WATER DISTRIBUTION SYSTEM IMPROVEMENTS
CHERYL'S HOLLOW 2ND ADDITION PHASE 2
PROJECT NO. 448-90290
O.C.A. NO. 735362

GENERAL NOTES

1. Contractor will be required to provide a minimum advance notice of twenty-four (24) hours to utility companies prior to starting any excavation as follows:

   Kansas One-Call 687-2470

2. The Contractor must notify the following in case of an emergency:

Cox Communications	262-0661
Kansas Gas Service (Jim Coe)	832-3126
Westar	383-8600
Aquila Net	1-800-303-0357
SBC	1-800-286-8313
City of Wichita Water Department	262-6000
City of Wichita Sewer Maintenance	262-6000
Conoco Phillips Pipeline (Rusty Lee)	681-2081

3. Underground utility service lines and overhead utility pole lines are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. Location information has been obtained from the various utility companies and is either from company record drawings or company-provided field locations. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

4. Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved.

5. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps permitting regulations. Any material buried or stockpiled beyond approved of Engineers construction limits would require additional archeological investigations unless buried in a previously approved borrow location.

6. The Contractor shall give all property owners and/or tenants of developed property directly abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.

7. The Contractor shall seed, fertilize and mulch all disturbed areas upon completion of construction in accordance with City of Wichita standard specifications.

8. The water main shall be constructed on the alignment shown by the plans. Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage. The cost for any necessary tree trimming, clearing and/or grubbing shall be included in the price bid for the installed water main pipe.

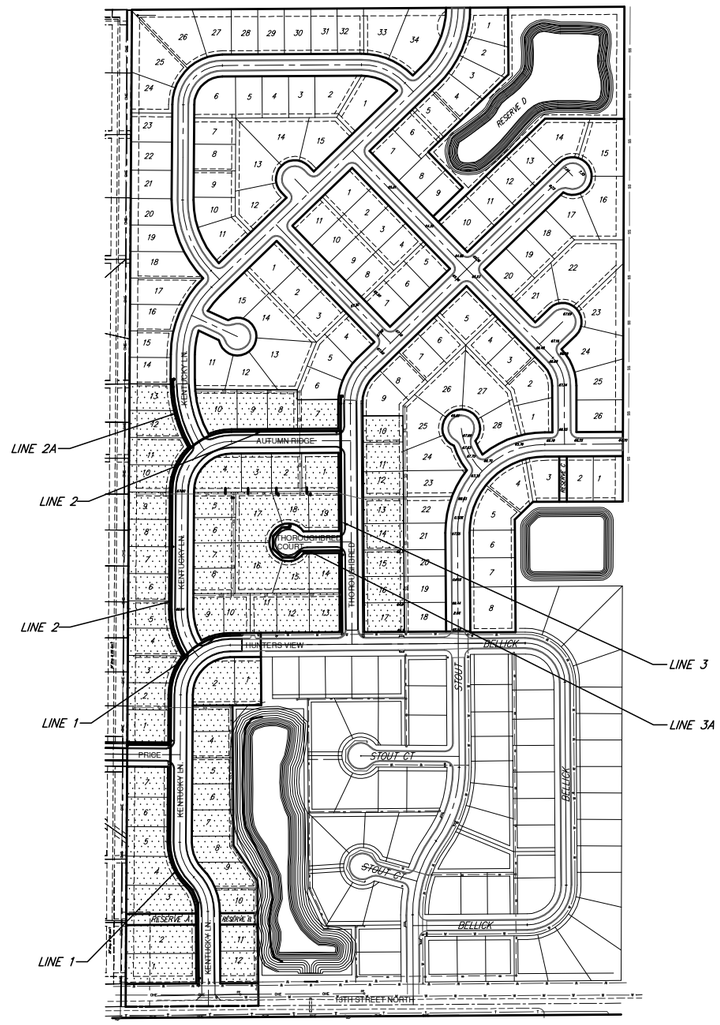
9. Opening and closing water valves shall be done slowly to prevent damage to the water distribution system from water hammer. All valves closed by the Contractor must be reopened as new construction permits. Project inspector must ascertain that any valve closed by the Contractor is reopened. Contractor will be permitted to operate water valves only when the project inspector assigned to the project is present.

10. Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Any work done without inspection will be required to be uncovered for inspection.

11. The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destoyed by his consturction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.

12. Pavement removal and/or replacement will be measured and paid for on the lineal foot basis as measured along the centerline of the water line regardless of width, pavement type and/or pavement thickness. Minimum limits of such pavement removal and replacement shall be one foot beyond the limits of the excavation made for the water line or the structure, except when such saw cuts are within three (3) feet of an existing joint the limits of removeal shall be extended to the existing joint. Removal and replacement of existing pavement shall conform the the applicable sections of the City of Wichita Standard Specifications.

13. The contractor shall maintain all existing erosion control BMP's that are present on the site at the time of construction. Cost of maintaining BMP's shall be incidental to the bid item for Site Clearing & Restoration.



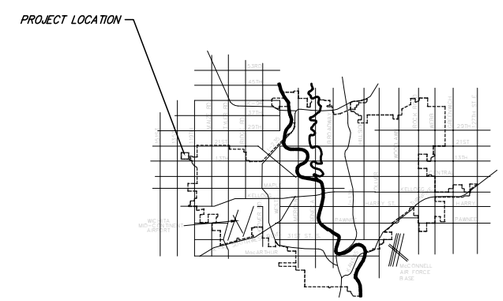
BENCHMARK

BENCH MARK: COW BENCHMARK AT THE SOUTHWEST CORNER OF INTERSECTION OF 135TH ST. W. AND 13TH ST. N., EAST SIDE OF CONC. BASE FOR HLP 30'± S. OF CENTER LINE AND 35'± W. OF CENTER LINE ELEV.=1355.65 (M.S.L.)

ON-SITE BENCH MARK: R.R. SPIKE ON NORTH FACE OF HIGHLINE POWER POLE 131 FEET WEST AND 28 FEET SOUTH OF THE S.E. CORNER, W1/2, SE1/4, SEC. 11, T27S, R2W ELEV.=1365.16 (M.S.L.)

INDEX

Scale: 1" = 100'



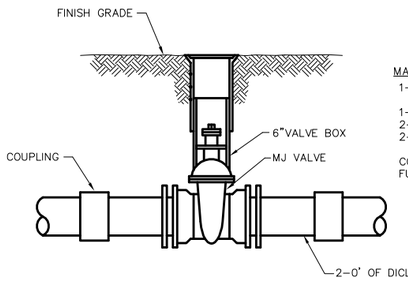
VICINITY MAP

IMPROVEMENT DISTRICT

CITY OF WICHITA, KANSAS
JAMES ARMOUR, P.E. - CITY ENGINEER

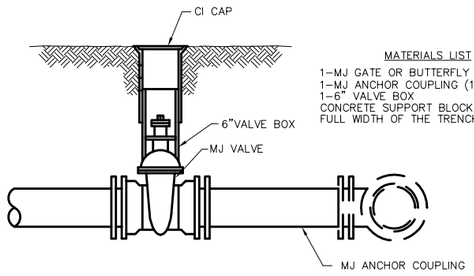
Ruggles & Bohm, P.A.
Engineering, Surveying, Land Planning
924 North Main (316) 264-8008
Wichita, Kansas 67203 (316) 264-4621 fax
www.rbkansas.com E-mail: info@rbkansas.com

RB Project 3041E



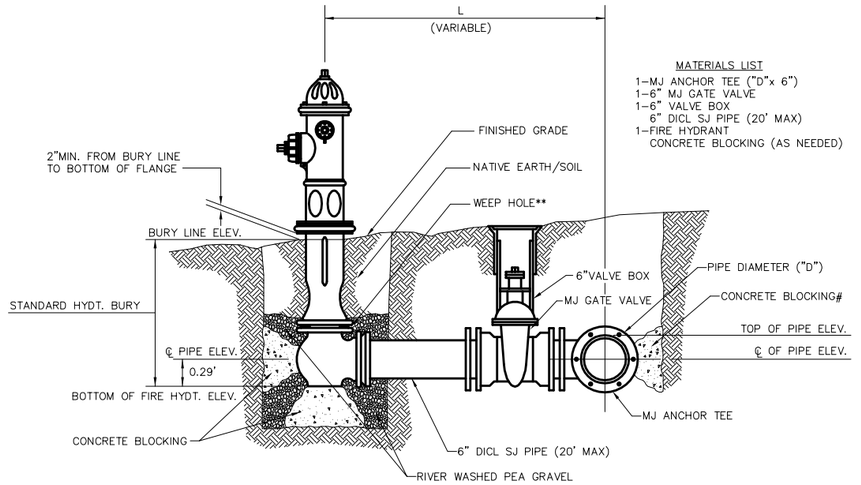
MATERIALS LIST
1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1-6" VALVE BOX
2-COUPLINGS
2-SHORT PCS. (DICL SJ PIPE)
CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

LINE VALVE ASSEMBLY



MATERIALS LIST
1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1-MJ ANCHOR COUPLING (12" OR SMALLER)
1-6" VALVE BOX
CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

ANCHORED VALVE ASSEMBLY



MATERIALS LIST
1-MJ ANCHOR TEE ("D"x 6")
1-6" MJ GATE VALVE
1-6" VALVE BOX
6" DICL SJ PIPE (20' MAX)
1-FIRE HYDRANT
CONCRETE BLOCKING (AS NEEDED)

** CAUTION! WEEP HOLES TO BE KEPT CLEAR DURING CONSTRUCTION AND BACKFILL. CONCRETE FOR THRUST BLOCKING SHALL NOT OBSTRUCT WEEP HOLES.

