

ENGINEERING SUCCESS



411 N. Webb Rd.
Wichita, KS 67206
316.684.9600

PRELIMINARY DRAINAGE REPORT FOR

Berkeley Square Second Addition
Wichita, Kansas

PROJECT NUMBER: 1401010053
DATE: February 2014
REVISION 1: February 12, 2014



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General Information

Location

The subject property is in the City of Wichita, Sedgwick County, Kansas. The proposed development is northwest of Greenwich Road and 13th Street East. The site is bordered by Berkley Square Addition to the north, Home Bank Company Addition to the east, 13th Street to the South, and Greenwich Office Park Second Addition to the west. The site lies in the southeast quarter of the southeast quarter of Section 9, Township 27 south, Range 2 East. The plat area is 11.3 acres, Appendix A. The site is shown on the USGS Quadrangle, Appendix B. The site is also shown on the Aerial Photograph, Appendix C.

Datum

The drawings and elevations are in NAVD 88.

Soils

According to the NRCS (SCS) Sedgwick County Soil Survey, Appendix D, soils on the site are:

- Irwin silty clay loam, 1 to 3 percent slopes, HSG "D"

The Hydraulic Soil Group (HSG) used to select runoff coefficients is "D".

Flood Insurance Rate Map (FIRM)

The site is shown on the FEMA FIRM Panel 20173C0379E effective February 2, 2007, Appendix E. The project is in Zone X (unshaded), areas outside of the 500-year floodplain.

Drainage

The site was planned with the Berkeley Square Addition. The area was considered developed for the detention, water quality, and channel protection calculations done with the Berkeley Square Addition Drainage Report dated December 2010 and supplemental January 5, 2011. The drainage and utility plan has been updated to show the lot layout for Berkeley Square Second Addition, Appendix F. Detention, water quality, and channel protection is provided by two dry detention ponds and swales that have been constructed in the Berkeley Square 1st Addition.

Lot Grading

Proposed grading will be determined as the site develops. The site will tie into existing properties on the perimeter. Four corner elevations are shown on the lot grading plan, Appendix G.

Water Quality

At the time of development of each lot, BMP's and water quality devices will be determined to meet City of Wichita standards. The methods will most likely consist of swales, rain gardens, proprietary devices, or some combination. Water quality will be integrated into the final site design.

Summary

This property was anticipated when the Berkeley Square 1st Addition was platted. The required detention, water quality, and channel protection for this site has been constructed with existing phases of the project. No additional detention, water quality, or channel protection is required for development of this site.

Appendix A - Plat

NOTES

- LOCATION: Located in the northeast Wichita in a commercial corridor. The property has access to K-96 Expressway via 13th Street. Existing adjoining land uses include: airplane manufacturing, senior housing, high-end commercial, retail, offices, dealerships, and single family residential.
- LOT TOTAL - 2
- ANNEXATION: City of Wichita
- EXISTING/PROPOSED USES: Existing - Vacant land
Proposed - Commercial Development
- ZONING DISTRICT: Existing LI - Limited Industrial (per associated case ZON2007-14)
- PLAT AREA: Gross/Net = 10.41 Acres
- SURVEY DATE: December 2010 (by MKEC)
- PUBLIC UTILITIES: Municipal sanitary sewer and water is available.
- ACCESS / ACCESS CONTROLS: 13th Street - Access points shall be placed according: The minimum distance between full turning movement drives shall be 400'. The minimum distance between a right-in/right-out drive and either another right-in/right-out drive or a full movement drive shall be 200'. A private cross lot access easement shall be provided for the development.
- RESERVE: None
- FLOOD: According to FEMA FIRM Community Unit Panel 20173C0379E, effective date February 7th, 2007; this property lies within flood zone "X", "Areas determined to be outside the 0.2% annual chance floodplain."
- DRAINAGE: A drainage report shall accompany this plat and will be submitted to the Public Works Department.
- BUILDING SETBACK: As per Wichita-Sedgwick County Unified Zoning Code.
- DEED RESTRICTIONS: All present and existing deed restrictions shall be enforced.

LEGAL DESCRIPTION

A replat of a portion of Home Bank & Trust Company Addition, an addition to Wichita, and also two of land lying within the Southeast Quarter of the Southeast Quarter, of Section 9, Township 27 South, Range 2 East, Wichita, all in Sedgwick County, Kansas, said tracts being more particularly described as follows:

Lot 2, Block 1, of said Home Bank & Trust Company Addition,
TOGETHER WITH,

BEGINNING 10.00 feet south of the southwest corner of Lot 2, Block 1, Home Bank & Trust Company Addition, to Wichita, Sedgwick County, Kansas; thence on a Kansas coordinate system of 1983 south zone grid bearing of S88°53'46"W, 611.42 feet to the east line of Greenwich Office Park Second Addition, an addition to Wichita, Sedgwick County, Kansas; thence along the east line of said Greenwich Office Park Second Addition for the next three (3) courses N01°06'14"W, 161.97 feet to a point on a curve to the right; thence along said curve 51.46 feet to a curve to the left, said curve to the right having a central angle of 38°47'53", a radius of 76.00 feet, and a long chord distance of 50.49 feet, bearing N18°17'43"E; thence along said curve to the left 15.59 feet to a curve to the right, said curve to the left having a central angle of 13°50'54", a radius of 64.50 feet, and a long chord distance of 15.55 feet, bearing N30°46'12"E; thence along said curve to the right 75.98 feet to a compound curve, said curve to the right having a central angle of 48°22'16", a radius of 90.00 feet, and a long chord distance of 73.75 feet, bearing N48°01'53"E; thence along said compound curve 367.21 feet to a curve to the left, said compound curve having a central angle of 21°22'54", a radius of 984.00 feet, and a long chord distance of 365.08 feet, bearing N82°54'28"E; thence along said curve to the left 459.61 feet, said curve having a central angle of 13°23'16", a radius of 1967.00 feet, and a long chord distance of 458.57 feet, bearing N86°54'17"E; thence S06°27'22"E, 78.97 feet to the northeast corner of Lot 2, Block 1, said Home Bank & Trust Company Addition; thence along the north line of said addition, S88°53'46"W, 297.21 feet to the northwest corner of said Lot 2; thence along the west line of said Lot 2, S00°54'08"E, 246.44 feet to the POINT OF BEGINNING.

