = Hollow Stem Augers
CFA = Continuous Flight Augers
DC = Driving Casing
MD = Mud Drilling

SAMPLE TYPE
PC = Pavement Core
CA = Continuous Flight Auger
DS = Driven Split Spoon
PT = Pressed Shelby Tube
RC = Rock Core

SAMPLE CONDITIONS
D = Disintegrated
I = Intact
U = Undisturbed
L = Lost

GROUNDWATER DEPTH
First Noted: None
At Completion: Dry
After: --
Backfilled: Immediately

* SPT = Standard Penetration Test - Driving 2" O.D. Sampler 18" with 140-Pound Hammer Falling 30"; Count Made at 6" Intervals

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, KY 41018-1002 / 859-746-9400 / Fax 859-746-9408
www.thelenassoc.com
Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

LOG OF TEST BORING

CLIENT: SURA Properties LLC
PROJECT: Geotechnical Exploration, Proposed Kyles Lookout
Covington, Kentucky
LOCATION OF BORING: As shown on Boring Plan, Drawing No. 140659E-1

BORING #: 105
PROJECT #: 140659E
PAGE #: 1 of 1

ELEV.	COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS DESCRIPTION	Strata Depth (feet)	Depth Scale (feet)	Sample Condition	Sample Number	Sample Type	SPT* Blows/6" / Rock Core RQD (%)	Recovery (in.)	Recovery (%)
612.0	Ground Surface	0.0	0						
	Mixed brown and gray moist medium stiff FILL, silty clay, trace shale and limestone fragments, trace hairlike roots (CL).			I	1	DS	1-2-2	12	67
				I	2	DS	3-3-5	10	56
			5	I	3	DS	2-2-2	2	11
605.0	Brown moist very loose fine to medium SAND, trace silt, trace gravel.	7.0		I	4A 4B	DS	2-1-3	18	100
603.5	Brown moist very soft highly weathered SHALE and thinly bedded LIMESTONE (bedrock).	8.5	10	I	5	DS	30-41-27	8	44
603.0	Interbedded gray moist soft SHALE and gray hard LIMESTONE (bedrock).	9.0							
600.5	Bottom of test boring at 11.5 feet.	11.5	15 20 25 30						

Datum: Mean Sea Level
Surface Elevation: 612.0 ft.
Date Started: 1/16/2015
Date Completed: 1/16/2015
Hammer Weight: 140 lb.
Hammer Drop: 30 in.
Pipe Size: 2 in. O.D.
Hole Diameter: 8 in.
Rock Core Diameter: --
Boring Method: HSA-3.25
Drill Rig: CME-55 TD-3
Foreman: V. Jones
Engineer: H. Ider

BORING METHOD
HSA = Hollow Stem Augers
CFA = Continuous Flight Augers
DC = Driving Casing
MD = Mud Drilling

SAMPLE TYPE
PC = Pavement Core
CA = Continuous Flight Auger
DS = Driven Split Spoon
PT = Pressed Shelby Tube
RC = Rock Core

SAMPLE CONDITIONS
D = Disintegrated
I = Intact
U = Undisturbed
L = Lost

GROUNDWATER DEPTH
First Noted 7.5 ft.
At Completion Dry
After --
Backfilled Immediately

* SPT = Standard Penetration Test - Driving 2" O.D. Sampler 18" with 140-Pound Hammer Falling 30"; Count Made at 6" Intervals

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, KY 41018-1002 / 859-746-9400 / Fax 859-746-9408
www.thelenassoc.com
Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

LOG OF TEST BORING

CLIENT: SURA Properties LLC
PROJECT: Geotechnical Exploration, Proposed Kyles Lookout
Covington, Kentucky
LOCATION OF BORING: As shown on Boring Plan, Drawing No. 140659E-1

BORING #: 106
PROJECT #: 140659E
PAGE #: 1 of 1

ELEV.	COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS DESCRIPTION	Strata Depth (feet)	Depth Scale (feet)	Sample Condition	Sample Number	Sample Type	SPT* Blows/6" / Rock Core RQD (%)	Recovery (in.)	Recovery (%)
637.4	Ground Surface	0.0	0						
	Brown moist medium stiff FILL, silty clay, trace limestone fragments.	2.0		I	1	DS	2-4-2	8	44
635.4									
	Brown moist medium stiff FILL, clay, trace shale fragments, trace asphalt fragments (CL).	4.0		I	2	DS	2-3-3	9	50
633.4									
	Olive brown moist stiff to very stiff FILL, silty clay, trace limestone fragments, trace pieces of wood.		5	U	3	PT		16	67
				I	4	DS	4-5-4	13	72
				I	5	DS	3-5-8	11	61
			10	I	6	DS	25-14-15	2	11
625.4		12.0							
	Brown and olive brown moist very soft highly weathered SHALE and thinly bedded LIMESTONE (bedrock).			I	7	DS	9-11-12	7	39
			15	I	8	DS	12-22-23	14	78
620.9		16.5							
	Bottom of test boring at 16.5 feet.		20						
			25						
			30						

Datum: Mean Sea Level
Surface Elevation: 637.4 ft.
Date Started: 1/16/2015
Date Completed: 1/16/2015
Hammer Weight: 140 lb.
Hammer Drop: 30 in.
Pipe Size: 2 in. O.D.
Hole Diameter: 8 in.
Rock Core Diameter: --
Boring Method: HSA-3.25
Drill Rig: CME-55 TD-3
Foreman: V. Jones
Engineer: H. Ider

BORING METHOD
HSA = Hollow Stem Augers
CFA = Continuous Flight Augers
DC = Driving Casing
MD = Mud Drilling

