

The SDDTCM is being revised currently with the updated manual anticipated to be released at the end of October. This site will need to be in compliance with the latest storm drainage manual update at time of civils. Please utilize the following tables for imperviousness and C Values which were determined to be a better representation of surface types within the City of Aurora than the current criteria manual.

Per updated COA Draft SDTCM, landscaped areas shall be considered 20% impervious, and open space must be considered to be the below

BASIN SUMMARY TABLE		
Parks and Open Space		
Open Space		5%
Community Parks		25%
Neighborhood Parks		15%
Golf Courses		30%
Cemeteries		25%
Surface Type		
Paved Streets		100%
Concrete Drive and Walks		90%
Roofs		90%
Gravel	No Traffic Areas (pedestrian use)	40%
	Low Traffic Areas (maintenance paths and substations)	60%
	High Traffic Areas (roadways and parking)	80%
Landscaping (including water-wise vegetation, active turf, uncompacted gravel, planting beds, residential artificial turf, etc.)		20%

JR ENGINEERING:
IMPERVIOUS
CALCS UPDATED
TO REFLECT LAND
USE

A9	0.63	77%	0.69	0.86	11.9	0.9	3.4
A10	12.97	31%	0.33	0.70	15.4	8.3	50.3
A11	0.88	87%	0.77	0.89	14.9	1.3	4.4
A12	1.39	68%	0.63	0.83	15.2	1.7	6.4
A13	0.48	78%	0.70	0.86	12.9	0.7	2.5
A14	1.93	42%	0.41	0.74	14.5	1.6	8.1
A15	1.70	71%	0.58	0.78	13.2	2.0	7.8
A16	0.19	76%	0.69	0.86	11.2	0.3	1.0
A17	0.55	73%	0.63	0.82	12.8	0.7	2.7
A18	1.85	71%	0.57	0.77	12.4	2.2	8.7
A19	0.44	75%	0.66	0.83	12.2	0.6	2.3
A20	0.33	70%	0.57	0.77	11.0	0.4	1.6
A21	0.20	78%	0.70	0.86	11.1	0.3	1.1
A22	0.41	76%	0.68	0.85	12.0	0.6	2.2
A23	0.69	73%	0.63	0.82	13.2	0.9	3.4
A24	1.74	71%	0.57	0.77	12.5	2.1	8.1
A25	17.12	51%	0.44	0.72	16.4	14.1	66.0
A26	0.32	75%	0.66	0.84	11.7	0.5	1.7
A27	0.74	49%	0.43	0.73	11.0	0.7	3.5
A28	0.27	73%	0.67	0.85	12.0	0.4	1.4
A29	0.60	43%	0.43	0.75	12.0	0.6	2.8
A30	2.12	71%	0.57	0.77	12.5	2.6	9.9
A31	0.19	72%	0.65	0.84	11.2	0.3	1.0
A32	1.17	72%	0.58	0.78	12.7	1.4	5.5
A33	1.41	78%	0.67	0.83	16.7	1.7	6.2
A34	0.58	71%	0.64	0.84	12.8	0.8	2.9
A35	1.71	67%	0.57	0.80	13.7	2.0	8.0
A36	1.05	77%	0.66	0.83	12.2	1.5	5.4
A37	1.13	72%	0.63	0.82	13.1	1.5	5.5
A38	2.65	19%	0.23	0.66	13.3	1.3	10.5
A39	1.81	78%	0.66	0.83	12.6	2.5	9.2
A40	2.06	24%	0.27	0.68	11.7	1.2	8.8
A41	2.53	46%	0.45	0.76	13.5	2.3	11.3
A42	0.56	75%	0.65	0.84	12.4	0.8	2.9
A43	2.00	73%	0.61	0.79	13.0	2.5	9.5
A44	0.42	73%	0.63	0.82	11.2	0.6	2.2
A45	2.75	60%	0.56	0.81	14.6	3.1	12.6
A46	1.44	65%	0.57	0.80	12.9	1.7	6.9
A47	1.06	71%	0.57	0.77	11.8	1.3	5.1
A48	1.86	71%	0.60	0.79	12.8	2.3	8.9
A49	1.34	72%	0.59	0.78	12.5	1.7	6.4
A50	2.45	71%	0.58	0.77	12.8	3.0	11.4
A51	2.33	72%	0.59	0.78	14.7	2.7	10.3
A52	1.18	84%	0.70	0.83	14.2	1.6	5.6
A53	2.63	68%	0.59	0.80	15.1	3.0	11.8
A54	0.30	74%	0.66	0.83	10.7	0.4	1.6
A55	1.44	73%	0.63	0.82	15.3	1.7	6.6
A56	2.04	76%	0.64	0.82	13.7	2.6	9.8
A57	1.75	10%	0.18	0.65	11.6	0.7	7.2
A58	2.11	66%	0.58	0.80	15.3	2.3	9.4
A59	0.70	60%	0.55	0.80	11.8	0.8	3.5
A60	1.13	64%	0.57	0.80	11.8	1.4	5.6
A61	2.39	63%	0.55	0.79	13.4	2.7	11.2
A62	0.09	80%	0.72	0.87	10.6	0.1	0.5
A63	2.56	72%	0.59	0.78	14.2	3.0	11.5
A64	2.72	72%	0.59	0.78	15.2	3.1	11.8
A65	1.45	72%	0.62	0.80	14.9	1.7	6.6
A66	0.19	72%	0.65	0.84	11.3	0.3	1.0
A67	0.21	74%	0.67	0.85	11.5	0.3	1.1
A68	0.22	75%	0.68	0.85	11.3	0.3	1.2
A69	2.00	75%	0.64	0.83	15.2	2.5	9.2
A70	11.98	75%	0.60	0.80	14.6	14.2	54.4
A71	1.00	88%	0.78	0.89	12.8	1.6	5.4
A72	11.90	20%	0.24	0.67	21.7	4.6	37.0
A73	1.69	71%	0.59	0.78	12.8	2.1	8.0
A74	0.78	71%	0.58	0.77	11.9	1.0	3.8
A75	0.87	71%	0.60	0.79	12.1	1.1	4.2
A76	0.92	73%	0.60	0.79	12.2	1.2	4.5
A77	1.20	78%	0.64	0.82	12.9	1.6	5.9
A78	0.98	16%	0.22	0.66	11.8	0.5	4.0
A79	0.53	53%	0.47	0.76	11.0	0.6	2.6
A80	1.59	63%	0.55	0.78	12.3	1.9	7.6
A81	0.35	67%	0.61	0.83	11.3	0.5	1.8

BASIN SUMMARY TABLE							
Tributary	Area	Percent			t _c	Q ₂	Q ₁₀₀
Sub-basin	(acres)	Impervious	C ₂	C ₁₀₀	(min)	(cfs)	(cfs)
D1	1.10	80%	0.72	0.87	16.2	1.5	5.2
D2	0.32	80%	0.72	0.87	11.4	0.5	1.8
D3	0.59	80%	0.72	0.87	12.9	0.9	3.1
D4	0.49	89%	0.79	0.90	12.7	0.8	2.7
OS1	8.23	75%	0.60	0.80	17.4	8.9	34.3
OS2	34.21	75%	0.60	0.80	22.6	32.4	124.8
OS3	12.88	75%	0.60	0.80	17.8	13.8	53.2
OS4	9.32	75%	0.60	0.80	18.6	9.8	37.6
OS5	11.58	75%	0.60	0.80	17.5	12.5	48.2
OS6	66.83	76%	0.61	0.79	24.3	61.9	229.5
OS7	14.99	10%	0.18	0.65	16.3	5.0	52.4