CONCRETE THRUST BLOCKING SHALL BE KEPT CLEAR OF BOLTS, NUTS, AND MJ ACCESSORIES.

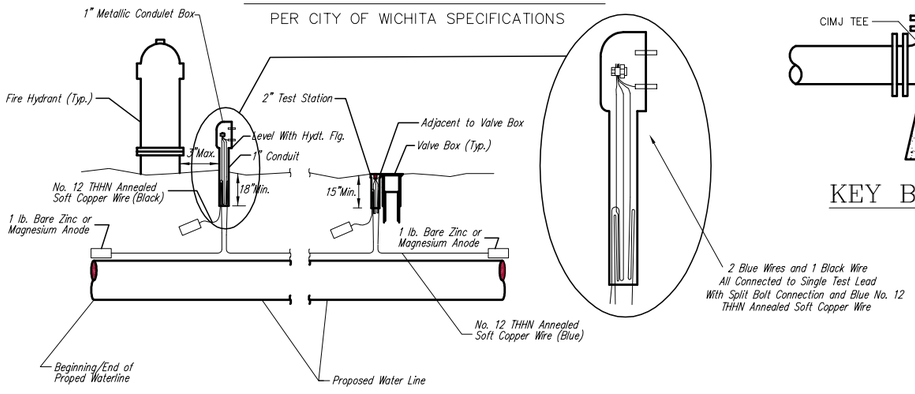
* IF HYDRANT BURY IS IN EXCESS OF 5', CONTRACTOR SHALL USE STANDARD 5' HYDRANT BURY AND HYDRANT BARREL EXTENSIONS AS NECESSARY.

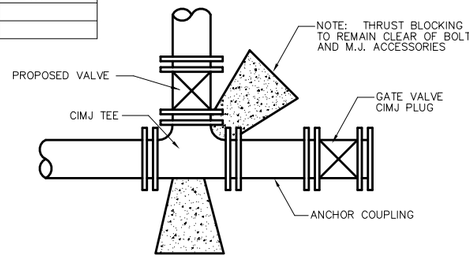
FIRE HYDRANTS REQUIRED

STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*
0+20.00, LINE 1	*1364.81*	*1358.99*	*6.5'*
6+68.96, LINE 1	*1366.43*	*1362.11*	*5.0'*
2+96.05, LINE 2	*1366.34*	*1362.52*	*4.5'*
9+67.35, LINE 2	*1369.57*	*1365.25*	*5.0'*
2+10.63, LINE 3	*1367.98*	*1363.66*	*5.0'*

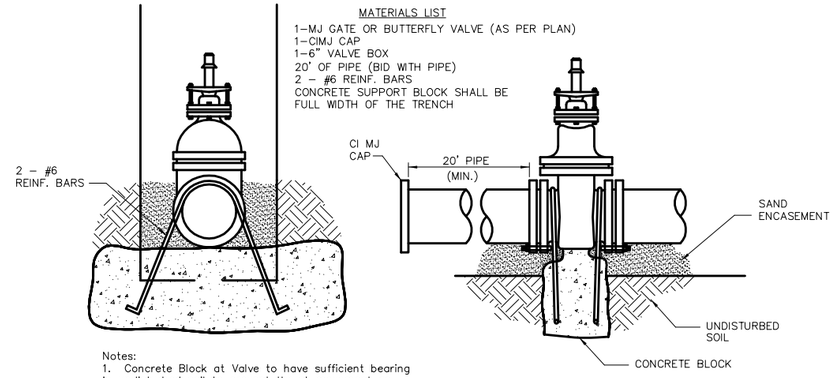
FIRE HYDRANT ASSEMBLY

PER CITY OF WICHITA SPECIFICATIONS





KEY BLOCK DETAIL



MATERIALS LIST
1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1-CIMJ CAP
1-6" VALVE BOX
20' OF PIPE (BID WITH PIPE)
2 - #6 REINF. BARS
CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

Notes:
1. Concrete Block at Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.

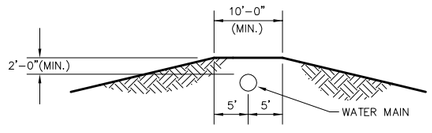
2. The thrust block shall be constructed such that bolts, nuts, and other MJ accessories are kept clear of concrete.

3. All valves at dead ends and at other locations as called out on the plans shall be blocked as shown here.

THRUST AT VALVES

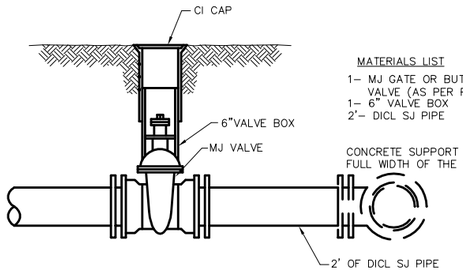
VALVE	THRUST AT 150 #/in²
4"	1809 lbs.
6"	4245 lbs.
8"	7540 lbs.
12"	16965 lbs.

ANCHORED VALVE ASSEMBLY, SPECIAL



PROTECTIVE FILL DETAIL

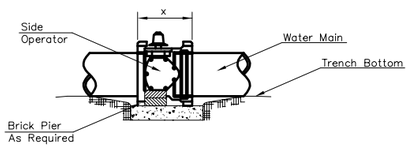
MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN (2) FEET. (COST SUBSIDIARY TO PIPE INSTALLATION)



MATERIALS LIST
1- MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
1- 6" VALVE BOX
2'- DICL SJ PIPE

CONCRETE SUPPORT BLOCK SHALL BE FULL WIDTH OF THE TRENCH

VALVE ASSEMBLY



NOTES

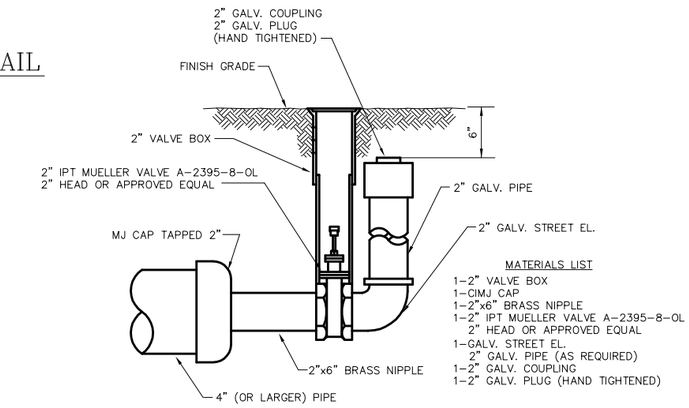
1. This detail covers Butterfly Valve installation, inclusive, regardless of type of pipe or joint used. Larger lines to be detailed on plans.
2. 6" Valve Box and Cover required per City of Wichita Std. Specifications.
3. Conc. Support Block to be full width of trench.

CONCRETE SUPPORT BLOCKING FOR BUTTERFLY VALVE INSTALLATION

TRACER WIRE
Conductive type pipe locator/tracer wire shall be installed to locate Polyvinyl Chloride (PVC) or any nonmetallic waterline pipes. The wire shall extend the entire length of the proposed pipe. The wire shall be taped to the waterline and pulled with the pipe. Split-bolt connectors shall be used at splice locations. Electrical tape shall cover all splices so no bare wire is exposed. Test stations shall be installed adjacent to all fire hydrants along the waterline and at blowoffs or valves near the ends of the waterlines. Any exceptions to the location of test stations shall be approved by the engineer. At each test station, the tracer wire shall be connected to a 1 lb. Zinc or magnesium anode. Anodes shall also be attached to the tracer wire at both the beginning and the end of the proposed waterline. A typical layout of the tracer wire and test station is provided in the above figure.
WIRE
The tracer wire shall be Blue No. 12 THHN annealed soft copper wire with thermal plastic insulation. The insulation shall be heat, oil, and gasoline resistant as manufactured by Temple Electric or approved equal. To allow for grade adjustment, a minimum of 12" of excess wire shall be coiled at the bottom of the test station for all wires. The insulation sheathing shall be removed such that 1" bare copper wire is exposed at all points of connection. Contractor shall attach wire being installed with proposed water main to any tracer wire installed with adjacent waterline projects.
TEST STATIONS
The test station for fire hydrant applications shall be a 1 inch galvanized condulet style test station as manufactured by AGRA Industries with a removable solid cover having two leads extending from the face or approved equal. The test station for valve applications shall be 2 inch flush style test station T2PS3B as manufactured by HANDLEY Industries or approved equal. The condulet style shall be attached to a 1 inch rigid galvanized conduit with a minimum length of 36" and plastic end bushing. The flush style shall have the word "WATER" stamped or molded into the lid. All test stations shall be manufactured using molded blue tops or sufficiently coated with blue enamel paint. The tracer wire and the anode wire shall be installed to allow 10 inches of wire within the test station. In concrete environments such as sidewalks or in the downtown area the contractor shall use the flush style test station. The location of all test stations shall be approved by the engineer, recorded, and shown in the as-built drawings.
ANODES
The anodes shall be 1 lb. bare zinc or magnesium. The anodes shall be buried at the same elevation as the waterline at each test station. The anodes shall be connected to Black No. 12 THHN annealed soft copper wire which shall be extended to the test station.

