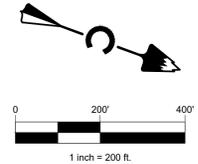
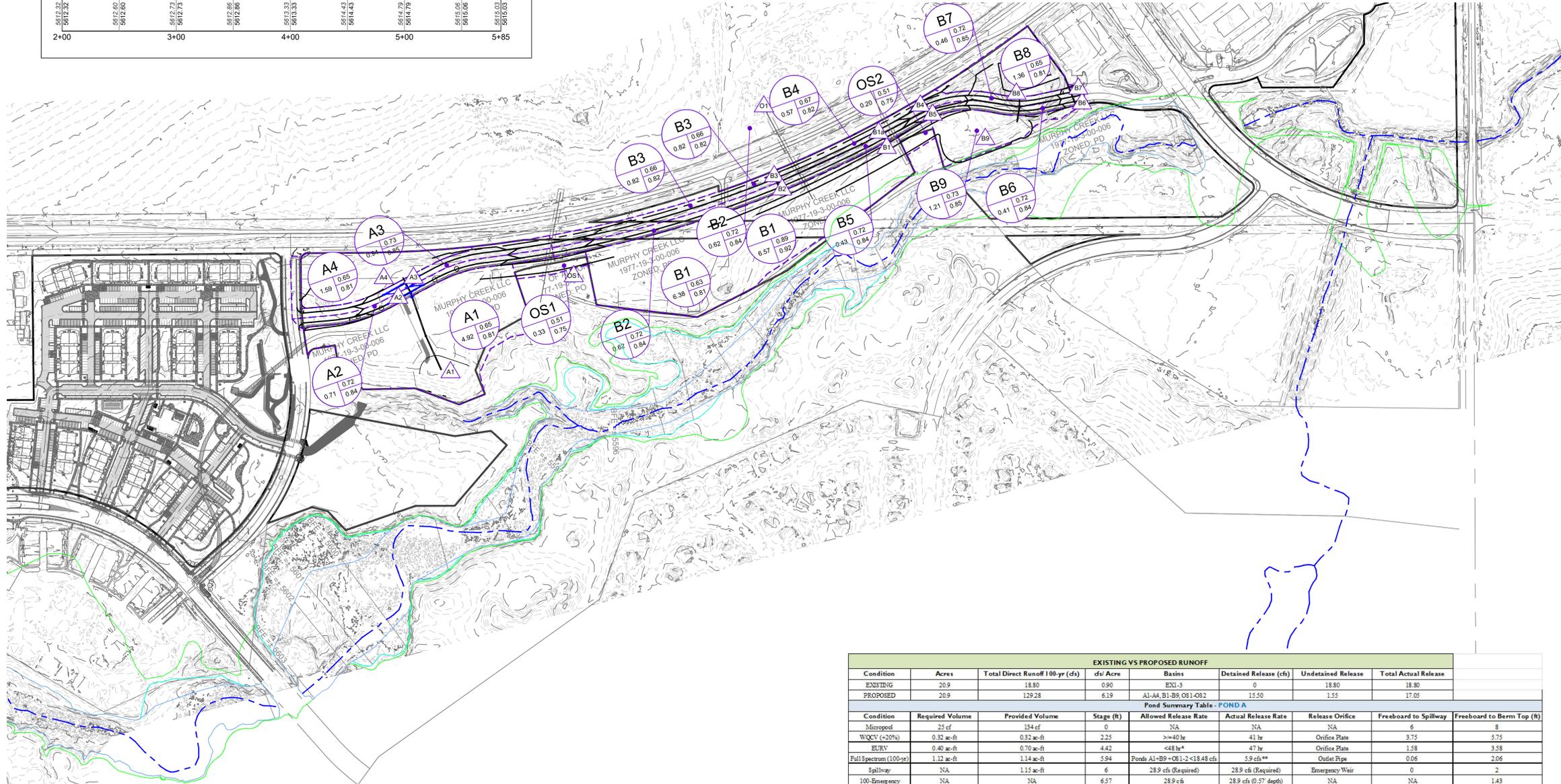


