July 30, 2021

Ben Wade Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, CO 80203

Phone: 303-866-3441 x3238 Email: ben.wade@state.co.us

## RE: WSRF Grant Final Report for Phase 1 of the Chambers Reservoir Rehabilitation Project

Dear Mr. Wade,

Below is the final summary report for Phase 1 of the Chambers Reservoir Rehabilitation Project. Please feel free to contact me with any further questions or needs. Thank you very much for your time and it has been a pleasure working with the CWCB on this project.

Phase 1 of the Chambers Reservoir Rehabilitation Project began in August 2019 with preliminary site permitting, mobilization, reservoir dewatering, and riprap removal. The earthwork within the reservoir which includes the cutting of current slope material, importing of new material to raise the bottom of the reservoir, and final regrading of the reservoir began in September 2019. The amount of needed import material was determined to be 107,000 cubic yards, and the amount of slope material to be cut was 189,000 cubic yards. The material importing and grading tasks represented a large portion of the overall project, accounting for roughly \$1.7M of the overall \$3.1M project costs.

Progress on these grading tasks was hindered by both weather delays in October and November 2019 and an inconsistent supply of acceptable import material. The shortage resulted in a multiple week shutdown until another source was identified. Initially, a nearby development project was going to be the sole source of import material. The amount of acceptable material at this site was overestimated and resulted in a multiple week shutdown while a new source was located. Another nearby project was found with acceptable material in December 2019 and importing was able to recommence.

The material importing and grading tasks were largely completed by May 2020, but the overall project continued well into Fall 2020 due to several miscellaneous tasks such as fence replacement, access road construction, erosion control, and addressing drainage issues around the reservoir. These final wrap-up tasks were delayed into the fall due to the decision to overlap Phase 1 and Phase 2 of the overall project. The contractor for Phase 1, Fiore & Sons Construction, was the successful bidder for the Phase 2 project which was the synthetic liner installation. The tasks mentioned above were delayed until much of Phase 2 was also completed. Final retainage was released for the Phase 1 project in November 2020.

I have enclosed photos taken throughout construction of Phase 1 and Phase 2, final as-builts, Notice of Substantial Completion, and the final pay application for Phase 1 of the project. Again, please do not hesitate to reach out for additional information.



Regards,

Sandor Rebek

Water Resources Engineer

andor Kebek

Arapahoe County Water and Wastewater Authority

Email: <a href="mailto:srebek@acwwa.com">srebek@acwwa.com</a> Phone: 720-260-2887



July 22, 2019



September 5, 2019



December 12, 2019



April 20, 2020



June 11, 2020



August 13, 2020



August 21, 2020



September 15, 2020



October 9, 2020

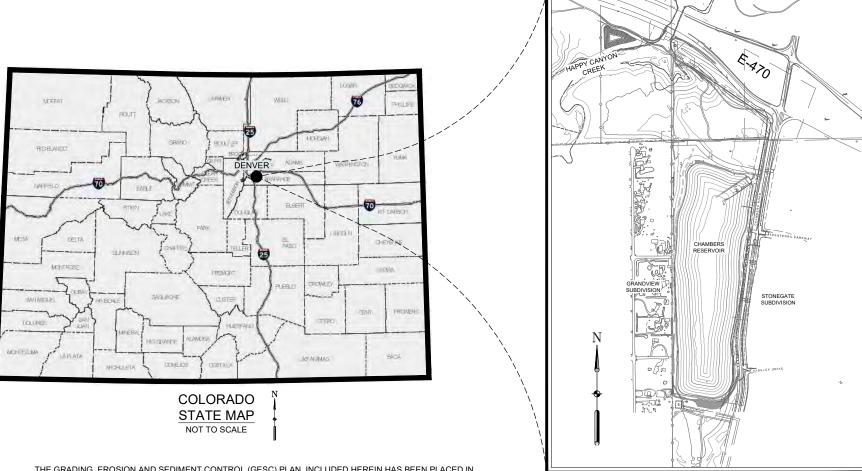


January 15, 2021

## CHAMBERS RESERVOIR REMEDIATION DESIGN (PHASE I)

PREPARED FOR:

