

## WETLANDS/TRAILS MAINTENANCE AGREEMENT

THIS WETLANDS MAINTENANCE AGREEMENT (this "Agreement") is hereby made and entered into as of the \_\_\_\_\_ day of \_\_\_\_\_, 2012 (the "Effective Date") by and between the CITY OF OVERLAND PARK, KANSAS, a municipal corporation duly organized under the laws of the State of Kansas (the "City"), and MC PRAIRIEFIRE I, LLC, a Kansas limited liability company ("Developer").

### RECITALS:

A. MC Prairiefire, LLC, a Kansas limited liability company (the "Owner") is the owner of approximately fifty-six (56) acres of real property which is located in the City and is generally located at 135th Street between Lamar Avenue and Nall Avenue and, along with approximately five and a half (5.5) acres of 137<sup>th</sup> Street right-of-way, is legally described on **Exhibit A-1** and generally depicted on **Exhibit A-2**, as attached hereto (the "Project Site"). A portion of the Project Site, which includes the Wetlands/Trails Area (as defined below), shall be leased from Owner to Developer pursuant to the Ground Lease.

B. Pursuant to that certain Prairiefire at Lionsgate Development Agreement (the "Development Agreement") dated as of October \_\_\_\_, 2012 between the City, Developer, and MC Prairiefire II, LLC, a Kansas limited liability company ("MCP II"), Developer and MCP II propose to design, develop, construct, complete and operate a unique destination experience on a portion of the Project Site (the "Project"), which Project is more particularly described therein. Capitalized terms which are not otherwise defined herein shall have the meanings assigned to them in the Development Agreement.

C. The Development Agreement also provides that the Project shall include a wetlands area and trail area (collectively, the "Wetlands/Trails Area") which is legally described on **Exhibit B-1** and generally depicted on **Exhibit B-2**, as attached hereto. The Wetlands/Trails Area shall be developed by Developer in accordance with a wetlands mitigation plan (the "Wetlands Plan") which Wetlands Plan is attached hereto as **Exhibit C**, and shall include (i) a native wetlands with streams, rocks and vegetation (the "Wetlands"), (ii) a bridge featuring natural materials which traverse the Wetlands (the "Bridge"), and (iii) a perimeter nature trail (the "Perimeter Trails") and (iv) internal trails within the Wetlands (the "Internal Trails"; collectively, the Perimeter Trails and the Internal Trails may be referred to herein as the "Trails").

D. The Wetlands/Trails Area shall also be subject to a Permanent Conservation Easement (the "Conservation Easement") which is executed contemporaneously herewith and pursuant to which the Developer shall grant to the City a permanent conservation easement for the purposes more particularly set forth therein.

E. Developer hereby agrees that Developer shall design, develop, construct, manage, maintain and operate the Wetlands/Trails Area pursuant to the terms and conditions of this Agreement.

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City and Developer hereby agree as follows:

1. Undertaking of Developer. Developer hereby agrees, subject to the terms and conditions hereinafter provided, to design, develop, construct, manage, maintain and operate the Wetlands/Trails Area on the Project Site. The performance of all activities by Developer hereunder shall be as an independent contractor and not as an agent of the City.

2. Term. The Term of this Agreement shall commence on the Effective Date and shall expire upon the expiration or termination of the Conservation Easement (the "Term").

3. Construction and Maintenance of the Wetlands/Trails Area, Generally. Developer hereby covenants, at its expense, that it shall construct the Wetlands as set forth in the Wetlands Plan and thereafter, Developer shall at all times during the Term, manage, maintain and operate the Wetlands/Trails Area. Without limiting the generality of the foregoing: (a) Developer shall manage the Wetlands/Trails Area in a dignified quality manner and in conformity with as good or better standards of practice for other similar-type amenities in Johnson County, Kansas, (b) Developer shall manage, maintain and operate the Wetlands/Trials Area in accordance with all of the terms and conditions set forth in the Development Agreement, the Conservation Easement and the Wetlands Plan, and (c) Developer shall be considered, in all respects, to be an independent contractor of, and not an agent or employee of, the City.

4. Maintenance and Use of Trails. Without limiting the generality of Section 3 hereof, Developer agrees that during the Term, Developer shall, at its sole cost and expense, cause the Trails to be maintained, preserved and kept in good repair and working order and in a safe condition and will make all repairs, renewals, replacements and improvements necessary for the safe and efficient operation of the Trails and as needed to maintain the physical and aesthetic integrity of the Trails in conformity with as good or better standards of practice for other similar-type amenities in Johnson County, Kansas. Developer may make additions, alterations and changes to the Trails so long as such additions, alterations and changes are made in compliance with the Development Agreement, the Conservation Easement and all Applicable Laws and Requirements. In particular, Developer hereby agrees that Developer shall (a) keep the Trail surfaces in good condition and repair, including without limitation, repair and replacement of surfaces resulting from normal wear and tear, accidents, weathering, vandalism, or material failure including providing replacement of material and all other incidental materials; (b) maintain any landscaping adjacent to the Trail; and (iii) keep the Bridge and Trail free of debris and litter.

5. Maintenance and Use of Wetlands. Without limiting the generality of Section 3 hereof, Developer agrees that during the Term, Developer shall, at its sole cost and expense, cause the Wetlands to be maintained, preserved and kept in good repair and condition and will take all necessary and appropriate actions for the preservation, operation and upkeep of the Wetlands and as needed to maintain the natural, physical and aesthetic integrity of the Wetlands in conformity with as good or better standards of practice for other similar-type amenities in Johnson County, Kansas. Developer may make additions, alterations and changes to the Wetlands so long as such additions, alterations and changes are made in compliance with the

Development Agreement, the Conservation Easement and all Applicable Laws and Requirements. In particular, Developer hereby agrees that:

5.1 Developer shall maintain, repair and/or replace, including without limitation, the Bridge and the vegetation, rocks structures, berms, drainage systems, and markers and signs (if any) constituting a part of the Wetlands.

5.2 Developer shall (i) keep the Bridge in good condition and repair, including without limitation, repair and replacement of surfaces resulting from normal wear and tear, accidents, weathering, vandalism, or material failure including providing replacement of material and all other incidental materials; (ii) maintain landscaping of the Wetlands in accordance with the Wetlands Plan; and (iii) keep the Bridge and Wetlands free of debris and litter.

5.3 Developer shall perform maintenance measures, including but not limited to:

- a. Removal and disposal of accumulated sediment and debris that is preventing the flow of water;
- b. Elimination of noxious weeds, nuisance trees and shrubs in the wetland and native grass buffer;
- c. Late season mowing in the native grass buffer and the Wetlands, if necessary, as well as landscaping in the native grass buffer and wetland to prevent seeding of nuisance species;
- d. Grading to repair water control structures, resetting of outfall structures and removal of excess sediment that would otherwise prevent the flow and circulation of water (but not in excess of the original as-built elevations);
- e. Transplanting of species in critical areas, reseeding, and tree maintenance;
- f. Biannual site monitoring as set forth in the Wetlands Plan; and

5.4 The Wetlands shall be included in the City's stream setback ordinance, which will include at least a fifty (50) foot wide buffer on either side of the mitigated channel.

5.5 Developer shall retain the Kansas State University's Department of Horticulture, Forestry & Recreation Resources or a similar expert to serve as a special consultant to Developer on the design, operation and maintenance of the Wetlands.

5.6 Developer shall maintain the Wetlands/Trails Area in as good or better condition as similarly situated amenities in Johnson County, Kansas.

6. Signage. During the Term, Developer shall install and maintain educational signage at certain viewing points around the Wetlands, which educational signage may include

information about wetland functions, native vegetation found in the Wetlands, water quality and other similar educational topics. Additionally, Developer shall install and maintain directional and educational signage along the Trails, which directional signs shall provide way-finding information and educational signs which shall provide information about the natural features along and around the Internal Trails.

7. Compliance. Developer shall conduct its affairs and carry on its business and operations in such a manner as to comply with any and all Applicable Laws and Requirements, and to observe and conform to all valid orders, regulations or requirements (including, but not limited to, those relating to safety and health) of any Governmental Authorities applicable to the conduct of its business and operations of the Wetlands/Trails Area. Developer agrees to promptly pay any and all fees and expenses related to the Wetlands/Trails Area imposed by Applicable Law and Requirements.

8. Payment of Taxes and Other Charges. Developer shall pay or cause to be paid as they become due and payable all taxes, assessments and other governmental charges lawfully levied or assessed or imposed upon Developer or the Wetlands/Trails Area or any part thereof or upon any income therefrom, including, but not limited to, any taxes, assessments or other governmental charges levied, assessed or imposed on the Wetlands/Trails Area, or with respect to the assessed value of the Wetlands/Trails Area; provided, however, that Developer shall not be required to pay and discharge or cause to be paid and discharged any such tax, assessment or governmental charge to the extent that the amount, applicability or validity thereof shall be contested in good faith by appropriate proceedings.

9. Default Provisions. Developer shall be in default under this Agreement if:

9.1 Developer fails to keep or perform any covenant or obligation herein contained on Developer's part to be kept or performed, and Developer fails to remedy the same within thirty (30) days after the City has given Developer written notice specifying such failure and requesting that it be remedied; provided, however, that if any default shall be such that it cannot be corrected within such period, it shall not constitute a default if corrective action is instituted by Developer within such period and diligently pursued until the default is corrected; or

9.2 Developer shall file a voluntary petition under any bankruptcy law or an involuntary petition under any bankruptcy law is filed against any such party in a court having jurisdiction and said petition is not dismissed within sixty (60) days; or Developer generally is not paying its debts as such debts become due; or Developer makes an assignment for the benefit of its creditors; or a custodian, trustee or receiver is appointed or retained to take charge of and manage any substantial part of the assets of Developer and such appointment is not dismissed within sixty (60) days; or any execution or attachment shall issue against Developer whereupon the Wetlands/Trails Area, or any part thereof, or any interest therein of Developer under this Agreement shall be taken and the same is not released prior to judicial sale thereunder (each of the events described in this subparagraph being deemed a default under the provisions of this Agreement); or

9.3 Subject to any cure rights provided therein, Developer fails to perform its covenants and obligations set forth in the Conservation Easement or the Development Agreement.

In the event of such default, the City may take such actions, or pursue such remedies, as exist hereunder, or at law or in equity, and Developer covenants to pay and to indemnify the City against all reasonable costs and charges, including attorneys' fees, lawfully and reasonably incurred by or on behalf of the City in connection with the enforcement of such actions or remedies. In addition to the foregoing remedies, the City shall also have the right, but not the obligation, to perform any of Developer's obligations hereunder and Developer shall reimburse the City for the City's costs of such performance within ten (10) days of demand therefor, with interest at fifteen percent (15%) per annum.

10. Amendments. This Agreement may be amended, changed or modified only by a written agreement duly executed by the City and Developer.

11. Construction and Enforcement. This Agreement shall be construed and enforced in accordance with the laws of the State.

12. Invalidity of Any Provisions. If for any reason any provision hereof shall be determined to be invalid or unenforceable, the validity and effect of the other provisions hereof shall not be affected thereby.

13. Headings. The Section headings shall not be treated as a part of this Agreement or as affecting the true meaning of the provisions hereof.

14. Execution of Counterparts. This Agreement may be executed simultaneously in two or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

15. Notices. All notices required or desired to be given hereunder shall be in writing and all such notices and other written documents required or desired to be given hereunder shall be deemed duly served and delivered for all purposes:

a. upon the City, if mailed by certified or registered mail, postage prepaid, addressed to the City as set forth below, or at such other place as the City from time to time may designate in writing to Developer:

City Manager  
City of Overland Park  
8500 Santa Fe Drive  
Overland Park, Kansas 66212

With copies to:

Deputy City Manager  
City of Overland Park  
8500 Santa Fe Drive

Overland Park, Kansas 66212

City Attorney  
City of Overland Park  
8500 Santa Fe Drive  
Overland Park, Kansas 66212

b. upon Developer, if mailed by certified or registered mail, postage prepaid, addressed to Developer as follows, or at such other place as Developer from time to time may designate in writing to the City:

MC Prairiefire I, LLC  
6240 West 135<sup>th</sup> Street  
Overland Park, KS 66223  
Attn: Fred L. Merrill Jr.

With a copy to:

John Petersen, Esq.  
Curt Petersen, Esq.  
Polsinelli Shughart PC  
6201 College Blvd., Suite 500  
Overland Park, Kansas 66211

All notices given by certified or registered mail as aforesaid shall be deemed duly given as of the date they are so mailed.

