

Source: Community Development - BSD 

Agenda Item No: REP 88-13

To: City Council
From: City Manager and Staff 

Council Meeting Date: Jun 17, 2013

Re: Heritage Woods Dam (CM3882)

EXECUTIVE SUMMARY:

Staff was asked at the June 3, 2013 Council meeting to provide a report on the dam and adjacent roadway within the Heritage Woods, Plat 2 development following recent storm events. The Community Development Department and Fire Department had representatives on site on May 31, 2013. Some background and a summary of their findings follows.

DISCUSSION:

Background

The Heritage Woods pond is an old farm pond which was installed many years before either phase of Heritage Woods took place. Therefore, the design parameters used at the time the pipe was originally installed are unknown. Prior to the Heritage Woods, Plat 2 development the pipe was rusted out at the surface which was causing a decrease in the overall water level. The developer, as part of Plat 2, replaced the upper portion of the pipe which returned the water level to its original elevation. This has caused some concerns from the residents of Plat 1 who had become used to the pond at the lower water level. However, with this increased water level, the pond does still appear to stay within the pond's property. The pond is platted as a separate lot as part of Heritage Woods, Plat No. 2. A copy of the plat is attached for reference.

Plat 2 also included the installation of a residential street over the existing dam of the pond. The developer's engineer designed modifications to the existing dam to ensure that the roadway met the City's design requirements for residential streets. These dam modifications were completed prior to the most recent storm events. The roadway over the dam is designed to meet the City's spread requirement of one clear lane of traffic having a minimum width of 10 feet during the peak flows of a design storm having a 10 year frequency. The storm on May 31, 2013 did not exceed the 10-year frequency design storm.

When Plat 2 was proposed the installation of the street over the dam generated some concerns by both the Community Development and Public Works Departments during the plan review process. This street is the only way for Plat 2 residents to enter and exit the subdivision. It is also the only way for the City to access those lots for trash service, snow removal, and utility and roadway maintenance. Typically the most wear and tear on a roadway is during home construction. Therefore, in order to demonstrate that the new roadway over the dam would hold up sufficiently, the Public Works Department stipulated that the roadway would not be accepted for maintenance until which time 21 of the 26 lots proposed in Plat 2 received a Certificate of Occupancy. Community Development is tracking this for the Public Works Department as part of the permitting process. As of June 7, 2013, 7 Certificates of Occupancy have been issued on Plat 2.

The dam itself is currently the responsibility of the developer. Often developers turn over maintenance of facilities such as these following build out of the subdivision to the home owner's association. Staff is not aware of what is intended by this particular developer. At no time will the City be responsible for maintenance of the dam.

May 31, 2013 - Stormwater Concerns

The Public Works Department received a call and the Community Development Department received an e-mail the morning of Friday, May 31st from a representative of the Home Owner's Association for Heritage Woods during the storm event. The representative reported that Plat 2 residents were unable to exit the development due to the amount of water over the roadway. The representative also reported that water had “gone around” the dam which was adding to the problem. Following discussions with the Public Works Department, the Community Development Department sent an inspector out to examine the situation. Community Development also requested that the developer's engineer inspect the area as well since the roadway has not been accepted for maintenance and provide a report of their findings. Additionally Public Works requested that the Fire Department examine the situation as well so that Joint Communications could be notified of any deficiencies that might hinder emergency services, if applicable.

The Community Development inspector met the developer on site at approximately 11:15 a.m. The inspector noted that the water was exiting the dam via the emergency spillway and the stand pipe was under water. However, no damage to the dam was noted and there was no evidence of water breaching the dam itself. The situation appeared to be exacerbated by erosion and sediment control devices (straw bales) which were being used in nearest curb inlet. This was causing water from the emergency spillway to back up and pond in the street. The developer removed the straw bales which greatly aided in reducing the water on the street. During the heaviest rainfall the street was most likely blocked or nearly blocked by rising water. The developer's engineer provided a very similar report verbally later that afternoon. The Fire Department arrived on site at approximately 1:30 p.m. and reported no concerns to emergency services.

Conclusions

It appears that had Plat 2 been fully stabilized, thereby eliminating the need for the straw bales in the curb inlet, that the situation would have been of much less concern. Due to the amount of recent rain it is feasible that the pond had reached capacity during the May 31st event. If so, the dam functioned as intended, using the emergency spillway to discharge the water to the nearby curb inlet. Staff will continue to monitor the roadway over the dam throughout the home construction on Plat 2.

FISCAL IMPACT:

None.

