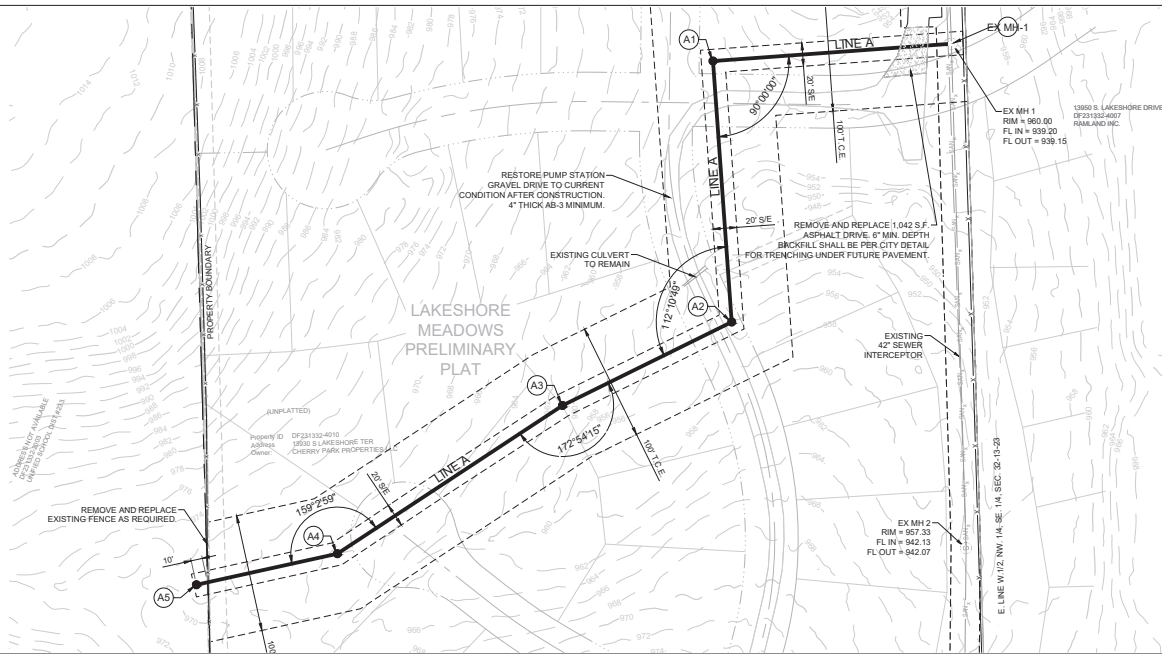


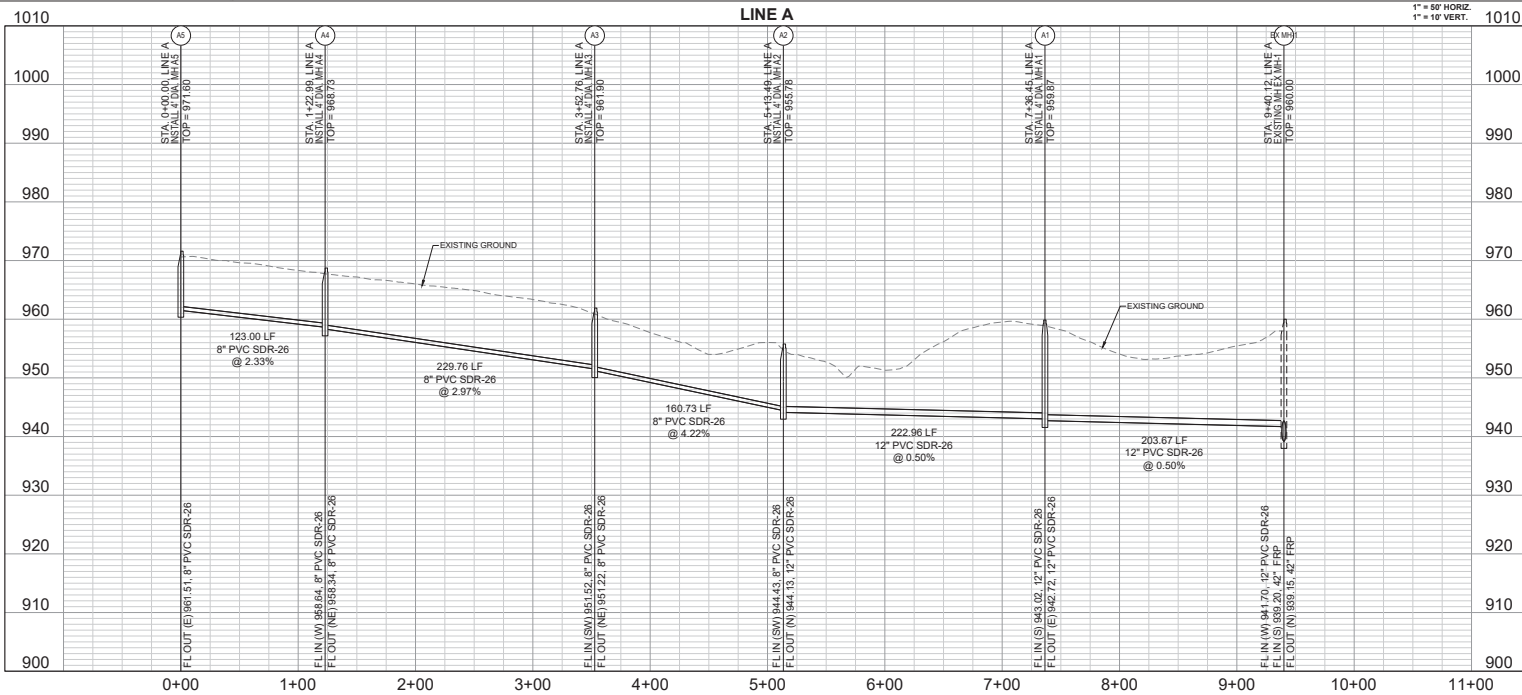




JOHNSON COUNTY BENCHMARK:
Bernstein Aluminum Disk Stamped BM 631
Set on the S.E. Corner of Headwall on South Side 143rd St.
ELEV. 946.82

PROJECT BENCHMARK:
POINT 4096 MONUMENT FOUND 12\"/>

Structure Table		
Structure Name	Structure Northing	Structure Easting
A1	212957.2016	2200050.4064
A2	212734.8079	2200616.2920
A3	212663.6769	2200473.1547
A4	212537.3234	2200280.2531
A5	212510.8891	2200160.1401



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PLANNERS SURVEYORS LANDSCAPE ARCHITECTS