DESIGN POINT			DESIGN POINT			DESIGN POINT		
DP	Q2	Q100	DP	Q2	Q100	DP	Q2	Q100
Total	Total	Total	Total	Total	Total	Total	Total	Total
1	2.1	7.2	7	0.8	2.9	40	1.3	9.3
1.1	5.0	11.6	7.1	16.5	47.6	41	2.7	13.1
1.2	6.2	14.0	7.2	16.4	47.8	41.1	3.3	8.7
1.3	19.4	80.5	7.3	66.6	191.8	42	0.8	13.4
1.4	20.4	83.0	7.4	68.1	194.7	43	2.9	15.3
1.5	1.0	3.6	7.5	87.8	251.4	44	0.7	2.6
1.6	1.4	5.3	7.6	91.0	251.4	45	3.8	15.5
1.7	2.8	8.4	7.7	24.5	94.6	46	2.0	8.0
1.8	23.3	91.6	8	1.8	4.5	47	1.2	8.3
1.9	23.4	93.8	9	4.0	11.4	48	2.7	10.3
2	3.0	11.9	10	8.3	50.3	49	1.7	9.9
2.1	4.8	11.9	11	1.7	5.6	50	3.6	13.7
2.2	6.6	18.1	12	2.0	7.6	51	2.5	10.7
2.3	7.0	18.8	13	0.8	4.0	52	1.7	6.0
2.4	9.4	29.0	14	1.7	8.9	53	3.0	18.4
2.5	11.4	39.1	15	2.1	12.1	54	0.5	1.8
2.6	12.7	43.6	16	0.4	1.3	55	2.6	13.7
2.7	17.9	65.5	17	0.8	3.0	56	3.7	18.0
3	1.3	5.1	18	2.4	10.4	57	0.7	7.7
3.1	8.8	51.4	19	0.7	2.5	58	3.1	12.3
3.2	2.6	13.2	20	0.5	1.8	58.1	5.2	20.5
3.3	10.9	62.1	21	0.4	1.4	59	1.1	4.7
3.4	11.1	64.4	22	0.6	4.4	60	1.4	7.4
3.5	11.2	64.7	22.1	14.6	69.5	61	3.7	15.3
3.6	3.5	12.7	23	1.1	3.9	62	0.2	0.7
3.7	13.9	75.0	24	2.5	9.5	63	3.6	13.5
4	2.5	9.2	25	14.1	66.0	64	3.3	12.6
4.1	26.6	110.8	26	0.5	1.7	65	2.1	7.9
4.2	6.0	22.4	27	0.7	3.7	66	0.2	6.1
4.3	31.2	128.6	28	0.5	1.9	67	0.4	1.5
4.4	32.6	135.7	29	0.6	2.8	68	0.4	1.6
4.5	47.3	193.4	30	2.7	10.4	69	2.5	9.3
4.6	47.5	199.4	31	0.3	1.3	70	14.2	54.4
4.7	8.8	19.9	31.1	4.6	6.2	71	2.3	7.5
4.8	51.5	210.0	32	1.9	9.3	72	4.7	37.0
5	1.8	10.0	33	2.2	7.9	73	2.3	12.1
5.1	2.4	11.9	34	1.0	3.8	74	1.1	10.1
5.2	4.3	16.9	34.1	1.5	5.9	75	0.9	6.8
5.3	7.1	23.9	34.2	24.9	24.9	76	1.4	5.2
5.4	11.2	44.4	34.3	57.9	57.9	77	2.0	7.6
5.5	14.7	64.1	34.4	59.1	66.9	77.1	2.5	14.2
5.6	7.2	33.5	35	2.4	9.5	78	0.5	4.1
5.7	21.7	93.9	36	1.8	6.6	79	0.6	2.9
5.8	4.3	15.7	36.1	2.8	16.1	80	3.6	19.9
5.9	24.3	103.1	37	1.9	7.2	80.1	27.2	119.3
6	2.5	9.4	37.1	2.0	2.2	80.2	36.6	160.2
6.1	6.7	18.9	38	1.3	10.8	81	0.6	2.4
6.2	7.7	33.7	39	2.7	12.6			
6.3	4.2	41.9						
6.4	11.6	49.6						
6.5	38.8	165.0						
6.6	5.5	27.6						
6.7	43.3	189.5						
6.8	43.8	191.6						
6.9	55.7	238.8						

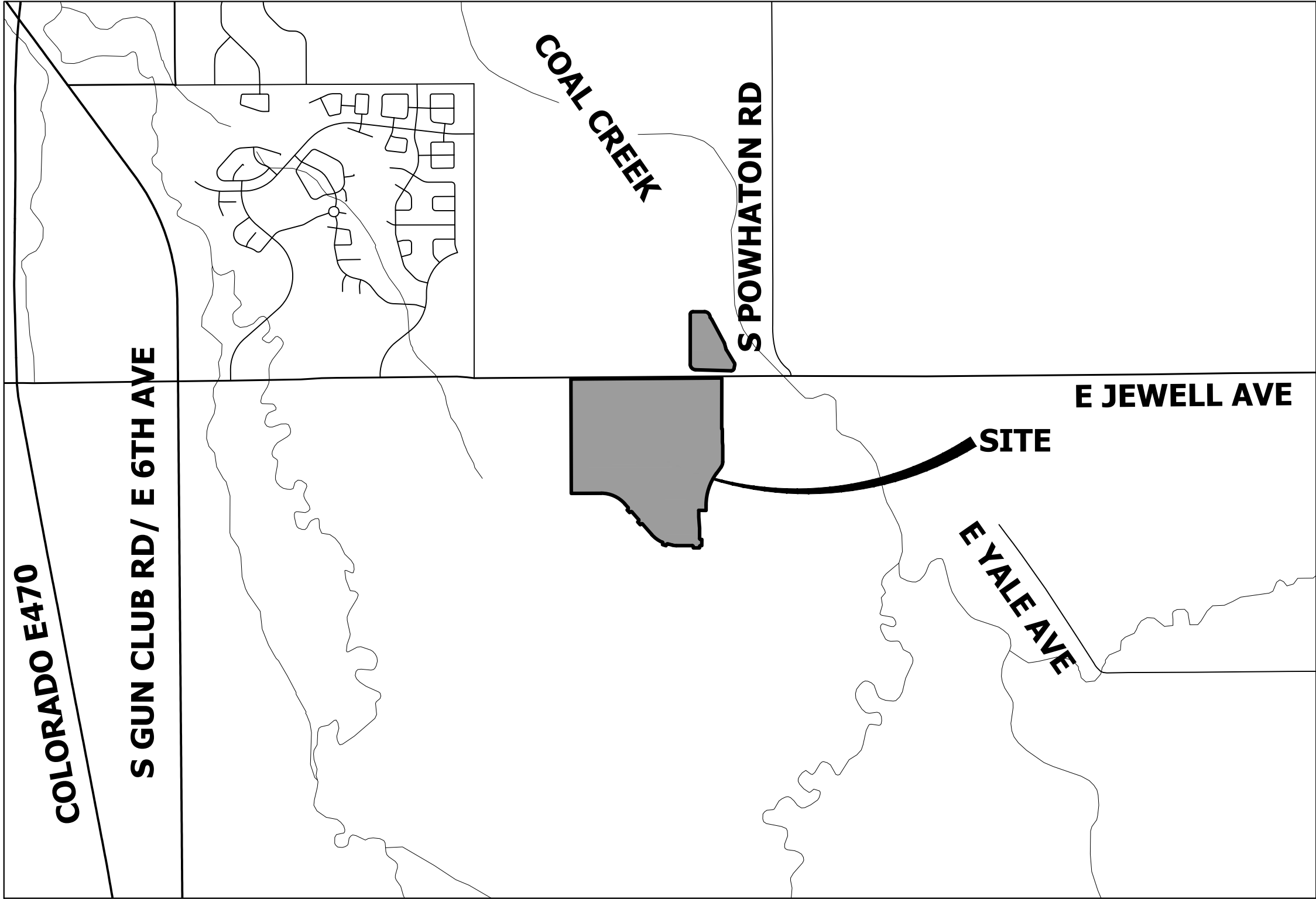
CITY OF AURORA POND CERTIFICATION NOTE:

THE DEVELOPER SHALL HAVE A LICENSED PROFESSIONAL ENGINEER CERTIFY EACH STORM WATER DETENTION POND AND/OR WATER QUALITY BMP IS BUILT ACCORDING TO THE APPROVED PLANS AND SPECIFICATIONS AND THE REQUIRED DETENTION VOLUME, INCLUDING THE WQCV WHEN USED, IS MET. THE CERTIFICATION SHALL ALSO VERIFY ALL PERTINENT DIMENSIONS, ELEVATIONS, REQUIRED OUTLET ORIFICE PLATES FOR DETENTION AND WQCV AND OTHER PERMANENT BMPS REQUIREMENTS ARE INSTALLED PER THE APPROVED PLANS AND SPECIFICATIONS, AND SHALL SHOW THE AS-BUILT DESIGN VOLUMES (WQCV, 10-YEAR, 100-YEAR, EURV) AND OTHER PERTINENT DIMENSIONS, ELEVATIONS AND CAPACITY REQUIREMENTS ASSOCIATED WITH THE WQ BMP USED. THE CERTIFICATION SHALL BE PROVIDED TO THE CITY OF AURORA ENGINEERING CONTROL SECTION PRINCIPAL ENGINEER. AN APPROVED POND CERTIFICATE SHALL BE REQUIRED PRIOR TO THE RETURN OF ANY FISCAL SECURITY DEPOSIT (AS WELL AS SATISFYING OTHER CONDITIONS OF THE STORM WATER PERMIT) FOR SITES THAT DO NOT REQUIRE A CERTIFICATE OF OCCUPANCY. EXAMPLES OF THESE SITES INCLUDE BUT ARE NOT LIMITED TO: SITES WITHOUT VERTICAL CONSTRUCTION, OIL AND GAS WELL PADS, OUTDOOR STORAGE, AND TOW YARDS. AN APPROVED POND CERTIFICATE SHALL BE REQUIRED PRIOR TO COMMENCEMENT OF BUSINESS OPERATIONS. IN NO CASE SHALL A CERTIFICATE OF OCCUPANCY OR TEMPORARY CERTIFICATE OF OCCUPANCY BE ISSUED WITHOUT AN APPROVED POND CERTIFICATE.

FOUNDRY FILING NO. 1

ND LOCATED IN SECTION 29, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN.

CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO



VICINITY MAP

1"=2000'

SHEET INDEX

- COVER
- SHEET MAP
- 16 PRELIMINARY DRAINAGE PLAN
- 17 EMERGENCY OVERFLOW SECTION
- 18 SWALE CROSS-SECTIONS
- 19-22 FOXTAIL RUN PLAN AND PROFILE
- 22 TOTAL SHEETS

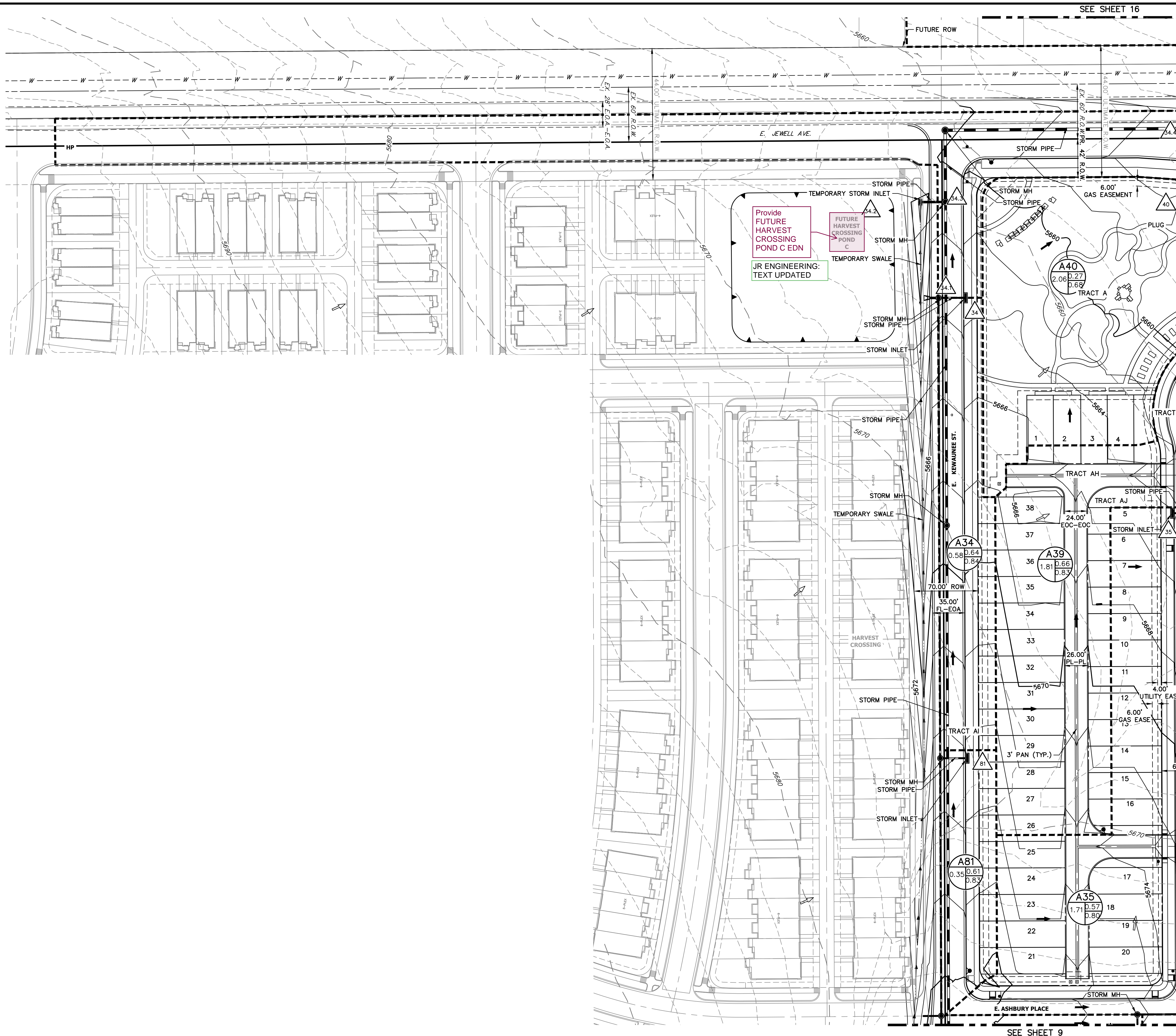
The next submittal is your last review before additional fees are charged. There are still significant comments remaining.

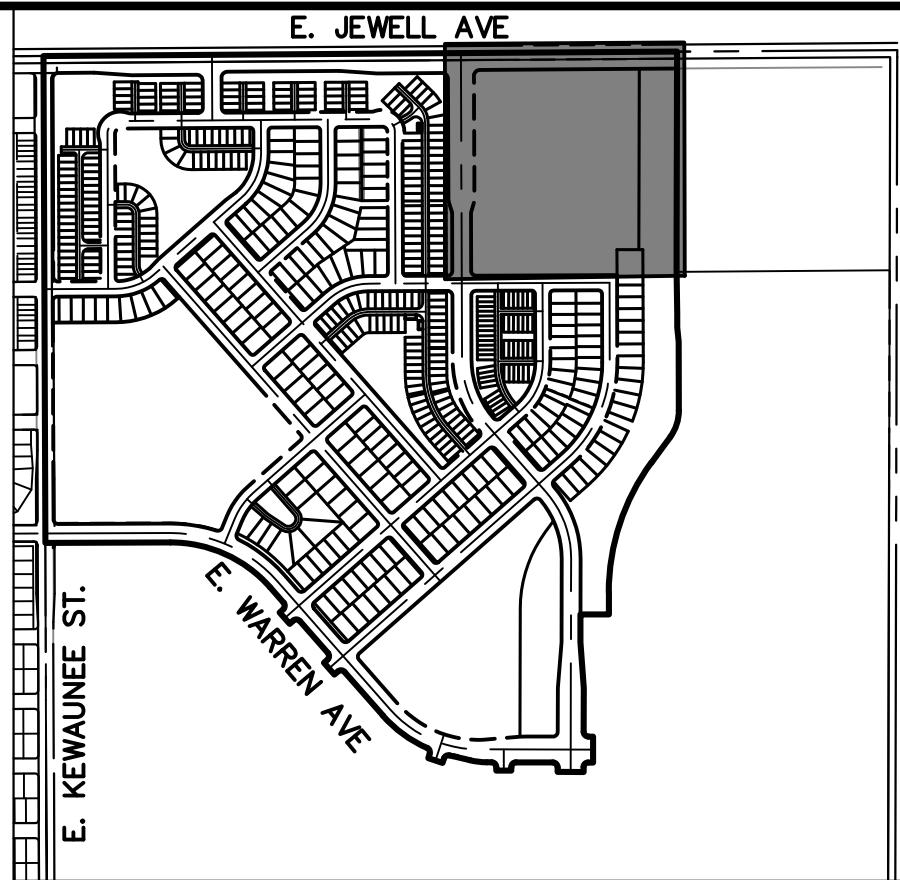
Please submit a locked and unlocked drainage plan and report and if all issues have been resolved the City will approve the submittal. Please note the process in Amanda does not represent signature set requested, and preliminary drainage reports will not be permitted at this time, until the MDR is at signature set requested or approved.