SAMPLE TYPE
PC = Pavement Core
CA = Continuous Flight Auger
DS = Driven Split Spoon
PT = Pressed Shelby Tube
RC = Rock Core

SAMPLE CONDITIONS
D = Disintegrated
I = Intact
U = Undisturbed
L = Lost

GROUNDWATER DEPTH
First Noted: None
At Completion: Dry
After: --
Backfilled: Immediately

* SPT = Standard Penetration Test - Driving 2" O.D. Sampler 18" with 140-Pound Hammer Falling 30"; Count Made at 6" Intervals

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, KY 41018-1002 / 859-746-9400 / Fax 859-746-9408
www.thelenassoc.com
Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

LOG OF TEST BORING

CLIENT: SURA Properties LLC
PROJECT: Geotechnical Exploration, Proposed Kyles Lookout
Covington, Kentucky
LOCATION OF BORING: As shown on Boring Plan, Drawing No. 140659E-1

BORING #: 107
PROJECT #: 140659E
PAGE #: 1 of 1

ELEV.	COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS DESCRIPTION	Strata Depth (feet)	Depth Scale (feet)	Sample Condition	Sample Number	Sample Type	SPT* Blows/6" / Rock Core RQD (%)	Recovery (in.)	Recovery (%)
625.4	Ground Surface	0.0	0						
623.4	Brown moist medium stiff FILL, silty clay, mixed with little asphalt fragments, trace vegetative matter.	2.0		I	1	DS	1-2-5	10	56
618.4	Mixed brown and gray moist medium stiff FILL, silty clay, trace shale fragments, trace asphalt fragments, trace vegetative matter (CL).	7.0	5	I	2	DS	1-2-4	9	50
				I	3	DS	2-2-3	7	39
613.4	Brown and olive brown, trace gray moist stiff to very stiff SILTY CLAY with shale fragments and limestone floaters (colluvium).	12.0	10	I	4	DS	3-3-9	9	50
				I	5	DS	3-6-10	12	67
611.4	Brown and olive brown moist very soft highly weathered SHALE and thinly bedded LIMESTONE (bedrock).	14.0		I	6	DS	7-13-25	12	67
	Bottom of test boring at 14.0 feet.		15						
			20						
			25						
			30						

Datum: Mean Sea Level
Surface Elevation: 625.4 ft.
Date Started: 1/16/2015
Date Completed: 1/16/2015

Hammer Weight: 140 lb.
Hammer Drop: 30 in.
Pipe Size: 2 in. O.D.

Hole Diameter: 8 in.
Rock Core Diameter: --
Boring Method: HSA-3.25

Drill Rig: CME-55 TD-3
Foreman: V. Jones
Engineer: H. Ider

BORING METHOD
HSA = Hollow Stem Augers
CFA = Continuous Flight Augers
DC = Driving Casing
MD = Mud Drilling

SAMPLE TYPE
PC = Pavement Core
CA = Continuous Flight Auger
DS = Driven Split Spoon
PT = Pressed Shelby Tube
RC = Rock Core

SAMPLE CONDITIONS
D = Disintegrated
I = Intact
U = Undisturbed
L = Lost

GROUNDWATER DEPTH
First Noted: None
At Completion: Dry
After: --
Backfilled: Immediately

* SPT = Standard Penetration Test - Driving 2" O.D. Sampler 18" with 140-Pound Hammer Falling 30"; Count Made at 6" Intervals

CIVIL ENGINEERS

G. J. Thelen & Associates, Inc.

☑ 516 Enterprise Drive / Covington, Kentucky 41017-1595 / 606-341-1322 / Fax 606-341-0832

☐ 1310 Kemper Meadow Drive, Suite 600 / Forest Park, Ohio 45240-1651 / 513-825-4350 / Fax 513-825-4756

LOG OF TEST BORING

CLIENT Mr. Gilbert Ellison BORING # 1

PROJECT Geotechnical Exploration, Proposed Kyles Lane Townhomes JOB # 95160E

LOCATION OF BORING As shown on Boring Plan, Drawing 95160E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRA. DEPTH	DEPTH SCALE	SAMPLE Cond	Blows/6"	No.	Type	Rec.
647.9	SURFACE	0.0						
646.9	TOPSOIL	1.0		I	1/4/6	1A 1B	DS	15"
	Dark brown and brown moist stiff SILTY CLAY with hairlike roots and limestone floaters.	2.0						
645.9		4.5		I	4/4/7	2	DS	18"
	Mottled brown and olive brown moist stiff to very stiff SILTY CLAY with limestone floaters, trace fine gravel and shale fragments (colluvium).		5	I	13/16/13	3	DS	18"
643.4		7.0						
	Olive brown moist soft weathered SHALE and thinly bedded LIMESTONE (bedrock).			I	9/12/30	4	DS	18"
640.9		9.5						
	Olive brown trace brown and gray moist soft weathered SHALE and thinly bedded LIMESTONE (bedrock).	10.5	10	I	50/6"	5	DS	6"
638.4								
	Gray, trace olive brown moist soft SHALE and thinly bedded LIMESTONE (bedrock).							
637.4			15					
	Bottom of test boring @ 10.5 feet.							

Datum USGS
Surf. Elev. 647.9 Ft.
Date Started 4/11/95

Hammer Wt. 140 Lbs.
Hammer Drop 30 In.
Pipe Size O.D. 2 In.

Hole Diameter 5"
Rock Core Dia.
Boring Method CFA

Foreman GB
Engineer JWK
Date Completed 4/11/95

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT
U – UNDISTURBED
L – LOST

SAMPLER TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
FIRST NOTED None FT.
AT COMPLETION Dry FT.
AFTER 48 HRS. 1.0 FT.
BACKFILLED 48 HRS.