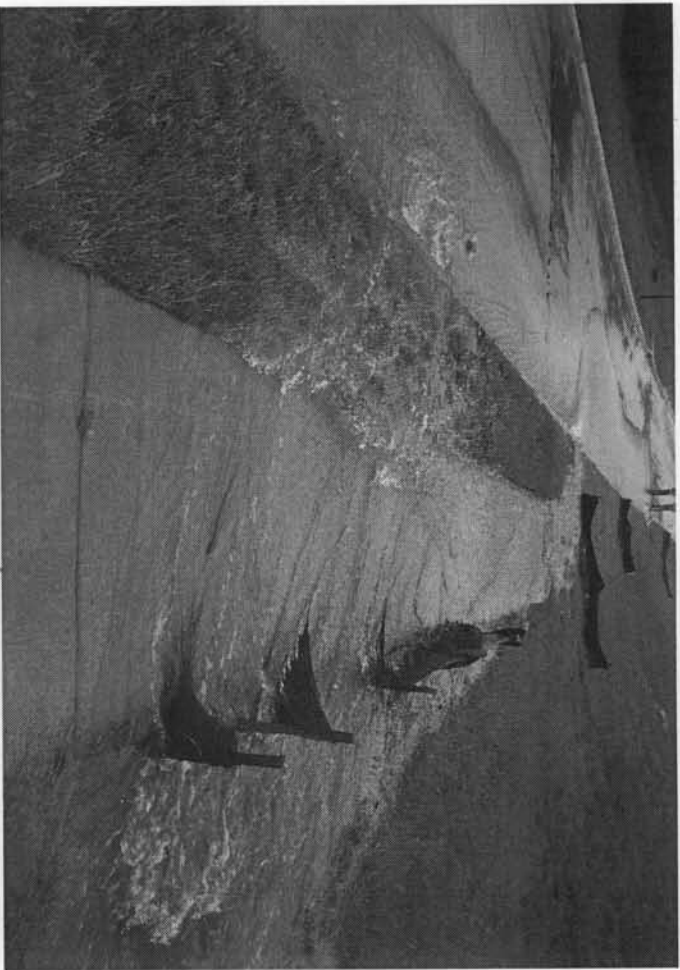
VISION IMPACT:

<http://www.gocolumbiamo.com/Council/Meetings/visionimpact.php>

SUGGESTED COUNCIL ACTIONS:

Acceptance of the report.

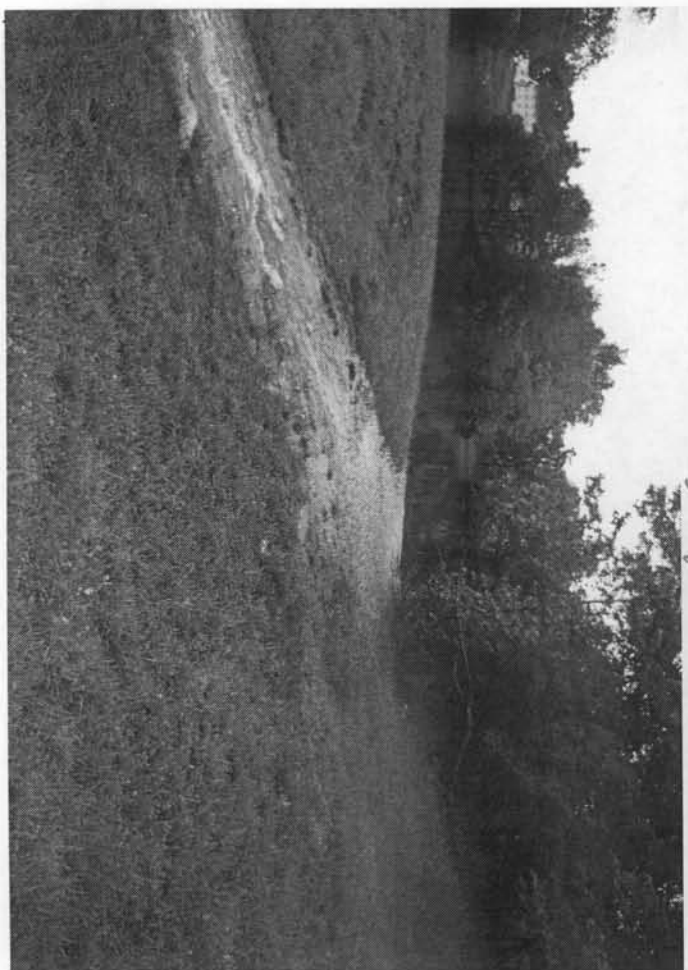
FISCAL and VISION NOTES:					
City Fiscal Impact Enter all that apply		Program Impact		Mandates	
City's current net FY cost	\$0.00	New Program/ Agency?	No	Federal or State mandated?	No
Amount of funds already appropriated	\$0.00	Duplicates/Expands an existing program?	No	Vision Implementation impact	
Amount of budget amendment needed	\$0.00	Fiscal Impact on any local political subdivision?	No	Enter all that apply: Refer to Web site	
Estimated 2 year net costs:		Resources Required		Vision Impact?	No
One Time	\$0.00	Requires add'l FTE Personnel?	No	Primary Vision, Strategy and/or Goal Item #	
Operating/ Ongoing	\$0.00	Requires add'l facilities?	No	Secondary Vision, Strategy and/or Goal Item #	
		Requires add'l capital equipment?	No	Fiscal year implementation Task #	