JR ENGINEERING:
NOTED

Advisory Comment:

The Review Fees paid at the





SCALE: 1"=400'

- | | |
|--|---|
| | EXISTING STORM SEWER |
| | PROPOSED STORM SEWER |
| | PROPOSED MAJOR CONTOUR |
| | PROPOSED MINOR CONTOUR |
| | EXISTING MAJOR CONTOUR |
| | EXISTING MINOR CONTOUR |
| | DRAINAGE BASIN |
| | DRAINAGE OFFSITE BASIN |
| | <p>A = BASIN DESIGNATION
 B = AREA IN ACRES
 C = 2-YR RUNOFF COEFFICIENT
 D = 100-YR RUNOFF COEFFICIENT</p> |
| | DESIGN POINT |
| | HIGH POINT |
| | LOW POINT |
| | DRAINAGE ARROW |
| | EXISTING DRAINAGE ARROW |
| | EMERGENCY OVERFLOW PATH |
| | PROPOSED DRAINAGE SWALE |
| | EXISTING 100YR FLOODPLAIN |
| | EXISTING FLOODWAY |



CITY OF AURORA BENCHMARK #4S6529NW001 BEING 3" BRASS CAP ATOP A 30" LONG STEEL PIPE IN CONC. ON SOUTH SIDE OF E. JEWELL AVE. BEING 1 FT. N. OF S. R/W FE. LINE & 4 FT. E. OF INTERS. OF SD. R/W FE. W/ N-S FE. RUNNING SOUTH. IN VICINITY OF 1/4 COR. TO SECS. 20/29, T4S, R65W. EL. NAVD88 = 5,643'

THE NORTH LINE OF THE NORTHWEST $\frac{1}{4}$ OF SECTION 29, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6TH P.M., BEING MONUMENTED BY A 2-1/2" ALUMINUM CAP STAMPED "PLS 13155" AT THE NORTHWEST CORNER, AND BY A 3-1/4" ALUMINUM CAP STAMPED "LS 15244" AT THE NORTH QUARTER CORNER, BEARING N89°35'54"E AS REFERENCED TO COLORADO STATE PLANE CENTRAL ZONE.

CITY OF AURORA PLANNING REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH CITY OF AURORA DESIGN CRITERIA AND THE CITY CODE. THE CITY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DESIGN CONDITIONS, AND CONDITIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF AURORA, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

ALL PROPOSED STORM INFRASTRUCTURE WITHIN THE RIGHT-OF-WAY SHALL BE PUBLIC AND SHALL BE AS MAINTAINED BY THE AURORA.

ALL PROPOSED DETENTION PONDS, SWALES, AND AREA INLETS SHALL BE PRIVATE AND WILL BE MAINTAINED BY THE HOA EXCEPT REGIONAL DETENTION FACILITY.

ALL STORM INFRASTRUCTURE IS SIZED FOR THE 100-YEAR STORM EVENT.

PIPE CLASS SHALL BE CLASS III.

PIPE BEDDING MATERIAL SHALL BE CLASS B.

ALL STORM SEWER LATERALS ARE 18" RCP UNLESS OTHERWISE NOTED.

FOR ALL SUMPS, INLETS AND EMERGENCY OVERFLOW LOCATIONS, FINISHED FLOOR ELEVATION SHALL BE AS SHOWN MINUS 6" ABOVE THE EMERGENCY OVERFLOW ELEVATIONS AND GARAGES SHALL NOT BE INUNDED.

PDR MUST BE APPROVED PRIOR TO CIVIL PLAN APPROVAL.

NO WORK IS ALLOWED IN THE FLOODPLAIN WITHOUT A FLOODPLAIN DEVELOPMENT PERMIT.

NO WORK IS ALLOWED WITHIN THE FLOODWAY WITHOUT A CLOMR OR A FLOODWAY DEVELOPMENT PERMIT.

NO RISE ANALYSIS INCLUDED WITHIN THE FLOODPLAIN DEVELOPMENT PERMIT.

ENSURE THE PROVISIONS OF CRS 37-92-606, AS AMENDED BY SENATE BILL 212, REGARDING NOTIFICATION OF DOWNSTREAM WATER RIGHTS HOLDERS ARE UPHELD.

PREPARED FOR

CENTURY COMMUNITIES, LLC
2000 S COLORADO BLVD
TOWER 1, STE 1500
DENVER, CO 80222
ATT: JERRY RICHMOND
(303) 268-8364

J·R ENGINEERING
A Westrian Company



Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jirengineering.com

BY	DATE
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No.	REVISION
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FOUNDRY FILING NO. 1

PRELIMINARY DRAINAGE PLAN

SHEET 6 OF 22

JOB NO. 16146.00



LEGEND:

-
- 50 25 0 50 100
- ORIGINAL SCALE: 1" = 50'