BORING METHOD
HSA – Hollow Stem Augers
CFA – Continous Flight Augers
DC – Driving Casing
MD – Mud Drilling

*STANDARD PENETRATION TEST – DRIVING 2" OD SAMPLER 1' WITH 140 #. HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

CIVIL ENGINEERS

G. J. Thelen & Associates, Inc.

☑ 516 Enterprise Drive / Covington, Kentucky 41017-1595 / 606-341-1322 / Fax 606-341-0832

☐ 1310 Kemper Meadow Drive, Suite 600 / Forest Park, Ohio 45240-1651 / 513-825-4350 / Fax 513-825-4756

LOG OF TEST BORING

CLIENT Mr. Gilbert Ellison — BORING # 2

PROJECT Geotechnical Exploration, Proposed Kyles Lane Townhomes — JOB # 95160E

LOCATION OF BORING As shown on Boring Plan, Drawing 95160E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRA. DEPTH	DEPTH SCALE	SAMPLE Cond	Blows/6"	No.	Type	Rec.
613.1	SURFACE	0.0						
611.1	Mixed brown moist very soft FILL, clay with shale, topsoil, and limestone floaters.	2.0		I	1/1/1	1	DS	12"
	Mixed brown and dark gray moist stiff FILL, silty clay with shale fragments, limestone floaters, topsoil, and organic (plant) matter.		5	I	6/8/2	2	DS	18"
				I	10/11/12	3	DS	3"
606.1		7.0						
604.8	Brown moist very stiff SILTY CLAY with limestone floaters, iron oxide stains, shale fragments (colluvium).	8.3		I	10/10/12	4A 4B	DS	13"
	Brown and olive brown, trace gray moist very soft highly weathered SHALE and thinly bedded LIMESTONE (bedrock).		10	I	8/22/17	5	DS	13"
				I	18/29/50/6"	6	DS	18"
			15					
		16.0		I	28/50/6"	7	DS	12"
	Bottom of test boring @ 16.0 feet.							

Datum USGS — Hammer Wt. 140 Lbs. — Hole Diameter 5" — Foreman GB

Surf. Elev. 613.1 Ft. — Hammer Drop 30 In. — Rock Core Dia. — Engineer JWK

Date Started 4/13/95 — Pipe Size O.D. 2 In. — Boring Method CFA — Date Completed 4/13/95

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT
U – UNDISTURBED
L – LOST

SAMPLER TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
FIRST NOTED None FT.
AT COMPLETION Dry FT.
AFTER 3.5 HRS. Dry FT.
BACKFILLED 3.5 HRS.

BORING METHOD
HSA – Hollow Stem Augers
CFA – Continous Flight Augers
DC – Driving Casing
MD – Mud Drilling

*STANDARD PENETRATION TEST – DRIVING 2" OD SAMPLER 1' WITH 140 #, HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

CIVIL ENGINEERS

G. J. Thelen & Associates, Inc.

☑ 516 Enterprise Drive / Covington, Kentucky 41017-1595 / 606-341-1322 / Fax 606-341-0832

☐ 1310 Kemper Meadow Drive, Suite 600 / Forest Park, Ohio 45240-1651 / 513-825-4350 / Fax 513-825-4756

LOG OF TEST BORING

CLIENT Mr. Gilbert Ellison — BORING # 3

PROJECT Geotechnical Exploration, Proposed Kyles Lane Townhomes — JOB # 95160E

LOCATION OF BORING As shown on Boring Plan, Drawing 95160E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRA. DEPTH	DEPTH SCALE	SAMPLE Cond	Blows/6"	No.	Type	Rec.
589.9	SURFACE	0.0						
	Mixed dark brown medium stiff FILL, topsoil,			I	9/14/24	1	DS	7"
587.9	and limestone floaters (fill from loader).	2.0						
	Mottled brown trace gray moist medium stiff			I	4/7/10	2	DS	10"
	SILTY CLAY with iron oxide stains, shale fragments	4.5	5					
585.4	and limestone floaters (colluvium).			I	11/14/31	3	DS	18"
	Brown and olive brown moist very soft highly							
	weathered SHALE and thinly bedded LIMESTONE	8.0						
581.9	(bedrock).			I	50/6"	4	DS	4"
			10					
	Bottom of test boring @ 8.0 feet							
			15					

Datum USGS — Surf. Elev. 589.9 Ft. — Date Started 4/13/95

Hammer Wt. 140 Lbs. — Hammer Drop 30 In. — Pipe Size O.D. 2 In.

Hole Diameter 5" — Rock Core Dia. — Boring Method CFA

Foreman GB — Engineer JWK — Date Completed 4/13/95

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT
U – UNDISTURBED
L – LOST

SAMPLER TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
FIRST NOTED None FT.
AT COMPLETION Dry FT.
AFTER ____ HRS. Dry FT.
BACKFILLED Immed. HRS.