16. Entire Agreement. Together with the Exhibits hereto, which are hereby incorporated by reference, this Agreement constitutes the entire agreement of the parties with respect to the subject matter hereof and supersedes and replaces all prior oral or written agreements concerning the subject matter hereof.

17. Run with the Property. This Agreement shall be binding on and inure to the benefit of the parties hereto and their respective heirs, successors and assigns and shall run with the land that constitutes the Wetlands/Trails Area.

18. Memorandum of Agreement. The parties shall execute and record a memorandum of this Agreement against the Wetlands/Trails Area, which memorandum shall be in a form acceptable to both parties.

**[REMAINDER OF PAGE IS INTENTIONALLY BLANK]**

IN WITNESS WHEREOF, the parties hereto have executed these presents as of the day and year first above written.

**CITY OF OVERLAND PARK, KANSAS**

**ATTEST:**

\_\_\_\_\_  
Carl Gerlach, Mayor

\_\_\_\_\_  
Marian Cook, City Clerk

**APPROVED AS TO FORM:**

\_\_\_\_\_  
Tammy M. Owens  
Deputy City Attorney

**APPROVED AS TO FORM:**

\_\_\_\_\_  
Todd A. LaSala, Esq.  
Stinson Morrison Hecker LLP







## **EXHIBITS**

- Exhibit A-1 Project Site – Legal Description
- Exhibit A-2 Project Site – Map
- Exhibit B-1 Wetlands/Trails Area – Legal Description
- Exhibit B-2 Wetlands/Trails Area – Map
- Exhibit C Wetlands Plan

**EXHIBIT A-1**  
**Project Site – Legal Description**

File No. 2007-0004  
PrairieFire  
October 09, 2009  
Revised September 27, 2012

Project Site

All of Tract A, and all that part of 137<sup>th</sup> Street right of way within the final plat of Prairiefire, First Plat, together with an unplatted portion of land, all lying in the North half of Section 32, Township 13 South, Range 25 East, in the City of Overland Park, Johnson County, Kansas, described as follows:

COMMENCING at the Northwest corner of the Northeast Quarter of Section 32, Township 13 South, Range 25 East; thence North 87 degrees 50 minutes 31 seconds East along the North line of the Northeast Quarter of said Section 32 a distance of 47.63 feet to a point; thence South 2 degrees 09 minutes 29 seconds East a distance of 100.00 feet to the Northwest corner of Tract A, Prairiefire, First Plat, a subdivision in the City of Overland Park, Johnson County, Kansas, the POINT OF BEGINNING; thence North 87 degrees 50 minutes 31 seconds East along the North line of said Tract A and the South right of way line of 135<sup>th</sup> Street a distance of 2535.97 feet to a point on the West right of way line of Nall Avenue; thence South 2 degrees 05 minutes 12 seconds East along the West right of way line of Nall Avenue a distance of 1308.78 feet to a point on the South right of way line of 137<sup>th</sup> Street as established by the final plat of said Prairiefire, First Plat; thence South 87 degrees 54 minutes 43 seconds West along the South right of way line of said 137<sup>th</sup> Street a distance of 118.86 feet to a point of curvature; thence in a Northwesterly direction along the South right of way line of said 137<sup>th</sup> Street and along a curve to the right, having a radius of 513.00 feet, through a central angle of 25 degrees 21 minutes 59 seconds, an arc distance of 227.12 feet to a point; thence North 66 degrees 43 minutes 18 seconds West along the South right of way line of said 137<sup>th</sup> Street and the North line of Lot 4, Nicklaus Golf Club at Lionsgate Second Plat, a subdivision in the City of Overland Park, Johnson County, Kansas, a distance of 238.09 feet to a point; thence North 47 degrees 09 minutes 27 seconds West along the Southerly right of way line of 137<sup>th</sup> Street a distance of 119.45 feet to a point; thence North 66 degrees 43 minutes 18 seconds West a distance of 40.00 feet to a point; thence South 23 degrees 16 minutes 42 seconds West a distance of 40.00 feet to a point on the North line of said Lot 4; thence North 66 degrees 43 minutes 18 seconds West along the North line of said Lot 4 a distance of 314.52 feet to a point; thence in a Northwesterly direction along the North line of said Lot 4 and along a curve to the left, having a radius of 1160.00 feet, through a central angle of 55 degrees 15 minutes 27 seconds, an arc distance of 1118.73 feet to a point; thence South 58 degrees 01 minutes 15 seconds West along the North line of said Lot 4 a distance of 204.94 feet to a point; thence North 31 degrees 58 minutes 45 seconds West a distance of 40.00 feet to a point; thence South 58 degrees 01 minutes 15 seconds West a distance of 40.00 feet to a point on the Southerly right of way line of said 137<sup>th</sup> Street; thence in a Southwesterly direction along the Southerly right of way line of said 137<sup>th</sup> Street and along a curve to the right whose initial tangent bears South 37 degrees 39 minutes 24 seconds West, having a radius of 640.00 feet, through a central angle of 20 degrees 22 minutes 02

seconds, an arc distance of 227.50 feet to a point on the East right of way line of Lamar Avenue; thence North 31 degrees 58 minutes 45 seconds West along the East right of way line of Lamar Avenue a distance of 80.00 feet to a point of curvature; thence in a Southwesterly, Westerly and Northwesterly direction along the East right of way line of Lamar Avenue and along a curve to the right whose initial tangent bears South 58 degrees 01 minutes 15 seconds West, having a radius of 20.00 feet, through a central angle of 93 degrees 33 minutes 38 seconds, an arc distance of 32.66 feet to a point of compound curvature; thence in a Northeasterly direction along the East right of way line of Lamar Avenue and along a curve to the right, having a radius of 810.00 feet, through a central angle of 34 degrees 21 minutes 55 seconds, an arc distance of 485.83 feet to a point; thence North 5 degrees 56 minutes 48 seconds East along the East right of way line of Lamar Avenue a distance of 215.17 feet to a point of curvature; thence in a Northeasterly direction along the East right of way line of Lamar Avenue and along a curve to the left, having a radius of 2640.00 feet, through a central angle of 5 degrees 04 minutes 22 seconds, an arc distance of 233.74 feet to a point; thence North 5 degrees 27 minutes 38 seconds East along the East right of way line of Lamar Avenue a distance of 37.20 feet to a point; thence North 3 degrees 52 minutes 30 seconds East along the East right of way line of Lamar Avenue a distance of 63.11 feet to a point; thence North 1 degree 56 minutes 41 seconds West along the East right of way line of Lamar Avenue and the West line of said Tract A, a distance of 134.06 feet to the POINT OF BEGINNING and containing 2,675,895 Square Feet or 61.430 Acres, more or less.



**EXHIBIT B-1**  
**Wetlands/Trails Area – Legal Description**

File No. 2007-0004  
Prairiefire  
October 8, 2012

EXH15

Property Description Phase I Wetlands

All that part of the Northeast Quarter of Section 32, Township 13 South, Range 25 East, in the City of Overland Park, Johnson County, Kansas, described as follows:

COMMENCING at the Northeast corner of the Northeast Quarter of Section 32, Township 13 South, Range 25 East; thence South 87 degrees 50 minutes 31 seconds West along the North line of the Northeast Quarter of said Section 32 a distance of 797.48 feet to a point; thence South 2 degrees 09 minutes 00 seconds East a distance of 100.00 feet to a point on the South right of way line of 135<sup>th</sup> Street, the POINT OF BEGINNING; thence continuing South 2 degrees 09 minutes 00 seconds East a distance of 176.30 feet to a point; thence in a Southeasterly direction along a curve to the left, having a radius of 527.00 feet, through a central angle of 8 degrees 35 minutes 35 seconds, an arc distance of 79.04 feet to a point; thence South 75 degrees 30 minutes 12 seconds West a distance of 22.24 feet to a point; thence in a Westerly direction along a curve to the right, having a radius of 215.50 feet, through a central angle of 12 degrees 20 minutes 48 seconds, an arc distance of 46.44 feet to a point; thence South 87 degrees 51 minutes 00 seconds West a distance of 7.81 feet to a point; thence South 83 degrees 16 minutes 34 seconds West a distance of 53.83 feet to a point; thence South 87 degrees 51 minutes 00 seconds West a distance of 124.64 feet to a point; thence North 2 degrees 09 minute 00 seconds West a distance of 269.04 feet to a point on the South right of way line of 135<sup>th</sup> Street; thence North 87 degrees 50 minutes 31 seconds East along the South right of way line of 135<sup>th</sup> Street a distance of 248.00 feet to the POINT OF BEGINNING and containing 66,287 Square Feet or 1.5217 Acres, more or less.

File No. 2007-0004  
Prairiefire  
October 11, 2012

EXH26

Property Description Phase I Wetlands

All that part of the Northeast Quarter of Section 32, Township 13 South, Range 25 East, in the City of Overland Park, Johnson County, Kansas, described as follows:

COMMENCING at the Northeast corner of the Northeast Quarter of Section 32, Township 13 South, Range 25 East; thence South 87 degrees 50 minutes 31 seconds West along the North line of the Northeast Quarter of said Section 32 a distance of 928.48 feet to a point; thence South 2 degrees 09 minutes 00 seconds East a distance of 369.05 feet to the POINT OF BEGINNING; thence continuing South 2 degrees 09 minutes 00 seconds East a distance of 60.50 feet to a point; thence South 87 degrees 51 minutes 00 seconds West a distance of 125.00 feet to a point; thence North 5 degrees 22 minutes 57 seconds East a distance of 61.03 feet to a point; thence North 87 degrees 51 minutes 00 seconds East a distance of 117.00 feet to the POINT OF BEGINNING and containing 7,320 Square Feet or 0.1681 Acres, more or less.

File No. 2007-0004  
Prairiefire  
October 8, 2012

EXH16

Property Description Phase I Wetlands

All that part of the Northeast Quarter of Section 32, Township 13 South, Range 25 East, in the City of Overland Park, Johnson County, Kansas, described as follows:

COMMENCING at the Northeast corner of the Northeast Quarter of Section 32, Township 13 South, Range 25 East; thence South 87 degrees 50 minutes 31 seconds West along the North line of the Northeast Quarter of said Section 32 a distance of 928.48 feet to a point; thence South 2 degrees 09 minutes 00 seconds East a distance of 429.55 feet to the POINT OF BEGINNING; thence continuing South 2 degrees 09 minutes 00 seconds East a distance of 405.17 feet to a point on the Northerly right of way line of 137<sup>th</sup> Street; thence in a Northwesterly direction along the Northerly right of way line of 137<sup>th</sup> Street and along a curve to the left whose initial tangent bears North 52 degrees 51 minutes 36 seconds West, having a radius of 640.00 feet, through a central angle of 13 degrees 19 minutes 04 seconds, an arc distance of 148.76 feet to a point; thence North 2 degrees 09 minute 00 seconds West a distance of 325.14 feet to a point; thence North 87 degrees 51 minutes 00 seconds East a distance of 125.00 feet to the POINT OF BEGINNING and containing 45,217 Square Feet or 1.0380 Acres, more or less.



File No. 2007-0004  
Prairiefire  
October 8, 2012

EXH22

Property Description Phase I Wetlands

All that part of the Northeast Quarter of Section 32, Township 13 South, Range 25 East, in the City of Overland Park, Johnson County, Kansas, described as follows:

COMMENCING at the Northeast corner of the Northeast Quarter of Section 32, Township 13 South, Range 25 East; thence South 2 degrees 05 minutes 12 seconds East along the East line of the Northeast Quarter of said Section 32 a distance of 1173.05 feet to a point; thence South 87 degrees 54 minutes 48 seconds West a distance of 698.35 feet to a point on the South right of way line of 137<sup>th</sup> Street, the POINT OF BEGINNING; thence North 66 degrees 43 minutes 18 seconds West a distance of 40.00 feet to a point; thence South 23 degrees 16 minutes 42 seconds West a distance of 40.00 feet to a point; thence North 66 degrees 43 minutes 18 seconds West a distance of 314.52 feet to a point; thence in a Northwesterly direction along a curve to the left, having a radius of 1160.00 feet, through a central angle of 2 degrees 01 minutes 19 seconds, an arc distance of 40.93 feet to a point; thence North 19 degrees 16 minutes 43 seconds East a distance of 177.80 feet to a point on the Southerly right of way line of 137<sup>th</sup> Street; thence in a Southeasterly direction along the Southerly right of way line of 137<sup>th</sup> Street and along a curve to the right whose initial tangent bears South 56 degrees 44 minutes 38 seconds East, having a radius of 560.00 feet, through a central angle of 9 degrees 35 minutes 11 seconds, an arc distance of 93.69 feet to a point; thence South 47 degrees 09 minutes 27 seconds East along the Southerly right of way line of 137<sup>th</sup> Street a distance of 336.80 feet to the POINT OF BEGINNING and containing 42,936 Square Feet or 0.9857 Acres, more or less.