ARAPAHOE COUNTY WATER WASTEWATER ASSOCIATION (ACWWA)
ISSUED FOR CONSTRUCTION
JULY, 2019



	LIST OF DRAWINGS
SHEET NO.	SHEET TITLE
	PHASE I: CIVIL
C-01	COVER
C-02	EXISTING CONDITIONS
C-03	EXISTING SOILS MAP
C-04	DEMO PLAN
C-05	LAYDOWN PLAN
C-06	SITE PLAN
C-07	EMBANKMENT GRADING PLAN
C-08	REALIGNED PERIMETER ROAD PROFILES (EAST AND WEST BENCHES)
C-09	EAST EMBANKMENT SECTION POINTS
C-10	WEST EMBANKMENT SECTION POINTS AND ADDITIONAL EMBANKMENT POINTS
C-11	TYPICAL EMBANKMENT GRADING SECTIONS
C-12	FINISHED GRADING PLAN
C-13	DETAILED GRADING SECTIONS AND DETAILS
C-14	FINISHED GRADE POINTS TABLES
C-15	EAST ACCESS PLAN AND PROFILE
C-16	AVENTERRA INTERSECTION ACCESS PLAN
C-17	NORTH CONSTRUCTION ENTRANCE ACCESS PLAN
C-18	STORM DRAIN PLAN AND PROFILE
C-19	DOUGLAS COUNTY STORM DRAIN DETAILS SHEET 1 OF 3
C-20	DOUGLAS COUNTY STORM DRAIN DETAILS SHEET 2 OF 3
C-21	DOUGLAS COUNTY STORM DRAIN DETAILS SHEET 3 OF 3
C-22	DRAINAGE LAYOUT
C-23	DRAINAGE DETAILS
C-24	SECTIONS REFERENCE PLAN
C-25	SECTIONS STA 1+00 TO 4+00 SHEET 1 OF 7
C-26	SECTIONS STA 5+00 TO 7+00 SHEET 2 OF 7
C-27	SECTIONS STA 8+00 TO 10+00 SHEET 3 OF 7
C-28	SECTIONS STA 11+00 TO 13+00 SHEET 4 OF 7
C-29	SECTIONS STA 14+00 TO 16+00 SHEET 5 OF 7
C-30	SECTIONS STA 17+00 TO 19+00 SHEET 6 OF 7
C-31	SECTIONS STA 20+00 TO 22+00 SHEET 7 OF 7
C-32	STORM WATER MANAGEMENT PLAN INITIAL DRAWING
C-33	STORMWATER MANAGEMENT PLAN INTERIM DRAWING
C-34	STORMWATER MANAGEMENT PLAN FINAL DRAWING
C-35	GRAVITY OUTLET DETAILS
GESC	SHEETS 1 TO 14 OF COUNTY GESC PLANS
	PHASE I: STRUCTURAL
S-01	PUMP STATION GENERAL NOTES
S-02	PUMP STATION DETAILS

THE GRADING, EROSION AND SEDIMENT CONTROL (GESC) PLAN INCLUDED HEREIN HAS BEEN PLACED IN THE DOUGLAS COUNTY FILE FOR THIS PROJECT AND APPEARS TO FULFILL APPLICABLE DOUGLAS COUNTY GRADING, EROSION AND SEDIMENT CONTROL CRITERIA, AS AMENDED. ADDITIONAL GRADING, EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED OF THE PERMITTEE(S) DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED GESC PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS GESC PLAN SHALL RUN WITH THE LAND AND BE THE OBLIGATION OF THE PERMITTEE(S) UNTIL SUCH TIME AS THE GESC PLAN IS PROPERLY COMPLETED, MODIFIED OR VOIDED.

THE PROJECT IS LOCATED IN SECTION 8, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN.

BASIS OF BEARINGS: BEARINGS USED IN THE CALCULATIONS OF COORDINATES ARE BASED ON A GRID BEARING OF \$20°40'06"E FROM CONTROL POINT 6902 A FOUND NUMBER 6 REBAR IN MONUMENT BOX AND CONTROL POINT 6915 A FOUND NUMBER 6 REBAR IN MONUMENT BOX. THE SURVEY DATA WAS OBTAINED FROM A GLOBAL POSITIONING SYSTEM (GPS) SURVEY BASED ON NAD-1983(2007) COLORADO CENTRAL ZONE (0502)

ASSISTANT DIRECTOR OF DEVELOPMENT REVIEW

VICINITY MAP

THE GRADING, EROSION AND SEDIMENT CONTROL

(GESC) PLAN INCLUDED HEREIN HAS BEEN
PREPARED UNDER MY DIRECT SUPERVISION IN
ACCORDANCE WITH THE REQUIREMENTS OF THE

la mu

GESC DESIGN ENGINEER CO LICENSE 38982

JULY 18, 2019

GRADING, EROSION, AND SEDIMENT CONTROL (GESC) CRITERIA MANUAL OF DOUGLAS COUNTY, AS AMENDED.