RUNOFF SUMMARY TABLE							
DESIGN POINT	BASIN	AREA (AC)	5-YEAR RUNOFF (CFS)	100-YEAR RUNOFF (CFS)	2-YEAR C VALUE	100-YEAR C VALUE	% IMPERVIOUS
A1	A1	4.923	6.87	24.57	0.66	0.82	81.0%
A2	A2	0.708	1.62	5.18	0.78	0.87	95.0%
A3	A3	0.936	2.08	6.78	0.76	0.86	92.8%
A4	A4	1.586	2.57	9.28	0.65	0.81	80.0%
B1	B1	6.384	3.44	19.45	0.34	0.67	45.1%
B2	B2	0.624	1.25	3.99	0.78	0.87	95.0%
B3	B3	0.822	1.41	4.79	0.71	0.84	87.2%
B4	B4	0.566	1.04	3.54	0.71	0.84	87.5%
B5	B5	0.434	0.90	2.88	0.78	0.87	95.0%
B6	B6	0.411	0.94	3.01	0.78	0.87	95.0%
B7	B7	0.461	1.00	3.24	0.76	0.86	92.8%
B8	B8	1.360	2.55	9.22	0.65	0.81	80.0%
Total	B9	19.215	25.67	95.92	0.71	0.84	86.5%
OS1	OS1	0.33	0.62	2.22	0.65	0.81	80.0%
OS2	OS2	0.20	0.38	1.38	0.65	0.81	80.0%
EX1	EX1	8.04	0.43	21.63	0.03	0.50	5.0%
EX2	EX2	12.13	2.43	33.43	0.12	0.55	17.3%
EX3	EX3	0.20	0.46	1.46	0.78	0.87	95.0%



LEGEND

EXISTING PROPOSED

AREA 0.45 0.60
XX.X 0.60

AREA 0.45 0.60
XX.X 0.60

DESIGN POINT

DIRECTIONAL FLOW ARROW

PROPOSED DRAINAGE BASIN

PROPOSED MAJOR CONTOUR

PROPOSED MINOR CONTOUR

EXISTING MAJOR CONTOUR

EXISTING MINOR CONTOUR

PROPOSED STORM & STUB OUT

EXISTING STORM & STUB OUT

PROPOSED STORM TO BE SURVEYED

EXISTING STORM TO BE SURVEYED

STORM MANHOLES

STORM INLETS

FES, FOREBAY, & TRICKLE CHANNEL

EASEMENT

RIGHT OF WAY (R.O.W.)

CENTERLINE

DRAINAGE EASEMENT

PROJECT BOUNDARY

100 YEAR FLOODPLAIN

500 YEAR FLOODPLAIN

STREAMLINE

GOLF COURSE LIMITS

- NOTES:**
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 - ALL STORM INFRASTRUCTURE IS PUBLIC AND SIZED FOR THE 100 YEAR STORM, UNLESS OTHERWISE NOTED.
 - ZANTE STREET IS ENTIRELY VERTICAL CATCH CURB.
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 - NO WORK IS ALLOWED IN THE FLOODPLAIN WITHOUT A FLOODPLAIN DEVELOPMENT PERMIT. NO WORK IS ALLOWED WITHIN THE FLOODWAY WITHOUT A CLOMR OR A NO RISE ANALYSIS INCLUDED WITHIN THE FLOODPLAIN DEVELOPMENT PERMIT.

EXISTING VS PROPOSED RUNOFF							
Condition	Acres	Total Direct Runoff 100-yr (cfs)	d/d Acres	Basins	Detained Release (cfs)	Undetained Release	Total Actual Release
EXISTING	20.9	18.80	0.90	EX1-3	0	18.80	18.80
PROPOSED	20.9	129.28	6.19	A1-A4, B1-B9, OS1-OS2	15.50	1.55	17.05

Pond Summary Table - POND A								
Condition	Required Volume	Provided Volume	Stage (ft)	Allowed Release Rate	Actual Release Rate	Release Orifice	Freeboard to Spillway	Freeboard to Berm Top (ft)
Micropond	25 cf	134 cf	0	NA	NA	NA	6	8
WQCV (<20%)	0.32 ac-ft	0.32 ac-ft	2.25	>=40 hr	41 hr	Orifice Plate	3.75	5.75
EURV	0.40 ac-ft	0.70 ac-ft	4.42	<48 hr*	47 hr	Orifice Plate	1.58	3.58
Full Spectrum (100-yr)	1.12 ac-ft	1.14 ac-ft	5.94	Ponds A1-B9+OS1-2 <18.48 cfs	5.9 cfs**	Outlet Pipe	0.06	2.06
Spillway	NA	1.15 ac-ft	6	28.9 cfs (Required)	28.9 cfs (Required)	Emergency Weir	0	2
100-Emergency	NA	NA	6.57	28.9 cfs	28.9 cfs (0.57 depth)	NA	NA	1.43
Berm Top	NA	1.8 ac-ft	8	NA	NA	NA	NA	0