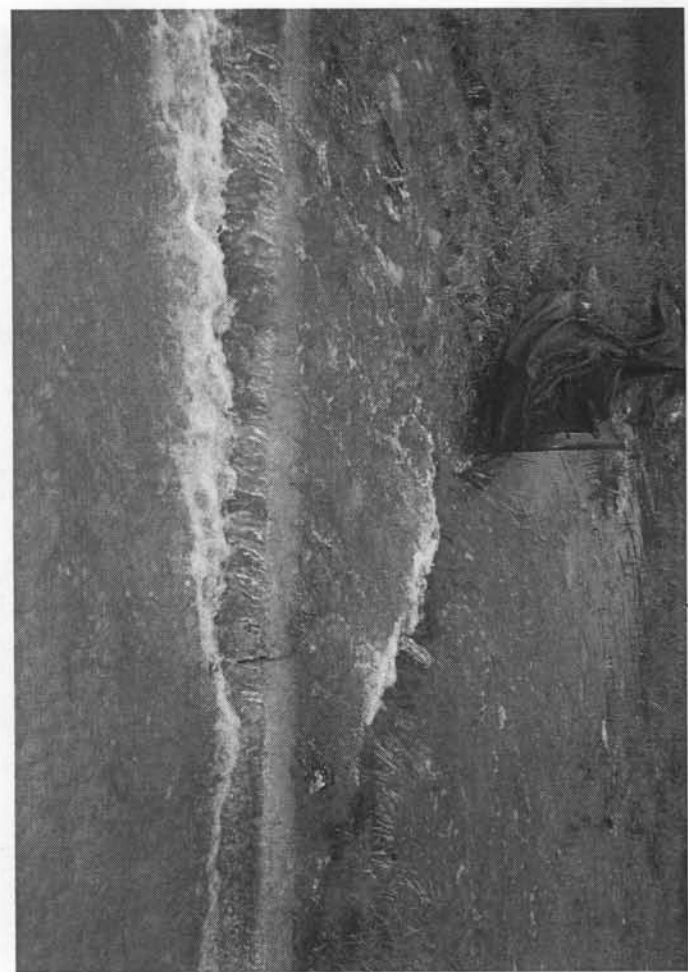
WATER CROSSING R/L LANE



CULVERT INLET PREVIOUSLY BLOCKED



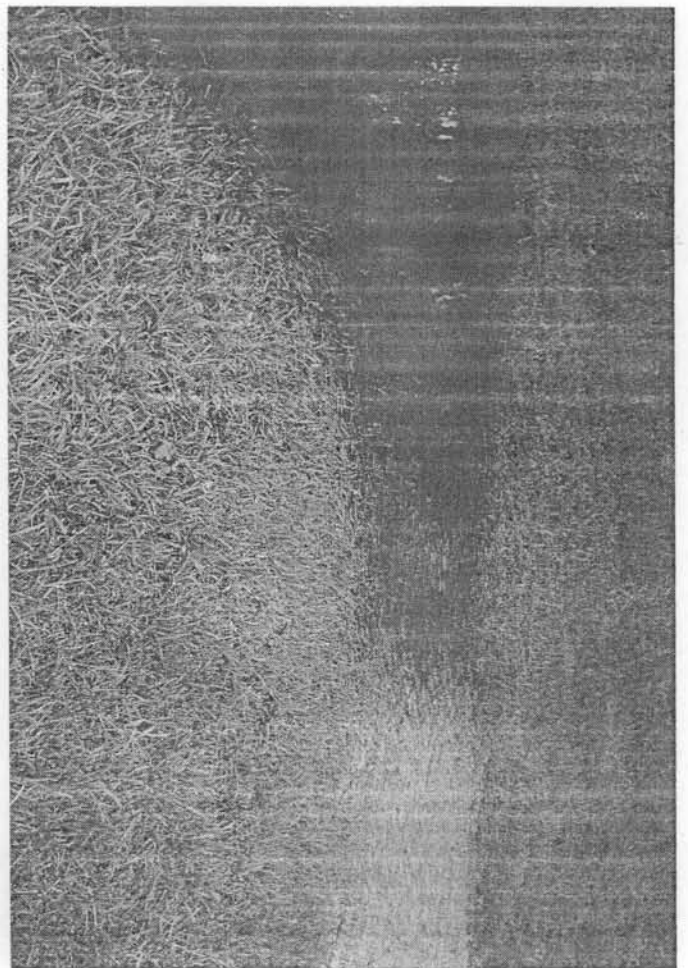
EMERGENCY SPILLWAY



AS WATER EXTENDS ROADWAY



PONDED WATER ON WAY TO
CURB INLET



Section 113-084; Ord. 21249; Approving the Final Plat of Heritage Woods, Plat No. 2; authorizing a performance contract

Ordinance No. 21249

Council Bill No. B 29-12 A

AN ORDINANCE

approving the Final Plat of Heritage Woods, Plat No. 2; accepting the dedication of rights-of-way and easements; setting forth conditions for approval; authorizing a performance contract; and fixing the time when this ordinance shall become effective.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF COLUMBIA, MISSOURI, AS FOLLOWS:

SECTION 1. The City Council hereby approves the Final Plat of Heritage Woods, Plat No. 2, dated October 31, 2011, a subdivision located on Kingsbridge Drive, east of Sinclair Road, containing approximately 20.99 acres in the City of Columbia, Boone County, Missouri, and hereby authorizes and directs the Mayor and City Clerk to sign the plat evidencing such approval.