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED BY DOUGLAS COUNTY FOR GRADING

INEERING DIVISION ACCEPTANCE BLOCK



ISSUED FOR CONSTRUCTION

**AECOM** 

PROJE

CHAMBERS RESERVOIR REMEDIATION DESIGN (PHASE I) 9165 S. CHAMBERS ROAD, PARKER, CO 80134

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1	07/15/2019	ISSUED FOR CONSTRUCTION
I/R	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER

60567161

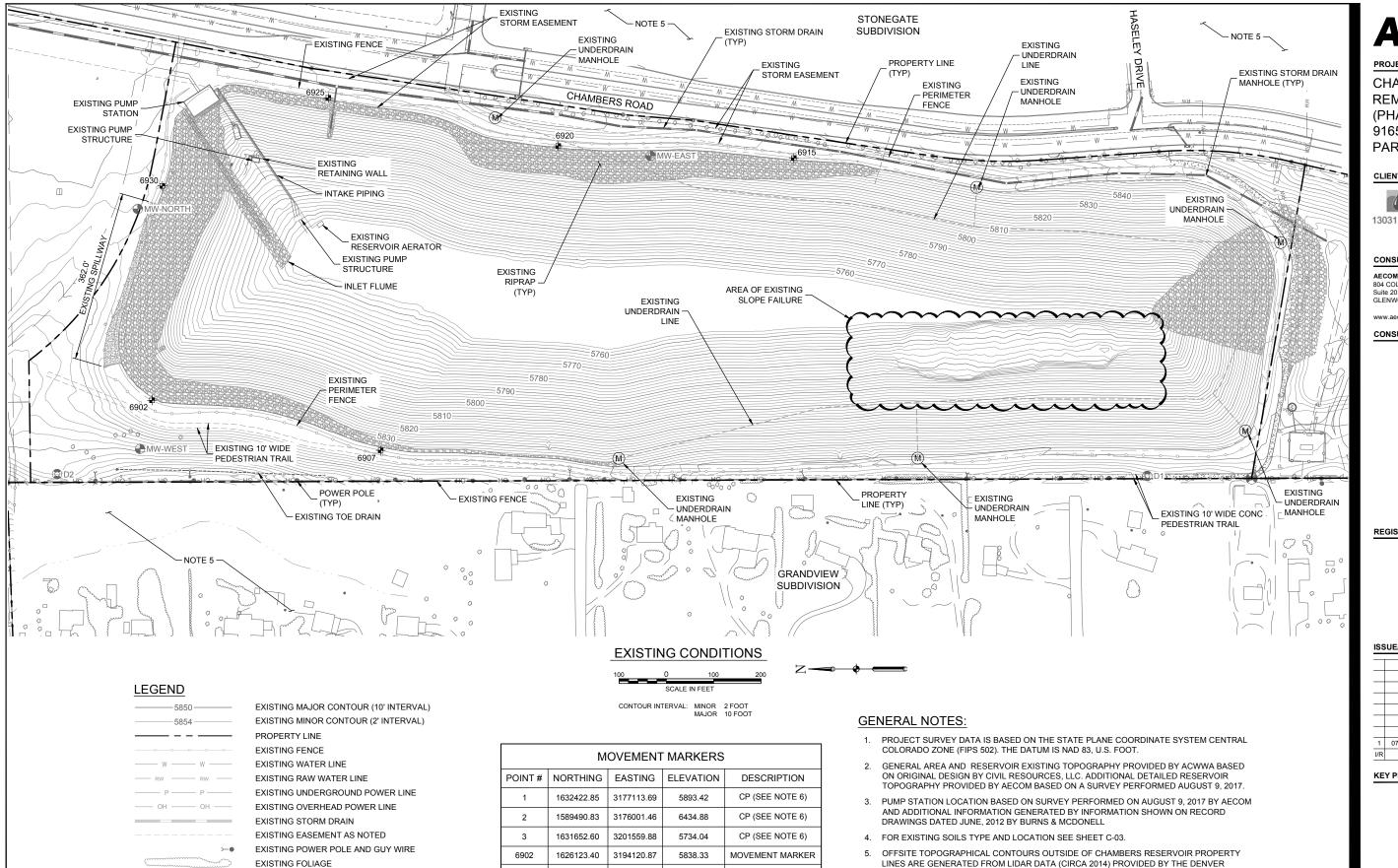
SHEET TITLE

COVER

SHEET NUMBER

C 04

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(or 1-800-922-1987)
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WWW.unc.org