BORING METHOD
HSA – Hollow Stem Augers
CFA – Continous Flight Augers
DC – Driving Casing
MD – Mud Drilling

*STANDARD PENETRATION TEST – DRIVING 2" OD SAMPLER 1' WITH 140 #, HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

CIVIL ENGINEERS

G. J. Thelen & Associates, Inc.

☑ 516 Enterprise Drive / Covington, Kentucky 41017-1595 / 606-341-1322 / Fax 606-341-0832

☐ 1310 Kemper Meadow Drive, Suite 600 / Forest Park, Ohio 45240-1651 / 513-825-4350 / Fax 513-825-4756

LOG OF TEST BORING

CLIENT Mr. Gilbert Ellison — BORING # 4

PROJECT Geotechnical Exploration, Proposed Kyles Lane Townhomes — JOB # 95160E

LOCATION OF BORING As shown on Boring Plan, Drawing 95160E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRA. DEPTH	DEPTH SCALE	SAMPLE Cond	Blows/6"	No.	Type	Rec.
649.2	SURFACE	0.5						
648.7	TOPSOIL	2.0		I	1/3/4	1A 1B	DS	18"
647.2	Dark brown moist stiff SILTY CLAY with limestone floaters and hairlike roots.	4.5		I	4/5/6	2	DS	18"
644.7	Mottled brown moist very stiff SILTY CLAY with limestone floaters and shale fragments (colluvium).		5	I	6/12/24	3	DS	13"
	Olive brown, trace brown and gray moist soft weathered SHALE and thinly bedded LIMESTONE (bedrock).			I	40/50/6"	4	DS	12"
638.2		11.0	10	I	29/50/6"	5	DS	10"
	Bottom of test boring @ 11.0 feet.		15					

Datum USGS — Surf. Elev. 649.2 Ft. — Date Started 4/11/95

Hammer Wt. 140 Lbs. — Hammer Drop 30 In. — Pipe Size O.D. 2 In.

Hole Diameter 5" — Rock Core Dia. — Boring Method CFA

Foreman GB — Engineer JWK — Date Completed 4/11/95

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT
U – UNDISTURBED
L – LOST

SAMPLER TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
FIRST NOTED None FT.
AT COMPLETION Dry FT.
AFTER 48 HRS. Dry FT.
BACKFILLED 48 HRS.

BORING METHOD
HSA – Hollow Stem Augers
CFA – Continous Flight Augers
DC – Driving Casing
MD – Mud Drilling

*STANDARD PENETRATION TEST – DRIVING 2" OD SAMPLER 1' WITH 140 #. HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

CIVIL ENGINEERS

G. J. Thelen & Associates, Inc.

☑ 516 Enterprise Drive / Covington, Kentucky 41017-1595 / 606-341-1322 / Fax 606-341-0832

☐ 1310 Kemper Meadow Drive, Suite 600 / Forest Park, Ohio 45240-1651 / 513-825-4350 / Fax 513-825-4756

LOG OF TEST BORING

CLIENT Mr. Gilbert Ellison — BORING # 5

PROJECT Geotechnical Exploration, Proposed Kyles Lane Townhomes — JOB # 95160E

LOCATION OF BORING As shown on Boring Plan, Drawing 95160E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRA. DEPTH	DEPTH SCALE	SAMPLE Cond	Blows/6"	No.	Type	Rec.
617.9	SURFACE	0.0						
615.9	Mixed brown moist very soft FILL, silty clay and shale with limestone floaters.	2.0		I	1/12"/7	1	DS	8"
611.9	Mixed dark brown and brown moist stiff to very stiff FILL, silty clay with topsoil, trace fine gravel, shale fragments, limestone floaters, and organic (plant) matter.	6.0	5	I	19/15/9	2	DS	13"
610.9	Brown and olive brown trace gray moist very stiff SILTY CLAY, with shale fragments and limestone floaters (colluvium).	7.0		I	9/10/23	3A 3B	DS	15"
604.9	Brown and olive brow- moist very soft highly weathered shale and thinly bedded LIMESTONE (bedrock).	13.0	10	I	14/24/39	4	DS	15"
	Bottom of test boring @ 13.0 feet.			I	30/30/50/6"	5	DS	6"
			15	I	50/6"	6	DS	4"

Datum USGS — Surf. Elev. 617.9 Ft. — Date Started 4/13/95

Hammer Wt. 140 Lbs. — Hammer Drop 30 In. — Pipe Size O.D. 2 In.

Hole Diameter 5" — Rock Core Dia. — Boring Method CFA

Foreman GB — Engineer JWK — Date Completed 4/13/95

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT
U – UNDISTURBED
L – LOST

SAMPLER TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
FIRST NOTED None FT.
AT COMPLETION Dry FT.
AFTER 75 HRS. Dry FT.
BACKFILLED 75 HRS.

BORING METHOD
HSA – Hollow Stem Augers
CFA – Continous Flight Augers
DC – Driving Casing
MD – Mud Drilling

*STANDARD PENETRATION TEST – DRIVING 2" OD SAMPLER 1' WITH 140 #. HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

CIVIL ENGINEERS

G. J. Thelen & Associates, Inc.

☑ 516 Enterprise Drive / Covington, Kentucky 41017-1595 / 606-341-1322 / Fax 606-341-0832

☐ 1310 Kemper Meadow Drive, Suite 600 / Forest Park, Ohio 45240-1651 / 513-825-4350 / Fax 513-825-4756

LOG OF TEST BORING

CLIENT Mr. Gilbert Ellison — BORING # 6

PROJECT Geotechnical Exploration, Proposed Kyles Lane Townhomes — JOB # 95160E

LOCATION OF BORING As shown on Boring Plan, Drawing 95160E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRA. DEPTH	DEPTH SCALE	SAMPLE Cond	Blows/6"	No.	Type	Rec.
606.4	SURFACE	0.0						
604.4	Mixed brown, olive brown moist soft FILL, silty clay with shale fragments and limestone floaters.	2.0		I	1/1/6	1	DS	6"
603.2	Dark brown moist stiff TOPSOIL.	3.2		I	4/8/12	2A 2B	DS	13"
601.9	Mottled brown moist stiff to very stiff SILTY CLAY with limestone floaters and shale fragments (colluvium).	4.5	5	I	10/5/12	3	DS	13"
599.4	Mottled brown, trace gray moist stiff to very stiff SILTY CLAY with limestone floaters, shale fragments and trace bedding planes.	7.0		I	16/25/29	4	DS	18"
594.9	Brown and olive brown moist soft weathered SHALE and thinly bedded LIMESTONE (bedrock).	9.5	10	I	25/50/5"	5	DS	12"
595.5	Olive brown and gray moist soft SHALE and thinly bedded LIMESTONE (bedrock).	10.9	15					
	Bottom of test boring @ 10.9 feet.							