SECTION 2. The City Council hereby accepts the dedication of all rights-of-way and easements as dedicated upon the plat.

SECTION 3. The approval of the Final Plat of Heritage Woods, Plat No. 2 is subject to the following conditions:

- a. The subdivider shall be responsible for maintaining the portion of Kingsbridge Drive that crosses the dam (hereafter, "the Street"), together with all appurtenances, until certificates of occupancy have been issued for houses on 21 lots in the plat. Thereafter, the City shall be responsible for maintaining the Street.
- b. Before issuance of a building permit for construction of a house on any lot in the plat, subdivider shall provide City with a bond in the amount of \$250.00 per lineal foot of the Street. The bond shall secure any repairs to the Street that are needed before certificates of occupancy have been issued for houses on 21 lots in the plat. The surety and conditions of the bond are subject to the approval of the City's Public Works Director and the City Counselor.
- c. The City shall not be responsible for the dam or its structural components (e.g. overflow pipes or swales).

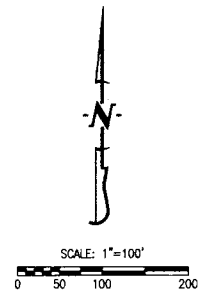
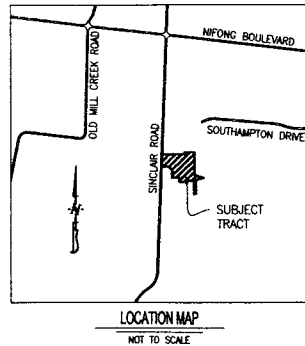
SECTION 4. The City Manager is hereby authorized to execute a performance contract with Heritage Woods Development, LLC in connection with the approval of the Final Plat of Heritage Woods, Plat No. 2. The form and content of the contract shall be substantially as set forth in "Exhibit A" attached hereto and made a part hereof as fully as if set forth herein verbatim.

SECTION 5. This ordinance shall be in full force and effect from and after its passage.

PASSED this 5th day of March, 2012.

FINAL PLAT HERITAGE WOODS, PLAT No. 2

SOUTHEAST 1/4 OF SECTION 34, TOWNSHIP 48 NORTH,
RANGE 13 WEST, BOONE COUNTY, MISSOURI
OCTOBER 31, 2011



BEARINGS ARE REFERENCED TO THE EAST LINE
OF LOTS 4, 5 AND 6 OF HERITAGE WOODS,
PLAT NO. 1 RECORDED IN PLAT BOOK 39,
PAGE 58. BEARING SHOWN AS N 1°32'40"W.

- LEGEND:**
- E EXISTING
 - S SET
 - SET 1/2" IRON PIPE
(UNLESS NOTED OTHERWISE)
 - PERMANENT MONUMENT
(5/8" REBAR W/ ALUMINUM CAP)
 - (M) MEASURED DISTANCE
 - (REC) RECORDED DISTANCE
 - (R) RADIAL LINE
 - DH X DRILL HOLE
 - W/ CHISELED X
 - P.O.B. POINT OF BEGINNING