TRACER WIRE DETAIL

COST IS SUBSIDIARY TO PIPE INSTALLATION



MATERIALS LIST
1-2" VALVE BOX
1-CIMJ CAP
1-2"x6" BRASS NIPPLE
1-2" IPT MUELLER VALVE A-2395-8-OL
2" HEAD OR APPROVED EQUAL
1-GALV. STREET EL.
2" GALV. PIPE (AS REQUIRED)
1-2" GALV. COUPLING
1-2" GALV. PLUG (HAND TIGHTENED)

2" BLOWOFF ASSEMBLY

Revised: 6-7-00, MCG

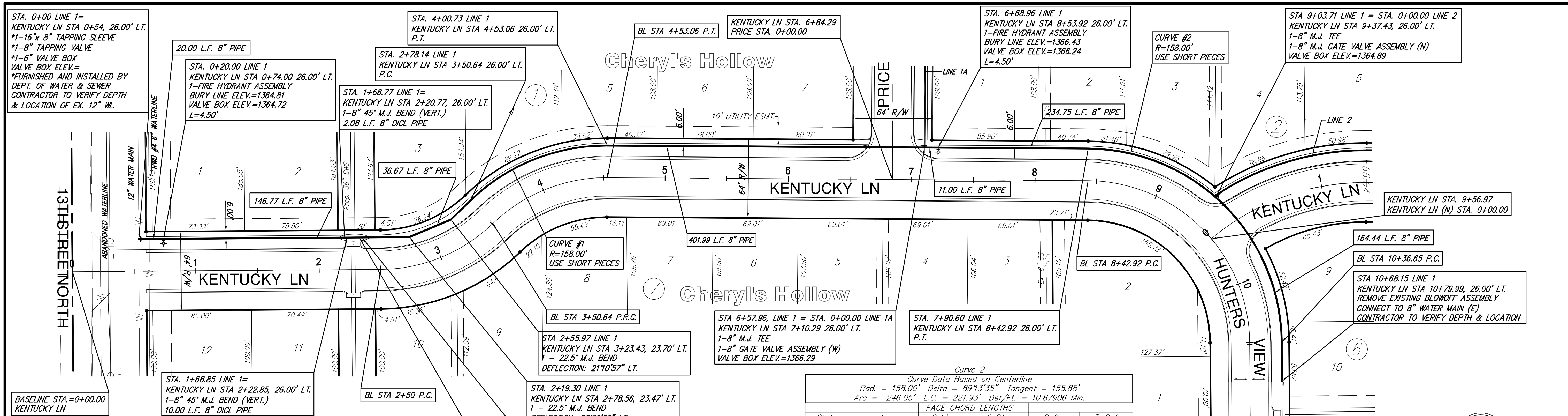
THE CITY OF WICHITA

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4501
(316) 268-4114 FAX

STANDARD WATER ASSEMBLY DETAILS

JAMES L. ARMOUR, P.E. - CITY ENGINEER

PROJECT NUMBER	OCA #
448-90290	*735362*
DATE DEC 98	SHEET *2* OF *9*



STA. 0+00 LINE 1=
KENTUCKY LN STA 0+54, 26.00' LT.
*1-16"x 8" TAPPING SLEEVE
*1-8" TAPPING VALVE
*1-6" VALVE BOX
VALVE BOX ELEV.=
*FURNISHED AND INSTALLED BY DEPT. OF WATER & SEWER
CONTRACTOR TO VERIFY DEPTH & LOCATION OF EX. 12" WL.
20.00 L.F. 8" PIPE
STA. 0+20.00 LINE 1
KENTUCKY LN STA 0+74.00 26.00' LT.
1-FIRE HYDRANT ASSEMBLY
BURY LINE ELEV.=1364.81
VALVE BOX ELEV.=1364.72
L=4.50'
STA. 4+00.73 LINE 1
KENTUCKY LN STA 4+53.06 26.00' LT.
P.T.
STA. 2+78.14 LINE 1
KENTUCKY LN STA 3+50.64 26.00' LT.
P.C.
STA. 1+66.77 LINE 1=
KENTUCKY LN STA 2+20.77, 26.00' LT.
1-8" 45° M.J. BEND (VERT.)
2.08 L.F. 8" DICL PIPE
BL STA 4+53.06 P.T.
Cheryl's Hollow
KENTUCKY LN STA. 6+84.29
PRICE STA. 0+00.00
STA. 6+68.96 LINE 1
KENTUCKY LN STA 8+53.92 26.00' LT.
1-FIRE HYDRANT ASSEMBLY
BURY LINE ELEV.=1366.43
VALVE BOX ELEV.=1366.24
L=4.50'
CURVE #2
R=158.00'
USE SHORT PIECES
STA 9+03.71 LINE 1 = STA. 0+00.00 LINE 2
KENTUCKY LN STA 9+37.43, 26.00' LT.
1-8" M.J. TEE
1-8" M.J. GATE VALVE ASSEMBLY (N)
VALVE BOX ELEV.=1364.89
PRICE
64' R/W
LINE 1A
10' UTILITY ESMT.
234.75 L.F. 8" PIPE
LINE 2
13TH STREET NORTH
12" WATER MAIN
RWD #4 6" WATERLINE
ABANDONED WATERLINE
36.67 L.F. 8" PIPE
146.77 L.F. 8" PIPE
Prop. 36" SWS
KENTUCKY LN
11.00 L.F. 8" PIPE
KENTUCKY LN STA. 9+56.97
KENTUCKY LN (N) STA. 0+00.00
164.44 L.F. 8" PIPE
BL STA 10+36.65 P.C.
STA 10+68.15 LINE 1
KENTUCKY LN STA 10+79.99, 26.00' LT.
REMOVE EXISTING BLOWOFF ASSEMBLY
CONNECT TO 8" WATER MAIN (E)
CONTRACTOR TO VERIFY DEPTH & LOCATION
CURVE #1
R=158.00'
USE SHORT PIECES
401.99 L.F. 8" PIPE
BL STA 8+42.92 P.C.
HUNTERS VIEW
BL STA 3+50.64 P.R.C.
STA 2+55.97 LINE 1
KENTUCKY LN STA 3+23.43, 23.70' LT.
1 - 22.5° M.J. BEND
DEFLECTION: 21°10'57" LT.
STA 6+57.96, LINE 1 = STA. 0+00.00 LINE 1A
KENTUCKY LN STA 7+10.29 26.00' LT.
1-8" M.J. TEE
1-8" GATE VALVE ASSEMBLY (W)
VALVE BOX ELEV.=1366.29
STA. 7+90.60 LINE 1
KENTUCKY LN STA 8+42.92 26.00' LT.
P.T.
STA. 1+68.85 LINE 1=
KENTUCKY LN STA 2+22.85, 26.00' LT.
1-8" 45° M.J. BEND (VERT.)
10.00 L.F. 8" DICL PIPE
BL STA 2+50 P.C.
STA. 2+19.30 LINE 1
KENTUCKY LN STA 2+78.56, 23.47' LT.
1 - 22.5° M.J. BEND
DEFLECTION: 22°30'00" LT.
BASELINE STA.=0+00.00
KENTUCKY LN
STA. 1+81.00 LINE 1=
KENTUCKY LN STA 2+35.00, 26.00' LT.
1-8" 45° M.J. BEND (VERT.)
38.30 L.F. 8" PIPE
STA. 1+78.85 LINE 1=
KENTUCKY LN STA 2+32.85, 26.00' LT.
1-8" 45° M.J. BEND (VERT.)
2.15 L.F. 8" DICL PIPE
EXISTING FIRE HYDRANT
SCALE 1" = 40'
IRON = ●