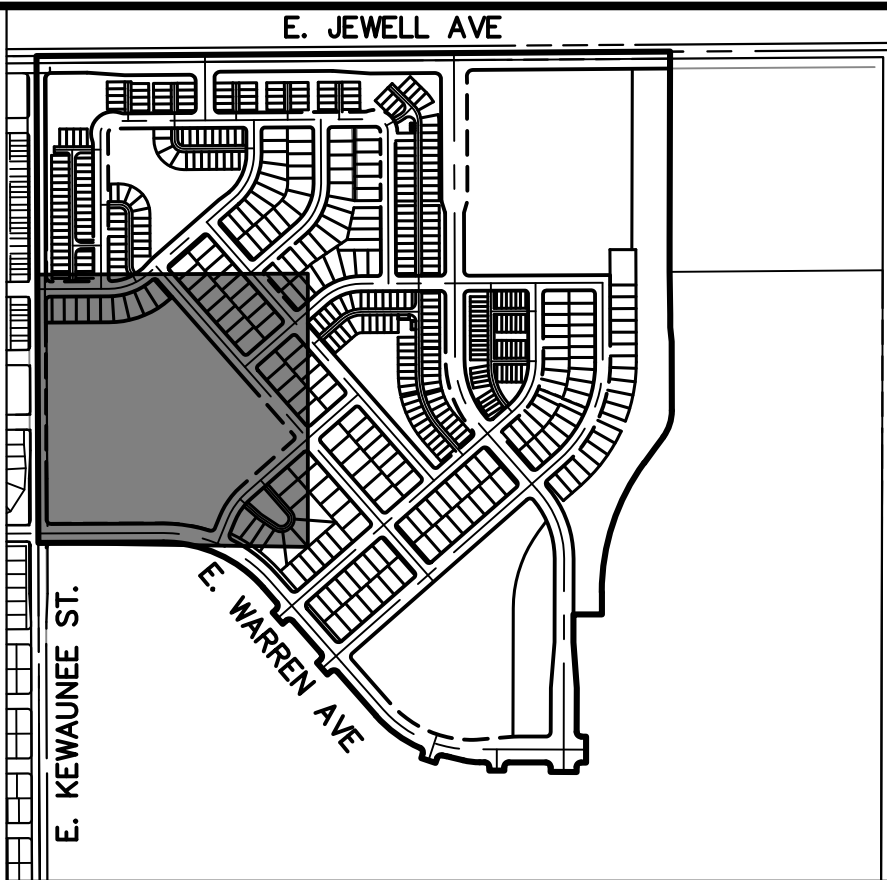
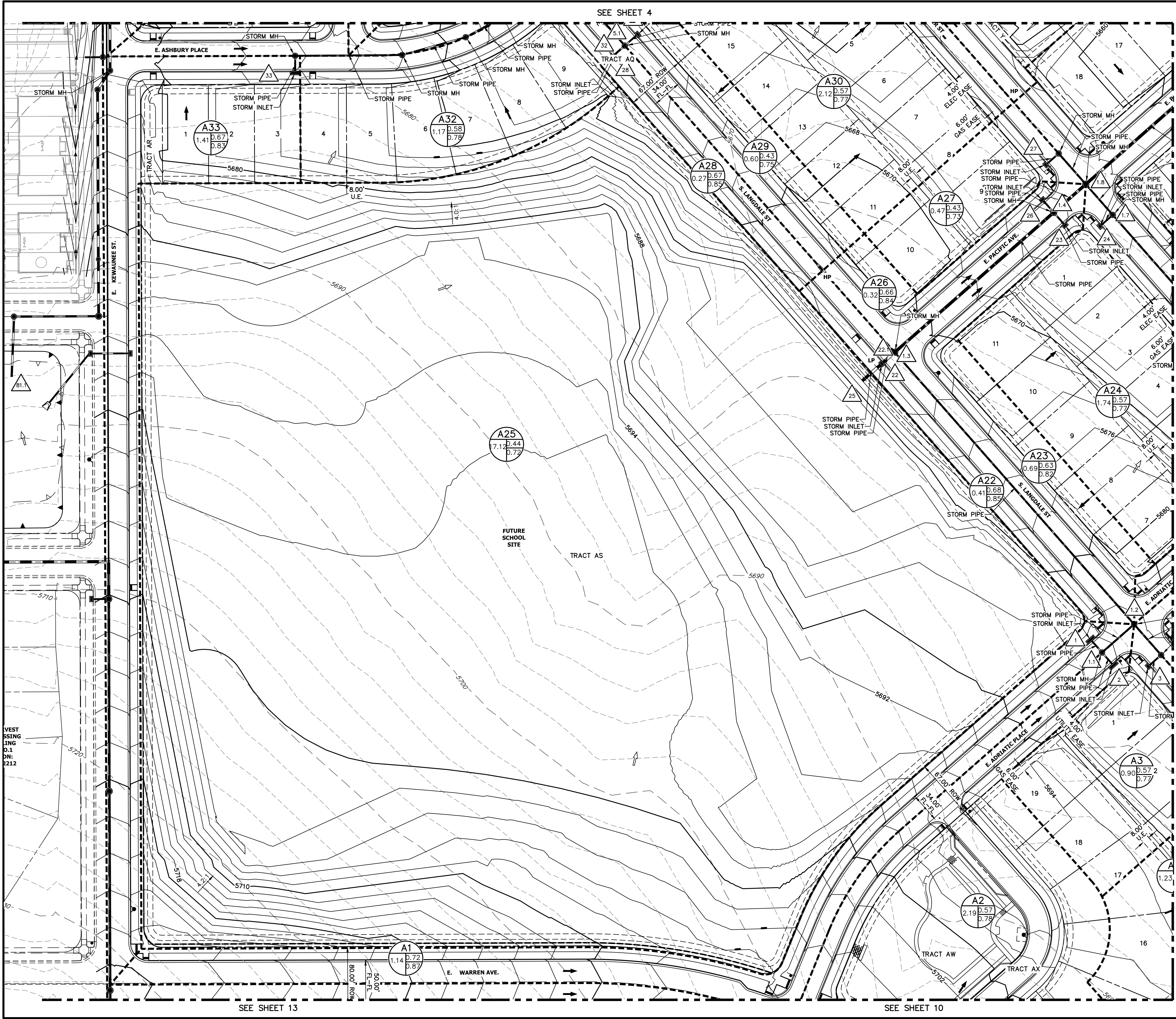
CITY OF AURORA BENCHMARK #4S6529NW001 BEING 3" BRASS CAP ATOP A 30" LONG STEEL PIPE IN CONC. ON SOUTH SIDE OF E. JEWELL AVE. BEING 1 FT. N. OF S. R/W FE. LINE & 4 FT. E. OF INTERS. OF SD. R/W FE. W/ N-S FE. RUNNING SOUTH. IN VICINITY OF 1/4 COR. TO SECS. 20/29, T4S, R65W. EL. NAVD88 = 5,643'

THE NORTH LINE OF THE NORTHWEST $\frac{1}{4}$ OF SECTION 29, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6TH P.M., BEING MONUMENTED BY A 2-1/2" ALUMINUM CAP STAMPED "PLS 13155" AT THE NORTHWEST CORNER, AND BY A 3-1/4" ALUMINUM CAP STAMPED "LS 15244" AT THE NORTH QUARTER CORNER, BEARING N89°35'54"E AS REFERENCED TO COLORADO STATE PLANE CENTRAL ZONE.

CITY OF AURORA PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH CITY OF AURORA DESIGN CRITERIA AND THE CITY CODE. THE CITY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, OF DIMENSIONS AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF AURORA, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR ANY INCOMPLETE DESIGN AND/OR ACCURACY OF THIS DOCUMENT.

- ALL PROPOSED STORM INFRASTRUCTURE WITHIN THE RIGHT-OF-WAY SHALL BE PUBLIC AND WILL BE MAINTAINED BY THE CITY OF AURORA.
- ALL PROPOSED DETENTION PONDS, SWALES, AND AREA INLETS SHALL BE MAINTAINED AND OPERATED BY THE CITY OF AURORA.
- ALL STORM INFRASTRUCTURE TO BE MAINTAINED BY THE HOA EXCEPT REGIONAL DETENTION FACILITY.
- ALL STORM INFRASTRUCTURE IS SIZED FOR THE 100-YEAR STORM EVENT. PIPE CLASS SHALL BE CLASS III.
- PIPE BEDDING MATERIAL SHALL BE CLASS B.
- ALL STORM SEWER LATERALS ARE 18" RCP UNLESS OTHERWISE NOTED.
- FOR ALL SUMP INLETS AND EMERGENCY OVERFLOW LOCATIONS, FINISHED FLOOR ELEVATIONS SHALL BE 1" MINIMUM ABOVE THE EMERGENCY OVERFLOW ELEVATIONS AND GARAGES SHALL NOT BE INUNDATED.
- FOR ALL STORM SEWER LATERALS, CIVILIAN APPROVAL IS REQUIRED.
- 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 WORK ANALYSIS INCLUDED WITHIN THE FLOODPLAIN DEVELOPMENT PERMIT.
- ENSURE THE PROVISIONS OF CRS 37-92-602, AS AMENDED BY SENATE BILL 15-212, REGARDING NOTIFICATION OF DOWNSTREAM WATER RIGHTS HOLDERS ARE UPHELD.

FOUNDRY FILING NO. 1		PRELIMINARY DRAINAGE PLAN	
SHEET	8	OF	22
JOB NO.	16146.00		



KEY MAP
SCALE: 1"=400'

LEGEND:

- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- 6100 PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 6100 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- DRAINAGE BASIN
- DRAINAGE OFFSITE BASIN
- A = BASIN DESIGNATION
- B = AREA IN ACRES
- C = 2-YR RUNOFF COEFFICIENT
- D = 100-YR RUNOFF COEFFICIENT
- DESIGN POINT
- HP HIGH POINT
- LP LOW POINT
- DRAINAGE ARROW
- EXISTING DRAINAGE ARROW
- EMERGENCY OVERFLOW PATH
- PROPOSED DRAINAGE SWALE
- EXISTING 100YR FLOODPLAIN
- EXISTING FLOODWAY



Know what's below.
Call before you dig.

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

BENCHMARK:

CITY OF AURORA BENCHMARK #4S6529NW001 BEING 3" BRASS CAP ATOP A 30" LONG STEEL PIPE IN CONC. ON SOUTH SIDE OF E. JEWELL AVE. BEING 1 FT. N. OF S. R/W FE. LINE & 4 FT. E. OF INTERS. OF SD. R/W FE. W/ N-S FE. RUNNING SOUTH. IN VICINITY OF 1/4 COR. TO SECS. 20/29, T4S, R65W, EL. NAVD88 = 5,643'

BASIS OF BEARINGS:

THE NORTH LINE OF THE NORTHWEST 1/4 OF SECTION 29, TOWNSHIP 4 SOUTH, RANGE 65 WEST OF THE 6TH P.M., BEING MONUMENTED BY A 2-1/2" ALUMINUM CAP STAMPED "PLS 13155" AT THE NORTHWEST CORNER, AND BY A 3-1/4" ALUMINUM CAP STAMPED "LS 15244" AT THE NORTH QUARTER CORNER, BEARING N89°35'54"E AS REFERENCED TO COLORADO STATE PLANE CENTRAL ZONE.