Datum USGS — Surf. Elev. 606.4 Ft. — Date Started 4/11/95

Hammer Wt. 140 Lbs. — Hammer Drop 30 In. — Pipe Size O.D. 2 In.

Hole Diameter 5" — Rock Core Dia. — Boring Method CFA

Foreman GB — Engineer JWK — Date Completed 4/11/95

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT
U – UNDISTURBED
L – LOST

SAMPLER TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
FIRST NOTED None FT.
AT COMPLETION Dry FT.
AFTER 51 HRS. Dry FT.
BACKFILLED 51 HRS.

BORING METHOD
HSA – Hollow Stem Augers
CFA – Continous Flight Augers
DC – Driving Casing
MD – Mud Drilling

*STANDARD PENETRATION TEST – DRIVING 2" OD SAMPLER 1' WITH 140 #. HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

CIVIL ENGINEERS

G. J. Thelen & Associates, Inc.

☑ 516 Enterprise Drive / Covington, Kentucky 41017-1595 / 606-341-1322 / Fax 606-341-0832

☐ 1310 Kemper Meadow Drive, Suite 600 / Forest Park, Ohio 45240-1651 / 513-825-4350 / Fax 513-825-4756

LOG OF TEST BORING

CLIENT Mr. Gilbert Ellison — BORING # 7

PROJECT Geotechnical Exploration, Proposed Kyles Lane Townhomes — JOB # 95160E

LOCATION OF BORING As shown on Boring Plan, Drawing 95160E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRA. DEPTH	DEPTH SCALE	SAMPLE Cond	Blows/6"	No.	Type	Rec.
649.7	SURFACE	0.0						
	Mottled brown trace gray moist very stiff SILTY CLAY, with shale fragments, limestone floaters and trace hairlike roots (colluvium).	0.9		I	2/4/6	1A 1B	DS	13"
648.8	Brown moist very soft highly weathered SHALE and thinly bedded LIMESTONE (bedrock).	4.5	5	I	8/12/25	2	DS	14"
645.2	Olive brown and gray, trace brown moist soft weathered SHALE and thinly bedded LIMESTONE (bedrock).	9.0		I	15/21/30	3	DS	13"
				I	12/18/13	4	DS	
	Bottom of test boring @ 9.0 feet.		10					
			15					

Datum USGS — Hammer Wt. 140 Lbs. — Hole Diameter 5" — Foreman GB

Surf. Elev. 649.7 Ft. — Hammer Drop 30 In. — Rock Core Dia. — Engineer JWK

Date Started 4/11/95 — Pipe Size O.D. 2 In. — Boring Method CFA — Date Completed 4/11/95

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT
U – UNDISTURBED
L – LOST

SAMPLER TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
FIRST NOTED None FT.
AT COMPLETION Dry FT.
AFTER 46 HRS. 5.5 FT.
BACKFILLED 46 HRS.

BORING METHOD
HSA – Hollow Stem Augers
CFA – Continous Flight Augers
DC – Driving Casing
MD – Mud Drilling

*STANDARD PENETRATION TEST – DRIVING 2" OD SAMPLER 1' WITH 140 #, HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

CIVIL ENGINEERS

G. J. Thelen & Associates, Inc.

☑ 516 Enterprise Drive / Covington, Kentucky 41017-1595 / 606-341-1322 / Fax 606-341-0832

☐ 1310 Kemper Meadow Drive, Suite 600 / Forest Park, Ohio 45240-1651 / 513-825-4350 / Fax 513-825-4756

LOG OF TEST BORING

CLIENT Mr. Gilbert Ellison — BORING # 8

PROJECT Geotechnical Exploration, Proposed Kyles Lane Townhomes — JOB # 95160E

LOCATION OF BORING As shown on Boring Plan, Drawing 95160E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRA. DEPTH	DEPTH SCALE	SAMPLE Cond	Blows/6"	No.	Type	Rec.
620.0	SURFACE	0.0						
618.0	Mixed brown moist very soft FILL, silty clay with limestone floaters, shale fragments, and organic (plant) matter.	2.0		I	1/18"	1	DS	8"
615.5	Dark brown moist medium stiff to stiff FILL, topsoil with hairlike roots.	4.5	5	I	3/6/10	2	DS	13"
613.0	Brown moist very stiff SILTY CLAY with limestone floaters and shale fragments (colluvium).	7.0		I	3/6/7	3	DS	14"
611.7	Brown and olive brown, trace gray moist very stiff SILTY CLAY with shale fragments and limestone floaters (colluvium).	8.3		I	5/14/20	4A 4B	DS	18"
608.5	Brown and olive brown moist very stiff highly weathered SHALE and thinly bedded LIMESTONE (bedrock).	11.5	10	I	15/27/37	5	DS	12"
	Bottom of test boring @ 11.5 feet.		15					

Datum USGS — Hammer Wt. 140 Lbs. — Hole Diameter 5" — Foreman GB

Surf. Elev. 620.0 Ft. — Hammer Drop 30 In. — Rock Core Dia. — Engineer JWK

Date Started 4/11/95 — Pipe Size O.D. 2 In. — Boring Method CFA — Date Completed 4/11/95

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT
U – UNDISTURBED
L – LOST

SAMPLER TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
FIRST NOTED None FT.
AT COMPLETION Dry FT.
AFTER 46 HRS. Dry FT.
BACKFILLED 46 HRS.