File No. 2007-0004  
Prairiefire  
October 8, 2012

EXH19

Property Description Phase I Bike/Hike Trail

All that part of the Northeast Quarter of Section 32, Township 13 South, Range 25 East, in the City of Overland Park, Johnson County, Kansas, described as follows:

COMMENCING at the Northeast corner of the Northeast Quarter of Section 32, Township 13 South, Range 25 East; thence South 2 degrees 05 minutes 12 seconds East along the East line of the Northeast Quarter of said Section 32 a distance of 100.00 feet to a point; thence South 87 degrees 50 minutes 31 seconds West a distance of 60.00 feet to the point of intersection of the South right of way line of 135<sup>th</sup> Street and the West right of way line of Nall Avenue, the POINT OF BEGINNING; thence South 2 degrees 05 minutes 12 seconds East along the West right of way line of Nall Avenue a distance of 483.54 feet to a point; thence South 87 degrees 51 minutes 00 seconds West a distance of 40.00 feet to a point; thence North 2 degrees 05 minutes 12 seconds West a distance of 433.53 feet to a point; thence South 87 degrees 50 minutes 31 seconds West a distance of 643.32 feet to a point; thence North 2 degrees 09 minutes 00 seconds West a distance of 50.00 feet to a point on the South right of way line of 135<sup>th</sup> Street; thence North 87 degrees 50 minutes 31 seconds East along the South right of way line of 135<sup>th</sup> Street a distance of 683.37 feet to the POINT OF BEGINNING and containing 51,509 Square Feet or 1.1825 Acres, more or less.

File No. 2007-0004  
Prairiefire  
October 8, 2012

EXH20

Property Description Phase I Bike/Hike Trail

All that part of the Northeast Quarter of Section 32, Township 13 South, Range 25 East, in the City of Overland Park, Johnson County, Kansas, described as follows:

COMMENCING at the Northeast corner of the Northeast Quarter of Section 32, Township 13 South, Range 25 East; thence South 2 degrees 05 minutes 12 seconds East along the East line of the Northeast Quarter of said Section 32 a distance of 645.54 feet to a point; thence South 87 degrees 50 minutes 31 seconds West a distance of 60.00 feet to a point on the West right of way line of Nall Avenue, the POINT OF BEGINNING; thence South 2 degrees 05 minutes 12 seconds East along the West right of way line of Nall Avenue a distance of 650.75 feet to a point on the Northerly right of way line of 137<sup>th</sup> Street; thence South 49 degrees 31 minutes 01 seconds West along the Northerly right of way line of 137<sup>th</sup> Street a distance of 17.51 feet to a point; thence South 89 degrees 21 minutes 57 seconds West along the Northerly right of way line of 137<sup>th</sup> Street a distance of 127.61 feet to a point; thence in a Northwesterly direction along the Northerly right of way line of 137<sup>th</sup> Street and along a curve to the right, having a radius of 650.00 feet, through a central angle of 43 degrees 28 minutes 36 seconds, an arc distance of 493.23 feet to a point; thence North 47 degrees 09 minutes 27 seconds West along the Northerly right of way line of 137<sup>th</sup> Street a distance of 236.72 feet to a point; thence in a Northeasterly direction along a curve to the left whose initial tangent bears North 46 degrees 20 minutes 23 seconds East, having a radius of 421.53 feet, through a central angle of 2 degrees 43 minutes 14 seconds, an arc distance of 20.02 feet to a point; thence South 47 degrees 09 minutes 27 seconds East a distance of 235.98 feet to a point; thence in a Southeasterly direction along a curve to the left, having a radius of 630.00 feet, through a central angle of 43 degrees 28 minutes 36 seconds, an arc distance of 478.05 feet to a point; thence North 89 degrees 21 minutes 57 seconds East a distance of 100.82 feet to a point; thence North 2 degrees 05 minutes 12 seconds West a distance of 640.91 feet to a point; thence North 87 degrees 51 minutes 00 seconds East a distance of 40.00 feet to the POINT OF BEGINNING and containing 42,840 Square Feet or 0.9835 Acres, more or less.

File No. 2007-0004  
Prairiefire  
October 8, 2012

EXH18

Property Description Phase I Bike/Hike Trail

All that part of the Northeast Quarter of Section 32, Township 13 South, Range 25 East, in the City of Overland Park, Johnson County, Kansas, described as follows:

COMMENCING at the Northeast corner of the Northeast Quarter of Section 32, Township 13 South, Range 25 East; thence South 87 degrees 50 minutes 31 seconds West along the North line of the Northeast Quarter of said Section 32 a distance of 928.48 feet to a point; thence South 2 degrees 09 minutes 00 seconds East a distance of 815.49 feet to the POINT OF BEGINNING; thence in a Southeasterly direction along a curve to the right whose initial tangent bears South 53 degrees 55 minutes 32 seconds East, having a radius of 655.00 feet, through a central angle of 6 degrees 46 minutes 05 seconds, an arc distance of 77.37 feet to a point; thence South 47 degrees 09 minute 27 seconds East a distance of 43.86 feet to a point; thence in a Southwesterly direction along a curve to the right whose initial tangent bears South 44 degrees 30 minutes 47 seconds West, having a radius of 367.53 feet, through a central angle of 2 degrees 20 minutes 29 seconds, an arc distance of 15.02 feet to a point on the Northerly right of way line of 137<sup>th</sup> Street; thence North 47 degrees 09 minutes 27 seconds West along the Northerly right of way line of 137<sup>th</sup> Street a distance of 43.11 feet to a point; thence in a Northwesterly direction along the Northerly right of way of 137<sup>th</sup> Street and along a curve to the left, having a radius of 640.00 feet, through a central angle of 5 degrees 42 minutes 09 seconds, an arc distance of 63.70 feet to a point; thence North 2 degrees 09 minutes 00 seconds West a distance of 19.23 feet to the POINT OF BEGINNING and containing 1,711 Square Feet or 0.0393 Acres, more or less.

File No. 2007-0004  
Prairiefire  
October 8, 2012

EXH21

Property Description Phase I Bike/Hike Trail

All that part of the Northeast Quarter of Section 32, Township 13 South, Range 25 East, in the City of Overland Park, Johnson County, Kansas, described as follows:

COMMENCING at the Northwest corner of the Northeast Quarter of Section 32, Township 13 South, Range 25 East; thence North 87 degrees 50 minutes 31 seconds East along the North line of the Northeast Quarter of said Section 32 a distance of 47.64 feet to a point; thence South 2 degrees 09 minutes 00 seconds East a distance of 100.00 feet to a point of intersection of the South right of way line of 135<sup>th</sup> Street and the East right of way line of Lamar Avenue, the POINT OF BEGINNING; thence North 87 degrees 50 minutes 31 seconds East along the South right of way line of 135<sup>th</sup> Street a distance of 480.86 feet to a point; thence South 2 degrees 09 minutes 00 seconds East a distance of 50.00 feet to a point; thence South 87 degrees 49 minutes 04 seconds West a distance of 461.04 feet to a point; thence South 1 degree 56 minutes 41 seconds East a distance of 84.95 feet to a point; thence South 1 degree 12 minutes 56 seconds East a distance of 101.35 feet to a point; thence in a Southerly direction along a curve to the right whose initial tangent bears South 0 degrees 54 minutes 00 seconds West, having a radius of 2670.00 feet, through a central angle of 5 degrees 02 minutes 48 seconds, an arc distance of 235.18 feet to a point; thence South 5 degrees 56 minutes 48 seconds West a distance of 157.63 feet to a point; thence South 87 degrees 51 minutes 00 seconds West a distance of 30.30 feet to a point on the East right of way line of Lamar Avenue; thence North 5 degrees 56 minutes 48 seconds East along the East right of way line of Lamar Avenue a distance of 161.88 feet to a point; thence in a Northerly direction along the East right of way line of Lamar Avenue and along a curve to the left, having a radius of 2640.00 feet, through a central angle of 5 degrees 04 minutes 22 seconds, an arc distance of 233.74 feet to a point; thence North 5 degrees 27 minutes 38 seconds East along the East right of way line of Lamar Avenue a distance of 37.20 feet to a point; thence North 3 degrees 52 minutes 30 seconds East along the East right of way line of Lamar Avenue a distance of 63.11 feet to a point; thence North 1 degree 56 minutes 41 seconds West along the East right of way line of Lamar Avenue a distance of 134.06 feet to the POINT OF BEGINNING and containing 40,098 Square Feet or 0.9205 Acres, more or less.