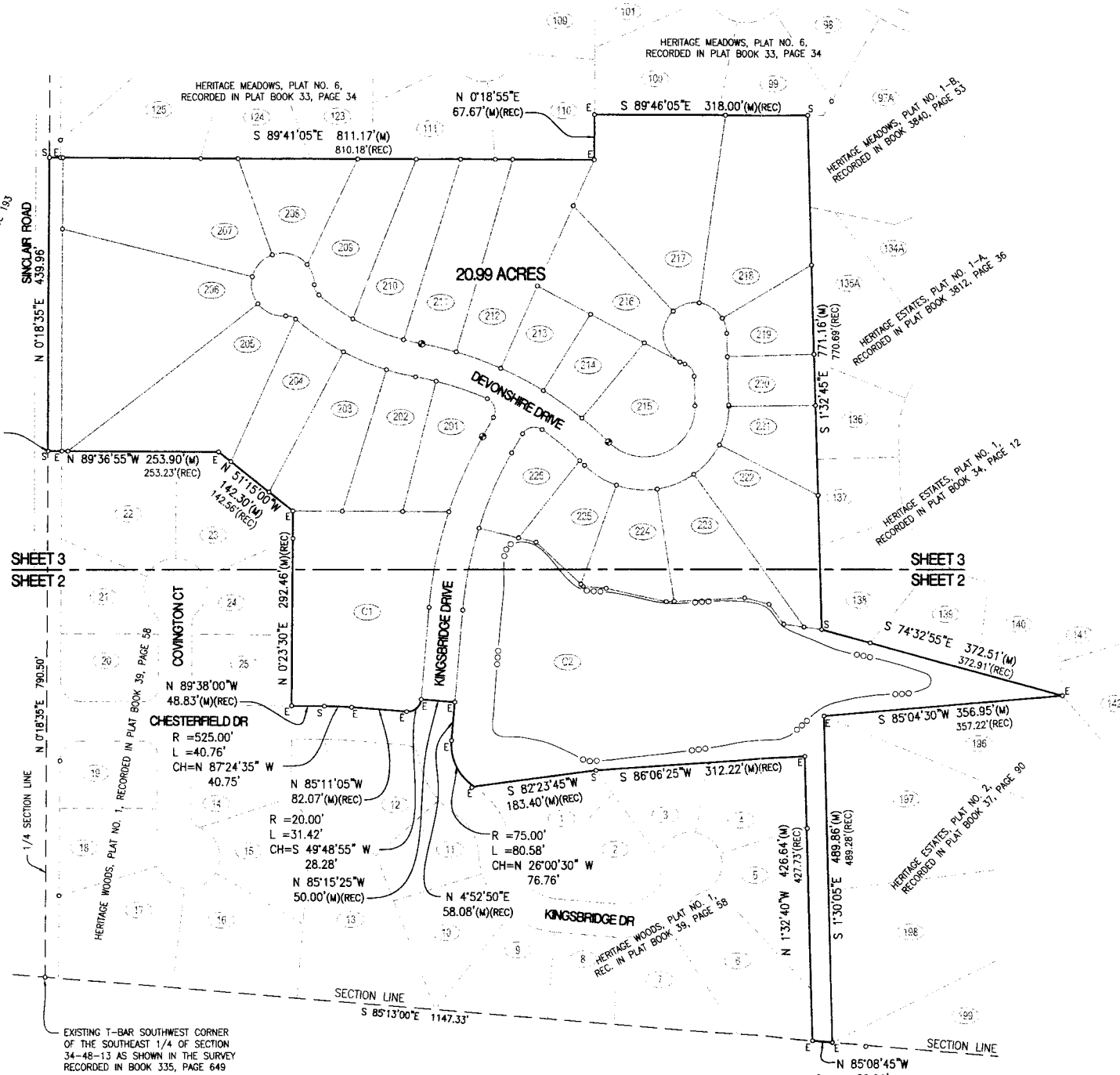
NOTES:

- THIS TRACT IS NOT LOCATED IN THE 100-YEAR FLOOD PLAIN AS SHOWN BY BOONE COUNTY FLOOD PLAIN MAP #29019C02900, DATED MARCH 17, 2011.
- THIS SURVEY CONFORMS TO THE ACCURACY STANDARDS FOR URBAN PROPERTY AS DEFINED BY MISSOURI STATUTE 20 CSR 2030-16.040(2)(A).
- A CURRENT TITLE COMMITMENT WAS NOT PROVIDED FOR THIS SURVEY.
- THIS TRACT IS NOT REGULATED BY THE STREAM BUFFER REQUIREMENTS IN SECTION 12A-230A ARTICLE X OF THE CITY OF COLUMBIA CODE OF ORDINANCES.
- THE CITY OF COLUMBIA DOES NOT ACCEPT RESPONSIBILITY FOR THE MAINTENANCE OF THE DAM, OUTLET STRUCTURES AND OVERFLOW SPILLWAY.

ACCEPTED BY ORDINANCE OF THE CITY COUNCIL OF COLUMBIA, MISSOURI,
THIS 5th DAY OF MARCH, 2012.

Robert McDavid
ROBERT MCDIVID, MAYOR

Sheela Amin
SHEELA AMIN, CITY CLERK



EXISTING T-BAR SOUTHWEST CORNER
OF THE SOUTHEAST 1/4 OF SECTION
34-48-13 AS SHOWN IN THE SURVEY
RECORDED IN BOOK 335, PAGE 649

WARRANTY DEED RECORDED IN BOOK 137, PAGE 620

CERTIFICATION:

I HEREBY CERTIFY THAT IN OCTOBER 2011, I COMPLETED A SURVEY AND SUBDIVISION FOR HERITAGE WOODS DEVELOPMENT, LLC. OF A TRACT OF LAND LOCATED IN THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 48 NORTH, RANGE 13 WEST, BOONE COUNTY, MISSOURI AND BEING PART OF THE LAND DESCRIBED BY THE WARRANTY DEED RECORDED IN BOOK 3892, PAGE 106 AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING ON THE WEST LINE OF SAID SOUTHEAST QUARTER AT THE NORTHWEST CORNER OF HERITAGE WOODS, PLAT NO. 1 RECORDED IN PLAT BOOK 39, PAGE 58, AND WITH THE WEST LINE THEREOF, N 0°18'35"E, 439.96 FEET TO THE SOUTHWEST CORNER OF HERITAGE MEADOWS, PLAT NO. 6, RECORDED IN PLAT BOOK 33, PAGE 34; THENCE WITH THE SOUTH LINE OF SAID HERITAGE MEADOWS, PLAT NO. 6, S 89°41'05"E, 811.17 FEET TO THE SOUTHEAST CORNER OF LOT 110 OF SAID HERITAGE MEADOWS, PLAT NO. 6; THENCE N 0°18'55"E, 67.67 FEET TO THE SOUTHWEST CORNER LOT 100 OF SAID HERITAGE MEADOWS, PLAT NO. 6, THENCE S 89°46'05"E, 318.00 FEET TO THE NORTHWEST CORNER OF LOT 97A OF HERITAGE MEADOWS, PLAT NO. 1-B RECORDED IN BOOK 3840, PAGE 53; THENCE LEAVING THE LINES OF SAID HERITAGE MEADOWS, PLAT NO. 6 AND WITH THE WEST LINE OF HERITAGE MEADOWS, PLAT NO. 1-B, S 1°32'45"E, 771.16 FEET TO THE SOUTHWEST CORNER OF LOT 138 OF HERITAGE ESTATES, PLAT 1, RECORDED IN PLAT BOOK 34, PAGE 12; THENCE WITH THE LINES OF SAID HERITAGE ESTATES, PLAT NO. 1, S 74°32'55"E, 372.51 FEET TO THE NORTHEAST CORNER OF LOT 196 OF HERITAGE ESTATES, PLAT NO. 2, RECORDED IN PLAT BOOK 37, PAGE 90; THENCE WITH THE LINES OF SAID HERITAGE ESTATES, PLAT NO. 2, S 85°04'30"W, 356.95 FEET TO THE NORTHWEST CORNER OF LOT 196 OF SAID HERITAGE ESTATES, PLAT NO. 2; THENCE S 1°30'05"E, 489.86 FEET TO THE SOUTHWEST CORNER OF LOT 198 OF SAID HERITAGE ESTATES, PLAT NO. 2 AND THE SOUTH LINE OF SAID SECTION 34; THENCE WITH THE SOUTH LINE OF SAID SECTION, N 85°08'45"W, 29.91 FEET TO THE SOUTHEAST CORNER OF LOT 6 OF SAID HERITAGE WOODS, PLAT NO. 1 RECORDED IN PLAT BOOK 39, PAGE 58; THENCE WITH THE LINES OF SAID HERITAGE WOODS, PLAT NO. 1, N 1°32'40"W, 426.64 FEET; THENCE S 86°06'25"W, 312.22 FEET; THENCE S 82°23'45"W, 183.40 FEET TO THE NORTHWEST CORNER OF LOT 1 ALSO BEING ON THE EASTERLY RIGHT-OF-WAY LINE OF KINGSBRIDGE DR; THENCE WITH SAID RIGHT-OF-WAY LINE, 80.58 FEET ALONG A 75.00-FOOT RADIUS, NON-TANGENT CURVE TO THE RIGHT, SAID CURVE HAVING A CHORD N 26°00'30"W, 76.76 FEET; THENCE N 4°52'50"E, 58.08 FEET; THENCE LEAVING SAID EASTERLY RIGHT-OF-WAY LINE, N 85°15'25"W, 50.00 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF KINGSBRIDGE DRIVE; THENCE WITH SAID RIGHT-OF-WAY LINE, 31.42 FEET ALONG A 20.00-FOOT RADIUS NON-TANGENT CURVE TO THE RIGHT, SAID CURVE HAVING A CHORD S 49°48'55"W, 28.28 FEET TO THE NORTHERLY RIGHT-OF-WAY LINE OF CHESTERFIELD DRIVE; THENCE WITH SAID RIGHT-OF-WAY LINE, N 85°11'05"W, 82.07 FEET; THENCE 40.76 FEET ALONG A 525.00-FOOT RADIUS CURVE TO THE LEFT, SAID CURVE HAVING A CHORD, N 87°24'35"W, 40.75 FEET; THENCE N 89°38'00"W, 48.83 FEET TO THE SOUTHEAST CORNER OF LOT 25 OF SAID HERITAGE WOODS, PLAT NO. 1; THENCE N 0°23'30"E, 292.46 FEET; THENCE N 51°15'00"W, 142.30 FEET; THENCE N 89°36'55"W, 253.90 FEET TO THE POINT OF BEGINNING AND CONTAINING 20.99 ACRES.

THIS SURVEY WAS MADE IN CONFORMANCE WITH THE CURRENT MISSOURI MINIMUM STANDARDS FOR PROPERTY BOUNDARY SURVEYS.