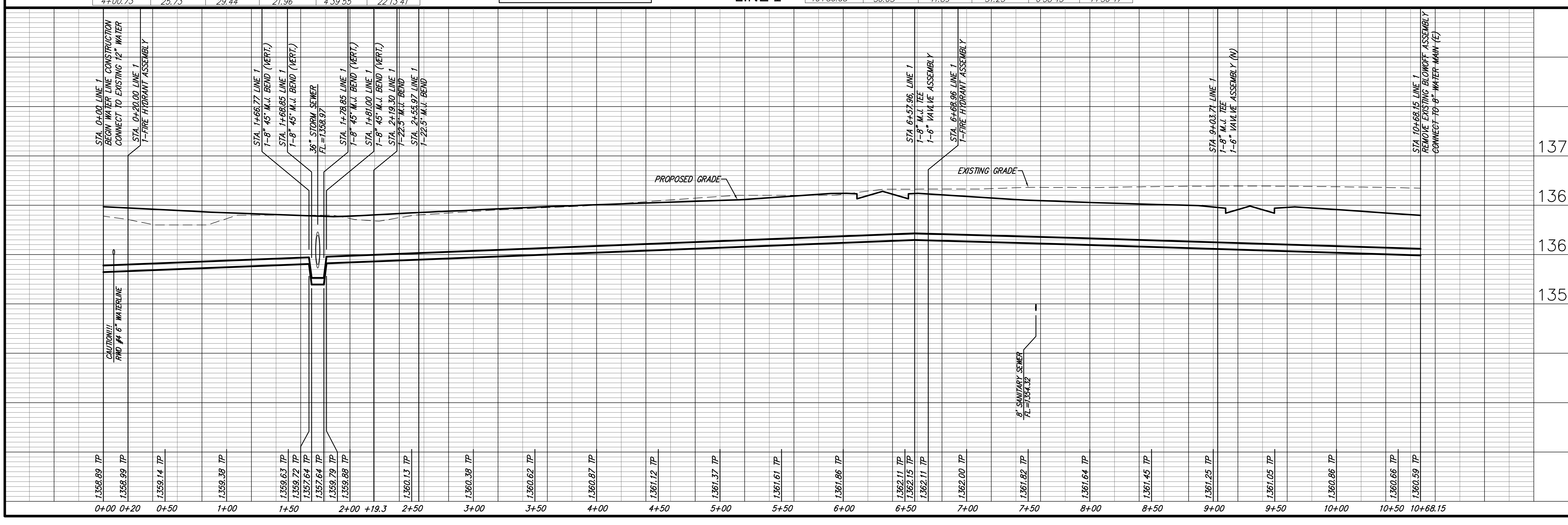
Curve 1

Curve Data Based on Centerline					
Rad. = 158.00' Delta = 44°27'22" Tangent = 64.57'					
Arc = 122.59' L.C. = 119.54' Def/Ft. = 10.87922 Min.					
		FACE CHORD LENGTHS			
Station	Arc	6 Lt.	6 Rt.	Defl.	T. Defl.
2+78.14	–	–	–	0°00'00"	0°00'00"
3+00.00	21.86'	25.02'	18.66'	3°57'49"	3°57'49"
3+25.00	25.00'	28.61'	21.34'	4°31'59"	8°29'48"
3+50.00	25.00'	28.61'	21.34'	4°31'59"	13°01'47"
3+75.00	25.00'	28.61'	21.34'	4°31'59"	17°33'46"
4+00.73	25.73'	29.44'	21.96'	4°39'55"	22°13'41"

Curve 2

Curve Data Based on Centerline					
Rad. = 158.00' Delta = 89°13'35" Tangent = 155.88'					
Arc = 246.05' L.C. = 221.93' Def/Ft. = 10.87906 Min.					
		FACE CHORD LENGTHS			
Station	Arc	6 Lt.	6 Rt.	Defl.	T. Defl.
7+90.60	–	–	–	0°00'00"	0°00'00"
8+00.00	9.40'	10.77'	8.03'	1°42'16"	1°42'16"
8+25.00	25.00'	28.61'	21.34'	4°31'58"	6°14'14"
8+50.00	25.00'	28.61'	21.34'	4°31'58"	10°46'13"
8+75.00	25.00'	28.61'	21.34'	4°31'58"	15°18'11"
9+00.00	25.00'	28.61'	21.34'	4°31'58"	19°50'10"
9+25.00	25.00'	28.61'	21.34'	4°31'58"	24°22'09"
9+50.00	25.00'	28.61'	21.34'	4°31'58"	28°54'07"
9+75.00	25.00'	28.61'	21.34'	4°31'58"	33°26'06"
10+00.00	25.00'	28.61'	21.34'	4°31'58"	37°58'04"
10+36.65	36.65'	41.89'	31.25'	6°38'43"	44°36'47"

LINE 1



STA. 0+00 LINE 1
BEGIN WATER LINE CONSTRUCTION
CONNECT TO EXISTING 12" WATER
STA. 0+20.00 LINE 1
1-FIRE HYDRANT ASSEMBLY
STA. 1+66.77 LINE 1
1-8" 45° M.J. BEND (VERT.)
STA. 1+68.85 LINE 1
1-8" 45° M.J. BEND (VERT.)
36" STORM SEWER
FL=1358.97
STA. 1+78.85 LINE 1
1-8" 45° M.J. BEND (VERT.)
STA. 1+81.00 LINE 1
1-8" 45° M.J. BEND (VERT.)
STA. 2+19.30 LINE 1
1-22.5° M.J. BEND
STA. 2+55.97 LINE 1
1-22.5° M.J. BEND
STA 6+57.96, LINE 1
1-8" M.J. TEE
1-6" VALVE ASSEMBLY
STA. 6+68.96 LINE 1
1-FIRE HYDRANT ASSEMBLY
STA 9+03.71 LINE 1
1-8" M.J. TEE
1-6" VALVE ASSEMBLY (N)
STA. 10+68.15 LINE 1
REMOVE EXISTING BLOWOFF ASSEMBLY
CONNECT TO 8" WATER MAIN (E)
PROPOSED GRADE
EXISTING GRADE
1370
1365
1360
1355
CAUTION!!!
RWD #4 6" WATERLINE
8" SANITARY SEWER
FL=1354.32
1358.89 TP
1358.99 TP
1359.14 TP
1359.38 TP
1359.63 TP
1359.72 TP
1357.64 TP
1357.64 TP
1359.79 TP
1359.88 TP
1360.13 TP
1360.38 TP
1360.62 TP
1360.87 TP
1361.12 TP
1361.37 TP
1361.61 TP
1361.86 TP
1362.11 TP
1362.15 TP
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1362.00 TP
1361.82 TP
1361.64 TP
1361.45 TP
1361.25 TP
1361.05 TP
1360.86 TP
1360.66 TP
1360.59 TP
0+00 0+20 0+50 1+00 1+50 2+00 +19.3 2+50 3+00 3+50 4+00 4+50 5+00 5+50 6+00 6+50 7+00 7+50 8+00 8+50 9+00 9+50 10+00 10+50 10+68.15

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(316) 264-4621 fax
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DESIGN	DRAWN	DATE	REVISED	REVIEW
TCR	EJB	May 9, 2007		