**EXHIBIT B-2**  
**Wetlands/Trails Area – Map**

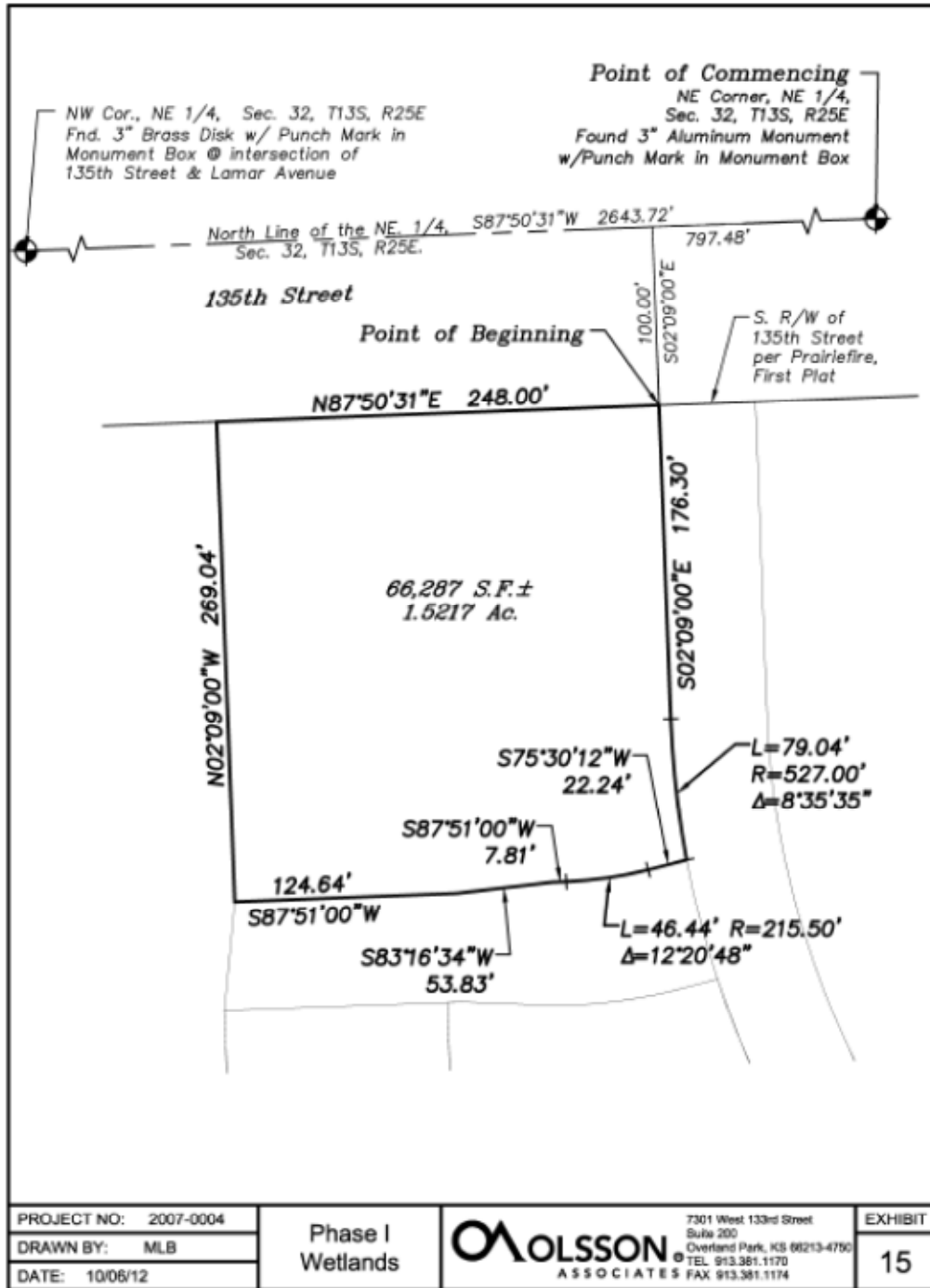


Exhibit B-2 - 1

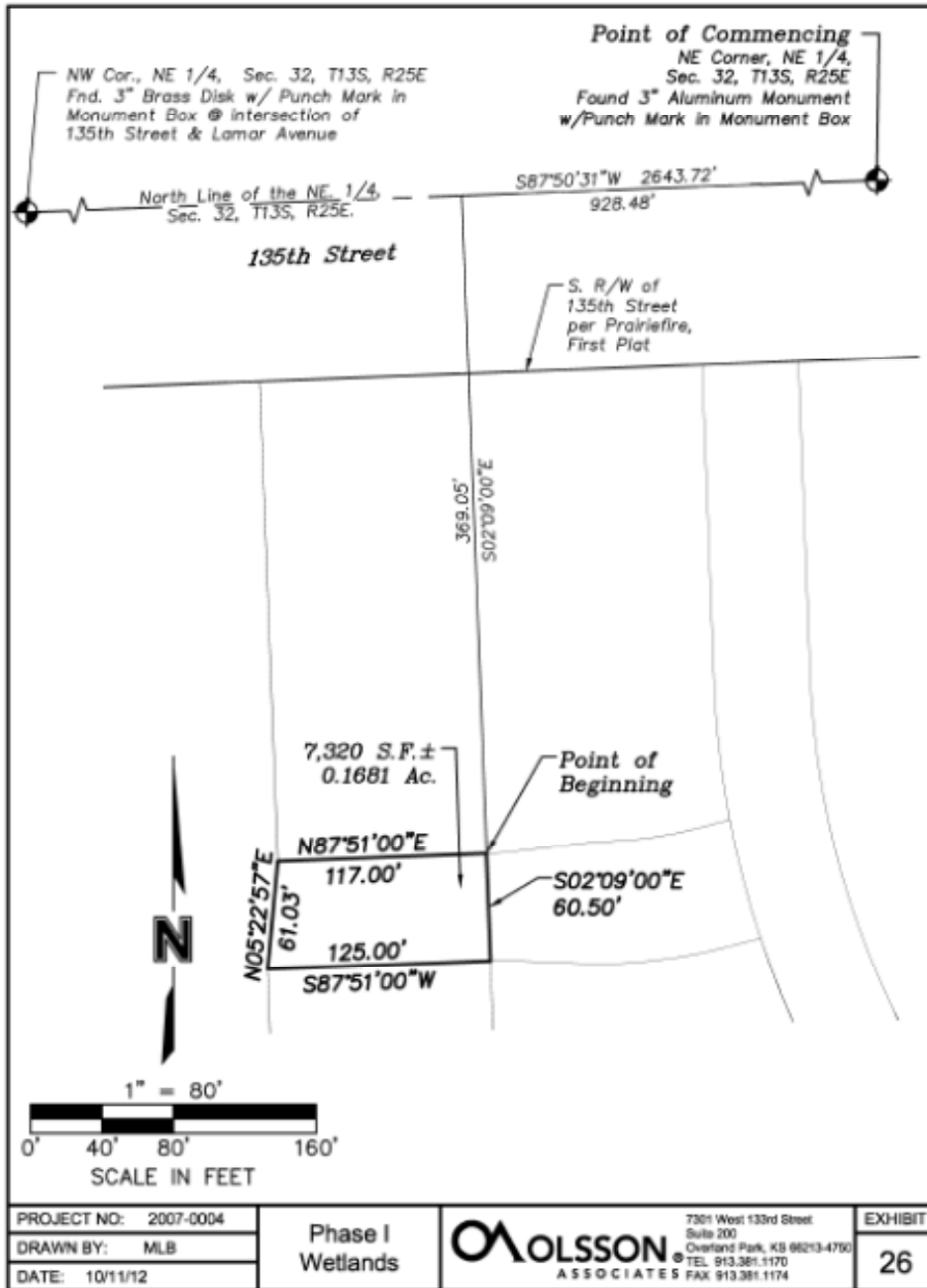


Exhibit B-2 - 2

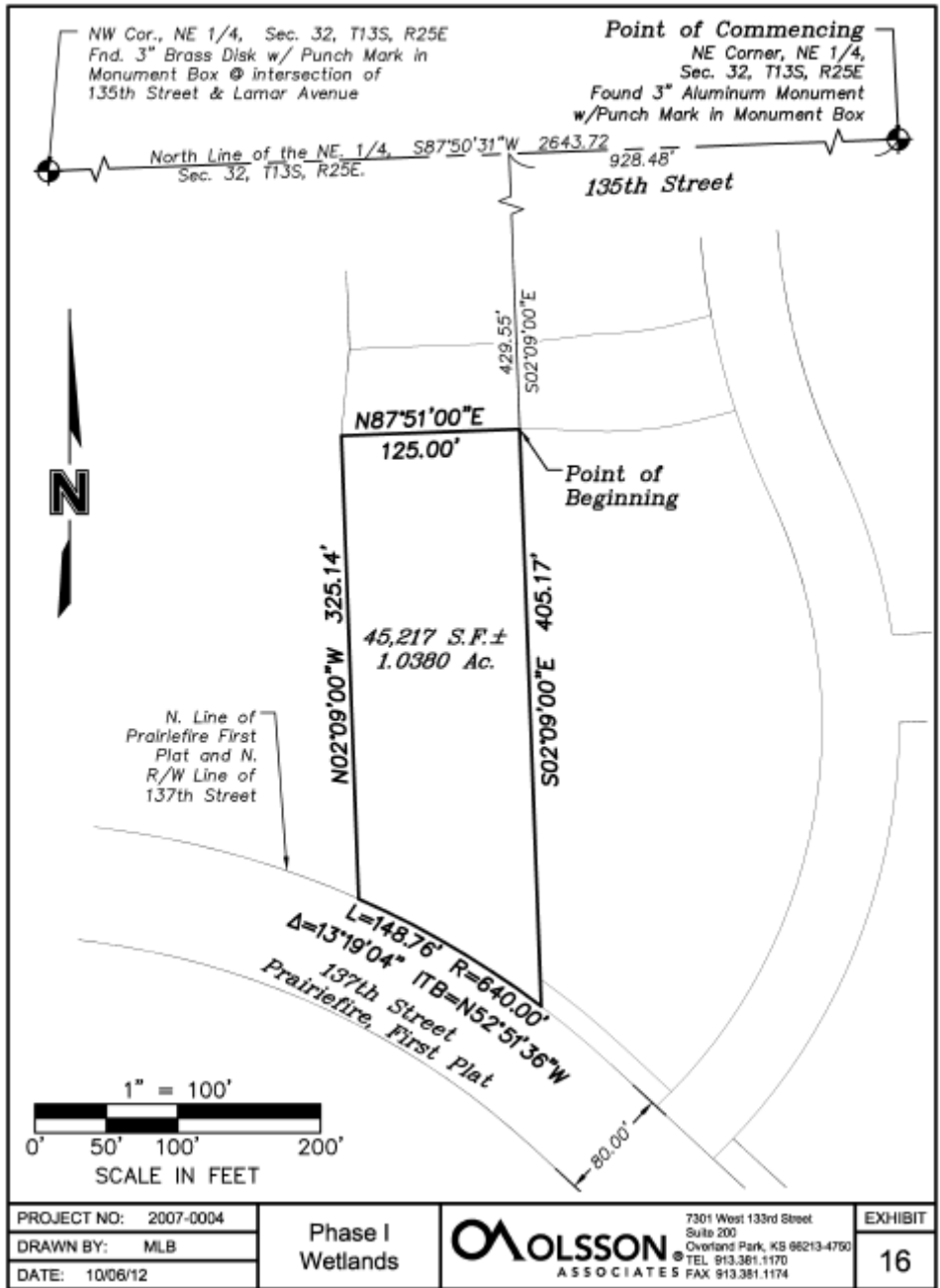


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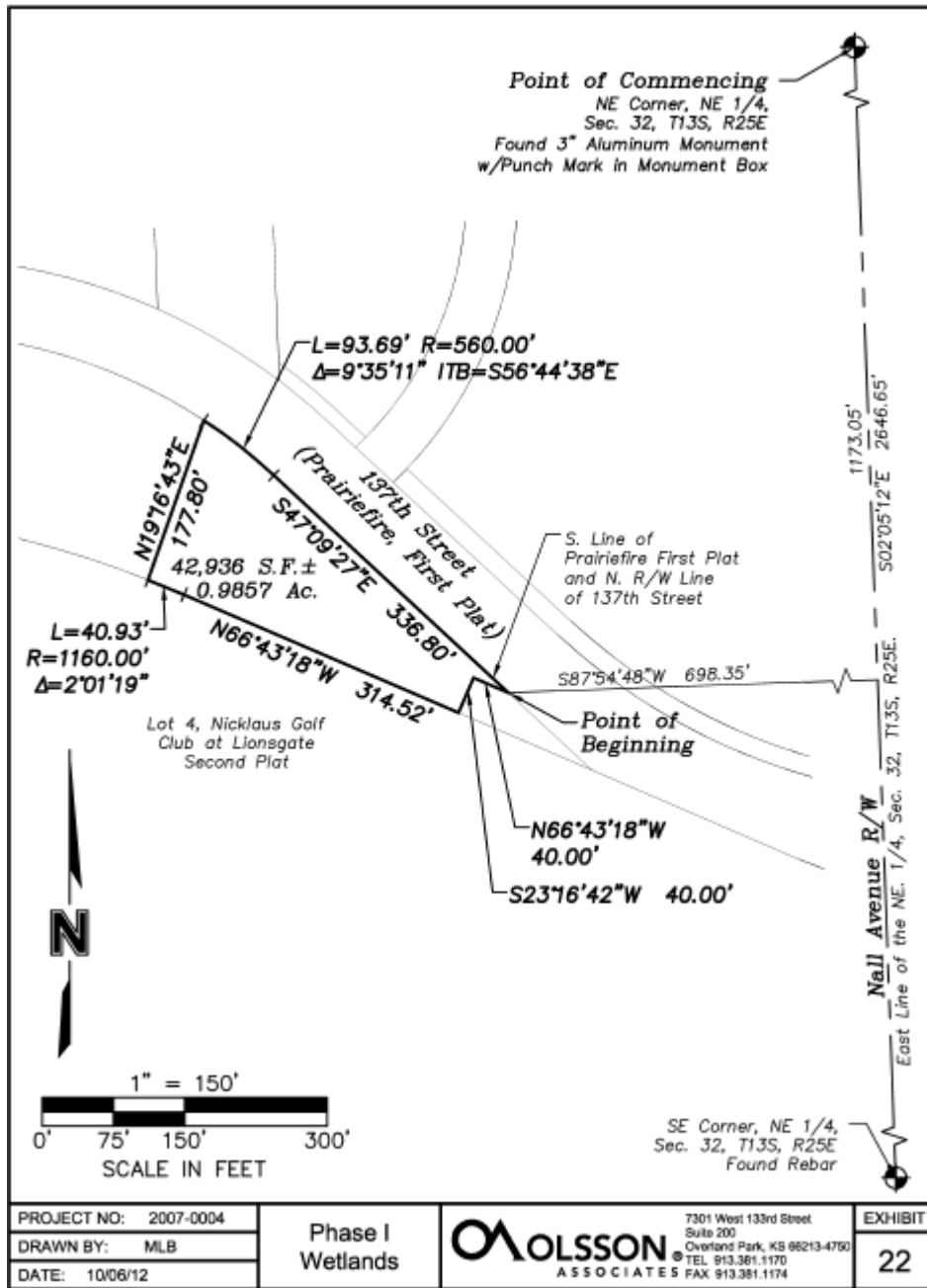