6907

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6920

6925

6930

1625639.73

1624765.98

1625264.38

1625750 38

1626101 38

3194015.00

3194632.93

3194658.74

3194760 44

3194574 06

5838.20

5838.17

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5838 18

5838 00

MOVEMENT MARKER

MOVEMENT MARKER

MOVEMENT MARKER

MOVEMENT MARKER

MOVEMENT MARKER

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**EXISTING CONDITIONS** 

SHEET NUMBER

- LINES ARE GENERATED FROM LIDAR DATA (CIRCA 2014) PROVIDED BY THE DENVER REGIONAL COUNCIL OF GOVERNMENTS (DRCOG). THE DATA WAS NOT VALIDATED BY USGS. THE DATA IS BASED ON UTM ZONE 13 NORTH, NAD 83 (METRIC) AND THE VERTICAL DATUM IS NAVD1988 (GEOID12A, METRIC). THIS TOPO IS FOR REFERENCE ONLY.
- 6. POINTS 1, 2, AND 3 ARE NOT SHOWN ON THE PLAN. THEY ARE OFF SITE CONTROL POINTS.

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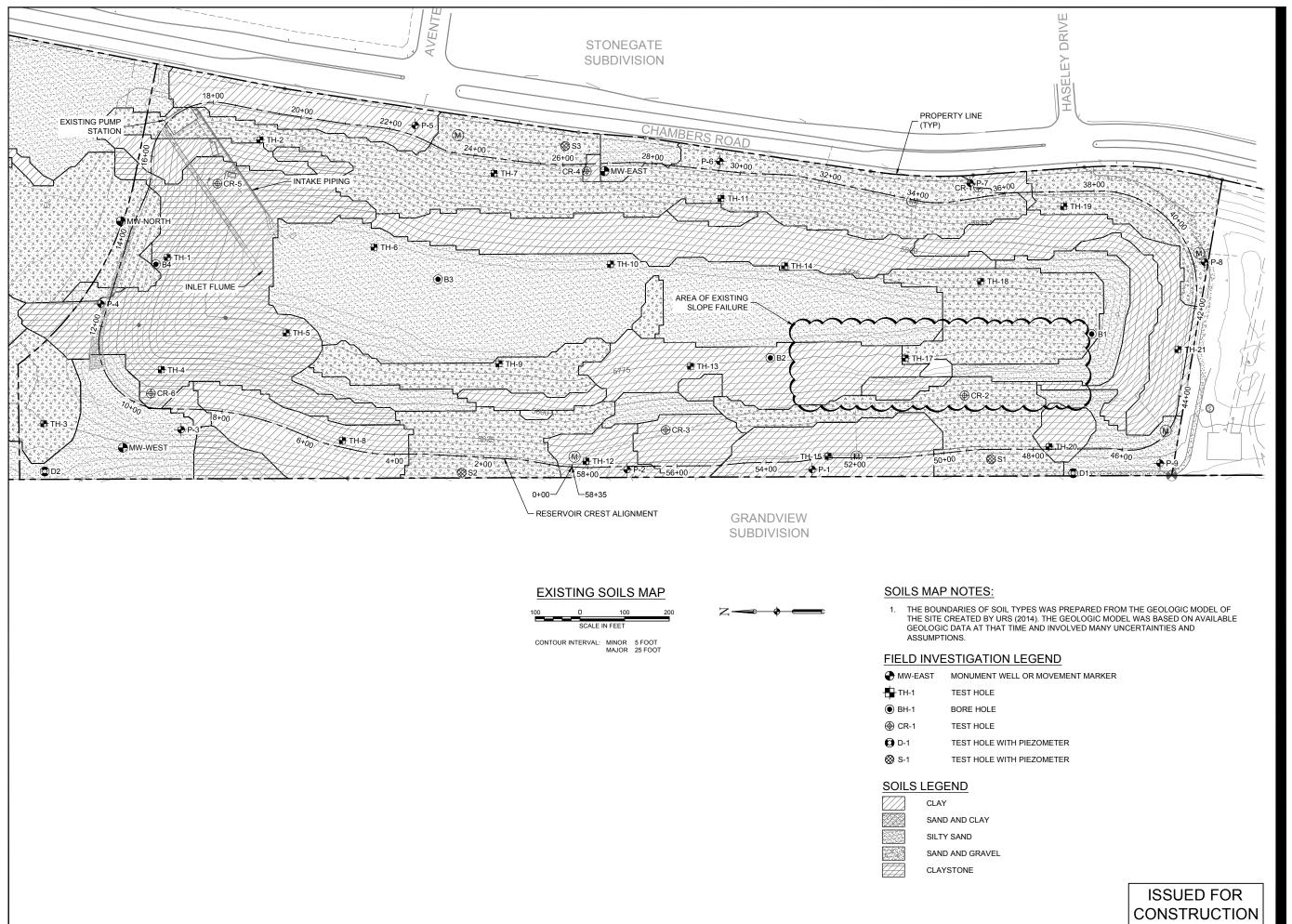
MW-EAST