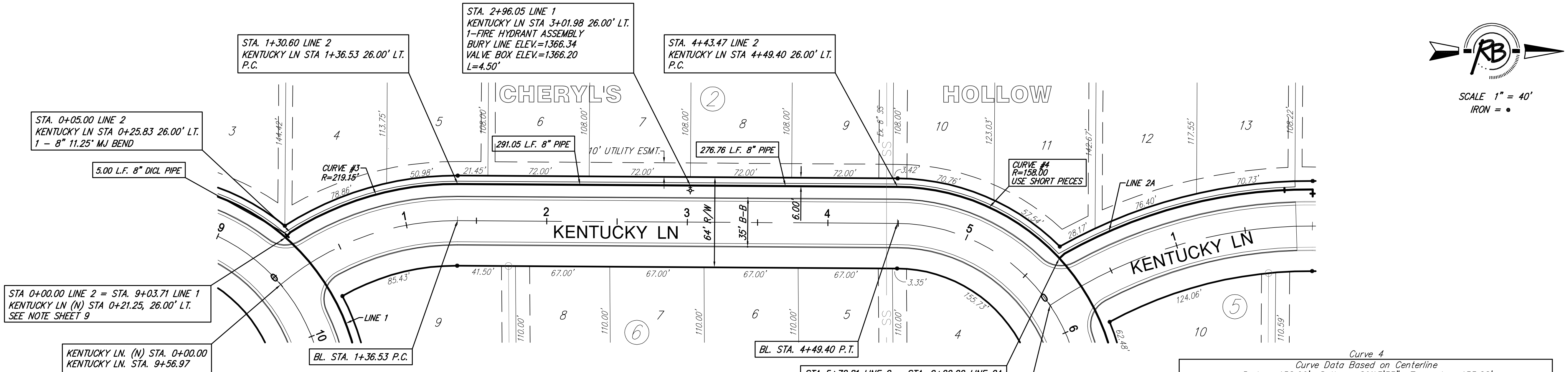
UTILITY

PROJECT NUMBER 448-90290

DRAWING FILE Base {Line 1}

CHERYL'S HOLLOW 2ND ADD. PHASE I
LINE 1
WICHITA, KANSAS

RB JOB 3041E



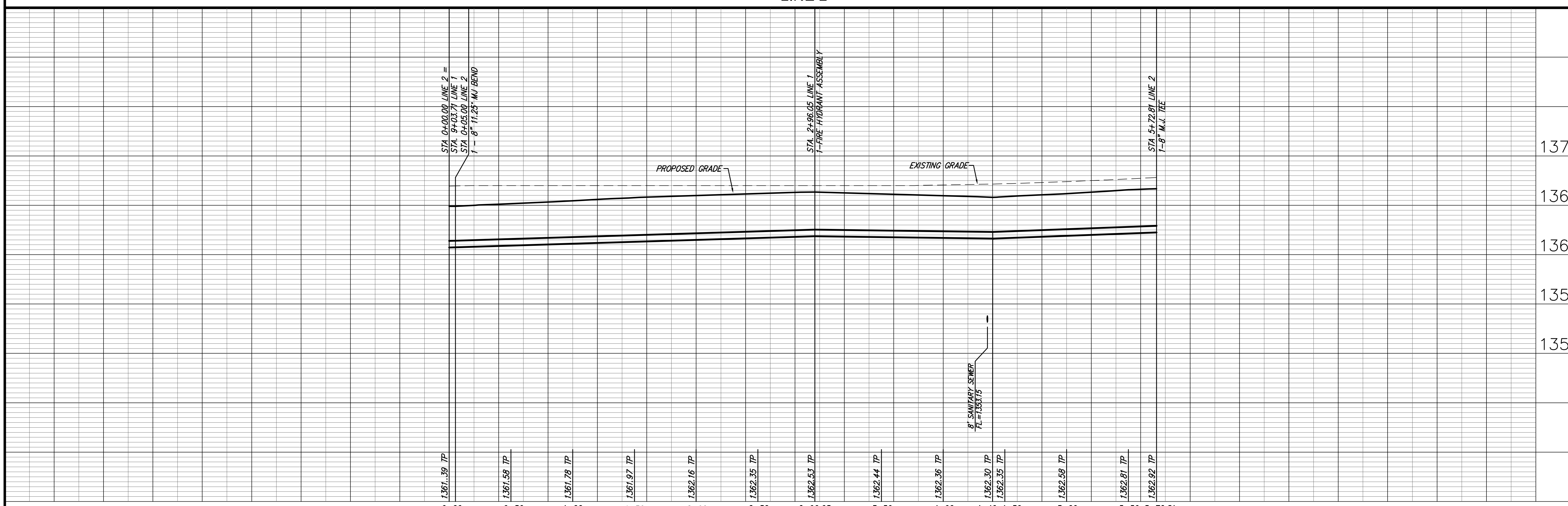
Curve 3

Curve Data Based on Centerline Rad. = 219.15' Delta = 32°50'14" Tangent = 64.58' Arc = 125.60' L.C. = 123.89' Def/Ft. = 7.84329 Min.					
		FACE CHORD LENGTHS			
Station	Arc	6 Lt.	6 Rt.	Defl.	T. Defl.
0+05.00	–	–	–	0°00'00"	0°00'00"
0+25.00	20.00'	22.09'	17.89'	2°36'52"	2°36'52"
0+50.00	25.00'	27.61'	22.36'	3°16'05"	5°52'57"
0+75.00	25.00'	27.61'	22.36'	3°16'05"	9°09'02"
1+00.00	25.00'	27.61'	22.36'	3°16'05"	12°25'07"
1+25.00	25.00'	27.61'	22.36'	3°16'05"	15°41'12"
1+30.60	5.60'	6.19'	5.01'	0°43'55"	16°25'07"

Curve 4

Curve Data Based on Centerline Rad. = 158.00' Delta = 89°13'35" Tangent = 155.88' Arc = 246.05' L.C. = 221.93' Def/Ft. = 10.87906 Min.					
		FACE CHORD LENGTHS			
Station	Arc	6 Lt.	6 Rt.	Defl.	T. Defl.
4+43.66	–	–	–	0°00'00"	0°00'00"
4+50.00	6.34'	7.26'	5.42'	1°08'58"	1°08'58"
4+75.00	25.00'	28.61'	21.34'	4°31'58"	5°40'57"
5+00.00	25.00'	28.61'	21.34'	4°31'58"	10°12'55"
5+25.00	25.00'	28.61'	21.34'	4°31'58"	14°44'54"
5+50.00	25.00'	28.61'	21.34'	4°31'58"	19°16'53"
5+75.00	25.00'	28.61'	21.34'	4°31'58"	23°48'51"
6+00.00	25.00'	28.61'	21.34'	4°31'58"	28°20'50"
6+25.00	25.00'	28.61'	21.34'	4°31'58"	32°52'48"
6+50.00	25.00'	28.61'	21.34'	4°31'58"	37°24'46"
6+89.71	39.71'	45.37'	33.84'	7°12'00"	44°36'46"

LINE 2



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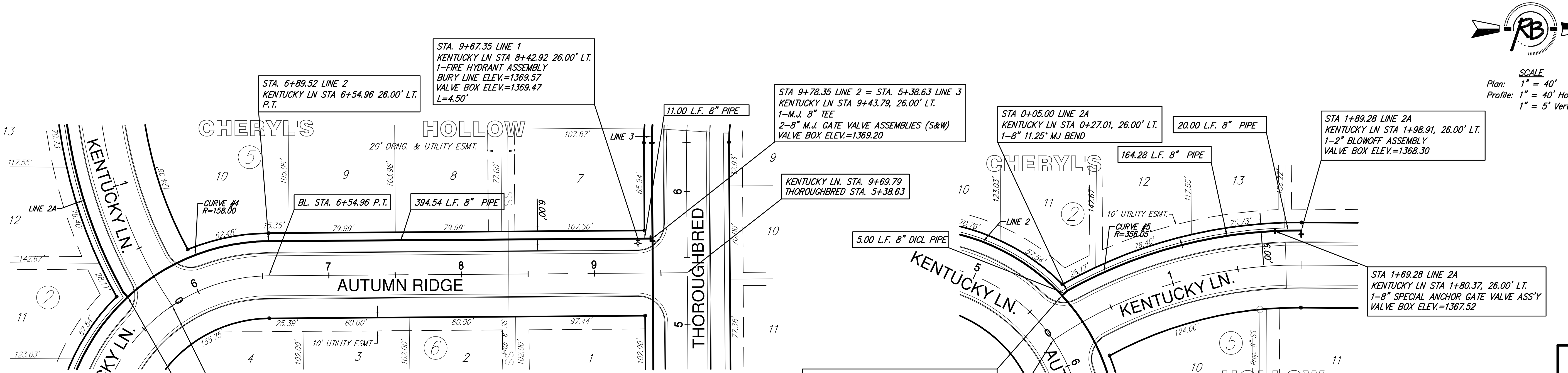
DESIGN TCR | DRAWN EJB | REVISED
UTILITY | DATE May 16, 2007 | REVIEW