Exhibit B-2 - 4

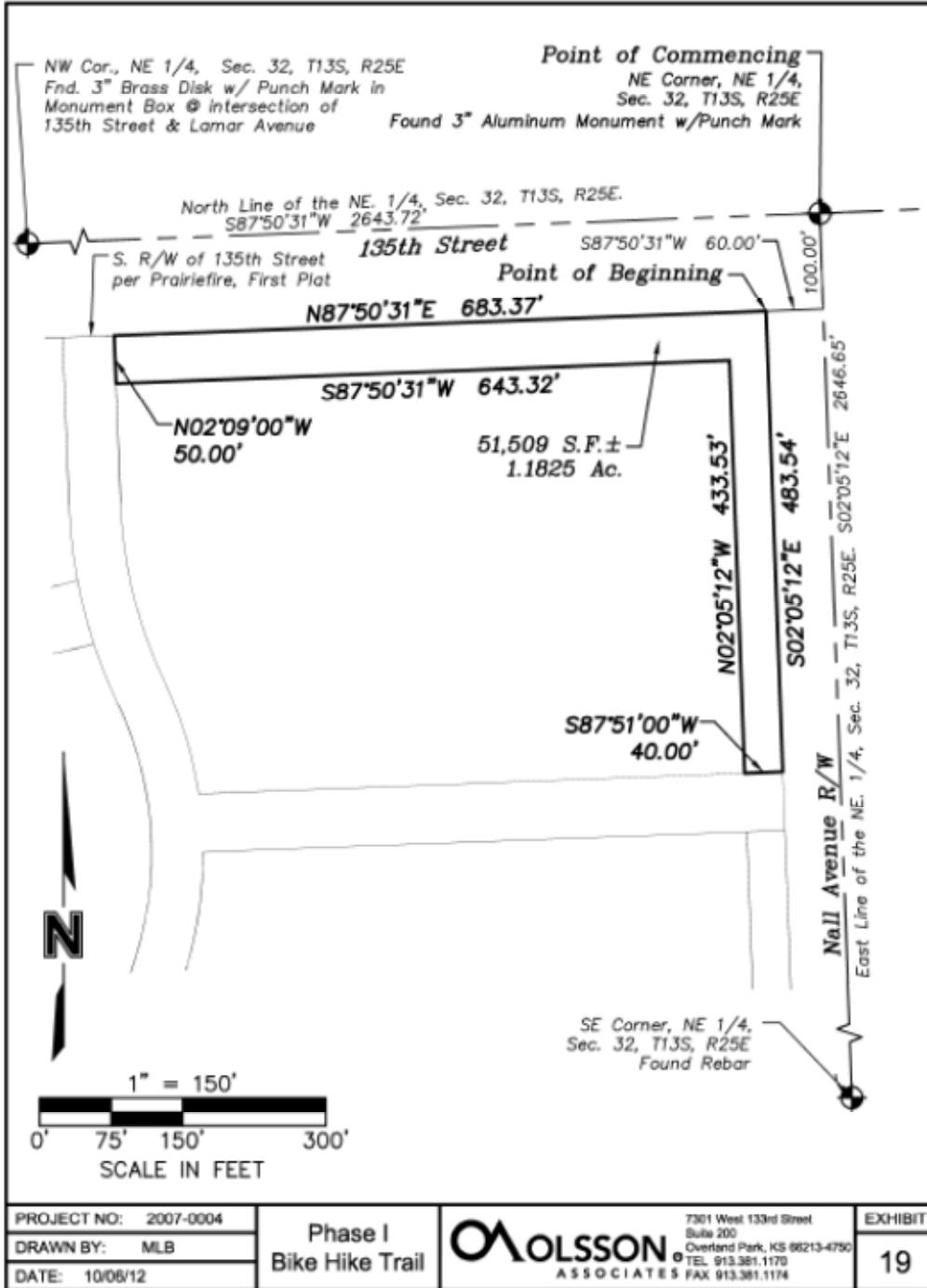


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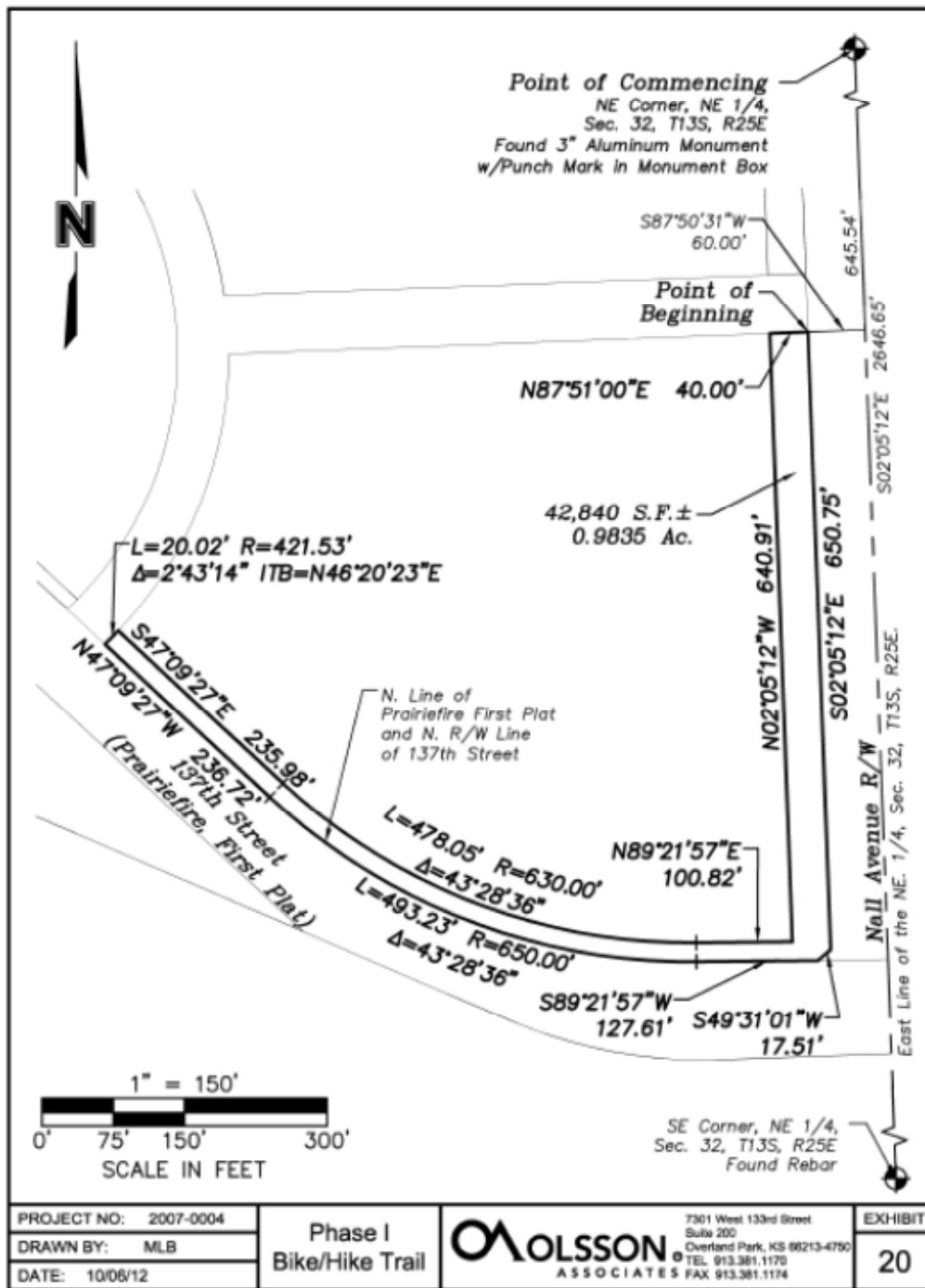


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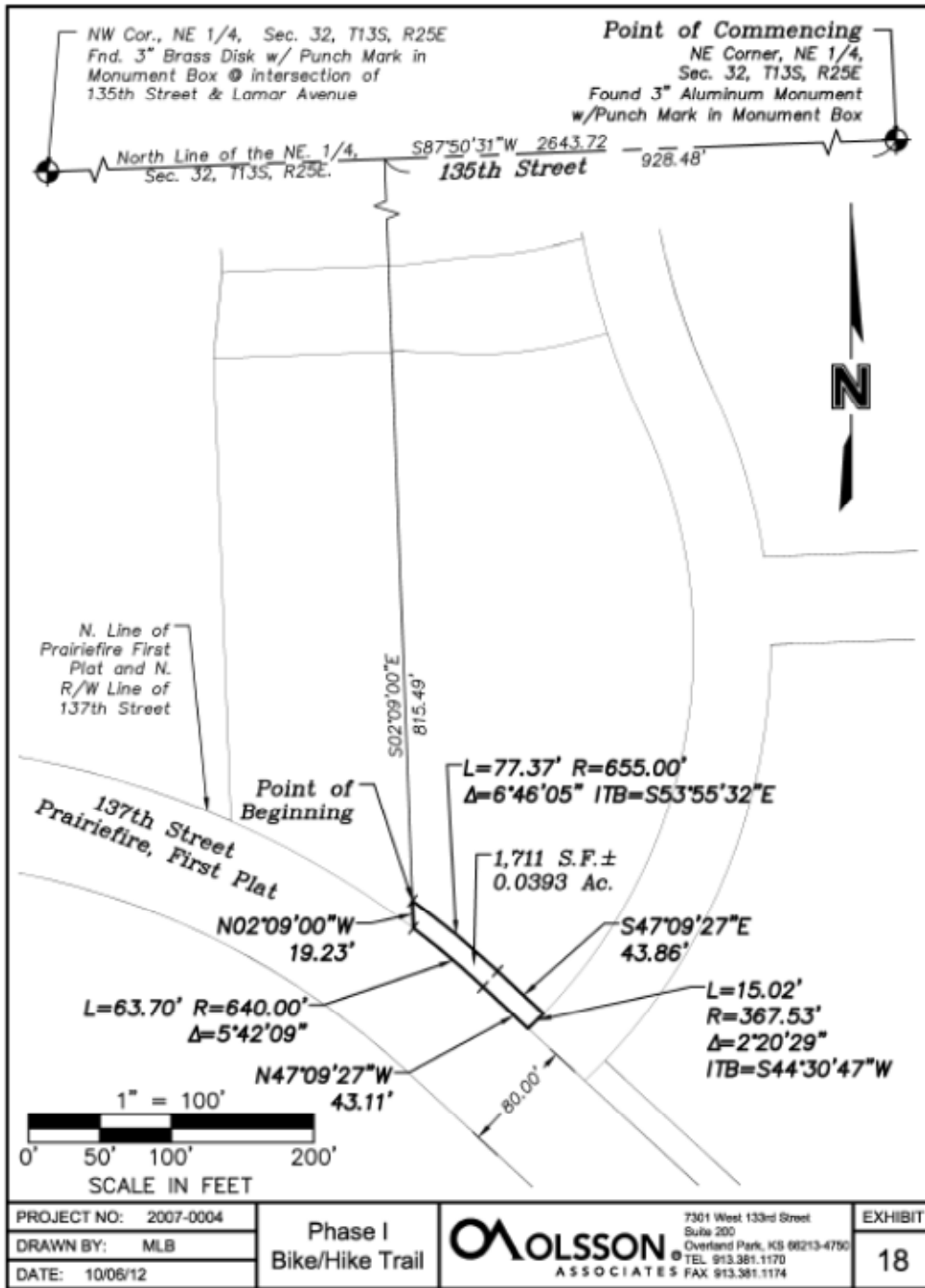