NOTES:

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- ALL PROPOSED STORM INFRASTRUCTURE WITHIN THE RIGHT-OF-WAY SHALL BE PUBLIC AND WILL BE MAINTAINED BY THE CITY OF AURORA.
- ALL PROPOSED DETENTION PONDS, SWALES, AND AREA INLETS SHALL BE PRIVATE AND WILL BE MAINTAINED BY THE HOA EXCEPT REGIONAL DETENTION FACILITY.
- ALL STORM INFRASTRUCTURE IS SIZED FOR THE 100-YEAR STORM EVENT. PIPE CLASS SHALL BE CLASS III.
- PIPE BEDDING MATERIAL SHALL BE CLASS B.
- ALL STORM SEWER LATERALS ARE 18" RCP UNLESS OTHERWISE NOTED.
- FOR ALL SUMP INLETS AND EMERGENCY OVERFLOW LOCATIONS, FINISHED FLOOR ELEVATIONS SHALL BE 1' MINIMUM ABOVE THE EMERGENCY OVERFLOW ELEVATIONS AND GARAGES SHALL NOT BE INUNDATED.
- PDR MUST BE APPROVED PRIOR TO CIVIL PLAN APPROVAL.
- 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.
- ENSURE THE PROVISIONS OF CRS 37-92-602, AS AMENDED BY SENATE BILL 15-212, REGARDING NOTIFICATION OF DOWNSTREAM WATER RIGHTS HOLDERS ARE UPHOLD.

PREPARED FOR
CENTURY COMMUNITIES, LLC
2000 S COLORADO BLVD
TOWER 1, STE 1500
DENVER, CO 80222
ATT: JERRY RICHMOND
(303) 268-8364

J.R. ENGINEERING
A Western Company

Central 303-740-9888 • Colorado Springs 719-583-2583
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

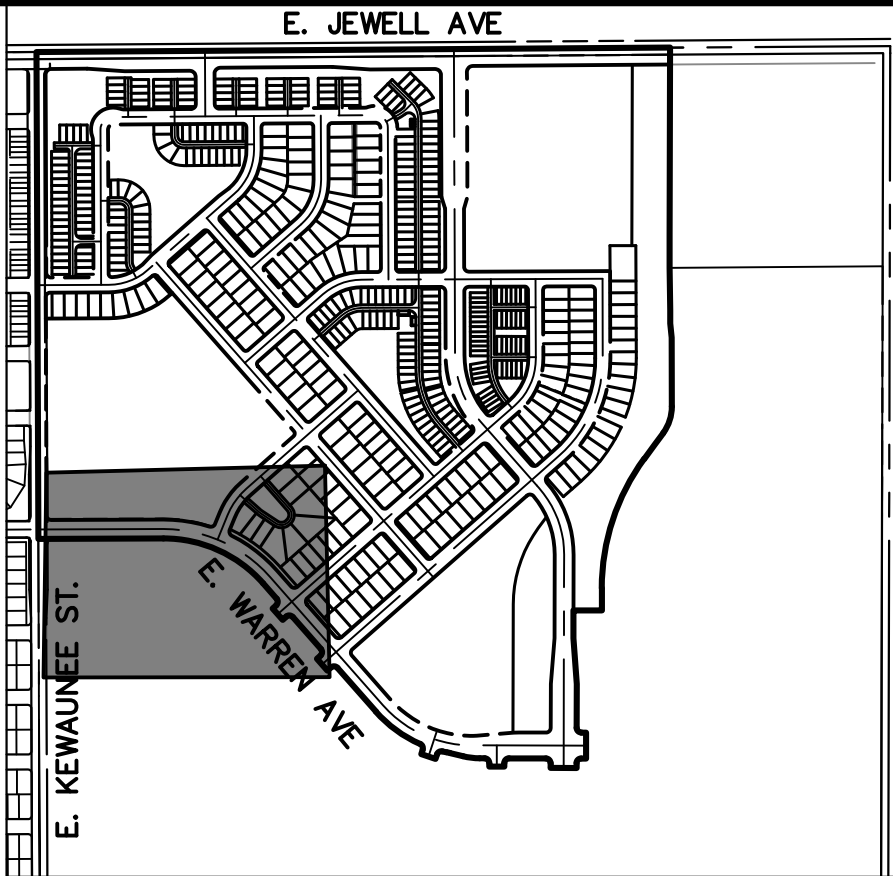
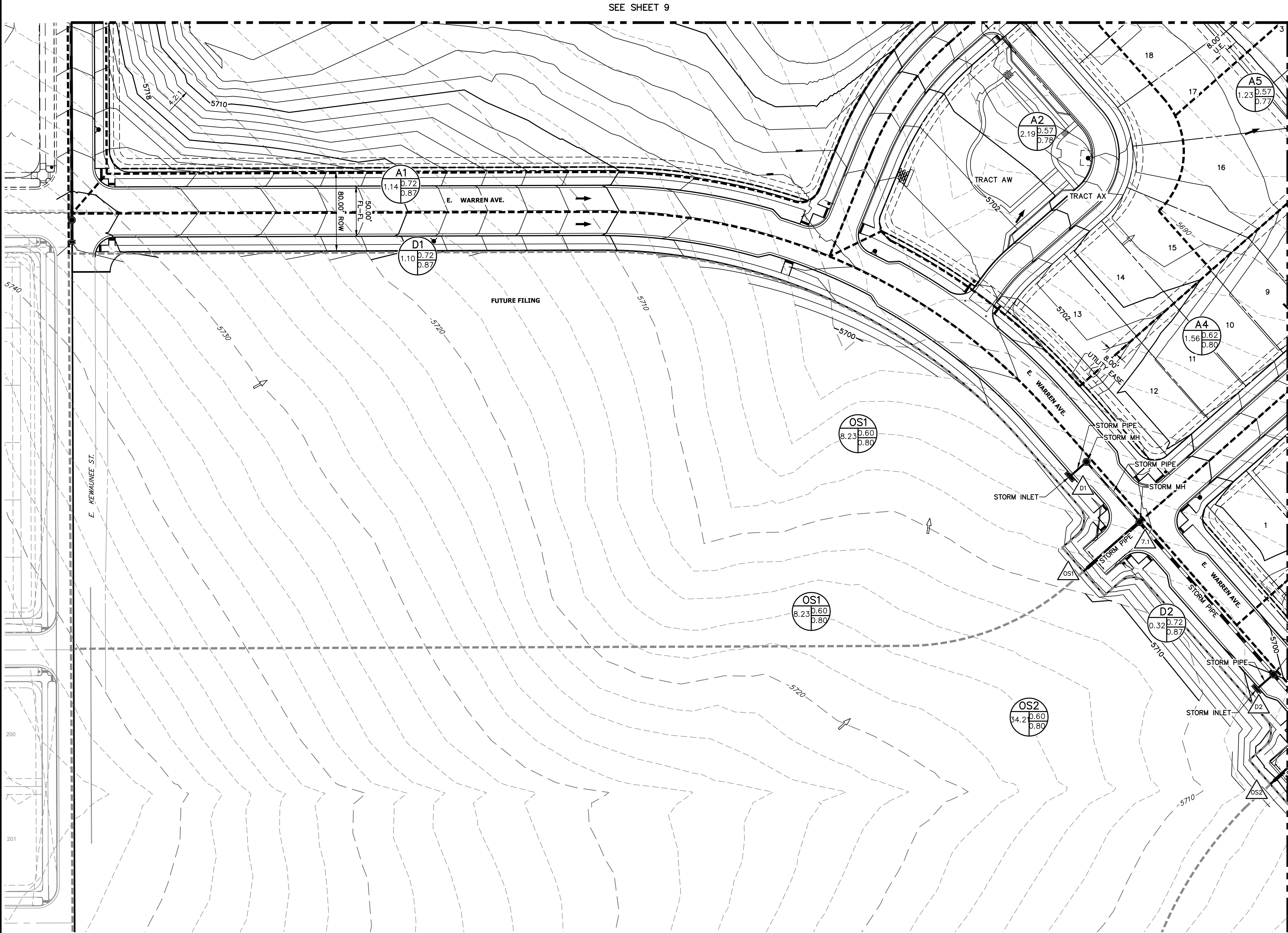
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=50'	N/A	9/14/23	DIG	RAB	