(D) D-1

MONUMENT WELL OR MOVEMENT MARKER

MOVEMENT MARKER / CONTROL POINT (CP)

TEST HOLE WITH PIEZOMETER



**AECOM** 

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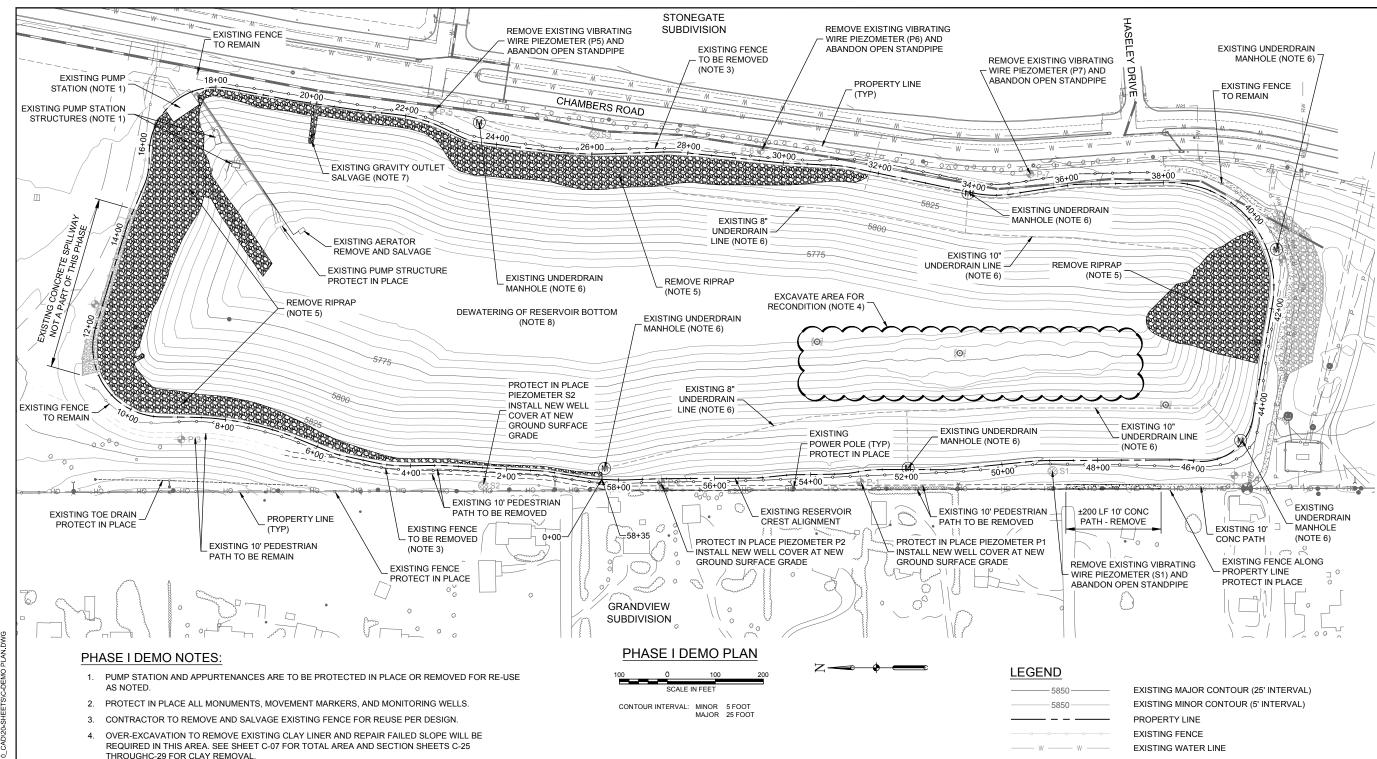
DATE DESCRIPTION