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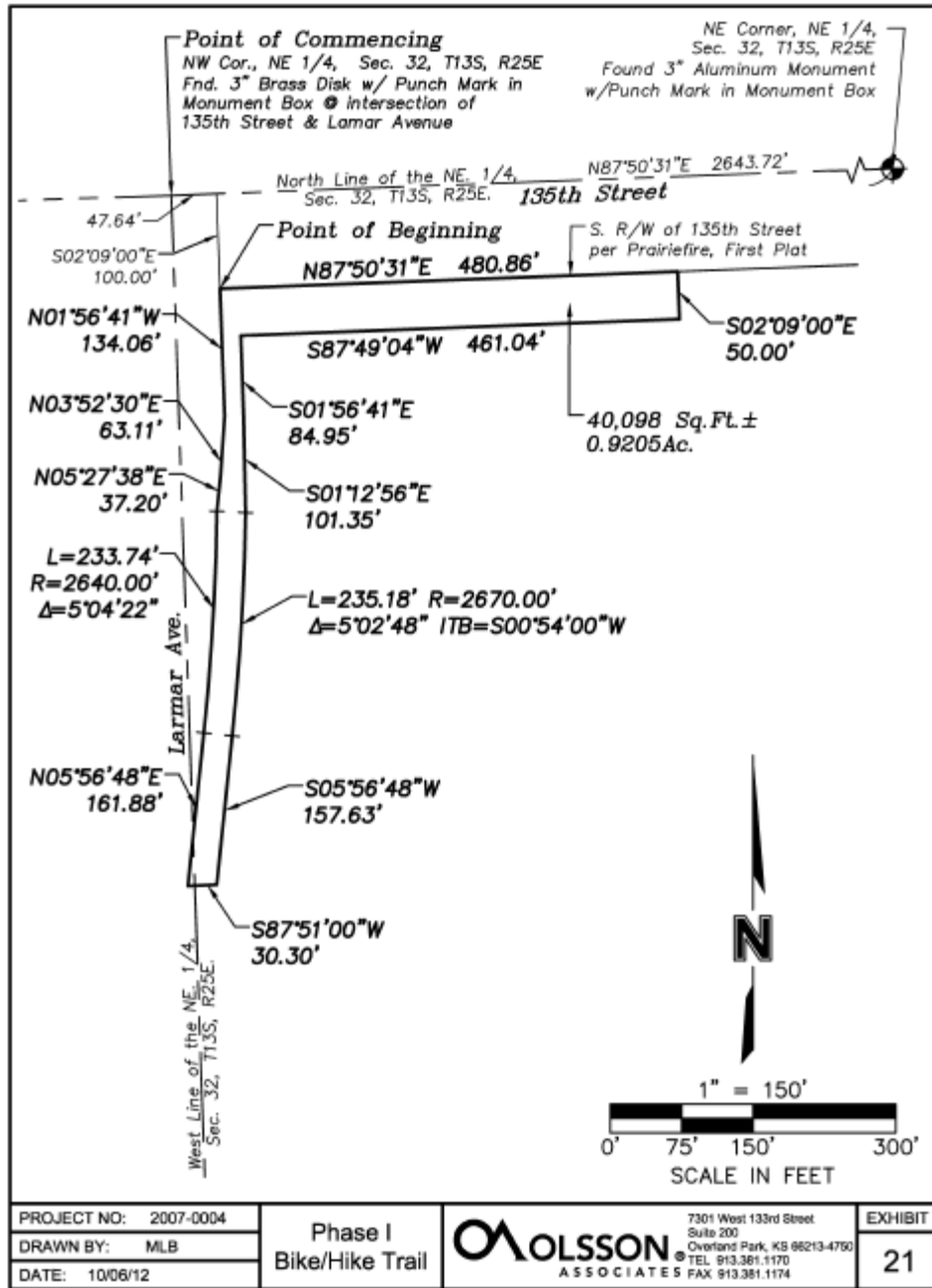


Exhibit B-2 - 8

**EXHIBIT C**  
**Wetlands Plan**

# **FINAL MITIGATION PLAN**

*for*

## **PRAIRIEFIRE AT LIONSGATE**

---

## **CITY OF OVERLAND PARK, KANSAS**

**PREPARED FOR  
MC Prairiefire, LLC**

**FEBRUARY 2007**

**PREPARED BY  
OLSSON ASSOCIATES  
7301 W. 133<sup>rd</sup> Street, Suite 200  
Overland Park, Kansas  
(913) 381-1170 · FAX (913) 381-1174**

**OLSSON No. 2007-0004**

**TABLE  
OF  
CONTENTS**

**APPENDIX**

Page No.

E. EXECUTIVE SUMMARY .....1  
I. INTRODUCTION .....2  
II. EXISTING CONDITIONS .....3  
III. GOALS AND OBJECTIVES .....5  
IV. MITIGATION WORK PLAN AND SITE DESIGN .....6  
V. PERFORMANCE STANDARDS.....10  
VI. SITE MONITORING .....10  
VII. SITE PROTECTION AND MAINTENANCE .....11  
VIII. FINANCIAL ASSURANCE.....12  
IX. MITIGATION BANKING MEASURE .....12

Figure 1: Planting Plan

Appendix A: Agency Letters



## Executive Summary

MC Prairiefire, LLC is proposing to construct Prairiefire at Lionsgate in Overland Park, Johnson County, Kansas. Prairiefire will be a mixed-use commercial and residential development with associated infrastructure, hardscape, and landscaping. The project also includes construction of 137<sup>th</sup> Street near the south property line.

Jurisdictional waters on the site include 1,557 linear feet of ephemeral tributary (0.07 acre) and 2.66 acres of wetlands. MC Prairiefire, LLC is proposing to complete resource mitigation as a combination of on-site and off-site activities. Onsite activities include the creation and preservation of 0.6 acre of emergent wetland and 1.79 acre of native buffer. Impacted wetlands not replaced onsite will be mitigated in the Johnson County Mitigation Bank. Table E-1 provides a summary of mitigation measures and mitigation credits requested.

**Table E-1: Mitigation Measures and Mitigation Credits**

Mitigation Measure	Resource Mitigated	Mitigation Acreage	Mitigation Ratio	Mitigation Credits
<b>On-Site Mitigation Measures</b>				
Wetland Creation/Preservation	Wetlands	0.6	1:1	0.6 acre
Native Buffer Creation/Preservation	Ephemeral Tributary	1.79	25:1	0.07 acre
<b>Total for On-Site Mitigation Credits</b>				<b>0.67 acre</b>
<b>Off-Site Mitigation Measures</b>				
Johnson County Mitigation Bank	Wetlands	1.99	1:1	<b>1.99 acre</b>
<b>Total Mitigation Credits</b>				<b>2.66 acre</b>

## **I Introduction**

MC Prairiefire, LLC is proposing to construct Prairiefire at Lionsgate in Overland Park, Johnson County, Kansas. Prairiefire will be a mixed-use commercial and residential development with associated infrastructure, hardscape, and landscaping. The project also includes construction of 137<sup>th</sup> Street near the south property line.

Construction of the development site and associated amenities will require the unavoidable impact to 1,557 linear feet (0.07 acre) of ephemeral tributary and 2.66 acres of palustrine emergent wetlands.

Pursuant to an approved Section 404 Individual Permit, Olsson Associates completed and submitted a permit application report on August 31, 2006. The permit application was succeeded by a 21-day Public Notice period to gather public and subsequent agency comments (Permit #200601618). No substantive comment was received during the Public Notice process and alternatives to mitigate impacted resources were pursued.

MC Prairiefire, LLC is proposing to complete resource mitigation as a combination of on-site and off-site activities. The functional replacement of wetland and tributary values impacted will be replaced on-site to the degree possible. Additionally, impacted acreage not replaced onsite will be mitigated in the Johnson County Mitigation Bank. The following report details a mitigation plan that includes a combination of both on-site and off-site mitigation measures to achieve a no-net-loss of wetland values for 2.66 acres of palustrine emergent wetlands and 1,557 linear feet of ephemeral tributary impacts. The plan follows the United States Army Corps of Engineers, Regulatory Guidance Letter 02-2, on Compensatory Mitigation Projects for Aquatic Resource Impacts.

## **II Existing Conditions and Baseline Information**

The following is a discussion of existing conditions and baseline information for the project site.

### *Location*

The project site is described as an approximately 59 acre tract of land located in the N ½, NE ¼ Section 32, Township 13 South, Range 25 East, Overland Park, Johnson County, Kansas. The site is bounded by Nall Avenue to the east, Lamar Avenue to the west, 135<sup>th</sup> Street to the north, and proposed 137<sup>th</sup> Street to the south. The site is adjacent to multifamily residential, commercial, and retail properties on all sides. A residential subdivision and golf course is located adjacent and south of the property. The general project area is a highly suburban and developing area.

### *Historic and Current Land Use*

No evidence of recent agricultural activities was found on the site during field or desktop data reviews. Historic land use for the property was likely open and grazed pasture lands. Current land use for the site is described as abandoned pasture.

### *Zoning*

The project site is currently zoned as Mixed Use (MXD) within the City of Overland Park.

### *Topography*

The topography of the project site is illustrated on the United States Geological Survey (USGS) 1963 and 1991 photo revised Lenexa, Kansas 7.5-minute topographic map. The topographic map indicates that the property slopes to the north. The elevation of the property ranges from approximately 960 feet above mean sea level (AMSL) on the south to 928 feet AMSL on the north, a change in elevation of 32 feet.

### *Waters of the U.S. on the Property*

On June 14, 2006 the U.S. Army Corps of Engineers completed an approved jurisdictional determination for the property. The approved determination included 1,557 linear feet of two (2) ephemeral tributaries and 2.66 acres of wetlands.

The two ephemeral tributaries found on the property flow from south to north. Both tributaries begin at outfalls from golf course ponds located on the adjacent property to the south. The existing site topography has a sloping terrain with a central ridge that generally directs runoff east and west. The tributaries each drain to Tomahawk Creek approximately ¾-mile north of the project site.

Wetlands on the property include thirteen independent wetland areas comprising approximately 2.0 acres of palustrine emergent wetlands and 0.66 acres of palustrine forested wetlands.

#### *Existing Function and Condition*

The existing tributaries on the site discharge flow from the adjacent residential development and golf course through the site and wetland complex. A breached impoundment has created a majority of the wetland area as stormwater runoff enters the location and disperses through the old impoundment. The breached impoundment has converted to a dominance of reed canarygrass (*Phalaris arundinacea*) and willow (*Salix nigra*). Vegetative diversity is very limited with reed canarygrass giving way to tall fescue (*Festuca arundinacea*) in transitions to uplands.

#### *Hydrology*

Site hydrology is generally stormwater runoff from adjacent properties to the south. Hydrology flows from south to north where it is discharged under 135<sup>th</sup> Street. Analysis completed in a stormwater management study for the development has shown that the proposed improvements to the western portion of the site will not cause runoff to exceed design capacities to the downstream storm sewer systems along 135<sup>th</sup> Street. However, development of the eastern portion of the site will cause runoff to exceed the design capacity of the 133<sup>rd</sup> Street culverts located downstream of the site. For this reason, a portion of the proposed mitigation in the eastern half of the site will be utilized to detain large storm events including the 50- and 100-year storms. This will prevent downstream flooding of the 133<sup>rd</sup> Street culverts. Detention in these events will occur within the mitigated tributary channel and wetland complex. This type of event has a two percent chance of occurrence in any given year and is quickly released downstream with no long lasting effect or detrimental impact to the mitigation area.

### **III Goals and Objectives**

The primary goal for the mitigation plan is to replace the functions and values of the existing tributary and wetlands found on the site. Functional losses and gains are described below.

#### *Functions Lost*

##### Tributaries

Tributaries on the site are ephemeral in nature. Minimally defined, the tributaries discharge stormwater from adjacent properties to the south across the property and discharge under 135<sup>th</sup> Street to the north. There is no riparian corridor associated with the tributaries and habitat diversity within the channel is non-existent.

##### Wetlands

Wetlands on the site are entirely associated with hydrology from the ephemeral tributaries described. The wetlands are a near monoculture of reed canarygrass (*Phalaris arundinacea*). From an ecological perspective, reed canarygrass competitively excludes other native plant species and limits the biological and habitat diversity of host wetland and riparian habitats. These changes likely precipitate effects on other wetland and riparian functions such as wildlife habitat. Reed canarygrass also evapotranspires large quantities of soil moisture and potentially affects shallow groundwater hydrologic characteristics. The species aggressive growth and significant biomass production affects hydraulic characteristics of surface waters by clogging ditches and stream courses with thick thatch. Infestations often form neoclimax communities that arise through human disturbance, which subsequently prevent original climax vegetation from reestablishing except in the face of new disturbance. Reed canarygrass also produces large quantities of pollen and can be a significant localized allergen source. The vegetation does provide water quality benefits from reduced storm flows and nutrient uptake.

### *Functions Gained*

Functions gained on the site will be replaced and enhanced by providing a self-sustaining and fully functional biological system. Functions will be enhanced by combining tributary and wetland functions, habitat diversity and a protective vegetated buffer. The intricate combination of ecological benefits will provide for a no-net-loss of wetland and tributary functions found on the site. Functions gained that will benefit the natural resources within the project area include:

- Shading and cooling to reduce thermal pollution.
- Vegetated buffer (wetlands/native grasses) benefits including:
  - Sediment removal
  - Filtration of contaminants.
  - Provide aquatic habitats.
  - Reduction of peak flows.
- Native tree buffer: Native trees will provide an aesthetic buffer between the facility and future adjacent facilities. The forested tributary high bank will provide habitat for song birds and small mammals.
- Maintain tributary function and prevent erosive damage.
- A planting plan that includes the establishment of a diverse, aesthetically pleasing and more wildlife suitable habitat.

## **IV Mitigation Work Plan and Site Design**

The mitigation site work plan was approached with an interdisciplinary team including surveyors, civil engineers, landscape architects, land planners, and ecologists. Every effort was made to provide a biologically functional natural system in the context of a suburban development setting. The onsite mitigation plan includes a fully functional tributary and wetland complex with native side slopes and improved habitat. The plan also includes the aesthetic amenities such as wildflower additions to native areas and transitional park-like landscaping at the edge of the proposed native buffer.

The mitigation area boundary includes the tributary channel bottom and associated side slopes. A walking trail on either side of the mitigation area will be utilized as a physical boundary that separates the mitigation areas from the adjacent highly maintained landscape and hardscape amenities.