TOGETHER WITH,

BEGINNING at the southeast corner of Lot 2, Block 1, Greenwich Office Park Second Addition, an addition to Wichita, Sedgwick County, Kansas; thence along the east line of said Lot 2, on a platted bearing of N00°54'24"W, 340.51 feet; thence N00°54'24"W, 70.00 feet; thence N88°53'46"E, 479.32 feet; thence S00°48'07"E, 383.98 feet to a point on a non-tangent curve to the left; thence along said curve 384.97 feet to a curve to the right, said curve to the left having a central angle of 21°42'36", a radius of 1016.00 feet, and a long chord distance of 382.67 feet, bearing S82°44'37"W; thence along said curve to the right 71.12 feet to a curve to the left, said curve to the right having a central angle of 45°16'35", a radius of 90.00 feet, and a long chord distance of 69.28 feet, bearing N85°28'23"W; thence along said curve to the left 30.57 feet to the POINT OF BEGINNING, said curve having a central angle of 27°09'17", a radius of 64.50 feet, and a long chord distance of 30.28 feet, bearing N76°24'45"W.

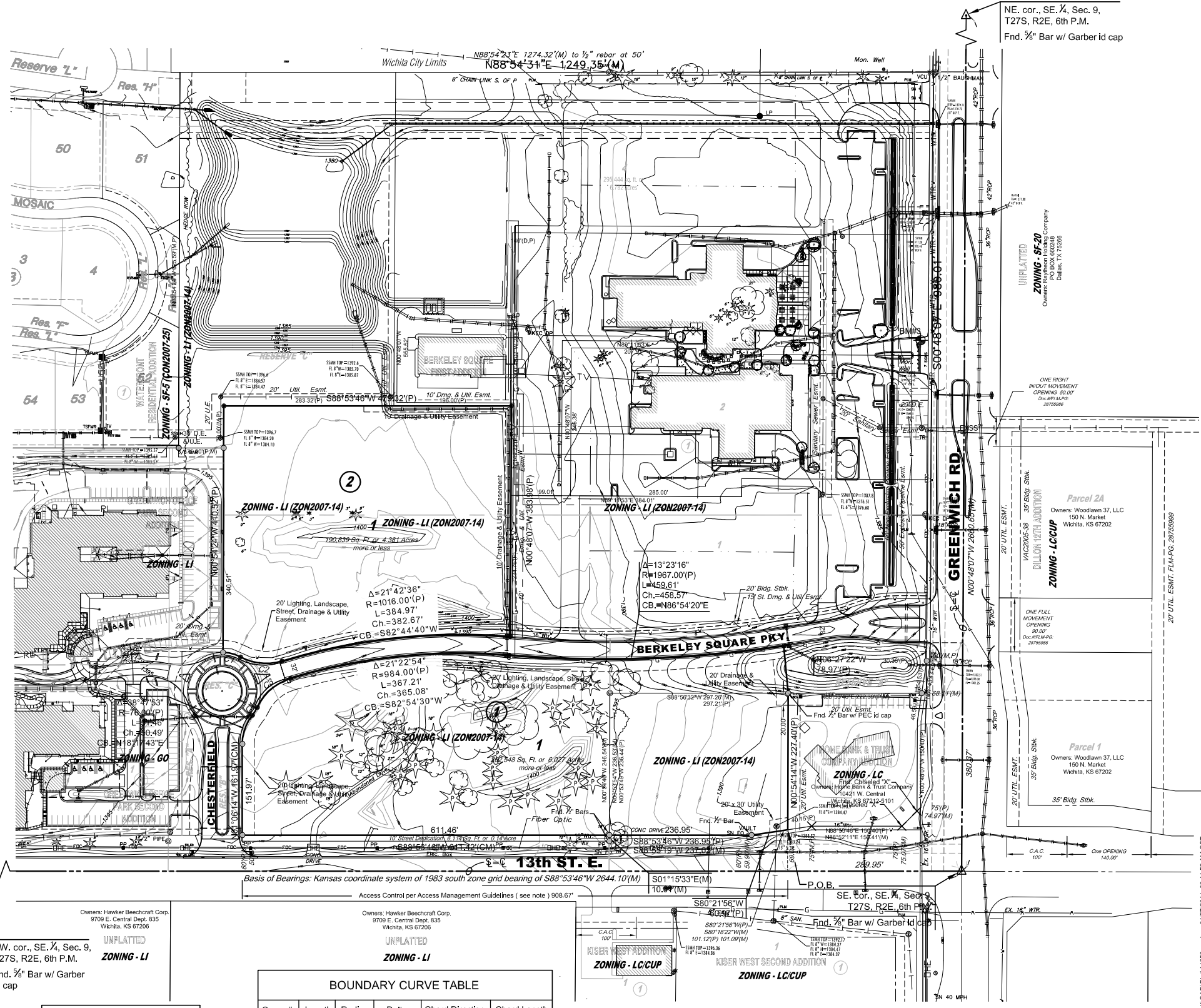
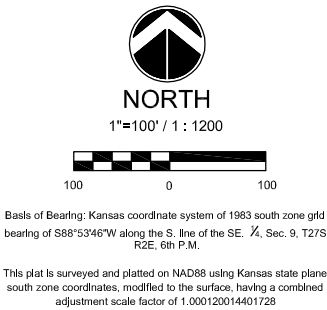
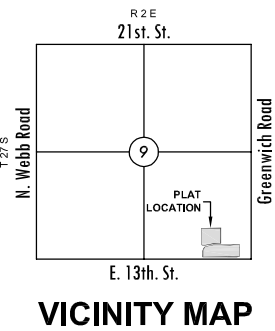
CONTAINING: 453,386 square feet or 10.41 acres of land, more or less.

LEGEND

- Edge of Trees
- 6IN - Coniferous Tree
- 3IN - Deciduous Tree
- SN - Sign
- PP - Power Pole
- ELEC BOX - Electric Box
- LP - Light Pole
- FH - Fire Hydrant
- WV - Water Valve
- WM - Water Meter
- SWMH - Storm Water Manhole
- SSMH - Sanitary Sewer Manhole
- TM - Telephone Manhole
- TR - Telephone Riser
- Inlet - Inlet
- Grate Inlet - Grate Inlet
- CM - Gas Meter
- Benchmark - Benchmark
- 3/8" Rebar/mkec Cis 39 - 3/8" Rebar/mkec Cis 39
- Property Corner Found - Property Corner Found
- Section Corner - Section Corner
- (M) - Measured
- (C) - Calculated
- (D) - Described
- (P) - Platted
- Easement
- Building Setback
- X - Fence
- Storm Sewer Pipe
- Water Line
- Sanitary Sewer Line
- Gas Line
- Telephone Line
- Underground Electric Line
- Overhead Telephone
- Overhead Electric
- Underground Fiber Optic Line
- Building Footprint

BENCHMARKS

- BM#1 - Chiseled square on top of curb at north end of 2nd Island, north of 13th St. N, on Veranda, 461' north of 13th St, and centerline Veranda. Elev.=1287.03 NAVD88.
- BM#2 - Railroad spike in north side of power pole, 930' east of centerline Veranda and 39' north of centerline 13th St. N. Elev.=1399.01 NAVD88.
- BM#3 - Chiseled square on top of curve at west end of north radius of driveway approach, 887' north and 73' west of the southeast corner of Section 9, Township 27 South, Range 2 East (centerline 13th Street North and Greenwich Road). Elev.=1380.08 NAVD88.



