

- DRAINAGE NOTES:**
1. OWNER/SUBDIVIDER: WILLIE JOE BATISTE 125 S. PRESCOTT CT. WICHITA, KS. 67209 NORVELL BUFFORD 2811 BEACON HILL COURT WICHITA, KS. 67220
 2. PREPARED BY REISS AND GOODNESS ENGINEERS c/o ROBERT G. PREVITERA LA#364, LS#1146 2160 W. 21ST ST. NO. WICHITA, KS. 67203
 3. 51ST STREET NORTH IS TO BE IMPROVED TO AN ASPHALT MAT STANDARD, WITH DITCHES.
 4. ALL INTERIOR ROADS SHALL BE 29 FOOT BACK TO BACK.
 5. PROPOSED POND SIZE IS APPROXIMATE AND IS TO BE UTILIZED FOR RETENTION.
 6. ALL ARROWS DEPICT THE ROUTING OF THE 2 YEAR INITIAL DESIGN STORM AND 100 YEAR STORM.
 7. PIPE SIZES TO BE DETERMINED PER THE FINAL DRAINAGE PLAN.
 8. DRAINAGE ON 51ST STREET NORTH MAY REQUIRE A MORE DETAILED STUDY INCLUDING ADDITIONAL SURVEYING TO OBTAIN A MORE ACCURATE DETERMINATION OF THE CONTRIBUTING WATERSHED TO THE NORTH RIGHT-OF-WAY OF 51ST STREET. THE OVERALL AREA IS VERY FLAT AND EXISTING DITCHES ALONG THE NORTH SIDE OF 51ST ARE NON-EXISTANT OR POORLY DEFINED. THESE ARE NO EXISTING CULVERTS THAT CONNECT THE DRAINAGE AREA NORTH OF 51ST STREET TO THE SOUTH SIDE OF 51ST STREET EXCEPT ONE-18" R.C.P. IN THE WEST RIGHT-OF-WAY OF DELAWARE, WHICH IS SHOWN ON THE CONCEPT PLAN. ADDITIONAL RIGHT-OF-WAY MAY BE NEEDED ON THE NORTH SIDE OF 51ST STREET BASED ON THE STREET IMPROVEMENT PLANS FOR 51ST STREET. IT IS MY UNDERSTANDING THAT THE CITY CONTEMPLATES AN "ASPHALT MAT" SECTION ROAD FOR 51ST STREET.
 9. THE PROPOSED POND, WHEN ABOVE IT'S PROPOSED STATIC WATER ELEVATION, SHALL OVERFLOW INTO THE EXISTING DRAINAGE EASEMENT TO THE SOUTH VIA A DRAW-DOWN STRUCTURE AND EXIT PIPE PROTECTED BY FLAP-GATE.

LEGAL DESCRIPTION THE EAST 34 1/2 ACRES OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 19, TOWNSHIP 26 SOUTH, RANGE 1 EAST OF THE SIXTH PRINCIPLE MERIDIAN, SEDGWICK COUNTY, KANSAS; EXCEPT A TRACT DESCRIBED AS: COMMENCING AT THE CENTER OF SAID SECTION 19, IN THE SOUTHEAST CORNER OF SAID TRACT; THENCE NORTH 89 DEGREES 35 MINUTES 53 SECONDS WEST ALONG THE SOUTH LINE OF SAID TRACT, A DISTANCE OF 0.87 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE ON SAID SOUTH LINE A DISTANCE OF 1142.68 FEET TO THE SOUTHWEST CORNER OF SAID TRACT; THENCE NORTH 0 DEGREES 03 MINUTES 38 SECONDS WEST ALONG THE WEST LINE OF SAID TRACT, A DISTANCE OF 540.78 FEET TO A POINT ON A CURVE ON THE SOUTH LINE OF A SEDGWICK COUNTY DRAINAGE EASEMENT; THENCE ON SAID SOUTH LINE ON SAID CURVE WITH A RADIUS OF 980.74 FEET AND A BEGINNING TANGENT OF A 71 DEGREES 34 MINUTES 39 SECONDS EAST AN ARC DISTANCE OF 189.35 FEET; THENCE CONTINUE ON SAID SOUTH LINE OF SAID DRAINAGE EASEMENT WITH A BEARING OF SOUTH 63 DEGREES 30 MINUTES 55 SECONDS EAST A DISTANCE OF 1080.1 FEET TO THE POINT OF BEGINNING.