FOUNDRY FILING NO. 1

PRELIMINARY DRAINAGE PLAN

SHEET 9 OF 22

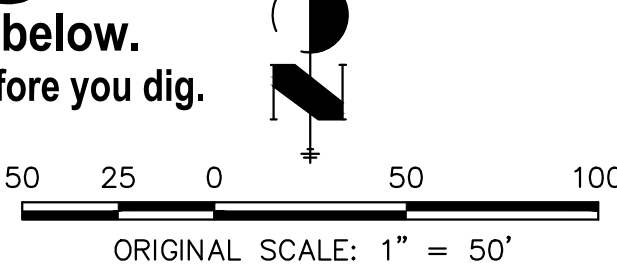
JOB NO. 16146.00



KEY MAP
SCALE: 1"=400'

LEGEND:

- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- DRAINAGE BASIN
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- EXISTING DRAINAGE ARROW
- EMERGENCY OVERFLOW PATH
- PROPOSED DRAINAGE SWALE
- EXISTING 100YR FLOODPLAIN
- EXISTING FLOODWAY



BENCHMARK:

CITY OF AURORA BENCHMARK #456529NW001 BEING 3" BRASS CAP ATOP A 30" LONG STEEL PIPE IN CONC. ON SOUTH SIDE OF E. JEWELL AVE. BEING 1 FT. N. OF S. R/W FE. LINE & 4 FT. E. OF INTERS. OF SD. R/W FE. W/ N-S FE. RUNNING SOUTH, IN VICINITY OF 1/4 COR. TO SECS. 20/29, T4S, R65W. EL. NAVD88 = 5,643'

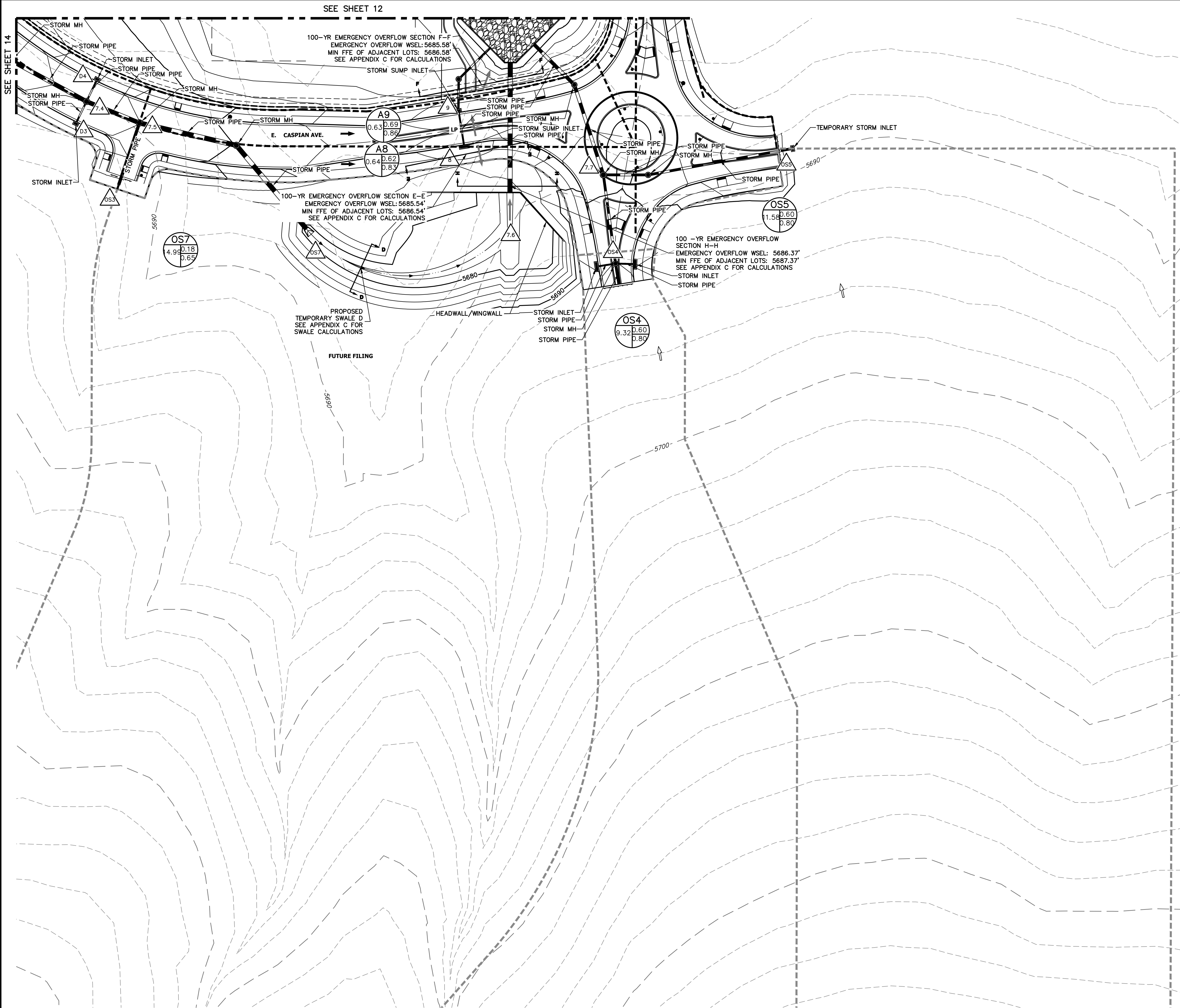
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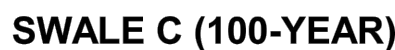
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- NO WORK IS ALLOWED WITHIN THE FLOODWAY WITHOUT A CLOMR OR A NO RISE ANALYSIS INCLUDED WITHIN THE FLOODPLAIN DEVELOPMENT PERMIT.
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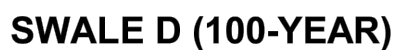
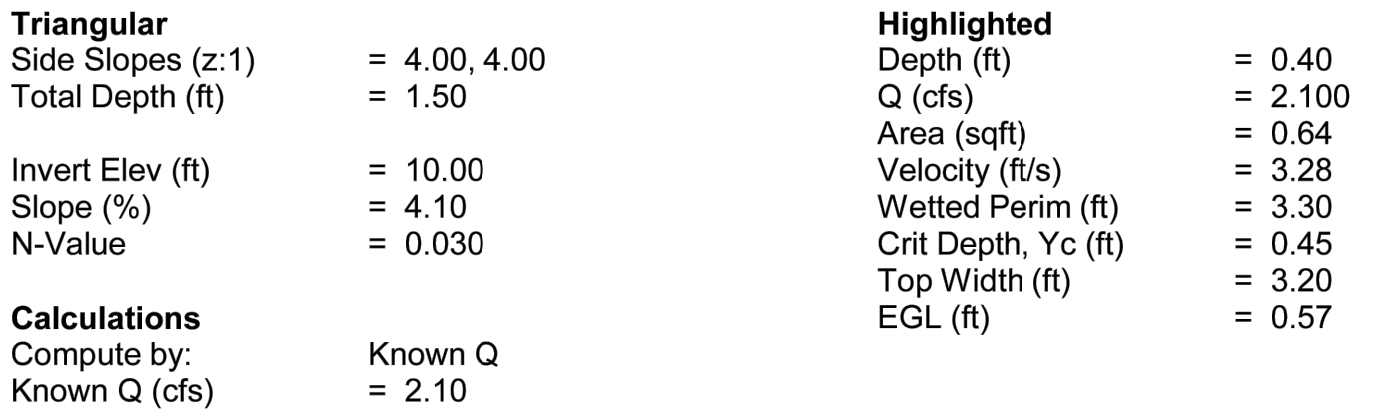
PREPARED FOR CENTURY COMMUNITIES, LLC 2000 S COLORADO BLVD TOWER 1, STE 1500 DENVER, CO 80222 ATT: JERRY RICHMOND (303) 268-8364		UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.	
J.R. ENGINEERING A Western Company		BY DATE	
BY DATE		REVISION	
H-SCALE 1"=50'		V-SCALE N/A	
DATE 9/14/23		DIG	
DESIGNED BY		RAB	
DRAWN BY		RAB	
CHECKED BY			
FOUNDRY FILING NO. 1		SHEET 13 OF 22	
PRELIMINARY DRAINAGE PLAN		JOB NO. 16146.00	