**MINIMUM PAD ELEVATIONS
LOWEST OPENINGS**

| LOT | BLOCK | ELEVATION NAVD88 |
|-----|-------|------------------|
| 1 | 1 | 1387.3 |
| 1 | 2 | 1389.9 |

BOUNDARY CURVE TABLE

| Curve # | Length | Radius | Delta | Chord Direction | Chord Length |
|---------|--------|--------|-----------|-----------------|--------------|
| C1 | 30.57' | 64.50' | 27°09'20" | N76° 24' 40"W | 30.28' |
| C2 | 71.12' | 90.00' | 45°16'30" | S85° 28' 20"W | 69.28' |
| C3 | 75.98' | 90.00' | 48°22'20" | S48° 01' 50"W | 73.74' |
| C4 | 15.59' | 64.50' | 13°50'50" | N30° 46' 10"E | 15.55' |

PRELIMINARY PLAT

A portion of the SE 1/4, SE 1/4, Sec. 9, T27S, R2E, 6th P.M.

BERKELEY SQUARE SECOND ADDITION

DEVELOPER/OWNER: Greenwich 13, L.L.C.

150 N. Market, Wichita, KS 67202 (316) 262-6400 (316) 516-0667



Date submitted: January 27th, 2014
Subdivision Hearing: February 13th, 2014

Wichita, KS • 316.684.9600

J:\Projects\2014\14010\0003 - Berkeley Square Second Addition\1403pre.dwg 01/27/2014 09:11:52 AM CST

CERTIFICATE OF SURVEY

I, Gregory J. Allison, a registered land surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "BERKELEY SQUARE SECOND ADDITION" an addition to Wichita, Sedgwick County, Kansas, into Lots, Blocks, and a Street, the same being accurately set forth in the accompanying plat and described herein:

A replat of a portion of Home Bank & Trust Company Addition, an addition to Wichita, and also two tracts of land lying within the Southeast Quarter of the Southeast Quarter, of Section 9, Township 27 South, Range 2 East, Wichita, all in Sedgwick County, Kansas, said tracts being more particularly described as follows:

Lot 2, Block 1, of said Home Bank & Trust Company Addition, TOGETHER WITH,

BEGINNING 10.00 feet south of the southwest corner of Lot 2, Block 1, Home Bank & Trust Company Addition, to Wichita, Sedgwick County, Kansas; thence on a Kansas coordinate system of 1983 south zone grid bearing of S88°53'46"W, 611.42 feet to the east line of Greenwich Office Park Second Addition, an addition to Wichita, Sedgwick County, Kansas; thence along the east line of said Greenwich Office Park Second Addition for the next three (3) course N01°06'14"W, 161.97 feet to a point on a curve to the right; thence along said curve 51.46 feet to a curve to the left, said curve to the right having a central angle of 38°47'53", a radius of 76.00 feet, and a long chord distance of 50.49 feet, bearing N18°17'43"E; thence along said curve to the left 15.59 feet to a curve to the right, said curve to the left having a central angle of 13°50'54", a radius of 64.50 feet, and a long chord distance of 15.55 feet, bearing N30°46'12"E; thence along said curve to the right 75.98 feet to a compound curve, said curve to the right having a central angle of 48°22'16", a radius of 90.00 feet, and a long chord distance of 73.75 feet, bearing N48°01'53"E; thence along said compound curve 367.21 feet to a curve to the left, said compound curve having a central angle of 21°22'54", a radius of 984.00 feet, and a long chord distance of 365.08 feet, bearing N82°54'28"E; thence along said curve to the left 459.61 feet, said curve having a central angle of 13°23'16", a radius of 1967.00 feet, and a long chord distance of 458.57 feet, bearing N86°54'17"E; thence S06°27'22"E, 78.97 feet to the northeast corner of Lot 2, Block 1, said Home Bank & Trust Company Addition; thence along the north line of said addition, S88°53'46"W, 297.21 feet to the northwest corner of said Lot 2; thence along the west line of said Lot 2, S00°54'08"E, 246.44 feet to the POINT OF BEGINNING.

TOGETHER WITH,

BEGINNING at the southeast corner of Lot 2, Block 1, Greenwich Office Park Second Addition, an addition to Wichita, Sedgwick County, Kansas; thence along the east line of said Lot 2, on a platted bearing of N00°54'24"W, 340.51 feet; thence N00°54'24"W, 70.00 feet; thence N88°53'46"E, 479.32 feet; thence S00°48'07"E, 383.98 feet to a point on a non-tangent curve to the left; thence along said curve 384.97 feet to a curve to the right, said curve to the left having a central angle of 21°42'36", a radius of 1016.00 feet, and a long chord distance of 382.67 feet, bearing S82°44'37"W; thence along said curve to the right 71.12 feet to a curve to the left, said curve to the right having a central angle of 45°16'35", a radius of 90.00 feet, and a long chord distance of 69.28 feet, bearing N85°28'23"W; thence along said curve to the left 30.57 feet to the POINT OF BEGINNING, said curve having a central angle of 27°09'17", a radius of 64.50 feet, and a long chord distance of 30.28 feet, bearing N76°24'45"W.

CONTAINING: 453,386 square feet or 10.41 acres of land, more or less

All streets, easements, rights-of-way, building setbacks, access controls, together with all other public dedications within the above described property, including Contingent Dedication recorded on Film 378, Page 142, Utility Easement recorded on DOC.#/FLM-PG: 28929918, Utility Easement recorded on DOC.#/FLM-PG: 29243695, Utility Easement recorded on DOC.#/FLM-PG: 29243696 are hereby vacated and replatted by virtue of K.S.A. 12-512b, as amended.

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this ___ day of _____, 2014.