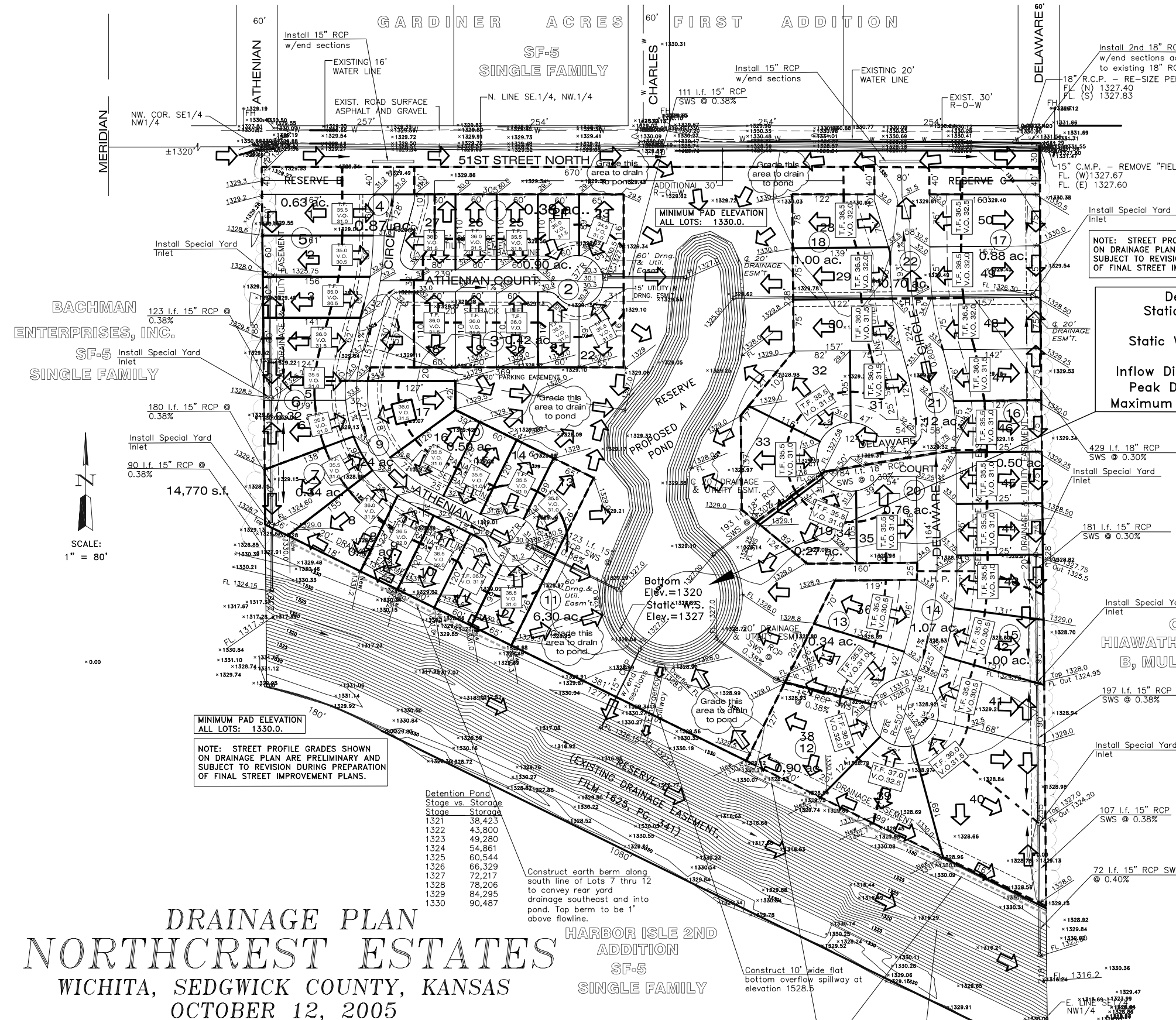
Detention Pond Analysis
 Static Water Area=66,330 s.f.
 (1.52 acres)
 Static Water Surface Elev.=1327.0
 Top Elev.=1329.0
 Inflow Discharge(100 year)=68.59 cfs
 Peak Discharge(100 yr.)=1.94 cfs
 Maximum Stage Elev.(100 yr.)=1327.80