*Due to being in proximity of an airport, the drain time for the entire pond must be less than 48 hours. **Pond A1-B9+ Basin OS1-OS2 = 17.15 cfs which is less than existing condition 18.48 cfs

Pond Summary Table - POND B								
Condition	Required Volume	Provided Volume	Stage (ft)	Allowed Release Rate	Actual Release Rate	Release Orifice	Freeboard to Spillway	Freeboard to Berm Top (ft)
Micropond	25 cf	134 cf	0	NA	NA	NA	7.5	9
WQCV (<20%)	0.49 ac-ft	0.49 ac-ft	3.12	>=40 hr	41 hr	Orifice Plate	4.38	5.88
EURV	0.61 ac-ft	1.10 ac-ft	5.58	<48 hr*	47 hr	Orifice Plate	1.92	3.42
Full Spectrum (100-yr)	1.72 ac-ft	1.72 ac-ft	7.16	Ponds A1-B9+OS1-2 <18.48 cfs	9.6 cfs**	Outlet Pipe	0.34	1.84
Spillway	NA	1.90 ac-ft	7.5	36.2 cfs (Required)	35.6 cfs (Required)	Emergency Weir	0	1.5
100-Emergency	NA	NA	7.88	35.6 cfs (0.38 depth)	35.6 cfs (0.38 depth)	NA	NA	1.12
Berm Top	NA	2.70 ac-ft	9	NA	NA	NA	NA	0

*Due to being in proximity of an airport, the drain time for the entire pond must be less than 48 hours. **Pond A1-B9+ Basin OS1-OS2 = 17.15 cfs which is less than existing condition 18.48 cfs

ENGINEER'S STATEMENT
PREPARED UNDER MY SUPERVISION

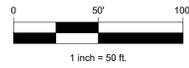
JESS KORDZIEL, PE, CFM
COLORADO NO. 36130
FOR AND ON BEHALF OF CORE CONSULTANTS INC.

DATE

BENCHMARK
CITY OF AURORA BENCHMARK 456519NW001
BENCHMARK IS A 3-INCH DIAMETER CAP, STAMPED "CITY OF AURORA
LS 16419 -1986" SET IN A RANGE BOX. BENCHMARK IS EAST OF GUN
CLUB ROAD 3/4 MILE SOUTH OF MISSISSIPPI AVENUE. BENCHMARK IS
ALSO THE MONUMENT FOR THE 1/4 CORNER COMMON TO SECTIONS
24 / 19 R66165W, T4S. PUBLISHED ELEVATION = 5608.25' NAVD83.