Gregory J. Allison, PE, LS #1257
MKEC Engineering Consultants, Inc.
411 North Webb Road
Wichita, Kansas 67206

OWNER'S CERTIFICATE

Know all men by these presents that we the undersigned property owners of the land above set forth in the Registered Land Surveyor's Certificate, have caused the same to be surveyed and platted into Lots, Blocks, and a Street, the same to be known as "BERKELEY SQUARE SECOND ADDITION," an addition to Wichita, Sedgwick County, Kansas.

The drainage and utility easements are hereby granted as indicated for drainage and utility purposes and are for the construction and maintenance of all public utilities. The street, lighting, landscape, drainage and utility easements are hereby granted as indicated for street, lighting, landscape, drainage and utility purposes and for the construction and maintenance of all public utilities, streets, and lighting.

The street is hereby dedicated to and for the use of the public.

All abutters rights of access to or from 13th Street over and across the south line of "BERKELEY SQUARE SECOND ADDITION," are hereby granted to the appropriate governing body, provided however Block 1, shall have access placed accordingly; The minimum distance between a full movement drive and another full movement drive shall be 400'. The minimum distance between a right-in/right-out drive and either another right-in/right-out drive or a full movement drive shall be 200' as set forth in the Access Management Standards.

A drainage plan has been developed for this plat. All drainage easements, rights-of-ways, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of stormwater.

Greenwich 13, L.L.C., a Kansas limited liability company

_____, manager
George E. Laham, II, manager
Laham Development Company, L.L.C., a Kansas limited liability company,
manager of Greenwich 13, L.L.C.

STATE OF KANSAS, SEDGWICK COUNTY) ss:

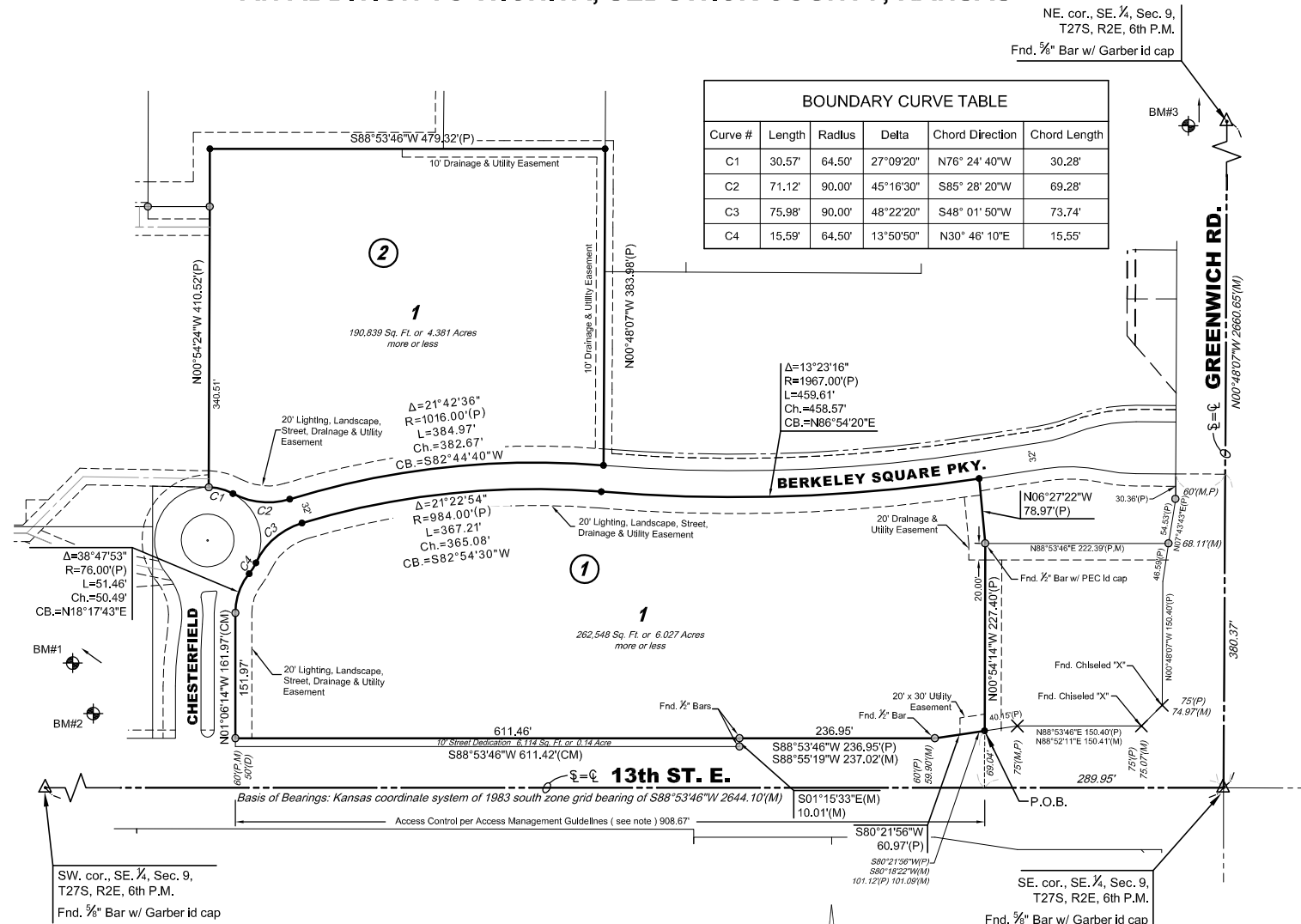
This instrument was acknowledged before me on ___ day of _____, 2014, by George E. Laham, II, manager of Laham Development Company, L.L.C., a Kansas limited liability company, manager of Greenwich 13, L.L.C., a Kansas limited liability company.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

_____, Notary Public
My Term Expires: _____

FINAL PLAT

BERKELEY SQUARE SECOND ADDITION
AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



MORTGAGE CERTIFICATE

INTRUST Bank, N.A., holder of a mortgage on a portion of the above described property, do hereby consent to the plat of "BERKELEY SQUARE SECOND ADDITION."

INTRUST Bank, N.A.

_____, Executive Vice President
Gary D. Schmitt, Executive Vice President

This instrument was acknowledged before me on this ___ day of _____, 2014, by Gary D. Schmitt, Executive Vice President, INTRUST Bank, N.A.