Minimum Building Pad Elevations For Lowest Opening to the Structures

Lot 1 thru 27	Block A	1330 NGVD
Lot 28 thru 50	Block A	1330 NGVD

SUMMARY OF PEAK DISCHARGE BY RATIONAL METHOD

Drainage Basin #	Area (Acres)	Tc	C2	i 2	Q 2	C100	i 100	Q 100
1	0.38	15 min.	0.42	3.80"/hr.	0.61 cfs	0.57	7.40"/hr.	1.60 cfs
2	0.90	15 min.	0.42	3.80"/hr.	1.44 cfs	0.57	7.40"/hr.	3.80 cfs
3	0.42	15 min.	0.42	3.80"/hr.	0.67 cfs	0.57	7.40"/hr.	1.77 cfs
4	0.87	15 min.	0.42	3.80"/hr.	1.39 cfs	0.57	7.40"/hr.	3.67 cfs
5	0.63	15 min.	0.42	3.80"/hr.	1.01 cfs	0.57	7.40"/hr.	2.66 cfs
6	0.32	15 min.	0.42	3.80"/hr.	0.51 cfs	0.57	7.40"/hr.	1.35 cfs
7	0.34	15 min.	0.42	3.80"/hr.	0.54 cfs	0.57	7.40"/hr.	1.43 cfs
8	0.47	15 min.	0.42	3.80"/hr.	0.75 cfs	0.57	7.40"/hr.	1.98 cfs
9	1.24	15 min.	0.42	3.80"/hr.	1.98 cfs	0.57	7.40"/hr.	5.23 cfs
10	0.50	15 min.	0.42	3.80"/hr.	0.80 cfs	0.57	7.40"/hr.	2.11 cfs
11	6.30	15 min.	0.17	3.80"/hr.	4.1 cfs	0.35	7.40"/hr.	16.3 cfs
12	0.90	15 min.	0.42	3.80"/hr.	1.44 cfs	0.57	7.40"/hr.	3.80 cfs
13	0.34	15 min.	0.42	3.80"/hr.	0.54 cfs	0.57	7.40"/hr.	1.43 cfs
14	1.07	15 min.	0.42	3.80"/hr.	1.71 cfs	0.57	7.40"/hr.	4.51 cfs
15	1.00	15 min.	0.42	3.80"/hr.	1.60 cfs	0.57	7.40"/hr.	4.22 cfs
16	0.50	15 min.	0.42	3.80"/hr.	0.80 cfs	0.57	7.40"/hr.	2.11 cfs
17	0.88	15 min.	0.42	3.80"/hr.	1.40 cfs	0.57	7.40"/hr.	3.71 cfs
18	1.00	15 min.	0.42	3.80"/hr.	1.60 cfs	0.57	7.40"/hr.	4.22 cfs
19	0.27	15 min.	0.42	3.80"/hr.	0.43 cfs	0.57	7.40"/hr.	1.14 cfs
20	0.76	15 min.	0.42	3.80"/hr.	1.21 cfs	0.57	7.40"/hr.	3.21 cfs
21	1.12	15 min.	0.42	3.80"/hr.	1.79 cfs	0.57	7.40"/hr.	4.72 cfs
22	0.70	15 min.	0.42	3.80"/hr.	1.12 cfs	0.57	7.40"/hr.	2.95 cfs



MINIMUM PAD ELEVATION ALL LOTS: 1330.0.
 NOTE: STREET PROFILE GRADES SHOWN ON DRAINAGE PLAN ARE PRELIMINARY AND SUBJECT TO REVISION DURING PREPARATION OF FINAL STREET IMPROVEMENT PLANS.

Detention Pond Stage vs. Storage

Stage	Storage
1321	38,423
1322	43,800
1323	49,280
1324	54,861
1325	60,544
1326	66,329
1327	72,217
1328	78,206
1329	84,295
1330	90,487

Construct earth berm along south line of Lots 7 thru 12 to convey rear yard drainage southeast and into pond. Top berm to be 1' above flowline.

Construct 10' wide flat bottom overflow spillway at elevation 1528.5

Construct earth berm along south line of Lots 38 thru 40 to convey rear yard drainage as shown. Top berm to be 1' above flowline.

DRAINAGE PLAN

NORTHCREST ESTATES

WICHITA, SEDGWICK COUNTY, KANSAS
 OCTOBER 12, 2005

SURVEY DISCLAIMER:
 TOPOGRAPHIC SURVEY AND CONTOUR MAP USED IN PREPARING PLANS WAS PROVIDED BY REISS AND GOODNESS ENGINEERS, C/O ROBERT G. PREVITERA, LS #1146, 2160 W. 21ST ST. NORTH, WICHITA, KS. 67203. CERTIFIED ENGINEERING DESIGN, P.A. DOES NOT GUARANTEE SURVEY ELEVATIONS FOR ACCURACY. CONTRACTOR SHALL VERIFY ELEVATIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

DRAINAGE PLAN PREPARED BY:
CERTIFIED ENGINEERING DESIGN, P.A.
 810 WEST DOUGLAS, SUITE C
 WICHITA, KANSAS 67203
 PH: (316) 262-8808
 FAX: (316) 262-1669

SHEET 1
 TOTAL 1

REV. 9.20.06 Revised Drainage Plan per further COW comments
 REV. 9.5.06 Revised Drainage Plan per comments dated March 7, 2006.

NORTHCREST ESTATES
DRAINAGE PLAN
 WICHITA, KS
 PROJ. NO.:
CERTIFIED ENGINEERING DESIGN, P.A.
 810 WEST DOUGLAS, SUITE C
 WICHITA, KANSAS 67203
 PH.(316)262-8808 FAX.(316)262-1669

DESIGNED: HDF
 DRAWN: HDF
 CHECKED: HDF

SCALE: 1" = 80'
 DATE: 2-4-06

SHEET 1
 TOTAL 1