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Olathe, MO 64643
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WWW.SCHLAGELASSOCIATES.COM

PREPARED BY:

SCHLAGEL & ASSOCIATES P.A.

143RD STREET & ANDREWS AVE. SEWER
MAIN EXTENSION

143RD STREET & ANDREWS AVE. OLATHE,
KANSAS

DATE	DESCRIPTION
10/1/2014	DESIGN
10/1/2014	REVISION
10/1/2014	REVISION
10/1/2014	REVISION
10/1/2014	REVISION
10/1/2014	REVISION
10/1/2014	REVISION
10/1/2014	REVISION
10/1/2014	REVISION
10/1/2014	REVISION

DESIGNED BY: [Signature]

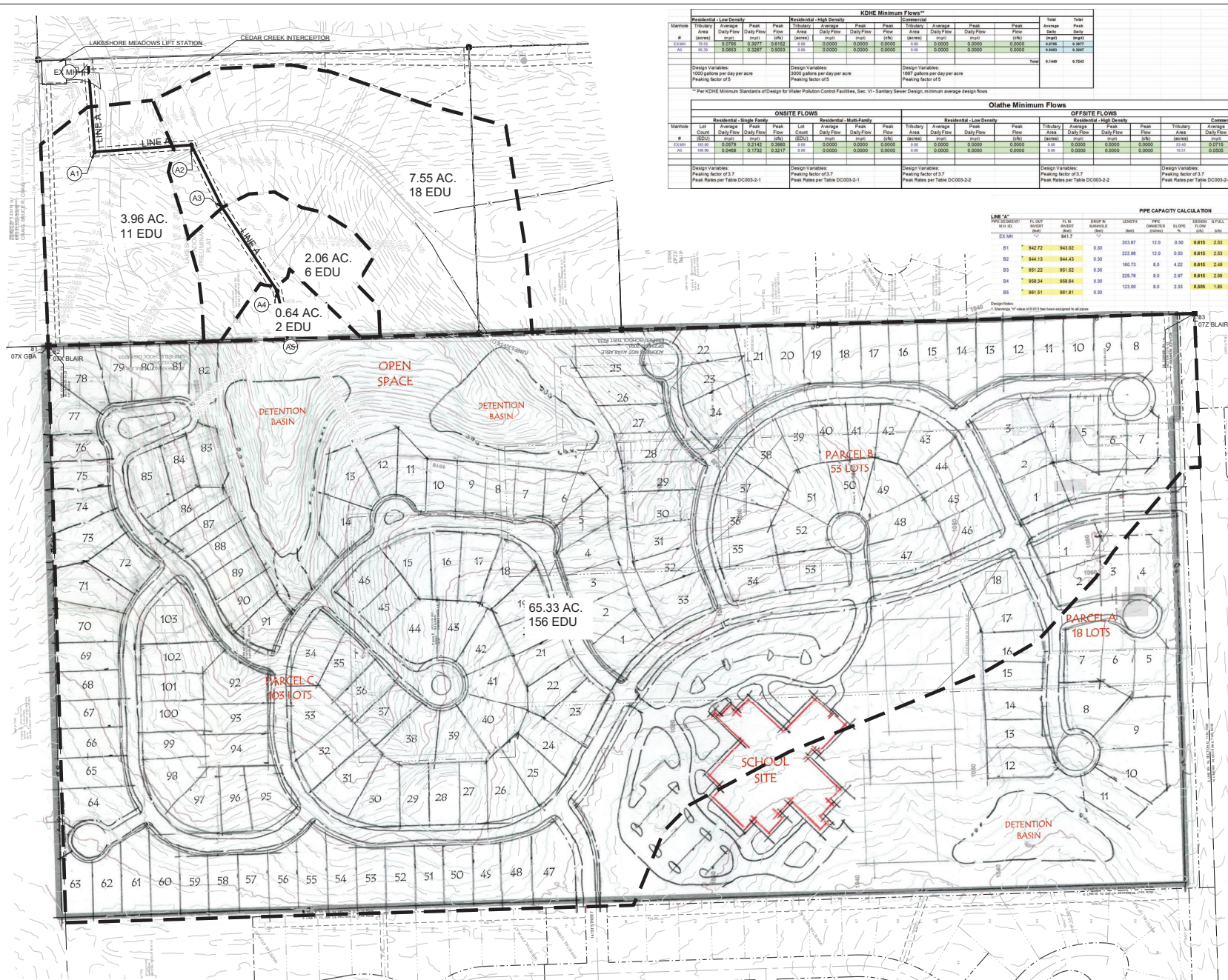
CHECKED BY: [Signature]