### *Grading Plan*

A grading plan was prepared that would provide the maximum creation of sustainable wetlands while maintaining the aesthetic integrity of the project site. Existing elevations across the mitigation site would prevent the creation of wetland habitats due to slope and the inability to restrict hydrology for wetland creation. For this reason, a series of weirs will be constructed at appropriate intervals to restrict hydrology and promote a prevalence of hydrophytic vegetation on the site. Each weir structure will restrict approximately six (6) inches of water and create a backwater flooding effect that will inundate a relatively flat contour elevation behind the weir. The stormwater study for the site would suggest that areas behind the weir structures will be frequently flooded resulting in inundation/saturation for long durations during the growing season. Weirs will be constructed of materials that maintain a natural appearance to the area. Side slopes will be between 3:1 and 6:1 to provide for the establishment of native vegetation on the channel embankments.

### *Planting Plan (See Attached)*

The planting plan for the site was developed to provide habitat diversity, ecological function, and aesthetic values to the site. Particular attention was paid to the specification of wetland vegetation that could withstand high flows during heavy storm events in the channel bottom. Installation of Zone 1 (0.6 acre channel bottom) and Zone 2 (1.79 acre channel embankment) will overlap to ensure diversity and vegetative establishment at the transition of each zone. The majority of plant materials provided are of seed source; however, live plugs are also included to expedite vegetative establishment. Also, the use of a turf reinforcement matting suitable for aquatic applications will be utilized in the channel bottom as an erosion control measure and to protect planted vegetation.

Preferential vegetation, false indigo (*Amorpha fruticosa*) and buttonbush (*Cephalanthus occidentalis*), will be transplanted with a tree spade to a nursery location on the site. Plants will then be transplanted to the mitigation area during initial construction activities. Mitigation area construction will be completed during the initial phases of site development to expedite plant establishment and provide water quality protection during construction.



**Example Wetland Species List (Zone 1)**

**Created Wetlands**  
 A minimum of fifteen (15) of the following species listed will be utilized in zone 1 (channel bottom). Species with an \* must be included in the final species mix to the extent available. Substitutions or additions to the following species list must be approved by the owner.

Common Name	Species Name
Blue Flag Iris	Iris shreveii
Soft-Stemmed Bulrush	Juncus effusus
Inland Rush	Juncus interior
Tickseed Sunflower	Bidens aristosa
Swamp Buttercup	Ranunculus septentrionalis
Swamp Milkweed	Asclepias incarnata
Sweetflag	Acorus calamus
Torrey Rush	Juncus torreyi
Tapertip Rush	Juncus acuminatus
Frank's Sedge	Carex frankii
Thinscale Sedge	Carex hyalinolepis
Cardinal Flower	Lobelia cardinalis
Frog-fruit	Phylla lanceolata
Chairmakers Rush	Schoenoplectus americanus
*Spikerush	Eleocharis palustris
*Woolgrass	Scirpus cyperinus
*Dark Green Bulrush	Scirpus atrovirens
*Prairie Cordgrass	Spartina pectinata
*Fox Sedge	Carex vulpinoidea

**Example Wetland Species List (Zone 2)**

**Created Wetlands**  
 A minimum of twelve (12) of the following species listed will be utilized in zone 2 (lower channel embankment). Species with an \* must be included in the final species mix to the extent available. Substitutions or additions to the following species list must be approved by the owner.

Common Name	Species Name
Woolgrass	Scirpus cyperinus
Tickseed Sunflower	Bidens aristosa
Blue Vervain	Verbena hastata
Blue Lobelia	Lobelia spicata
Swamp Buttercup	Ranunculus septentrionalis
Cut-leaf Coneflower	Rudbeckia laciniata
Cardinal Flower	Lobelia cardinalis
Reedgrass	Calamagrostis canadensis
River-oats	Chasmanthium latifolium
Slender Mountain Mint	Pycnanthemum tenuifolium
*Little Bluestem	Schizachyrium scoparium
*Virginia Wildrye	Elymus virginicus
*Prairie Cordgrass	Spartina pectinata
Swamp Milkweed	Asclepias incarnata
*New England Aster	Aster novae-angiae
*Prairie Ironweed	Vernonia fasciculata

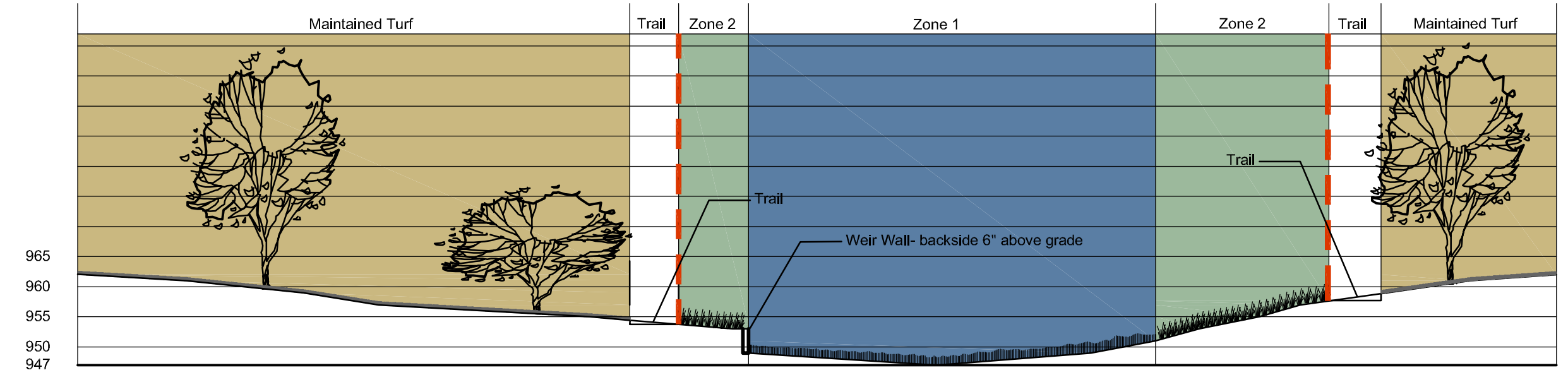
**Example Native Grassland Species List (Zone 3)**

**Upper Channel Embankment (Zone 3)**  
 The following list includes native species which will be utilized in zone 3 (upper channel embankment). A minimum of fifteen (15) of the following species listed will be utilized in the native grass area. Species with an \* must be included in the final species mix to the extent available. Substitutions or additions to the following species list must be approved by the owner.

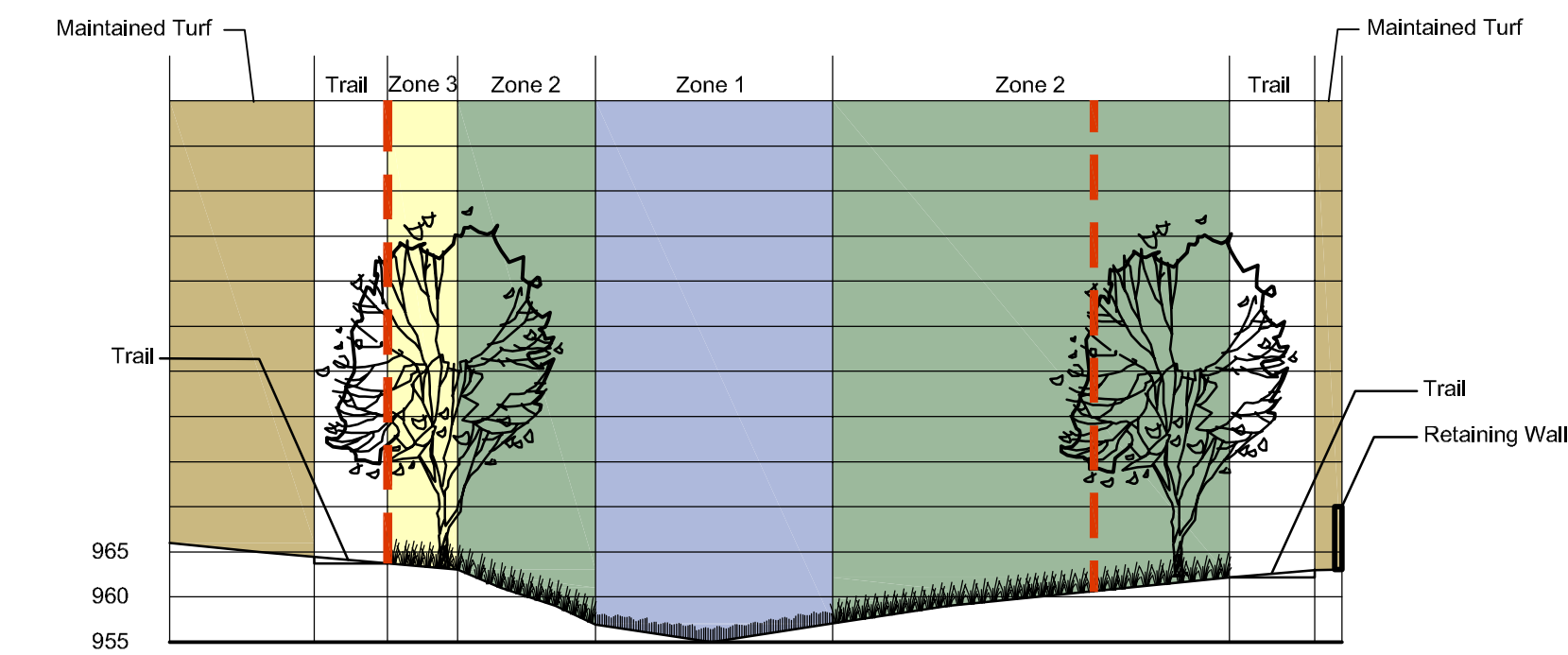
Common Name	Species Name
Big Bluestem	Andropogon gerardii
Hairy Grama Grass	Bouteloua hirsuta
Prairie June Grass	Koeleria macrantha
Gray-headed Coneflower	Ratibida pinnata
Lance-leaf Coreopsis	Coreopsis lanceolata
Blue Sage	Salvia azurea
Wild Bergamot	Monarda fistulosa
Tall Goldenrod	Solidago canadensis
Rigid Goldenrod	Solidago rigida
Foxglove Beardstongue	Penstemon digitalis
Prairie Coneflower	Ratibida columnifera
Pale Coneflower	Echinacea pallida
Golden Alexanders	Zizia aurea
Joe Pye Weed	Eupatorium maculatum
Large-flowered Beard Tongue	Penstemon grandiflorus
Common Spiderwort	Tradescantia ohioensis
Purple Prairie Clover	Dalea purpurea
*Little Bluestem	Schizachyrium scoparium
*Side Oats Grama	Bouteloua curtipendula
*Western Wheatgrass	Pascopyron Smithii
*Prairie Dropseed	Sporobolus heterolepis
*Purple Coneflower	Echinacea purpurea
*Virginia Wildrye	Elymus virginicus

**Key**

	Main Detention Facility
	Zone 1- Channel Bottom
	Zone 2- Toe of Slope up to 5'
	Zone 3- Entire Embankment Above Zone 2
	Maintained Turf
	Approximate Limits of 25' Buffer



Section AA  
 Scale: 1" = 20'



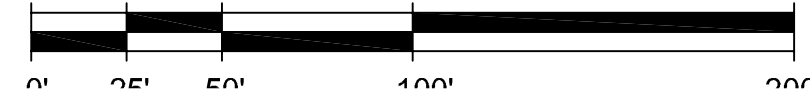
Section BB  
 Scale: 1" = 20'

*Prairiefire*  
 AT LIONS GATE

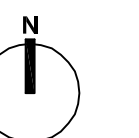


Wetland Planting - Zone Plan

Scale: 1" = 50'



February 5, 2007



OLSSON ASSOCIATES



BRIAN CLARK + ASSOCIATES  
 LANDSCAPE ARCHITECTURE | PLANNING | URBAN DESIGN



*Created Wetlands (Zone 1)*

A minimum of fifteen (15) of the following species listed will be utilized in Zone 1 (channel bottom). Species with a ✓ will be planted as live plant materials. Substitutions or additions to the following species list must be approved by the owner.