**KEY PLAN** 

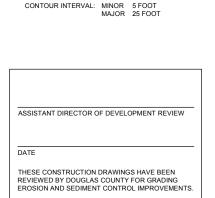
PROJECT NUMBER

60567161 SHEET TITLE

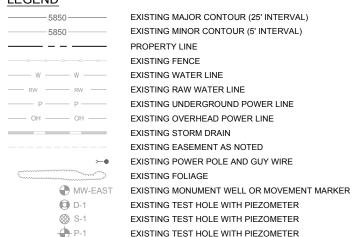
EXISTING SOILS MAP



- RIPRAP TO BE REMOVED FROM RESERVOIR EMBANKMENT AND STORED ONSITE FOR RECONDITIONING AND RE-USE PER ENGINEER'S INSTRUCTIONS.
- 6. EXISTING UNDERDRAIN SYSTEM TO BE REMOVED OR ABANDONED IN PLACE. REMOVE EXISTING MANHOLES. SOME UNDERDRAIN LINES MAY BE ENCOUNTERED DURING EXCAVATION. ANY EXPOSED PIPE SHALL BE REMOVED. ANY PIPE THAT IS TO REMAIN SHALL BE LOCATED AND PLUGGED (ABANDONED IN PLACE). CONNECTED LINES ARE TO BE PLUGGED WITH GRAVITY FLOW GROUT IF THEY CANNOT BE REMOVED.
- 7. EXISTING GRAVITY OUTLET GATE AND CONTROL MECHANISM TO BE REMOVED (SALVAGED). SPINDLE IS TO BE DEMOLISHED AND EXISTING PIPE TO BE PROTECTED IN PLACE.
- 8. CONTRACTOR IS TO SUBMIT A DEWATERING PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO COUNTY SUBMITTAL.



ENGINEERING DIVISION ACCEPTANCE BLOCK



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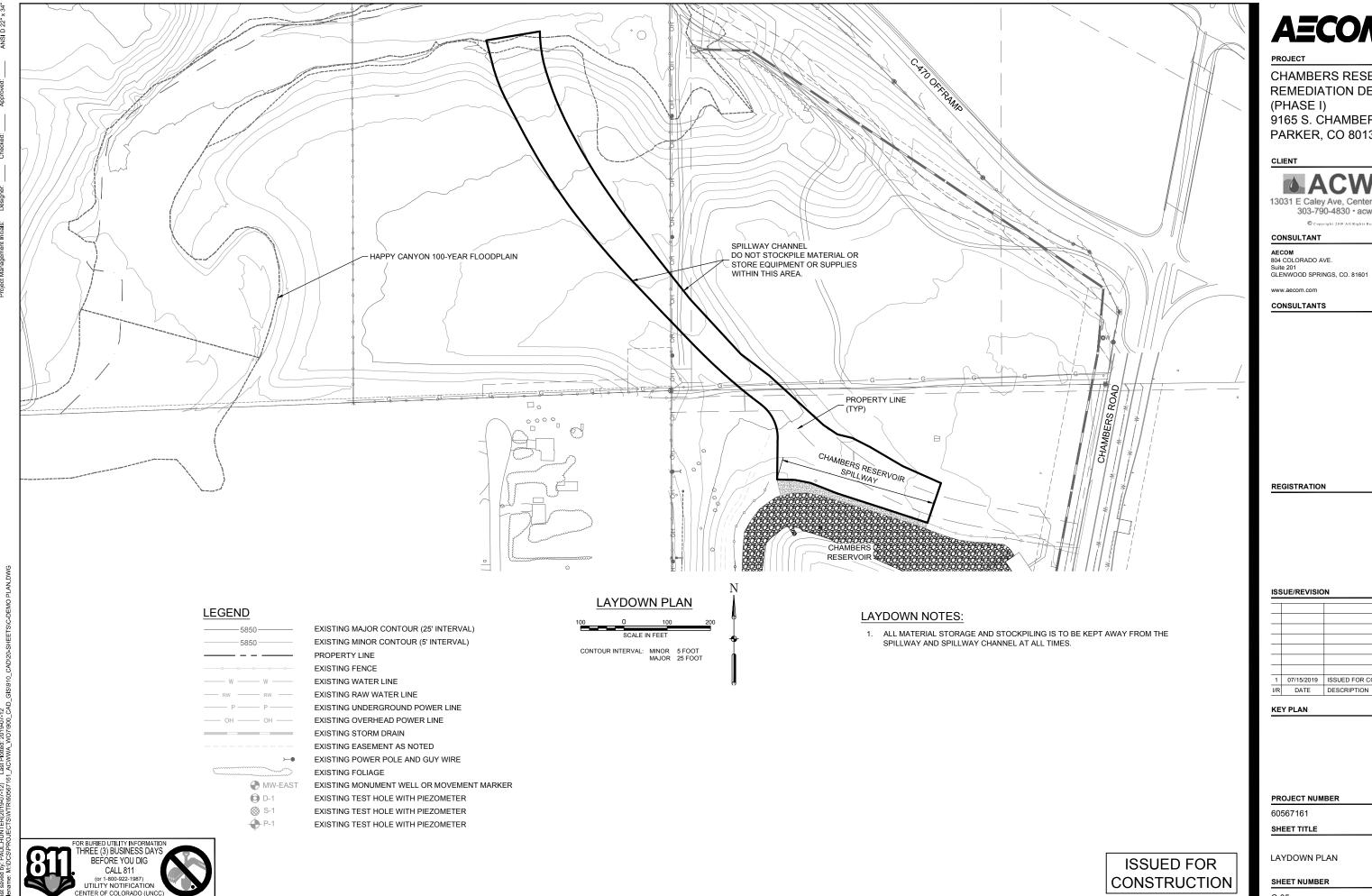
SHEET TITLE