PROJECT NUMBER 448-90290
DRAWING FILE Base {Line 2}

CHERYL'S HOLLOW 2ND ADD. PHASE 1
LINE 2
WICHITA, KANSAS

RB JOB 3041E



Curve 4

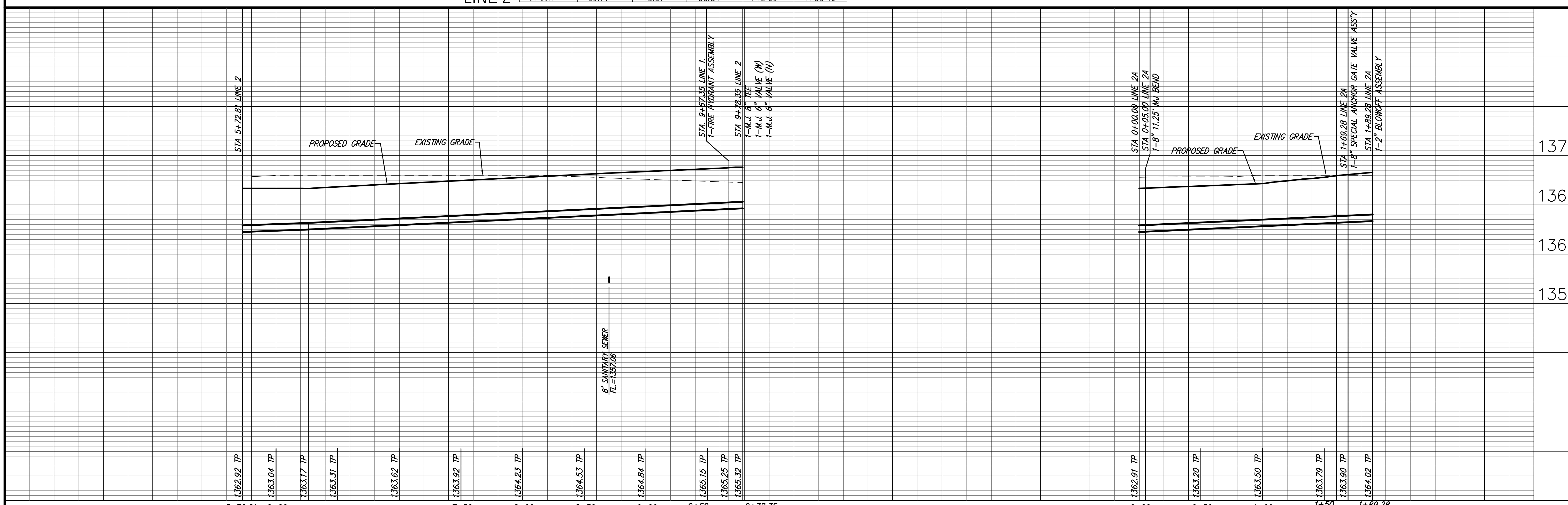
Curve Data Based on Centerline Rad. = 158.00' Delta = 89°13'35" Tangent = 155.88' Arc = 246.05' L.C. = 221.93' Def/Ft. = 10.87906 Min.					
		FACE CHORD LENGTHS			
Station	Arc	6 Lt.	6 Rt.	Defl.	T. Defl.
4+43.66	–	–	–	0°00'00"	0°00'00"
4+50.00	6.34'	7.26'	5.42'	1°08'58"	1°08'58"
4+75.00	25.00'	28.61'	21.34'	4°31'58"	5°40'57"
5+00.00	25.00'	28.61'	21.34'	4°31'58"	10°12'55"
5+25.00	25.00'	28.61'	21.34'	4°31'58"	14°44'54"
5+50.00	25.00'	28.61'	21.34'	4°31'58"	19°16'53"
5+75.00	25.00'	28.61'	21.34'	4°31'58"	23°48'51"
6+00.00	25.00'	28.61'	21.34'	4°31'58"	28°20'50"
6+25.00	25.00'	28.61'	21.34'	4°31'58"	32°52'48"
6+50.00	25.00'	28.61'	21.34'	4°31'58"	37°24'46"
6+89.71	39.71'	45.37'	33.84'	7°12'00"	44°36'46"

LINE 2

Curve 5

Curve Data Based on Centerline Rad. = 356.05' Delta = 29°39'15" Tangent = 94.25' Arc = 184.28' L.C. = 182.23' Def/Ft. = 4.82757 Min.					
		FACE CHORD LENGTHS			
Station	Arc	6 Lt.	6 Rt.	Defl.	T. Defl.
0+05.00	–	–	–	0°00'00"	0°00'00"
0+25.00	20.00	21.29'	18.71'	1°36'33"	1°36'33"
0+50.00	25.00'	26.61'	23.38'	2°00'41"	3°37'14"
0+75.00	25.00'	26.61'	23.38'	2°00'41"	5°37'56"
1+00.00	25.00'	26.61'	23.38'	2°00'41"	7°38'37"
1+25.00	25.00'	26.61'	23.38'	2°00'41"	9°39'18"
1+50.00	25.00'	26.61'	23.38'	2°00'41"	11°39'60"
1+75.00	25.00'	26.61'	23.38'	2°00'41"	13°40'41"
1+89.28	14.28'	15.20'	13.36'	1°08'56"	14°49'37"

LINE 2A



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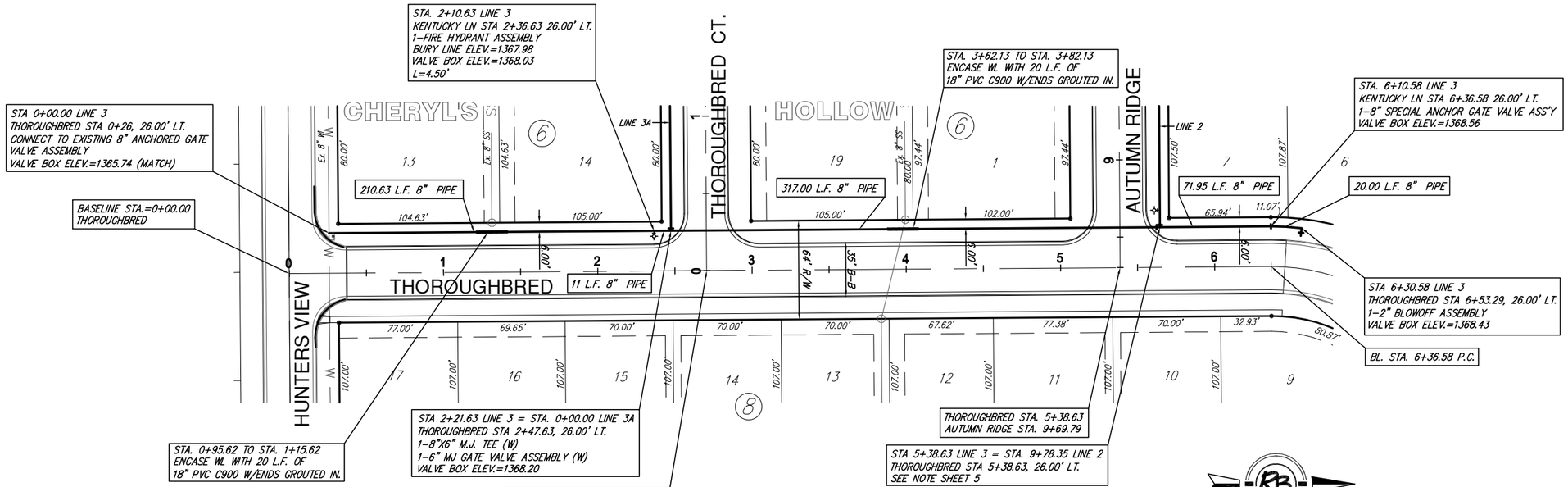
Engineering, Surveying, Land Planning

DESIGN TCR | DRAWN EJB | REVISED
UTILITY | DATE May 16, 2007 | REVIEW

PROJECT NUMBER 448-90290
DRAWING FILE Base (Line 2 & 2A)

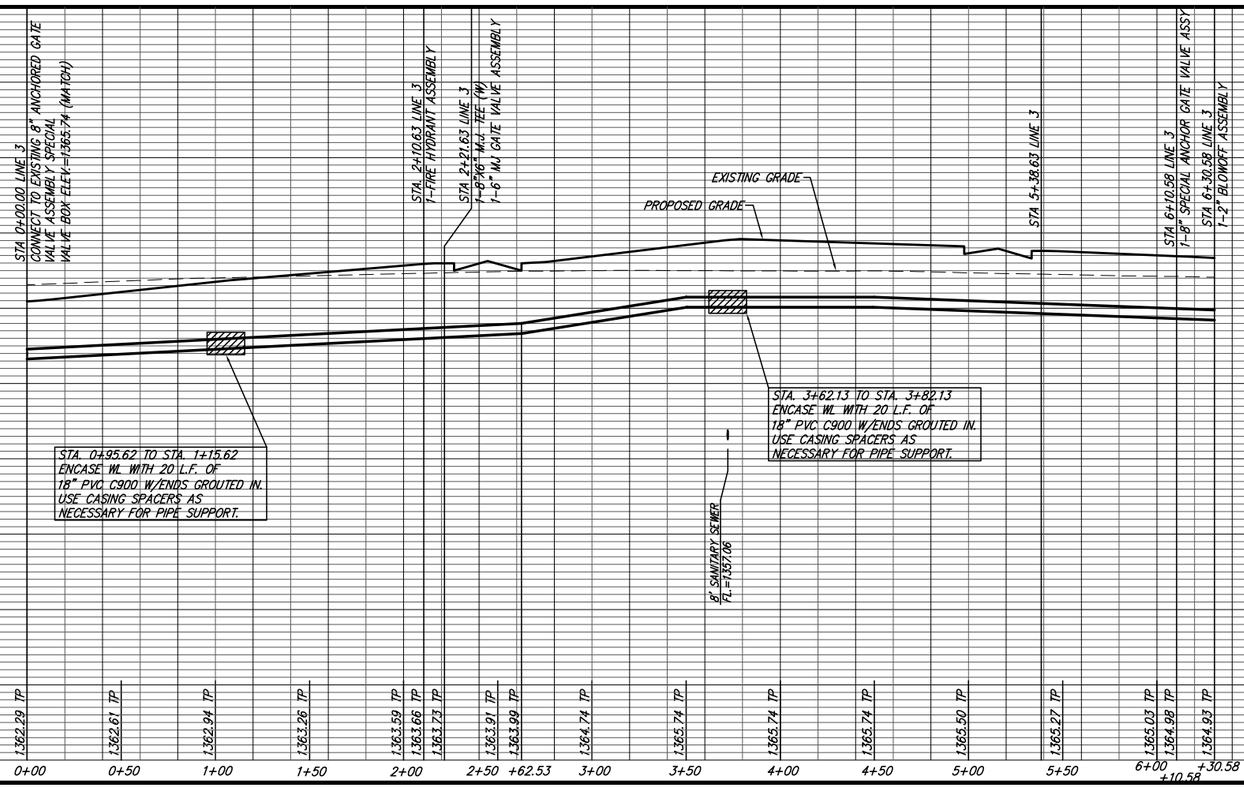
CHERYL'S HOLLOW 2ND ADD. PHASE 1
LINE 2 & 2A
WICHITA, KANSAS