**Example Wetland Species List (Zone 1)**

<b><u>Common Name</u></b>	<b><u>Species Name</u></b>
blue flag Iris	<i>Iris shrevii</i>
soft-stemmed bulrush	<i>Juncus effusus</i>
inland rush	<i>Juncus interior</i>
tickseed sunflower	<i>Bidens aristosa</i>
swamp buttercup	<i>Ranunculus septentrionalis</i>
swamp milkweed	<i>Asclepias incarnata</i>
sweetflag	<i>Acorus calamus</i>
torrey rush	<i>Juncus torreyi</i>
tapertip rush	<i>Juncus acuminatus</i>
frank's sedge	<i>Carex frankii</i>
thinscale sedge	<i>Carex hyalinolepis</i>
cardinal flower	<i>Lobelia cardinalis</i>
frog-fruit	<i>Phyla lanceolata</i>
chairmakers rush	<i>Schoenoplectus americanus</i>
spikerush	<i>Eleocharis palustris</i>
✓ hop sedge	<i>Carex lupulina</i>
✓ lurid sedge	<i>Carex lurida</i>
✓ woolgrass	<i>Scirpus cyperinus</i>
✓ dark green bulrush	<i>Scirpus atrovirens</i>
✓ prairie cordgrass	<i>Spartina pectinata</i>
✓ fox sedge	<i>Carex vulpinoidea</i>

*Lower Channel Embankment (Zone 2)*

A minimum of twelve (12) of the following species listed will be utilized in Zone 2 (lower channel embankment). Species with an \* must be included in the final species mix to the extent available. Substitutions or additions to the following species list must be approved by the owner.

**Example Wetland Species List (Zone 2)**

<b><u>Common Name</u></b>	<b><u>Species Name</u></b>
woolgrass	<i>Scirpus cyperinus</i>
tickseed sunflower	<i>Bidens aristosa</i>
blue vervain	<i>Verbena hastata</i>
blue lobelia	<i>Lobelia spicata</i>
swamp buttercup	<i>Ranunculus septentrionalis</i>
cut-leaf coneflower	<i>Rudbeckia laciniata</i>
cardinal flower	<i>Lobelia cardinalis</i>
reedgrass	<i>Calamagrostis Canadensis</i>
river-oats	<i>Chasmanthium latifolium</i>
slender mountain mint	<i>Pycnanthemum tenuifolium</i>

*little bluestem	<i>Schizachyrium scoparium</i>
*Virginia wildrye	<i>Elymus virginicus</i>
*prairie cordgrass	<i>Spartina pectinata</i>
*swamp milkweed	<i>Asclepias incarnata</i>
*new england Aster	<i>Aster novae-angliae</i>
*prairie ironweed	<i>Vernonia fasciculata</i>

*Upper Channel Embankment (Zone 3)*

The following list includes native species will be utilized in Zone 3 (upper channel embankment). A minimum of fifteen (15) of the following species listed will be utilized in the native grass area. Species with an \* will be included in the final species mix to the extent available. Substitutions or additions to the following species list must be approved by the owner.

**Example Native Grassland Species List**

<b><u>Common Name</u></b>	<b><u>Botanical Name</u></b>
big bluestem	<i>Andropogon gerardii</i>
hairy grama grass	<i>Bouteloua hirsuta</i>
prairie june grass	<i>Koeleria macrantha</i>
gray-headed coneflower	<i>Ratibida pinnata</i>
lance-leaf coreopsis	<i>Coreopsis lanceolata</i>
blue sage	<i>Salvia azura</i>
wild bergamot	<i>Monarda fistulosa</i>
tall goldenrod	<i>Solidago Canadensis</i>
rigid goldenrod	<i>Solidago rigida</i>
foxglove beardstongue	<i>Penstemon digitalis</i>
prairie coneflower	<i>Ratibida columnifera</i>
pale coneflower	<i>Echinacea pallida</i>
golden alexanders	<i>Zizia aurea</i>
joe pye weed	<i>Eupatorium maculatum</i>
large-flowered beard tongue	<i>Penstemon grandiflorus</i>
common spiderwort	<i>Tradescantia ohioenses</i>
purple prairie clover	<i>Dalea purpurea</i>
*little bluestem	<i>Schizachyrium scoparium</i>
*side oats grama	<i>Bouteloua curtipendula</i>
*western wheatgrass	<i>Pascopyron Smithii</i>
*prairie dropseed	<i>Sporobolus heterolepis</i>
*purple coneflower	<i>Echinacea purpurea</i>
*Virginia wildrye	<i>Elymus virginicus</i>

## **V Performance Standards**

Mitigation site success will be determined by assessing the following performance standards.

### *Primary performance objective*

The site will be considered successful if mitigation measures result in 0.6 acres of created and/or restored wetlands. Success will be monitored by the following:

- After one full growing season there is 70% plant cover; seedlings of three (3) planted grass and/or sedge species found.
- After five (5) full growing seasons there is 95% plant cover, and at least 51% cover by hydrophytic plant species.
- A wetland identification will be performed each year following construction; a final wetland boundary map will be completed for the site during year five (5) of the monitoring period. The site will be considered successful if, after the final monitoring, the wetlands created meet all three (3) Corps criteria for jurisdictional wetland: hydrophytic vegetation, hydric soils, and hydrology.

## **VI Site Monitoring**

MC Prairiefire, LLC will contract a qualified contractor to complete site monitoring and assess mitigation site success relative to the performance standards identified.

Monitoring of the site will be completed biannually during the spring and fall to determine mitigation site success relative to performance standards. During the spring, the site will be visited to inspect water control structures and berms, to document overall species occurring in the mitigation area, and to identify any remedial actions that should be implemented during the growing season.

Fall monitoring will be completed in mid-August to September for the first five (5) years after site plantings are complete. Measurements of vegetation cover and frequency, and a listing of all plant species present will be included in monitoring reports. Data will be compiled and summarized in absolute and relative values for frequency and cover for each species encountered during monitoring. Permanent photostations will be established and photographs taken as a part of the annual monitoring event.

Yearly site monitoring will culminate in an annual monitoring report to the Corps of Engineers, Kansas City District for review. The report will include vegetation analysis results (percent cover, density, dominance, and general species composition), summary

Typical site maintenance measures may include:

- Late season mowing in the native grass buffer and the wetland, if necessary, to prevent seeding of nuisance species.
- Nuisance species control will include the elimination of noxious weeds, nuisance trees and shrubs in the wetland, and native grass buffer. Nuisance species measures could include burning, hand weeding, pulling of trees, and the application of herbicides (Rodeo for aquatic applications for herbaceous species and Garlon for woody species or equivalent).
- Minor grading to repair water control structures, reset outfall structures, and remove excess sediment that is preventing the flow and circulation of water. Sediment removal will not be in excess of the original as-built elevations.

## **VIII Financial Assurances**

MC Prairiefire, LLC will provide funding for mitigation site maintenance, remedial actions, and contingency measures. During the five-year monitoring period (2008-2012), MC Prairiefire, LLC will have under contract, a qualified professional to complete site maintenance and corrective measures in the mitigation area. Maintenance and remedial actions including but not limited to:

- Nuisance species control
- Site mowing
- Transplanting in critical areas
- Reseeding
- Tree maintenance
- Re-grading

## **IX Mitigation Banking Measure**

Development of the site will require the unavoidable impact to 1,557 linear feet (0.07 acre) of ephemeral tributary and 2.66 acres of palustrine emergent wetlands. Mitigation for project impacts will include a combination of on-site and off-site mitigation activities. On-site mitigation efforts include the creation of 0.6 acres of emergent wetlands and an approximately 25' foot wide wet meadow/native grass buffer on each side of the created wetland (1.79 acre). The 1.79 acre native buffer is proposed as mitigation for the 1,557 linear feet of ephemeral tributary. Remaining project impacts will be mitigated by purchasing credits in the Johnson County Mitigation Bank (described below). A total of 1.99 acres of wetland credits will be purchased in the bank.

of wetland success with regards to mitigation site requirements, any recommendations for corrective actions, and site photographs.

First year monitoring will be completed as described above, unless site installation is delayed until the fall. If the site is installed in early fall, a late fall monitoring of the area will be completed to assess mitigation area conditions; however, the first year monitoring will not be conducted until the fall following a full growing season. The projected five-year compliance period is outlined below:

Year 1	Growing season ending November 2008
Year 2	Growing season ending November 2009
Year 3	Growing season ending November 2010
Year 4	Growing season ending November 2011
Year 5	Growing season ending November 2012

## **VII Site Protection and Maintenance**

The mitigation area will be restricted as per Corps of Engineers conservation easement requirements and maintained long term as a natural features amenity as well as stormwater conveyance system. The area will also be included in the City of Overland Park's stream setback ordinance which will include at least a 50' wide buffer on either side of the mitigated channel.

The mitigation area will be maintained through the ownership association as part of common area maintenance by a qualified contractor. Kansas State University's Department of Horticulture, Forestry & Recreation Resources has agreed to serve as a special consultant during the design, installation, and maintenance of the facility in order to reinforce the functional success of the system.

In addition, educational signage will be incorporated at viewing points around the created wetland. Signage may include information about; wetland functions, native vegetation found in the wetland, water quality, etc.

*Johnson County Mitigation Bank*

The Johnson County Mitigation Bank is a 55-acre natural conservation area created on land bordering the Blue River, the Blue Valley School District's 30-acre Wilderness Science Center, and the Wilderness Valley residential development. The bank serves as a public amenity, nature preserve, and wildlife refuge. The site includes public trails and boardwalks that wind through the preserve. Upon completion of the bank, the preserve will be donated to Johnson County Park and Recreation District and the Blue Valley School District. These organizations will maintain the land in its natural condition for perpetuity and allow public access for recreational and educational purposes.

***APPENDIX A***  
**Agency Letters**

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**DEPARTMENT OF THE ARMY**

KANSAS CITY DISTRICT, CORPS OF ENGINEERS  
700 FEDERAL BUILDING  
KANSAS CITY, MISSOURI 64106-2896

October 25, 2006

REPLY TO  
ATTENTION OF:

Regulatory Branch  
(200601618)

Mr. Jonathan Polak, PE  
Olsson Associates  
7301 West 133rd Street, Suite 200  
Overland Park, Kansas 66213-4750

Dear Mr. Polak:

This letter pertains to your application for a Department of the Army permit submitted on behalf of Merrill Companies for the Lionsgate Village mixed-use residential and commercial development. The project site is located south of 135<sup>th</sup> street between Lamar and Nall Avenue in Overland Park, Kansas. We circulated a public notice describing your activity and received the enclosed comments regarding the project. Those comments are enclosed for your information.

We have completed our preliminary review of the project and have no specific concerns regarding the proposed development plans for the property. Prior to issuing a permit for the proposed project, more specific plans regarding the mitigation of impacts to waters of the U.S. present on the site will need to be submitted to us for review and approval. There were no substantive comments received regarding the proposed project during the public comment period. Enclosure of the stream channel located on the western portion of the site and the proposed road alignment for 137<sup>th</sup> Street as preferred by the City of Overland Park are considered to be viable options for this project.

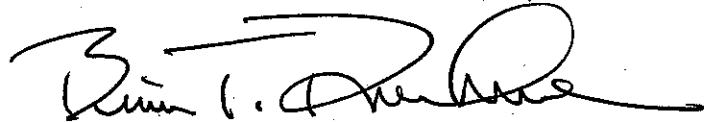
The Corps of Engineers will make the final decision on your application, and we will not issue a permit if issuance would be contrary to the public interest. We will consider the enclosed comments and your response, if any, along with other relevant factors in our determination of the public interest. Finally, you may choose to take no action on the enclosed comments received in response to the Public Notice. In that case, we will decide whether to issue the requested permit based on the information in your application, on the public notice comments, and on any other information we have developed about your activity from our own evaluation.

If we issue the permit, it may contain conditions that are necessary to address specific environmental issues or other public interest concerns. Some of those issues may be included in the enclosed comments, and others may be minor issues which are not in the enclosed comments.



In summary, we are forwarding the enclosed comments for your information and you do not have to respond. If you wish to respond in any way for consideration in our final decision, we encourage you to do so. However, we intend to finish processing your application as soon as possible. If you do not reply within 15 days, we will assume you are declining this opportunity to respond. If you have any questions concerning this matter, please feel free to write or call me at 816-389-3703 (FAX 816-389-2032).

Sincerely,

A handwritten signature in black ink, appearing to read "Brian T. Donahue". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Brian T. Donahue  
Regulatory Specialist  
Kansas City Regulatory Branch

Enclosures

Copies Furnished:

Environmental Protection Agency,  
Water Resources Protection Branch w/enclosures  
U.S. Fish and Wildlife Service,  
Manhattan, Kansas w/enclosures  
Kansas Department of Agriculture  
w/enclosures  
Kansas Department of Health and  
Environment w/enclosures  
Kansas Department of Wildlife and Parks  
Pratt, Kansas