BORING METHOD
HSA – Hollow Stem Augers
CFA – Continous Flight Augers
DC – Driving Casing
MD – Mud Drilling

*STANDARD PENETRATION TEST – DRIVING 2" OD SAMPLER 1' WITH 140 #. HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

CIVIL ENGINEERS

G. J. Thelen & Associates, Inc.

☑ 516 Enterprise Drive / Covington, Kentucky 41017-1595 / 606-341-1322 / Fax 606-341-0832

☐ 1310 Kemper Meadow Drive, Suite 600 / Forest Park, Ohio 45240-1651 / 513-825-4350 / Fax 513-825-4756

LOG OF TEST BORING

CLIENT Mr. Gilbert Ellison BORING # 9

PROJECT Geotechnical Exploration, Proposed Kyles Lane Townhomes JOB # 95160E

LOCATION OF BORING As shown on Boring Plan, Drawing 95160E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRA. DEPTH	DEPTH SCALE	SAMPLE Cond	Blows/6"	No.	Type	Rec.
661.6	SURFACE							
660.9	TOPSOIL	0.7		I	6/9/9	1A 1B	DS	15"
660.1	Dark brown moist stiff SILTY CLAY, trace hairlike roots.	1.5		I	6/8/15	2	DS	12"
657.4	Brown trace dark brown moist stiff SILTY CLAY with limestone floaters, shale fragments and hairlike roots.	4.2	5	I	8/12/50/2"	3	DS	6"
656.8	Brown moist very soft highly weathered SHALE and thinly bedded LIMESTONE (bedrock).	4.8		I	50/2"	4	DS	2"
	Bottom of test boring @ 4.8 feet.		10					
			15					

NOTE

Datum USGS
Surf. Elev. 661.1 Ft.
Date Started 4/11/95

Hammer Wt. 35 Lbs.
Hammer Drop 30 In.
Pipe Size O.D. 2 In.

Hole Diameter 3"
Rock Core Dia. —
Boring Method Hand

Foreman GB
Engineer JWK
Date Completed 4/11/95

SAMPLE CONDITIONS
D – DISINTEGRATED
I – INTACT
U – UNDISTURBED
L – LOST

SAMPLER TYPE
DS – DRIVEN SPLIT SPOON
PT – PRESSED SHELBY TUBE
CA – CONTINUOUS FLIGHT AUGER
RC – ROCK CORE

GROUND WATER DEPTH
FIRST NOTED None FT.
AT COMPLETION Dry FT.
AFTER ___ HRS. ~~Dry~~ FT.
BACKFILLED Immed. HRS.

BORING METHOD
HSA – Hollow Stem Augers
CFA – Continous Flight Augers
DC – Driving Casing
MD – Mud Drilling

*STANDARD PENETRATION TEST – DRIVING 2" OD SAMPLER 1' WITH 140 #. HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408
2140 Waycross Road / Cincinnati, Ohio 45240-2719 / 513-825-4350 / Fax 513-825-4756
www.thelenassoc.com

LOG OF TEST BORING

CLIENT: Kyles Lane Development, LLC BORING #: 10

PROJECT: Geotechnical Exploration, Villages of Kyles Lane Townhomes, Covington, Ky. JOB #: 060710E

LOCATION OF BORING: As shown on Boring Plan, Drawing 060710E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH (feet)	DEPTH SCALE (feet)	SAMPLE Cond	Blows/6"	No.	Type	Rec. (inches)
599.0	SURFACE	0.0						
598.5	TOPSOIL	0.5		I	3/3/6	1A 1B	DS	18
597.0	Brown moist stiff FILL, silty clay, trace roots.	2.0		I	6/7/10	2	DS	18
594.7	Brown, trace gray moist very stiff CLAY, trace bedding planes with roots (residual, blocky structure). (CH)	4.3	5	U	-	3	PT	12/18
590.0	Interbedded olive brown moist soft weathered SHALE and gray hard LIMESTONE (bedrock). (CL)	9.0		I	6/8/15	3	DS	18
586.5	Interbedded brown, trace gray moist soft weathered SHALE and gray hard LIMESTONE (bedrock).	12.5	10	I	18/21/30	5	DS	18
585.0	Interbedded gray moist soft SHALE and gray hard LIMESTONE (bedrock).	14.0		I	25/35/40	6	DS	18
	Bottom of test boring at 14.0 feet.		15	I	35/50/60	7	DS	18
			20					
			25					

Datum MSL Hammer Wt. 30 lbs. Hole Diameter 8 in. Foreman LW

Surf. Elev. 599.0 ft. Hammer Drop 140 in. Rock Core Dia. - in. Engineer LDP

Date Started 8/2/06 Pipe Size O.D. 2 in. Boring Method HSA Date Completed 8/2/06

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

SAMPLE TYPE
DS -DRIVEN SPLIT SPOON
PT -PRESSED SHELBY TUBE
CA -CONTINUOUS FLIGHT AUGER
RC -ROCK CORE

GROUNDWATER DEPTH
FIRST NOTED None ft.
AT COMPLETION Dry ft.
AFTER 0.5 hr Dry ft.
BACKFILLED 0.5 hrs.