RB JOB 3041E



SCALE 1" = 40'
IRON = ●

LINE 3



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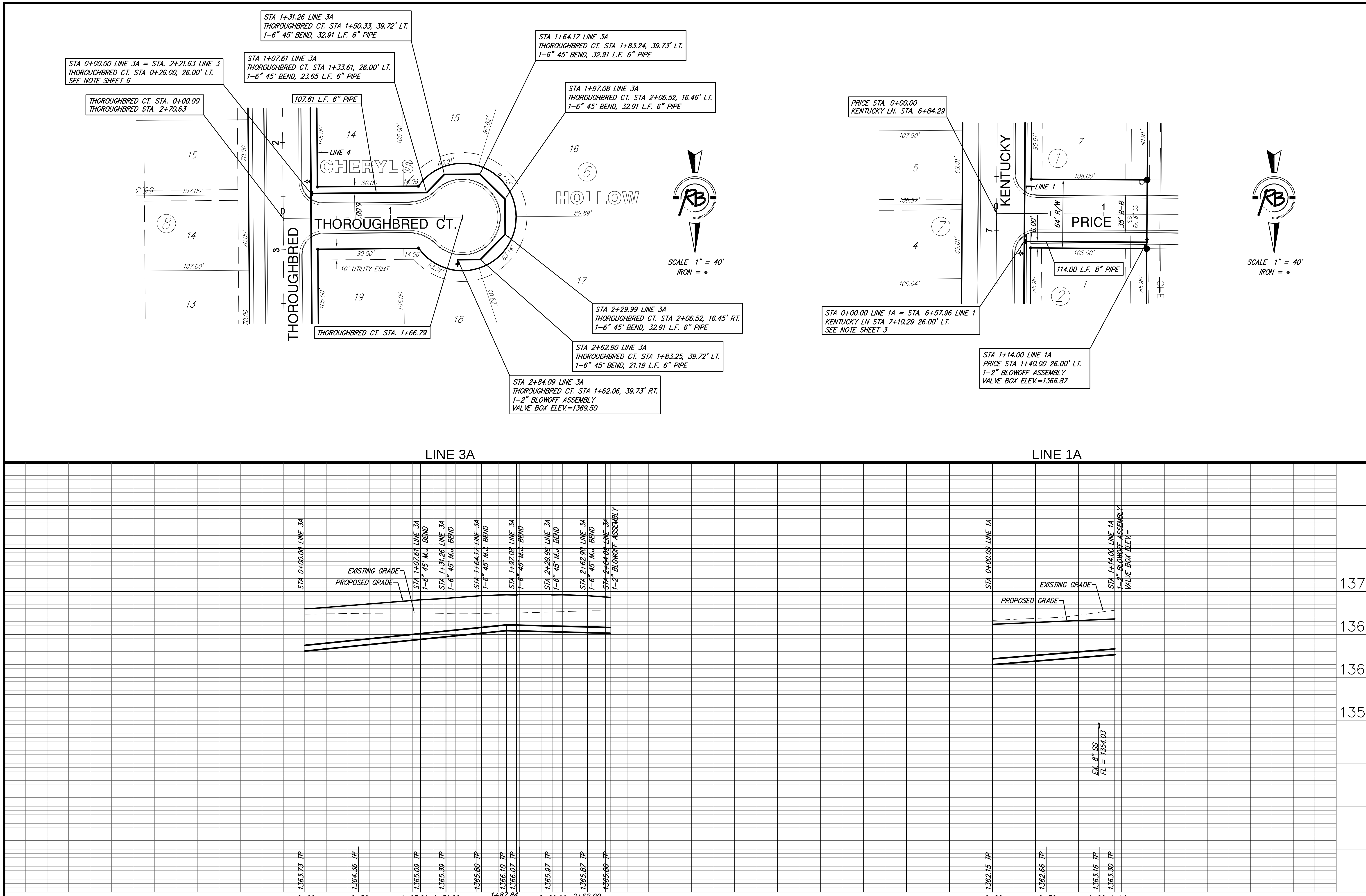
REVISED
DRAWN EJB
DESIGN TCR
DATE May 16, 2007
REVIEW
UTILITY
PROJECT NUMBER 448-90290
DRAWING FILE Base \Line 3\

CHERYL'S HOLLOW 2ND ADD. PHASE I
LINE 3
WICHITA, KANSAS

RB JOB 3041E
SHEET 3 of 6



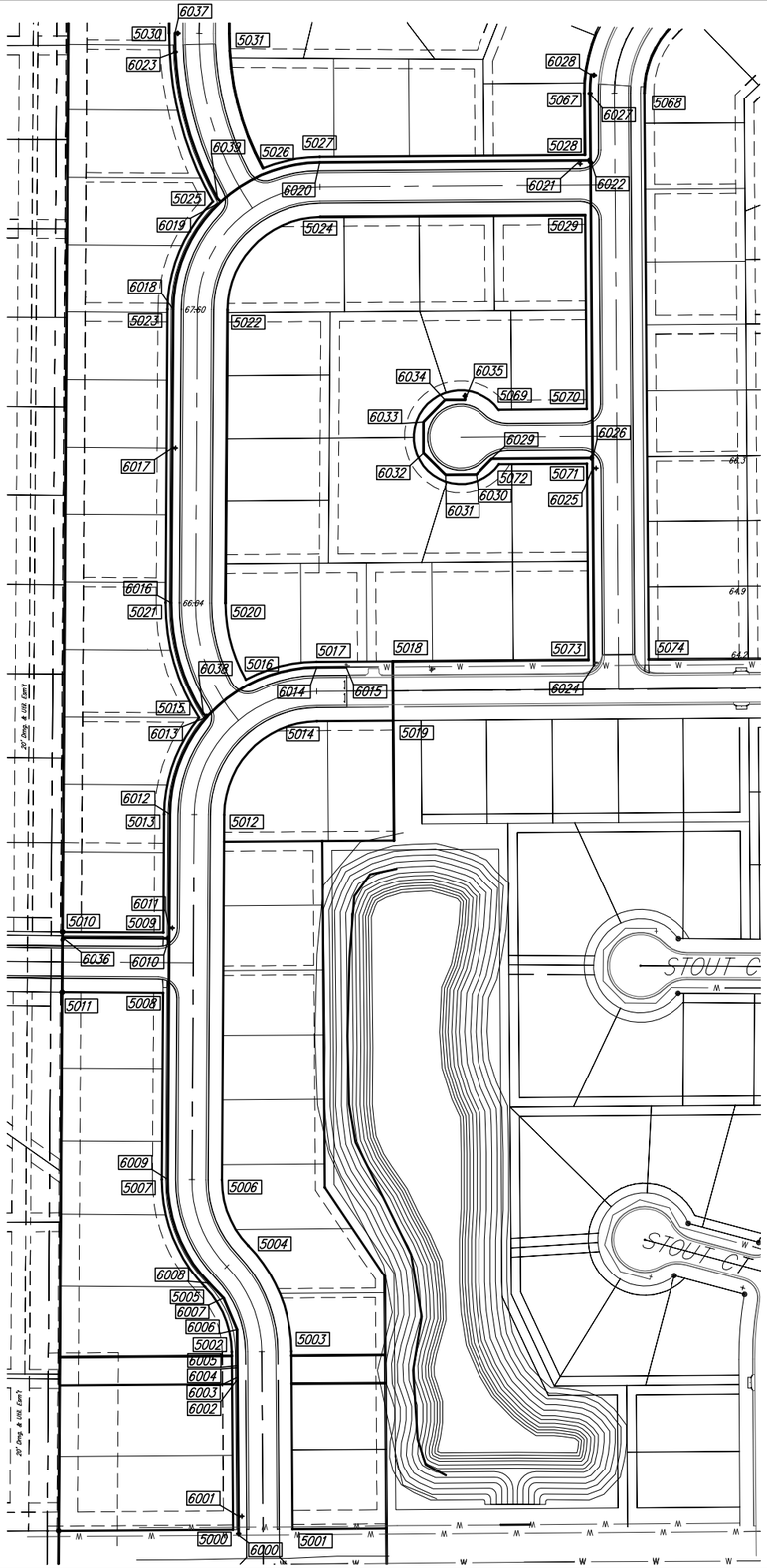
Ruggles & Bohm, P.A.
Engineering, Surveying, Land Planning