DEMO PLAN

SHEET NUMBER

C-04

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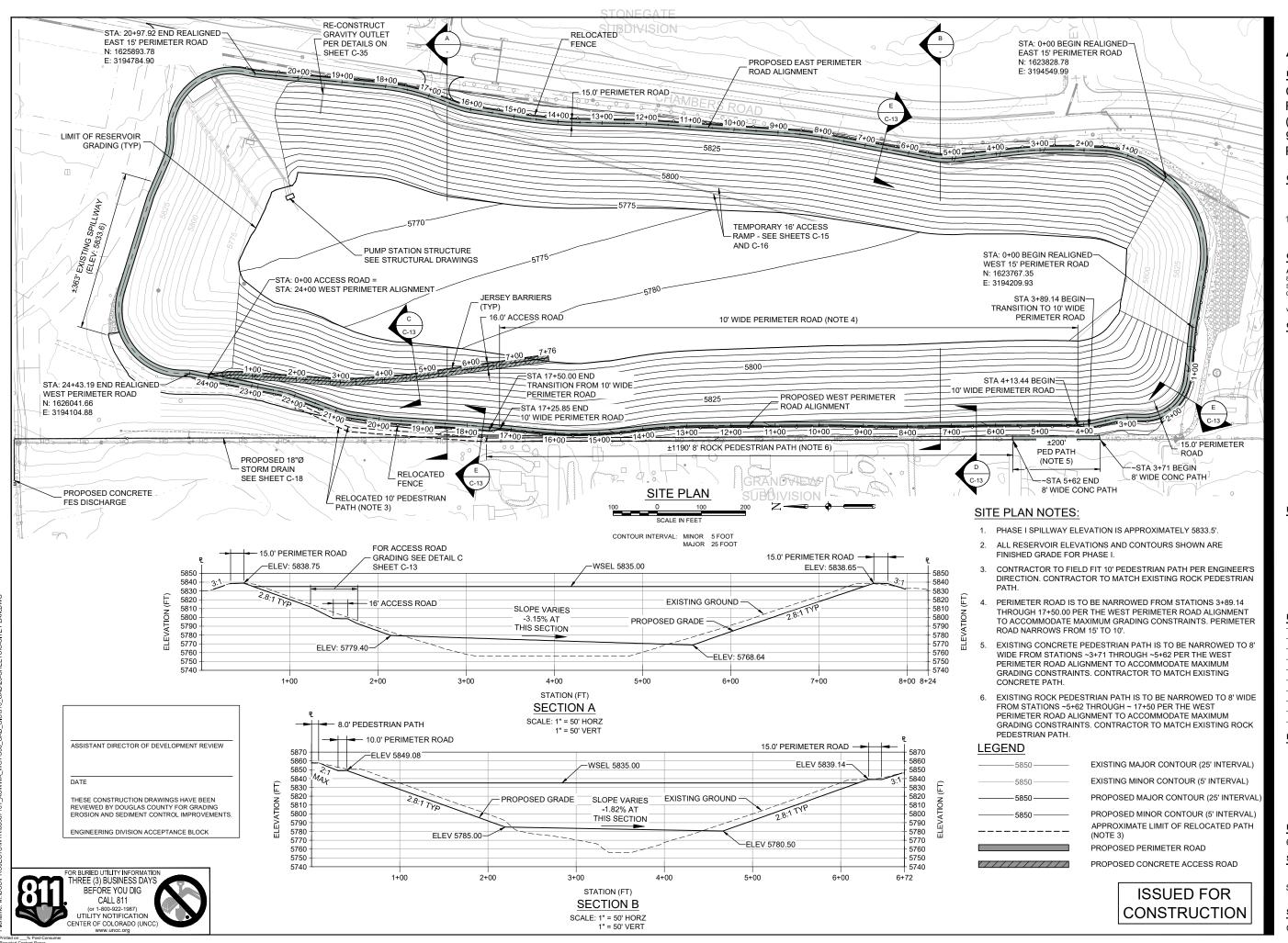
**KEY PLAN** 