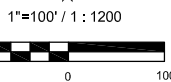
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

_____, Notary Public
Notary Public: _____ My Term Expires: _____

BENCHMARKS

- BM#1 Chiseled square on top of curb at north end of 2nd island, north of 13th St. N. on Veranda, 461 feet north of 13th Street and centerline Veranda. Elevation = 1287.03 NAVD88
- BM#2 Railroad spike in north side of power pole, 930 feet of centerline Veranda and 39' north of centerline 13th Street. Elevation = 1399.01 NAVD88
- BM#3 Chiseled Square on top of curb at west end of north radius of driveway approach, 887' north and 73' west of the southeast corner of Section 9, Township 27 South, Range 2 East (centerline 13th Street and Greenwich Road). Elevation = 1380.08 NAVD88

| LOT | BLOCK | ELEVATION NAVD88 |
|-----|-------|------------------|
| 1 | 1 | 1387.3 |
| 1 | 2 | 1389.9 |



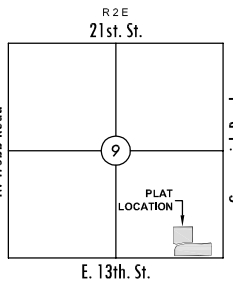
Basis of Bearing: Kansas coordinate system of 1983 south zone grid bearing of S88°53'46"W along the S. line of the SE ¼, Sec. 9, T27S, R2E, 6th P.M.

This plat is surveyed and platted on NAD88 using Kansas state plane south zone coordinates, modified to the surface, having a combined adjustment scale factor of 1.000120014401728

LEGEND

Date of Survey: December, 2010

- △ = Section corner monument found
- = Found 5/8" rebar w/ MKEC CLS 39 id. cap unless otherwise annotated
- = Set 5/8" rebar w/ MKEC CLS 39 id. cap
- ⊕ = Benchmark
- (M) = Measured
- (CM) = Calculated from measured
- (P) = Platted



VICINITY MAP

ACCESS CONTROLS NOTE

13th Street - Access points for the Lots shall be placed accordingly; The minimum distance between full turning movement drives shall be 400'. The minimum distance between a right-in/right-out drive and either another right-in/right-out drive or a full movement drive shall be 200'.

PLANNING COMMISSION CERTIFICATE

STATE OF KANSAS, SEDGWICK COUNTY) ss:

This plat of "BERKELEY SQUARE SECOND ADDITION" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this ___ day of _____, 2014.

WICHITA-SEGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

_____, Chair
Don Klausmeyer, Chair

Attest: _____, Secretary
John L. Schlegel, Secretary

GOVERNING BODY CERTIFICATE

STATE OF KANSAS, SEDGWICK COUNTY) ss:

The dedications shown on this plat are hereby accepted and this plat is hereby approved by the governing body of the City of Wichita, Kansas.

Dated this ___ day of _____, 2014.

At the direction of the City Council.

_____, Mayor
Carl Brewer, Mayor

Attest: _____, City Clerk
Karen Sublett, City Clerk

TRANSFER RECORD

STATE OF KANSAS, SEDGWICK COUNTY) ss:

Entered on transfer record this ___ day of _____, 2014.

_____, County Clerk
Kelly B. Arnold, County Clerk

REGISTER OF DEEDS' CERTIFICATE

STATE OF KANSAS, SEDGWICK COUNTY) ss:

This is to certify that this instrument was filed for record in the Register of Deeds office this day of _____, 2014, at _____ o'clock ___ M; and is duly recorded.

_____, Register of Deeds
Bill Meek, Register of Deeds

Attest: _____, Deputy
Tonya E. Buckingham, Deputy

COUNTY SURVEYOR

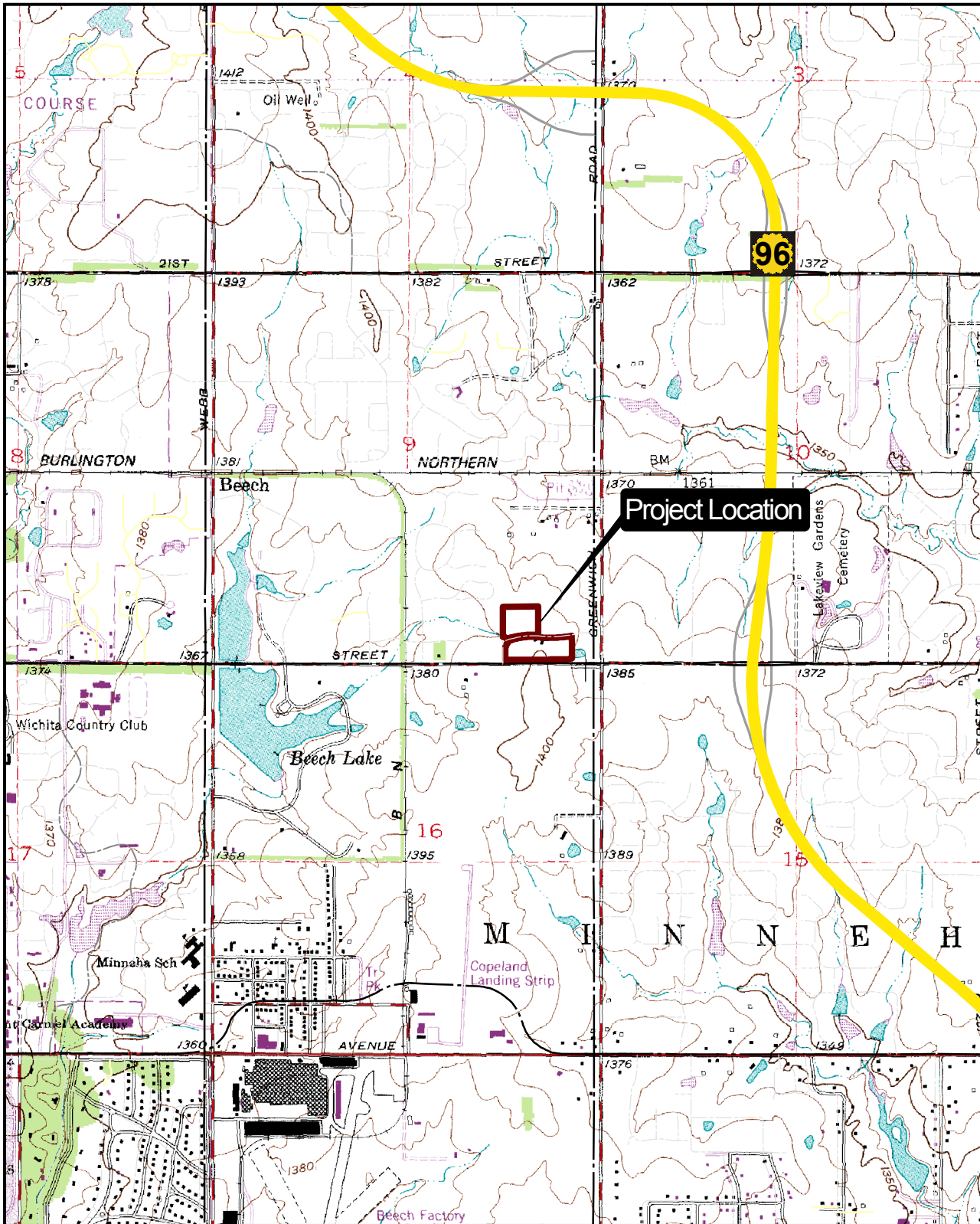
STATE OF KANSAS, SEDGWICK COUNTY) ss:

Reviewed in accordance with K.S.A. 58-2005 on this ___ day of _____, 2014.