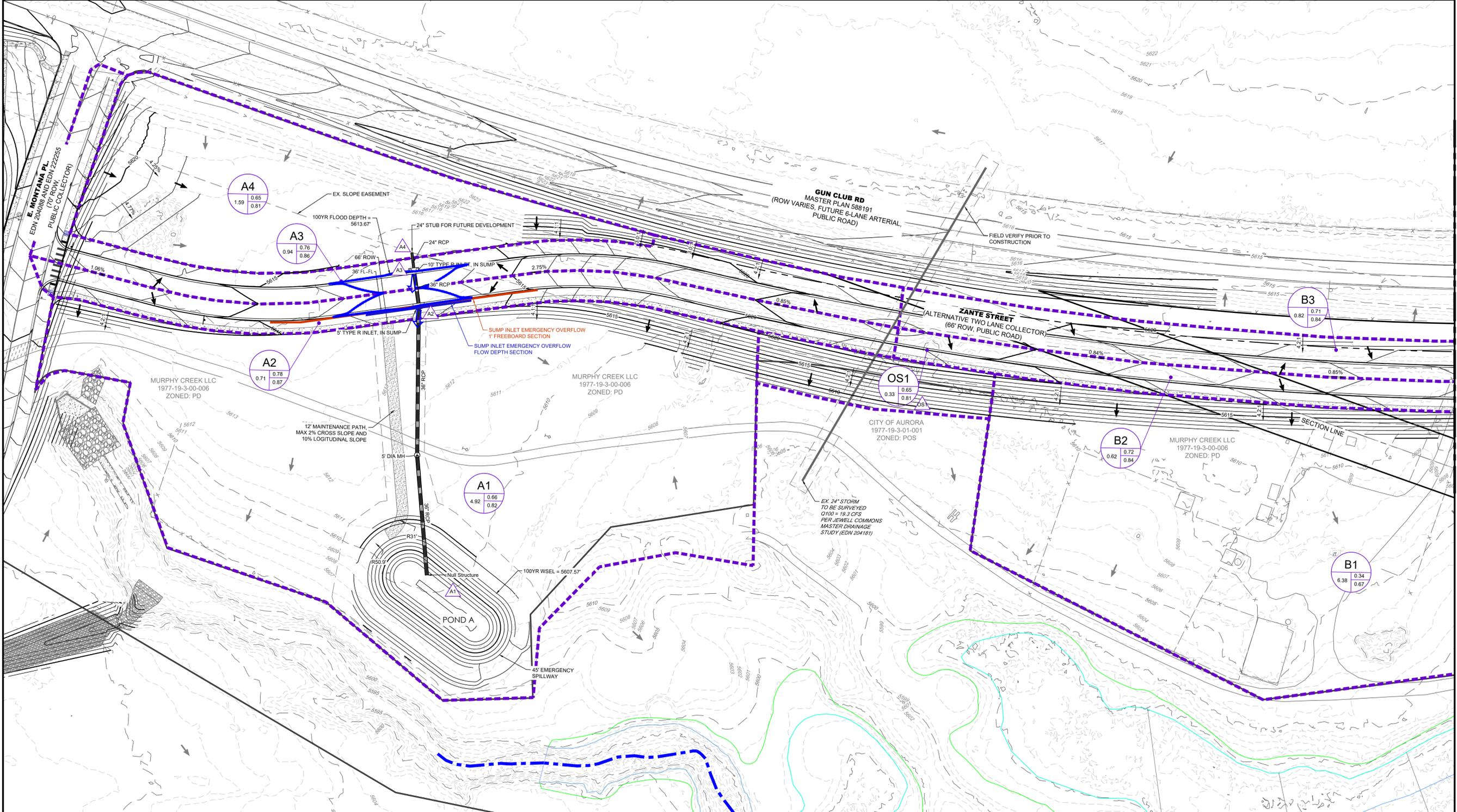
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LEGEND

	EXISTING DRAINAGE BASIN		PROPOSED STORM & STUB OUT
	EXISTING MAJOR CONTOUR		EXISTING STORM & STUB OUT
	EXISTING MINOR CONTOUR		EXISTING STORM TO BE SURVEYED
	PROPOSED MAJOR CONTOUR		STORM MANHOLES
	PROPOSED MINOR CONTOUR		STORM INLETS
	EXISTING MAJOR CONTOUR		FES, FOREBAY, & TRICKLE CHANNEL
	EXISTING MINOR CONTOUR		CRUSHER FINES
	BASIN DESIGNATION		MAINTENANCE ACCESS
	2 YEAR COEFFICIENTS		RIPRAP
	100 YEAR COEFFICIENTS		EASEMENT
	DESIGN POINT		DRAINAGE EASEMENT
	DIRECTIONAL FLOW ARROW		RIGHT OF WAY (R.O.W.)
	EMERGENCY OVERFLOW ROUTE		CENTERLINE
	PROPOSED DRAINAGE BASIN		PROJECT BOUNDARY
	5280		EX. 100 YR FLOODPLAIN, ZONE AE
	5279		EX. 500 YR FLOODPLAIN, ZONE X
	5278		100 YR FLOODWAY

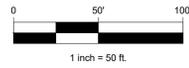


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MATCHLINE STA 25+00
SEE NEXT SHEET

<p>811 Know what's below. Call before you dig.</p>		<p>CORE</p>	
		<p>CORE CONSULTANTS, INC. 3473 S. BROADWAY DENVER, CO 80113 303.703.4444 LIVE@CORE.COM</p>	
DATE	BY	REVISION DESCRIPTION	
<p>MURPHY CREEK - ZANTE STREET AURORA, COLORADO</p>		<p>PRELIMINARY DRAINAGE PLAN 1</p>	
<p>NOT FOR CONSTRUCTION</p>			
DESIGNED BY:	GP	JOB NO. 21-134	
DRAWN BY:	GP	SHEET 2	
CHECKED BY:	JK		