BORING METHOD
HSA -HOLLOW STEM AUGERS
CFA -CONTINUOUS FLIGHT AUGERS
DC -DRIVING CASING
MD -MUD DRILLING

STANDARD PENETRATION TEST - DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408
2140 Waycross Road / Cincinnati, Ohio 45240-2719 / 513-825-4350 / Fax 513-825-4756
www.thelenassoc.com

LOG OF TEST BORING

CLIENT: Kyles Lane Development, LLC BORING # : 11

PROJECT: Geotechnical Exploration, Villages of Kyles Lane Townhomes, Covington, Ky. JOB # : 060710E

LOCATION OF BORING: As shown on Boring Plan, Drawing 060710E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH (feet)	DEPTH SCALE (feet)	SAMPLE Cond	Blows/6"	No.	Type	Rec. (Inches)
623.4	SURFACE	0.0						
622.6	TOPSOIL	0.8		I	3/4/6	1A 1B	DS	18
621.4	Mottled brown moist stiff to very stiff silty clay, trace roots, trace limestone fragments.	2.0		I	8/9/12	2	DS	18
618.9	Brown moist very stiff CLAY, trace shale fragments (colluvium). (CH)	4.5	5	I	10/11/15	3	DS	18
615.4	Interbedded brown moist very soft highly weathered SHALE with gray hard LIMESTONE (bedrock).	8.0		I	10/18/23	4	DS	8
613.4	Interbedded olive brown moist soft weathered SHALE and gray hard LIMESTONE (bedrock).	10.0	10	I	45/30/6"	5	DS	8
609.4	Interbedded gray moist soft SHALE and gray hard LIMESTONE (bedrock).	14.0		I	55/50/1"	6	DS	6
	Split spoon refusal and bottom of test boring at 14.0 feet.		15 20 25					

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 8 in. Foreman LW

Surf. Elev. 623.4 ft. Hammer Drop 30 in. Rock Core Dia. - in. Engineer LDP

Date Started 8/2/06 Pipe Size O.D. 2 in. Boring Method HSA Date Completed 8/2/06

SAMPLE CONDITIONS
D - DISINTEGRATED
I -INTACT
U -UNDISTURBED
L -LOST

SAMPLE TYPE
DS -DRIVEN SPLIT SPOON
PT -PRESSED SHELBY TUBE
CA -CONTINUOUS FLIGHT AUGER
RC -ROCK CORE

GROUNDWATER DEPTH
FIRST NOTED None ft.
AT COMPLETION Dry ft.
AFTER 0.5 hr Dry ft.
BACKFILLED 0.5 hrs.

BORING METHOD
HSA -HOLLOW STEM AUGERS
CFA -CONTINUOUS FLIGHT AUGERS
DC -DRIVING CASING
MD -MUD DRILLING

STANDARD PENETRATION TEST - DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408
2140 Waycross Road / Cincinnati, Ohio 45240-2719 / 513-825-4350 / Fax 513-825-4756
www.thelenassoc.com

LOG OF TEST BORING

CLIENT: Kyles Lane Development, LLC BORING # : 12

PROJECT: Geotechnical Exploration, Villages of Kyles Lane Townhomes, Covington, Ky. JOB # : 060710E

LOCATION OF BORING: As shown on Boring Plan, Drawing 060710E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH (feet)	DEPTH SCALE (feet)	SAMPLE Cond	Blows/6"	No.	Type	Rec. (Inches)
597.6	SURFACE	0.0						
597.4	TOPSOIL	0.2		I	4/5/6	1	DS	18
595.6	Mixed brown moist stiff FILL, silty clay, trace roots trace limestone floaters.	2.0		I	6/7/7	2	DS	18
593.1	Mixed brown, trace dark brown moist very stiff FILL, silty clay with limestone floaters trace roots.	4.5	5	I	9/9/10	3	DS	8
590.6	Brown moist stiff to very stiff SILTY CLAY with limestone floaters, trace bedding planes.	7.0		I	18/31/36	4	DS	18
586.1	Interbedded gray moist soft SHALE and gray hard LIMESTONE (bedrock).	11.5	10	I	12/35/40	5	DS	18
	Bottom of test boring at 11.5 feet.		15 20 25					

Datum MSL Hammer Wt. 140 lbs. Hole Diameter 8 in. Foreman LW

Surf. Elev. 597.6 ft. Hammer Drop 30 in. Rock Core Dia. - in. Engineer LDP

Date Started 8/2/06 Pipe Size O.D. 2 in. Boring Method HSA Date Completed 8/2/06

SAMPLE CONDITIONS
D - DISINTEGRATED
I -INTACT
U -UNDISTURBED
L -LOST

SAMPLE TYPE
DS -DRIVEN SPLIT SPOON
PT -PRESSED SHELBY TUBE
CA -CONTINUOUS FLIGHT AUGER
RC -ROCK CORE

GROUNDWATER DEPTH
FIRST NOTED None ft.
AT COMPLETION Dry ft.
AFTER 1.0 hr Dry ft.
BACKFILLED 1.0 hrs.

BORING METHOD
HSA -HOLLOW STEM AUGERS
CFA -CONTINUOUS FLIGHT AUGERS
DC -DRIVING CASING
MD -MUD DRILLING

STANDARD PENETRATION TEST - DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408
2140 Waycross Road / Cincinnati, Ohio 45240-2719 / 513-825-4350 / Fax 513-825-4756
www.thelenassoc.com

LOG OF TEST BORING

CLIENT: Kyles Lane Development, LLC — BORING # : 14

PROJECT: Geotechnical Exploration, Villages of Kyles Lane Townhomes, Covington, Ky. — JOB # : 060710E

LOCATION OF BORING: As shown on Boring Plan, Drawing 060710E-1

ELEV.	SOIL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTH (feet)	SAMPLE Cond	Blows/6"	No.	Type	Rec. (Inches)
567.7	SURFACE	0.0					
567.3	TOPSOIL	0.4	I	4/4/5	1	DS	18
565.7	Mixed dark brown moist stiff FILL, silty clay, trace limestone fragments, trace roots.	2.0	I	5/4/5	2	DS	18
563.2	Dark brown moist stiff CLAY, trace roots. (CH)	4.5	I	10/11/12	3	DS	18
560.7	Brown, trace gray moist very stiff SILTY CLAY with limestone floaters, trace bedding planes (residual). (CL)	7.0	I	8/14/20	4	DS	18
558.2	Interbedded brown moist very soft highly weathered SHALE and gray hard LIMESTONE (bedrock).	9.5	I	11/40/51	5	DS	18
556.2	Interbedded olive brown moist soft weathered SHALE and gray hard LIMESTONE (bedrock).	11.5					
	Bottom of test boring at 11.5 feet.						