_____, Deputy County Surveyor
Tricia L. Robello, LS #1246
Deputy County Surveyor
Sedgwick County, Kansas



Appendix B - USGS Quadrangle Map



USGS QUAD EXHIBIT
BERKELEY SQUARE SECOND ADDITION

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SEC: 9
TWP: T27S
RNG: R3E

PROJECT NO. 1401010053

DATE 2/4/2014

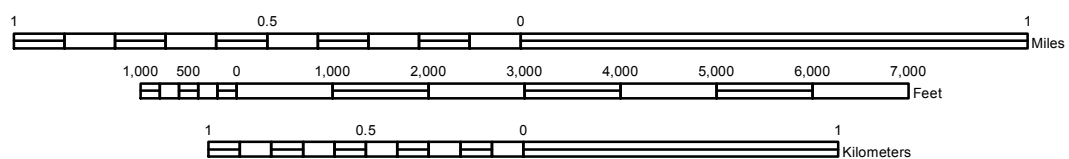
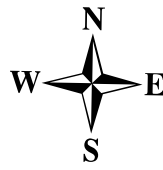
SCALE 1"=2000'

DESIGNED DRAWN CHECKED
MKEC MKEC MKEC

| | | |
|--|--|--|
| | | |
| | | |
| | | |
| | | |

NO. REVISION DATE

SHEET NO.



Appendix C - Aerial Photograph



GREENWICH RD

Project Location

BERKELEY SQUARE PKY

13TH ST

BERKELEY SQUARE
1ST ADD

HOME BANK
& TRUST
COMPANY ADD

RES C

RES A

RES B

RES C

RES B

RES A

38

RES H

51

RES G

RES L

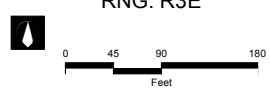
52

GREENWICH OFFICE
PARK 2ND ADD

RES C

RES B

RES A



SEC: 9
TWP: T27S
RNG: R3E

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the express consent of MKEC.



**AERIAL EXHIBIT
BERKELEY SQUARE SECOND ADDITION**

| | | |
|------------------------|------------------|------------------|
| PROJECT NO. 1401010053 | DATE: 2/4/2014 | SHEET NO. |
| DRAWN BY: JGD | DESIGNED BY: JGD | APPROVED BY: KLA |
| | | 1 OF 1 |

Path: J:\Projects\2014\1401010053 - Berkeley Square Second\5-Civil\GIS\Aerial\Exhibit.mxd - Date: 2/4/2014

Appendix D - NRCS Soil Survey

3911
Rosehill silty clay, 1 to 3 percent slopes
D

4671
Irwin silty clay loam, 1 to 3 percent slopes
D

GREENWICH RD

Project Boundary

13TH ST

3911
Rosehill silty clay, 1 to 3 percent slopes
D



SEC: 9
TWP: T27S
RNG: R3E



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the express consent of MKEC.



Wichita, KS · 316.684.9600

NRCS Soil Survey Exhibit
BERKELEY SQUARE SECOND ADDITION

| | | |
|------------------------|------------------|------------------|
| PROJECT NO. 1401010053 | DATE: 2/5/2014 | SHEET NO. |
| DRAWN BY: JGD | DESIGNED BY: JGD | APPROVED BY: KLA |
| | | 1 OF 1 |

Appendix E - Flood Insurance Rate Map (FIRM)



NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0379E

FIRM
 FLOOD INSURANCE RATE MAP

SEDGWICK COUNTY,
 KANSAS
 AND INCORPORATED AREAS

PANEL 379 OF 700
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY | NUMBER | PANEL | SUFFIX |
|------------------|--------|-------|--------|
| SEDGWICK COUNTY | 200321 | 0379 | E |
| WICHITA, CITY OF | 200328 | 0379 | E |