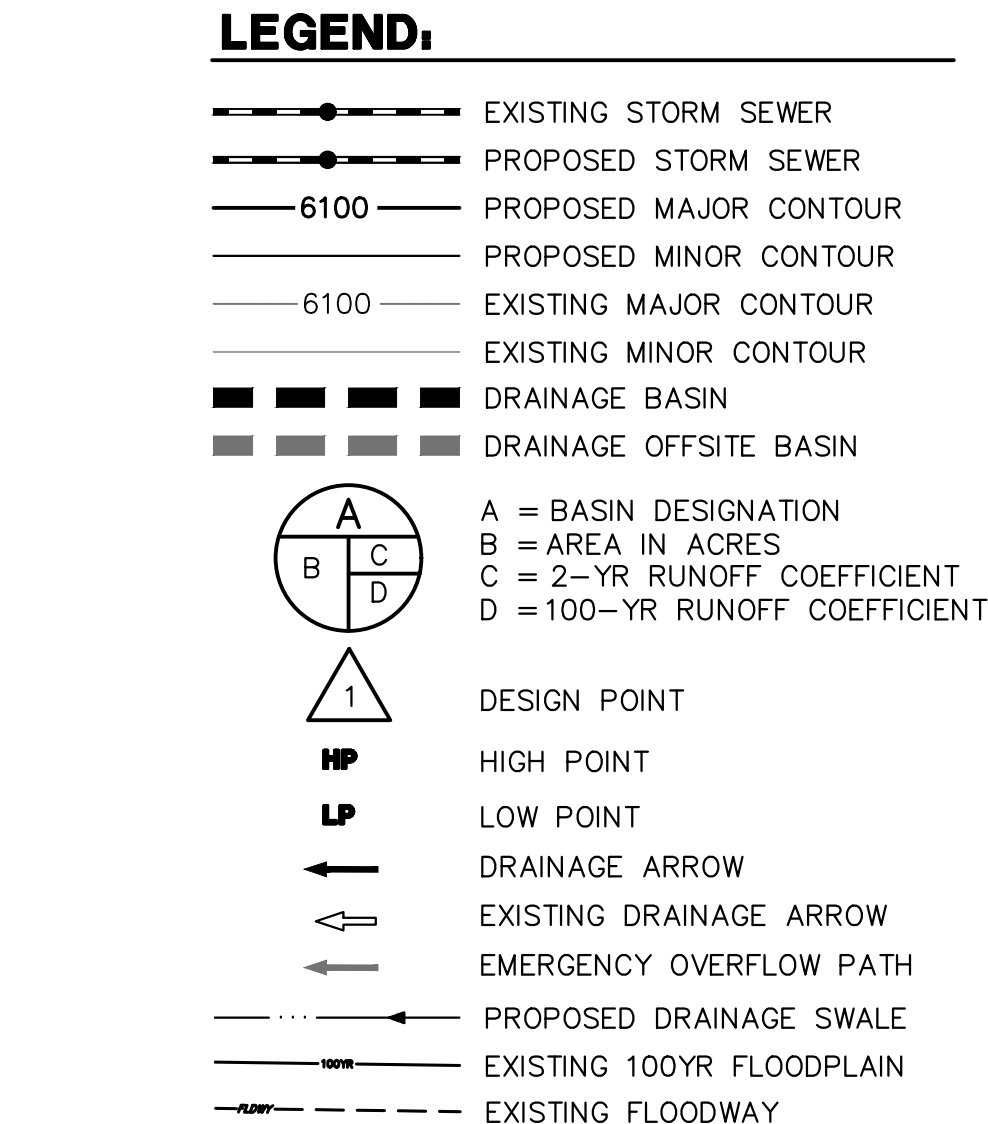
Triangular		Highlighted	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 0.44
Total Depth (ft)	= 1.50	Q (cfs)	= 2.100
		Area (sqft)	= 0.77
Invert Elev (ft)	= 10.00	Velocity (ft/s)	= 2.71
Slope (%)	= 2.60	Wetted Perim (ft)	= 3.63
N-Value	= 0.030	Crit Depth, Yc (ft)	= 0.45
		Top Width (ft)	= 3.52
		EGL (ft)	= 0.55
Calculations			
Compute by:	Known Q		
Known Q (cfs)	= 2.10		



Triangular		Highlighted	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 0.26
Total Depth (ft)	= 1.50	Q (cfs)	= 4.900
Invert Elev (ft)	= 10.00	Area (sqft)	= 0.27
Slope (%)	= 2.50	Velocity (ft/s)	= 18.12
N-Value	= 0.003	Wetted Perim (ft)	= 2.144
		Crit Depth, Yc (ft)	= 0.63
		Top Width (ft)	= 2.08
		EGL (ft)	= 5.37
Calculations			
Compute by:	Known Q		
Known Q (cfs)	= 4.90		



Triangular		Highlighted	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 3.11
Total Depth (ft)	= 5.00	Q (cfs)	= 251.10
		Area (sqft)	= 38.69
Invert Elev (ft)	= 10.00	Velocity (ft/s)	= 6.49
Slope (%)	= 1.00	Wetted Perim (ft)	= 25.65
N-Value	= 0.030	Crit Depth, Yc (ft)	= 3.01
		Top Width (ft)	= 24.88
Calculations		EGL (ft)	= 3.76
Compute by:	Known Q		
Known Q (cfs)	= 251.10		



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 - NO WORK IS ALLOWED WITHIN THE FLOODWAY WITHOUT A CLOMR OR A PERMIT.
 - NO RISE ANALYSIS INCLUDED WITHIN THE FLOODPLAIN DEVELOPMENT PERMIT.
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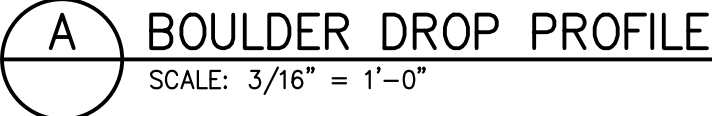
PREPARED FOR
CENTURY COMMUNITIES, LLC
2000 S COLORADO BLVD
TOWER 1, STE 1500
DENVER, CO 80222
ATT: JERRY RICHMOND
(303) 268-8364

J·R ENGINEERING
A Westrian Company

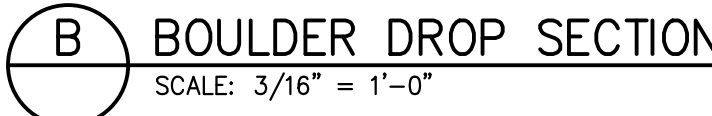


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FOUNDRY FILING NO. 1	H-SCALE	1"=50'	No.	REVISION	BY	DATE
	V-SCALE	N/A				
	DATE	9/14/23				
	DESIGNED BY	DIG				
SWALE CROSS-SECTIONS	DRAWN BY	RAB				
	CHECKED BY					
SHEET 18 OF 22	JOB NO. 16146.00					



Parameter	Reach 1	Reach 2	Reach 3	Reach 4
Bankfull Flow (cfs)	107	87	74	29
Depth (ft)	1.8	1.6	1.5	1.1
Area of Flow (sq ft)	27.2	23.4	20.5	10.3
Wetted Perimeter (ft)	22.8	21.2	19.9	14.1
Hydraulic Radius (ft)	1.2	1.1	1.0	0.7
Average Velocity (fps)	3.9	3.7	3.6	2.8
Top Width (T) (ft)	22.4	20.8	19.5	13.9
Froude Number	0.6	0.6	0.6	0.6
Critical Depth (ft)	1.4	1.3	1.2	0.8
Critical Velocity (fps)	5.6	5.4	5.2	4.3
Critical Slope (ft/ft)	0.01	0.01	0.014	0.016
Critical Top Width (ft)	19.3	17.8	16.7	11.6
Max Shear Stress (lb/ft ²)	0.55	0.51	0.48	0.34
Avg Shear Stress (lb/ft ²)	0.4	0.3	0.3	0.2
Composite Manning's n	Lotter method	Lotter method	Lotter method	Lotter method
Manning's Roughness	0.030	0.030	0.030	0.030



Provide elevations of adjacent residential FFEs in the cross section

See COA Roadway Manual 2.08.2.12 for elevation certificate requirements

Either remove the WS profile, or mark the profile as "Preliminary, not to be approved with the PDR"

JR ENGINEERING:
REMOVED FROM
PRELIMINARY

Label channel as private

JR ENGINEERING:
NAME UPDATED

SHEET	22	OF	22
JOB NO.	16146.00		
FOUNDRY FILING NO. 1			
FOXTAIL RUN PLAN AND PROFILE			