SURVEY AND PLAT BY:

CROCKETT ENGINEERING CONSULTANTS, LLC
2608 NORTH STADIUM BLVD.
COLUMBIA, MO 65202

CORPORATE NUMBER: 2000151304

David T. Butcher
DAVID T. BUTCHER, PLS-2002014095
3/1/2012
DATE

STATE OF MISSOURI } SS
COUNTY OF BOONE }

SUBSCRIBED AND AFFIRMED BEFORE ME THIS 1st DAY OF MARCH, 2012.

Lyndsay J. Perry NOTARY PUBLIC
LYNSAY J. PERRY MY COMMISSION EXPIRES JANUARY 12, 2015
COMMISSION NUMBER 11133898

LYNSAY J. PERRY
Notary Public - Notary Seal
STATE OF MISSOURI
Boone County
My Commission Expires: 1/12/2015
Commission #11133898

KNOW ALL MEN BY THESE PRESENTS:

THAT HERITAGE WOODS DEVELOPMENT, LLC IS THE SOLE OWNER OF THE HEREON DESCRIBED TRACT AND THAT SAID LIMITED LIABILITY COMPANY HAS CAUSED SAID TRACT TO BE SURVEYED, SUBDIVIDED, AND PLATTED AS SHOWN ON THE ABOVE DRAWING. THE STREET RIGHT OF WAY SHOWN BY THE ABOVE DRAWING IS HEREBY DEDICATED TO THE PUBLIC USE FOREVER. THE EASEMENTS AS SHOWN, ARE HEREBY DEDICATED TO THE PUBLIC USE FOREVER. THE ABOVE DRAWING AND DESCRIPTION SHALL HEREAFTER BE KNOWN AS "HERITAGE WOODS, PLAT NO. 2"

IN WITNESS WHEREOF, HERITAGE WOODS DEVELOPMENT, LLC HAS CAUSED THESE PRESENTS TO BE SIGNED BY ITS MANAGING MEMBER, THIS 1st DAY OF MARCH, 2012.

HERITAGE WOODS DEVELOPMENT, LLC

John R. Jones
JOHN R. JONES, MEMBER

STATE OF MISSOURI } SS
COUNTY OF BOONE }

ON THIS 1st DAY OF MARCH, 2012 BEFORE ME PERSONALLY APPEARED JOHN R. JONES, TO ME KNOWN, WHO BY ME DULY SWORN, DID SAY THAT HE IS THE MEMBER OF SAID LIMITED LIABILITY COMPANY AND THAT THEY FURTHER ACKNOWLEDGE THIS INSTRUMENT TO BE HIS FREE ACT AND THE FREE ACT AND DEED OF SAID LIMITED LIABILITY COMPANY.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND SEAL ON THE DAY AND YEAR AFORESAID.
MY COMMISSION EXPIRES: 1/12/2015

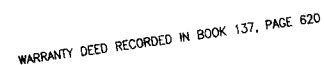
Lyndsay J. Perry NOTARY PUBLIC
LYNSAY J. PERRY MY COMMISSION EXPIRES JANUARY 12, 2015
COMMISSION NUMBER 11133898

LYNSAY J. PERRY
Notary Public - Notary Seal
STATE OF MISSOURI
Boone County
My Commission Expires: 1/12/2015
Commission #11133898