DATE PREPARED: 10/1/2014

PROJECT NUMBER: 14-001

LINE A PLAN & PROFILE

SHEET 5



		KDHE Minimum Flows**															
		Residential - Low Density				Residential - High Density				Commercial							
Station	ID # (Acres)	Voluntary	Passive	Peak	Flow	Voluntary	Passive	Peak	Flow	Voluntary	Passive	Peak	Flow	Average	Peak		
		(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)		
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
AS 60.3	0.0653	0.5707	0.5707	0.5707	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000		
														Total	0.6463		
Peaking factor: 5														Peaking factor: 5			
1000 gallons per day per acre														1000 gallons per day per acre			
Peaking factor: 5														Peaking factor: 5			

** Per KDHE Minimum Standards of Design for Water Pollution Control Facilities, Sec. VI - Sanitary Sewer Design, minimum average design flows

[illegible]

PIPE CAPACITY CALCULATION														
LINE #	PUMP STATION	FLOW RATE (MGD)	FLOW RATE (MGD)	DROPP IN PRESSURE (PSI)	LENGTH (feet)	PIPE CHARACTERISTICS		DESIGN FLOW (MGD)	ATRIAL LOSS (PSI)	100' FRICTION LOSS (PSI)	VELOCITY (FPS)	100' VELOCITY LOSS (PSI)	% OF FRICTION LOSS	% OF FRICTION LOSS
						DI (in)	SCOUR (in)							
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
01	042.72	040.02	0.00	0.00	203.87	12.0	0.00	0.015	0.23	1.26	3.22	0.50	30.82%	24.35
02	046.13	044.63	0.00	0.00	222.98	12.0	0.00	0.015	0.23	1.26	3.22	0.50	30.82%	24.35
03	046.13	044.63	0.00	0.00	166.76	8.0	0.22	0.015	2.49	1.24	7.13	1.97	78.51%	24.71
04	038.54	036.81	0.00	0.00	228.78	8.0	2.97	0.015	2.09	1.04	5.88	1.65	67.29%	29.46
05	038.54	036.81	0.00	0.00	133.00	8.0	2.93	0.005	1.85	0.92	3.50	1.46	59.51%	27.32

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Kansas State Certificate of Authority
#62-296 IKA-239 IL-3-54

PREPARED BY:

SCHLAGEL & ASSOCIATES, P.A.

143RD STREET & ANDREWS AVE. SEWER
MAIN EXTENSION

143RD STREET & ANDREWS AVE. OLATHE,
KANSAS

DRIVER BY: #48	REVISION DATE DATE	DESCRIPTION
CHECKED BY: MAB		DESCRIPTION 1
DATE PREPARED:		
COPI NUMBER		
24-985		

[illegible]

SHEET

6