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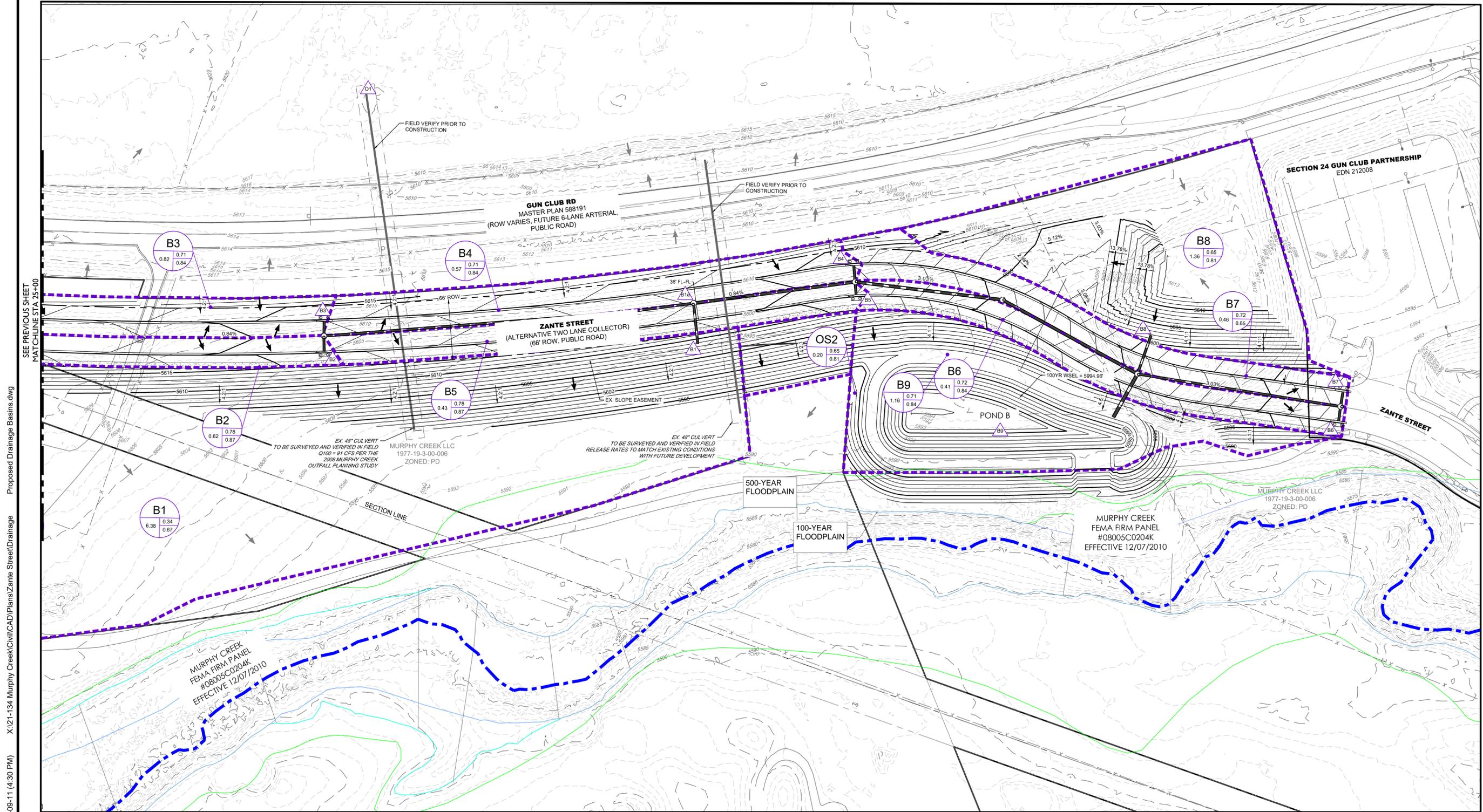


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	PROJECT BOUNDARY		EX. 100 YR FLOODPLAIN, ZONE AE
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	100 YR FLOODWAY		100 YR FLOODWAY



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MURPHY CREEK - ZANTE STREET
AURORA, COLORADO
PROPOSED DRAINAGE PLAN 2

#	REVISION DESCRIPTION	DATE	BY

DESIGNED BY: GP
DRAWN BY: GP
CHECKED BY: JK

JOB NO.
21-134
SHEET
3

CORE CONSULTANTS, INC.
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 AURORA, CO 80013
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 LIVE@CORE.COM

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PUBLIC INFRASTRUCTURE