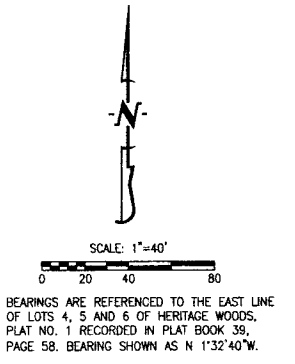
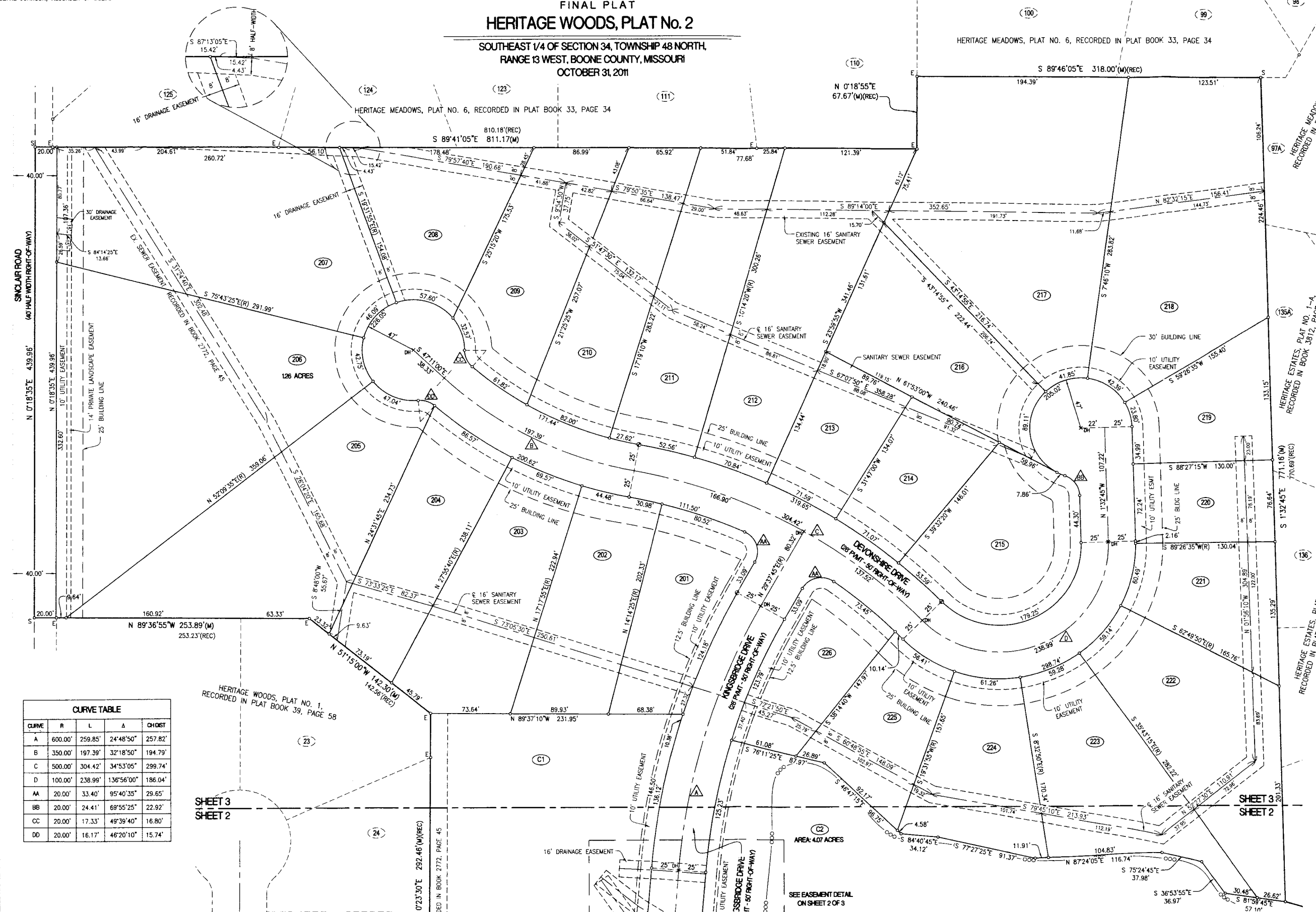
Recorded in Boone County, Missouri
Date and Time: 03/07/2012 08:32:16 AM
Instrument # 2012004848 Book 46 Page 7
Grantor: HERITAGE WOODS DEVELOPMENT LLC
Grantee: HERITAGE WOODS PLAT NO 2
Instrument Type: PLAT
Recording Fee: \$159.00
No. of Pages: 3
Bettie Johnson, Recorder of Deeds

SOUTHEAST 1/4 OF SECTION 34, TOWNSHIP 48 NORTH,
RANGE 13 WEST, COLUMBIA, BOONE COUNTY, MISSOURI
OCTOBER 31, 2011



EASEMENT DETAIL
SCALE: 1"=20'

FINAL PLAT
HERITAGE WOODS, PLAT No. 2
SOUTHEAST 1/4 OF SECTION 34, TOWNSHIP 48 NORTH,
RANGE 13 WEST, BOONE COUNTY, MISSOURI
OCTOBER 31, 2011



- LEGEND:
- E EXISTING
 - S SET
 - 1/2" IRON PIPE (UNLESS NOTED OTHERWISE)
 - STONE
 - PERMANENT MONUMENT
 - (M) MEASURED DISTANCE
 - (REC) RECORDED DISTANCE
 - (R) RADIAL LINE
 - DRILL HOLE
 - W/ CHISELED X

CURVE TABLE				
CURVE	R	L	Δ	CHORD
A	600.00'	259.85'	24°48'50"	257.82'
B	350.00'	197.39'	32°18'50"	194.79'
C	500.00'	304.42'	34°53'05"	299.74'
D	100.00'	238.99'	136°56'00"	186.04'
AA	20.00'	33.40'	95°40'35"	29.65'
BB	20.00'	24.41'	69°55'25"	22.92'
CC	20.00'	17.33'	49°39'40"	16.80'
DD	20.00'	16.17'	46°20'10"	15.74'

HERITAGE WOODS, PLAT NO. 1,
RECORDED IN PLAT BOOK 39, PAGE 58

SHEET 3
SHEET 2

SHEET 3
SHEET 2

David T. Butcher
DAVID T. BUTCHER, PLS-2002014095
3/11/2012
DATE

SEE EASEMENT DETAIL
ON SHEET 2 OF 3