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
 20173C0379E

EFFECTIVE DATE
 FEBRUARY 2, 2007
 Federal Emergency Management Agency

SEC: 9
 TWP: T27S
 RNG: R3E

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FEMA FIRM EXHIBIT
BERKELEY SQUARE SECOND ADDITION

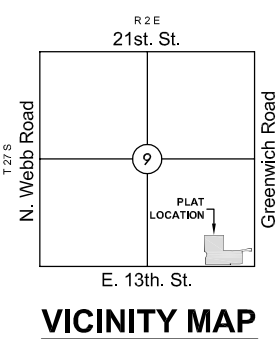
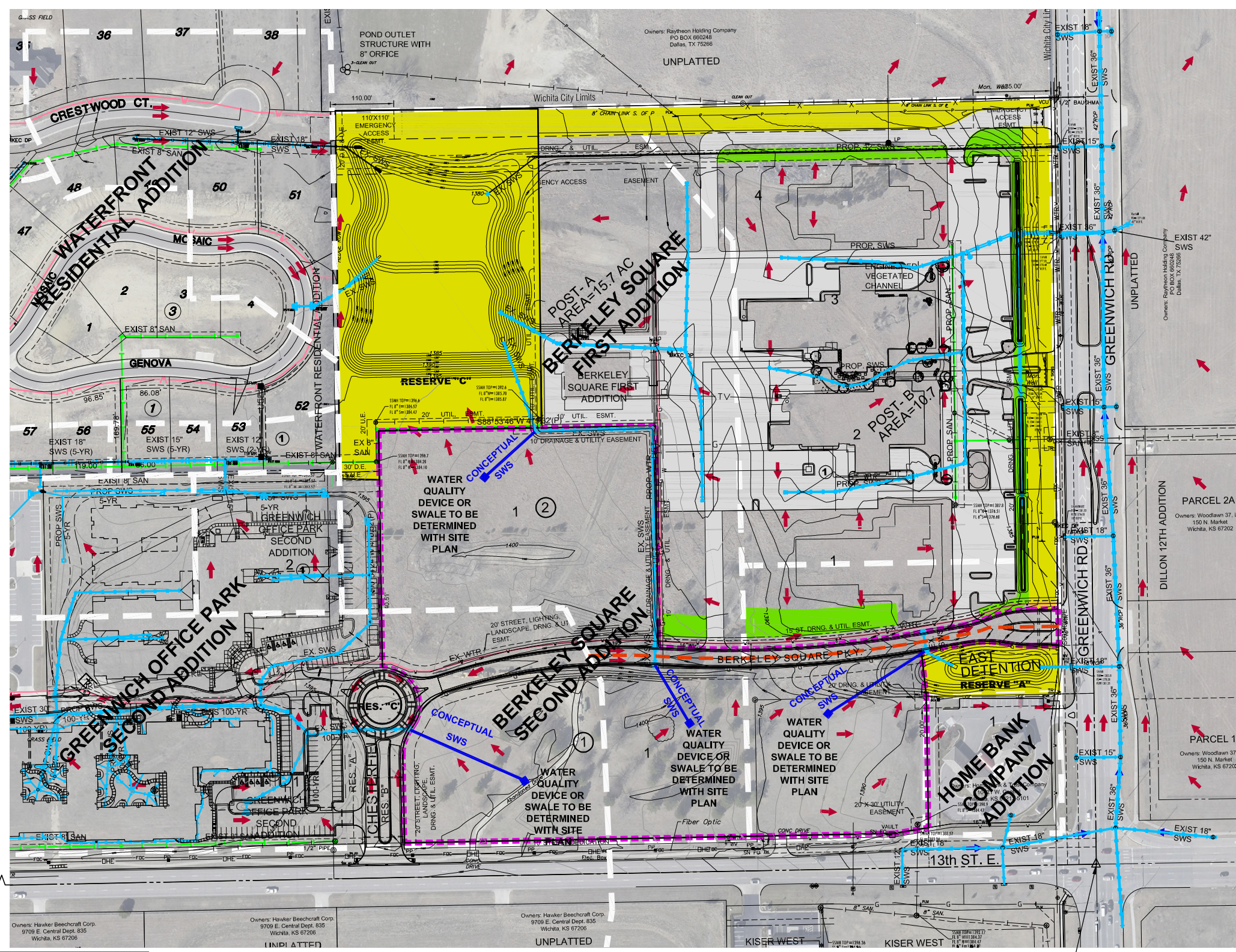
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|------------------------|------------------|------------------|
| PROJECT NO. 1401010053 | DATE: 2/4/2014 | SHEET NO. |
| DRAWN BY: JGD | DESIGNED BY: JGD | APPROVED BY: KLA |
| | | 1 OF 1 |

Appendix F - Drainage and Utility Plan

DRAINAGE & UTILITY PLAN

BERKELEY SQUARE ADDITION

WICHITA, KANSAS



LEGEND

- CONIFEROUS TREE
- DECIDUOUS TREE
- SIGN
- POWER POLE
- ELECTRIC BOX
- LIGHT POLE
- FIRE HYDRANT
- WATER VALVE
- WATER METER
- SECTION CORNER
- BENCHMARK
- EASEMENT
- BUILDING SETBACK
- FENCE
- STORM SEWER PIPE
- WATER LINE
- SANITARY SEWER LINE
- GAS LINE
- GAS PIPELINE
- TELEPHONE LINE
- UNDERGROUND ELEC.
- OVERHEAD ELECTRIC
- FIBER OPTIC CABLE
- DRAINAGE SUB BASIN
- DRAINAGE BASIN
- FLOW ARROW
- AREA FOR SWS SIZING
- SITE BOUNDARY
- OPEN AREA
- SWALE
- CONCEPTUAL SWS

A17

NORTH

100 0 100

SWALES

| |
|---------------------|
| 2.3 AC-FT BY OTHERS |
|---------------------|

WEST DETENTION

OUTLET: 8" CIRCULAR ORFICE AT 1380.0
2'X2' RISER AT 1386.0
12" PIPE

| YEARS | STORAGE AC-FT. | ELEVATION FT. |
|----------|----------------|---------------|
| 2-YEAR | 3.1 | 1384.2 |
| 5-YEAR | 4.4 | 1385.1 |
| 10-YEAR | 5.4 | 1385.6 |
| 25-YEAR | 6.5 | 1386.2 |
| 50-YEAR | 7.2 | 1386.5 |
| 100-YEAR | 8.1 | 1386.9 |

EAST DETENTION

OUTLET: 8" CIRCULAR ORFICE AT 1380.0
4'X4' RISER AT 1382.9
24" RCP

| YEARS | STORAGE AC-FT. | ELEVATION FT. |
|----------|----------------|---------------|
| 2-YEAR | 0.3 | 1383.3 |
| 5-YEAR | 0.4 | 1383.5 |
| 10-YEAR | 0.4 | 1383.6 |
| 25-YEAR | 0.4 | 1383.8 |
| 50-YEAR | 0.5 | 1384.1 |
| 100-YEAR | 0.6 | 1384.3 |

SW COR., SE 1/4, SEC. 9, T27S, R2E, 6TH P.M. FND. 5/8" BAR W/ GARBER ID CAP

FLOW TO GREENWICH ROAD

| | 1-YR | 2-YR | 5-YR | 10-YR | 25-YR | 50-YR | 100-YR |
|--------------|------|------|------|-------|-------|-------|--------|
| PRE PROJECT | 47.2 | 67.2 | 99.7 | 121.3 | 153.9 | 178.8 | 200.5 |
| POST PROJECT | 6.7 | 14.5 | 78.3 | 108.7 | 139.8 | 159.1 | 173.7 |

* FROM BERKELEY SQUARE 1ST. DRAINAGE REPORT JANUARY 5, 2011.

FLOW OUT OF BEECH LAKE (CFS)

| | 2-YR | 5-YR | 10-YR | 100-YR |
|--------------|------|------|-------|--------|
| PRE PROJECT | 224 | 396 | 527 | 1167 |
| POST PROJECT | 219 | 392 | 517 | 1111 |

* FROM WATERFRONT COMMERCIAL, WATERFRONT RESIDENTIAL AND GREENWICH OFFICE PARK AUGUST 2007.