DEPTH SCALE (feet): 5, 10, 15, 20, 25

Datum MSL — Hammer Wt. 140 lbs. — Hole Diameter 8 in. — Foreman LW

Surf. Elev. 567.7 ft. — Hammer Drop 30 in. — Rock Core Dia. - in. — Engineer LDP

Date Started 8/2/06 — Pipe Size O.D. 2 in. — Boring Method HSA — Date Completed 8/2/06

SAMPLE CONDITIONS
D - DISINTEGRATED
I - INTACT
U - UNDISTURBED
L - LOST

SAMPLE TYPE
DS -DRIVEN SPLIT SPOON
PT -PRESSED SHELBY TUBE
CA -CONTINUOUS FLIGHT AUGER
RC -ROCK CORE

GROUNDWATER DEPTH
FIRST NOTED None ft.
AT COMPLETION Dry ft.
AFTER 1.0 hr Dry ft.
BACKFILLED 1.0 hrs.

BORING METHOD
HSA -HOLLOW STEM AUGERS
CFA -CONTINUOUS FLIGHT AUGERS
DC -DRIVING CASING
MD -MUD DRILLING

STANDARD PENETRATION TEST - DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

THELEN ASSOCIATES, INC.
Geotechnical • Testing Engineers
• 1398 Cox Avenue, Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408
www.thelenassoc.com
Offices
Erlanger, Kentucky
Lexington, Kentucky
Cincinnati, Ohio
Dayton, Ohio

SOIL CLASSIFICATION SHEET

NON COHESIVE SOILS
(Silt, Sand, Gravel and Combinations)

Density

Very Loose	- 5 blows/ft. or less
Loose	- 6 to 10 blows/ft.
Medium Dense	- 11 to 30 blows/ft.
Dense	- 31 to 50 blows/ft.
Very Dense	- 51 blows/ft. or more

Relative Properties

Descriptive Term	Percent
Trace	1 – 10
Little	11 – 20
Some	21 – 35
And	36 – 50

Particle Size Identification

Boulders	- 8 inch diameter or more	
Cobbles	- 3 to 8 inch diameter	
Gravel	- Coarse	- 3/4 to 3 inches
	- Fine	- 3/16 to 3/4 inches
Sand	- Coarse	- 2mm to 5mm (dia. of pencil lead)
	- Medium	- 0.45mm to 2mm (dia. of broom straw)
	- Fine	- 0.075mm to 0.45mm (dia. of human hair)
Silt		- 0.005mm to 0.075mm (Cannot see particles)

COHESIVE SOILS
(Clay, Silt and Combinations)

Consistency	Field Identification	Unconfined Compressive Strength (tons/sq. ft.)
Very Soft	Easily penetrated several inches by fist	Less than 0.25
Soft	Easily penetrated several inches by thumb	0.25 – 0.5
Medium Stiff	Can be penetrated several inches by thumb with moderate effort	0.5 – 1.0
Stiff	Readily indented by thumb but penetrated only with great effort	1.0 – 2.0
Very Stiff	Readily indented by thumbnail	2.0 – 4.0
Hard	Indented with difficulty by thumbnail	Over 4.0

Classification on logs are made by visual inspection.

Standard Penetration Test – Driving a 2.0" O.D., 1 3/8" I.D., sampler a distance of 1.0 foot into undisturbed soil with a 140 pound hammer free falling a distance of 30 inches. It is customary to drive the spoon 6 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and making the tests are recorded for each 6 inches of penetration on the drill log (Example – 6/8/9). The standard penetration test results can be obtained by adding the last two figures (i.e. 8+9=17 blows/ft.). Refusal is defined as greater than 50 blows for 6 inches or less penetration.

Strata Changes – In the column "Soil Descriptions" on the drill log, the horizontal lines represent strata changes. A solid line (————) represents an actually observed change; a dashed line (— — — —) represents an estimated change.

Groundwater observations were made at the times indicated. Porosity of soil strata, weather conditions, site topography, etc., may cause changes in the water levels indicated on the logs.

TERMS & CONDITIONS

SALES TERMS: As Is/Non Contingent/10% down payment required on date of sale. Closing must take place on or before Monday, August 29, 2022. 10% buyer's premium added to the final price and included in the contract purchase price. Online bidders must email a letter of good standing to info@noelauctioneers.com at least 48 hours prior to auction date.

******IN ORDER TO BID ONLINE YOU MUST PUT UP A GOOD FAITH DEPOSIT IN THE AMOUNT OF $5,000 HELD IN ESCROW WITH DANIEL H. MILLER, ATTORNEY. EMAIL INFO@NOELAUCTIONEERS.COM FOR MORE INFORMATION!******

If you are the winning bidder online, you will have until Friday, July 15, 2022 on or before 5 p.m. to pay the remaining 10% down payment. If you are not the winning bidder, the money will be wired back to you before 5 p.m. on Friday, July 15, 2022.