DESIGN TCR | DRAWN EJB | REVISED
UTILITY | DATE May 16, 2007 | REVIEW

PROJECT NUMBER 448-90290
DRAWING FILE Base (Line 3A & 1A)

CHERYL'S HOLLOW 2ND ADD. PHASE I
LINE 3A & 1A
WICHITA, KANSAS

RB JOB 3041E
SHEET 7 OF 9



SCALE 1" = 80'

POINT TABLE			
POINT NO.	NORTHING	EASTING	DESCRIPTION
5000	20061.42	20198.51	IRON
5001	20061.88	20262.51	IRON
5002	20251.42	20197.15	IRON
5003	20251.87	20261.15	IRON
5004	20364.82	20214.94	IRON
5005	20320.28	20168.98	IRON
5006	20435.03	20186.77	IRON
5007	20435.44	20122.77	IRON
5008	20634.66	20124.03	IRON
5009	20698.66	20124.44	IRON
5010	20699.35	20016.44	IRON
5011	20635.35	20016.03	IRON
5012	20824.89	20189.24	IRON
5013	20825.30	20125.24	IRON
5014	20924.25	20288.52	IRON
5015	20928.11	20162.31	IRON
5016	20969.08	20212.28	IRON
5017	20988.25	20288.07	IRON
5018	20988.83	20369.17	IRON
5019	20924.83	20369.63	IRON
5020	21050.70	20190.68	IRON
5021	21051.11	20126.68	IRON
5022	21363.56	20192.66	IRON
5023	21363.97	20128.66	IRON
5024	21462.93	20291.95	IRON
5025	21479.27	20177.07	IRON
5026	21514.73	20230.59	IRON
5027	21526.92	20291.49	IRON
5028	21528.95	20574.31	IRON
5029	21464.95	20574.77	IRON
5030	21659.15	20130.54	IRON
5031	21658.74	20194.54	IRON
5067	21594.89	20573.84	IRON
5068	21595.34	20637.84	IRON
5069	21256.93	20482.69	IRON
5070	21257.95	20576.25	IRON
5071	21199.95	20576.67	IRON
5072	21199.28	20482.61	IRON
5073	20990.33	20578.16	IRON
5074	20990.78	20642.16	IRON
6000	20055.46	20204.55	0+00 LINE 1 CONNECT TO EX. WL
6001	20075.46	20204.41	0+20.00 LINE 1 FH ASSEMBLY
6002	20222.23	20203.35	1+66.77 LINE 1 45° MJ BEND (VERT)
6003	20224.31	20203.35	1+68.85 LINE 1 45° MJ BEND (VERT)
6004	20234.31	20203.27	1+78.85 LINE 1 45° MJ BEND (VERT)
6005	20236.46	20203.26	1+81.00 LINE 1 45° MJ BEND (VERT)
6006	20274.76	20202.98	2+19.30 LINE 1 22.5° MJ BEND
6007	20308.54	20188.71	2+55.97 LINE 1 22.5° MJ BEND
6008	20324.46	20173.29	2+78.14 LINE 1 PC
6009	20435.40	20128.77	4+00.73 LINE 1 PT
6010	20692.62	20130.40	6+57.96 LINE 1 8"x8" MJ TEE
6011	20703.62	20130.47	6+68.96 LINE 1 FH ASSEMBLY
6012	20825.26	20131.24	7+90.60 LINE 1 PC
6013	20928.71	20170.69	9+03.71 LINE 1 8"x8" MJ TEE
6014	20982.25	20288.11	10+36.65 LINE 1 PT
6015	20982.48	20319.61	10+68.15 LINE 1 CONNECT TO EX WL
6016	21051.07	20132.68	1+30.60 LINE 2 PC
6017	21216.52	20133.73	2+96.05 LINE 2 FH ASSEMBLY
6018	21363.93	20134.66	4+43.47 LINE 2 PC
6019	21478.19	20184.60	5+72.81 LINE 2 8"x8" MJ TEE
6020	21520.92	20291.53	6+89.52 LINE 2 PT
6021	21522.91	20569.36	9+67.55 LINE 2 FH ASSEMBLY
6022	21522.99	20580.36	9+78.55 LINE 2 8"x8" MJ TEE
6023	21639.11	20136.97	1+69.28 LINE 2A 1-8" SPECIAL ANCHOR GATE VALVE ASSY
6024	20984.37	20584.21	0+00 LINE 3 CONNECT TO EX WL
6025	21195.00	20582.70	2+10.63 LINE 3 FH ASSEMBLY
6026	21206.00	20582.62	2+21.63 LINE 3 8"x6" MJ TEE
6027	21594.93	20579.84	6+10.58 LINE 3 1-8" SPECIAL ANCHOR GATE VALVE ASSY
6028	21614.89	20580.96	6+30.58 LINE 3 B/O ASSEMBLY
6029	21205.23	20475.01	1+07.61 LINE 3A 45° MJ BEND
6030	21188.38	20458.42	1+31.26 LINE 3A 45° MJ BEND
6031	21188.15	20425.50	1+64.17 LINE 3A 45° MJ BEND
6032	21211.25	20402.07	1+97.08 LINE 3A 45° MJ BEND
6033	21244.16	20401.83	2+29.99 LINE 3A 45° MJ BEND
6034	21267.60	20424.93	2+62.90 LINE 3A 45° MJ BEND
6035	21267.75	20446.11	2+84.09 LINE 3A B/O ASSEMBLY
6036	20693.35	20016.40	1+14.00 LINE 1A B/O ASSEMBLY
6037	21659.11	20136.54	1+89.28 LINE 2A B/O ASSEMBLY
6038	20932.01	20166.94	0+05.00 LINE 2 11.25° MJ BEND
6039	21482.65	20182.05	0+05.00 LINE 2A 11.25° MJ BEND

Cheryl's Hollow 2nd Addition Phase 2

Addition Bubble Map

WICHITA, KANSAS

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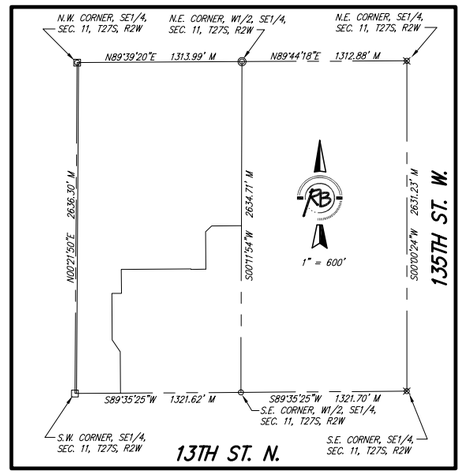
DESIGN	KWL
DRAWN	MLP
REVIEW	
UTILITY	
DATE	June 19, 2007
RB JOB#	304IE
SHEET	8 OF 9
DRAWING FILE	Water {Addition-Water Bubble}
PROJECT NUMBER	448-90290

CHERYL'S HOLLOW SECOND ADDITION

Wichita, Sedgwick County, Kansas



SURVEY MARKER LEGEND

- □ = STONE (FOUND)
- ⊠ = NAIL IN CENTER OF STONE (FOUND)
- ○ = 1/2" IRON PIPE (FOUND)
- ◎ = 1" IRON PIPE (FOUND)
- ø = 1/2" REBAR W/BAUGHMAN CAP (FOUND)
- ※ = 3/4" IRON PIPE W/SEDGWICK COUNTY ALUMINUM CAP (FOUND)
- ● = 5/8" REBAR W/R&B CAP (SET)

BUILDING SETBACK LINES PER ZONING REGULATIONS

BENCH MARK: COW BENCHMARK AT THE SOUTHWEST CORNER OF INTERSECTION OF 135TH ST. W. AND 13TH ST. N., EAST SIDE OF CONC. BASE FOR WLP. 30'± S. OF CENTER LINE AND 35'± W. OF CENTER LINE ELEV.=1355.65 (M.S.L.)

ON-SITE BENCH MARK: R.R. SPIKE ON NORTH FACE OF HIGHLINE POWER POLE 131 FEET WEST AND 28 FEET SOUTH OF THE S.E. CORNER, W1/2, SE1/4, SEC. 11, 127S, R2W ELEV.=1365.16 (M.S.L.)

MINIMUM BUILDING PAD ELEVATION FOR LOWEST OPENING INTO STRUCTURES		
BLOCK	LOT NO.	ELEVATION (M.G.V.D.)
7	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	1364.5
9	1, 2, 3, 4, 5, 6, 7, 8	1363.0
10	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	1364.0

SCALE 1" = 100'

CHERYL'S HOLLOW 2ND ADDITION
FINAL PLAT
WICHITA, KANSAS

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DESIGN	KWL
DRAWN	MLP
REVIEW	
UTILITY	
DATE	June. 14, 2007
R&B JOB	3041E
SHEET	9 OF 9
DRAWING FILE	Base {Final Plat}
PROJECT NUMBER	448-90290