SE COR., SE 1/4, SEC. 9, T27S, R2E, 6TH P.M. FND. 5/8" BAR W/ GARBER ID CAP

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DRAINAGE & UTILITY PLAN

| | | |
|--------------|------------|---------|
| PROJECT NO. | 1401010053 | |
| DATE | FEB 2014 | |
| SCALE | AS NOTED | |
| DESIGNED | DRAWN | CHECKED |
| KLA | DM | KLA |
| SWS Comments | 2-14-14 | |
| NO. | REVISION | DATE |
| | | |
| SHEET NO. | | |
| 1 OF 1 | | |

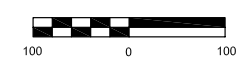
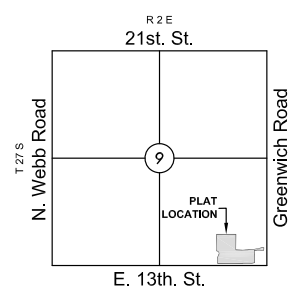
J:\PROJECTS\2014\1401010053 - BERKELEY SQUARE SECOND-CYCLE DRAINAGE DRAWING\14053_DUP.DWG

Appendix G - Lot Grading Plan

LOT GRADING PLAN

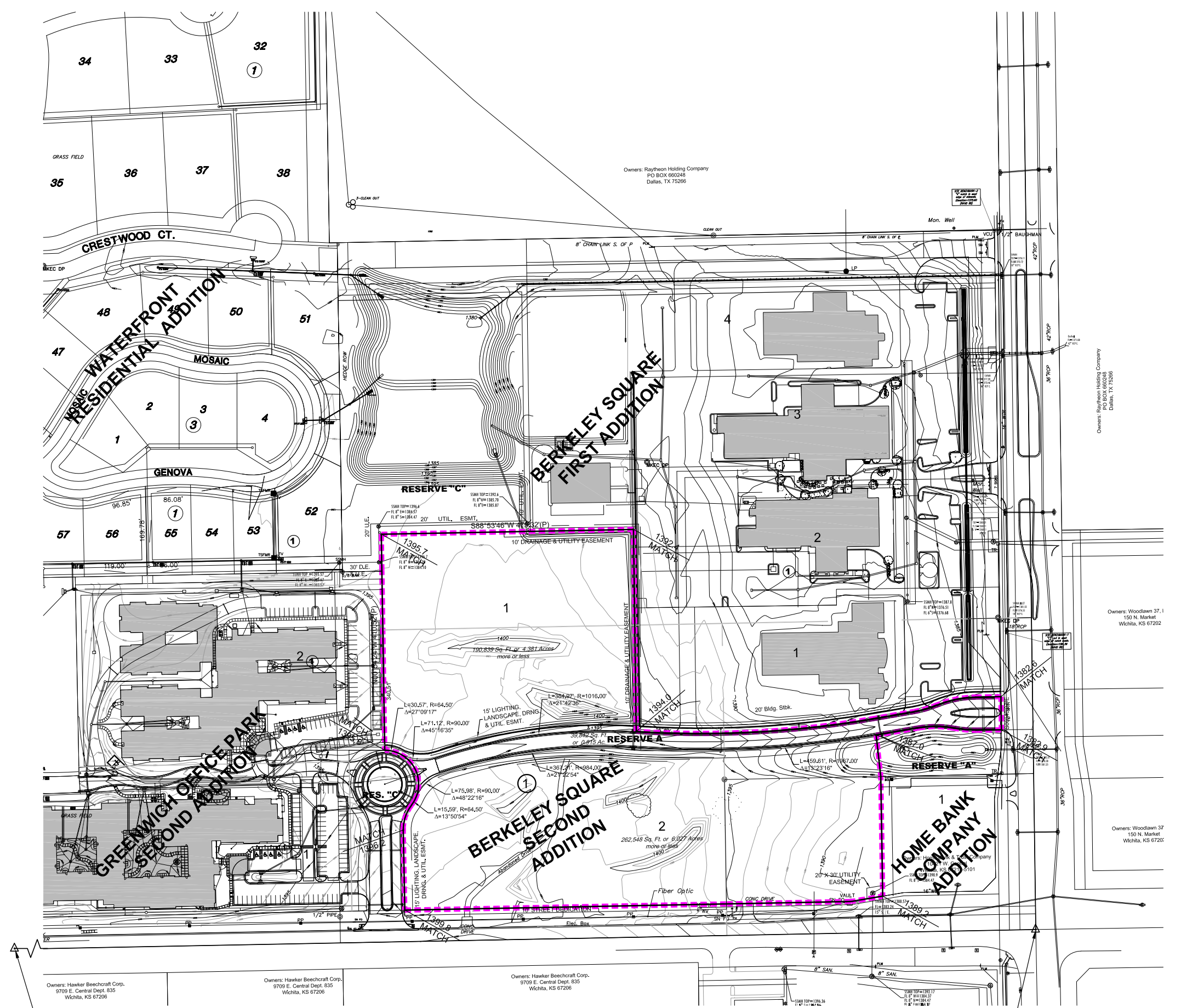
BERKELEY SQUARE ADDITION

WICHITA, KANSAS



LEGEND

| | |
|--|-----------------------|
| | - CONIFEROUS TREE |
| | - DECIDUOUS TREE |
| | - SIGN |
| | - POWER POLE |
| | - ELECTRIC BOX |
| | - LIGHT POLE |
| | - FIRE HYDRANT |
| | - WATER VALVE |
| | - WATER METER |
| | - SECTION CORNER |
| | - BENCHMARK |
| | - SPOT ELEVATION |
| | - EASEMENT |
| | - BUILDING SETBACK |
| | - FENCE |
| | - STORM SEWER PIPE |
| | - WATER LINE |
| | - SANITARY SEWER LINE |
| | - GAS LINE |
| | - GAS PIPELINE |
| | - TELEPHONE LINE |
| | - UNDERGROUND ELEC. |
| | - OVERHEAD ELECTRIC |
| | - FIBER OPTIC CABLE |
| | - SITE BOUNDARY |
| | - EXISTING STRUCTURE |



SW COR., SE 1/4, SEC. 9, T27S,
R2E, 6TH P.M. FND. 5/8" BAR
W/ GARBER ID CAP

SE COR., SE 1/4, SEC. 9, T27S,
R2E, 6TH P.M. FND. 5/8" BAR
W/ GARBER ID CAP

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| LOT GRADING PLAN | | |
|------------------|------------|---------|
| PROJECT NO. | 1401010053 | |
| DATE | FEB 2014 | |
| SCALE | AS NOTED | |
| DESIGNED | DRAWN | CHECKED |
| KLA | DM | KLA |

| NO. | REVISION | DATE |
|-----|----------|------|
| | | |
| | | |
| | | |

SHEET NO.
1 OF 1

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