PROJECT NUMBER

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SHEET TITLE

LAYDOWN PLAN



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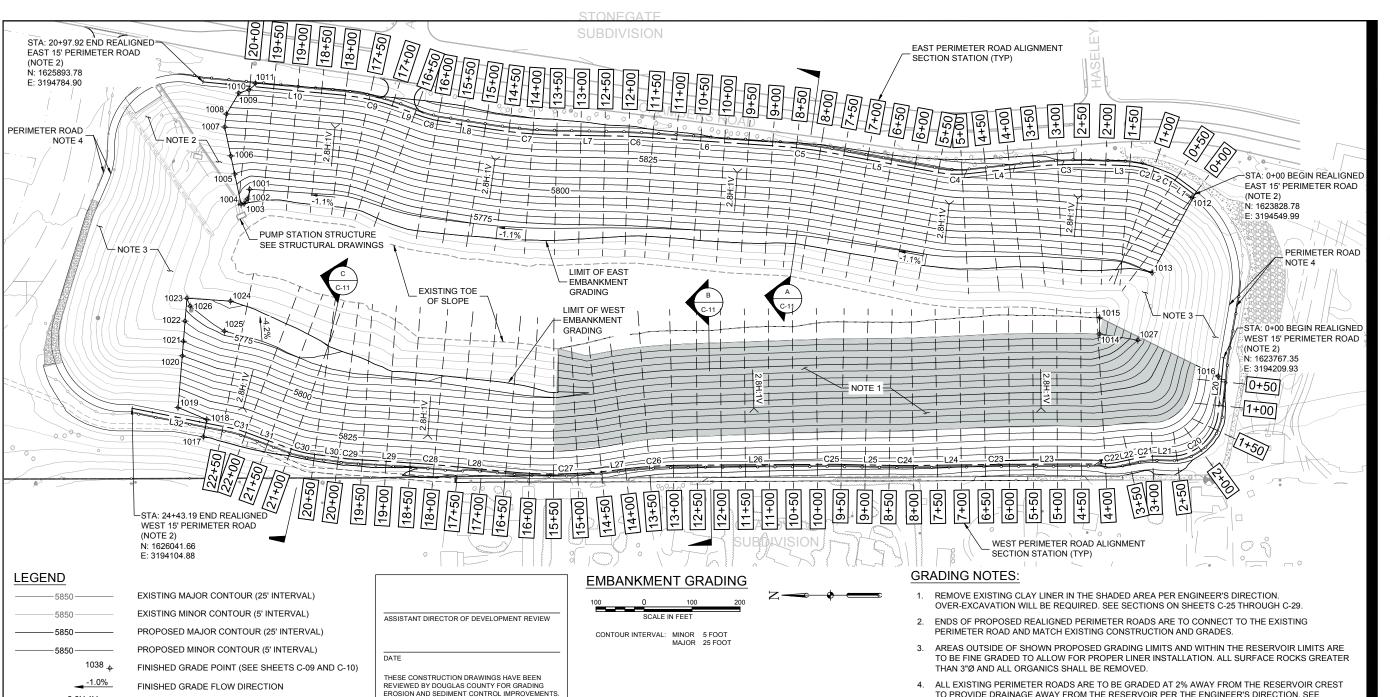
**KEY PLAN** 

PROJECT NUMBER

60567161

SHEET TITLE

SITE PLAN



WE	WEST REALIGNMENT LINE TABLE					
LINE	LENGTH	BEARING				
L20	116.00	N84°11'30"W				
L21	22.59	N1°16'56"E				
L22	30.78	N12°38'41"W				
L23	213.15	N0°14'15"W				
L24	164.66	N0°48'30"W				
L25	130.60	N1°01'51"E				
L26	297.45	N0°22'26"W				
L27	34.15	N6°48'53"W				
L28	146.94	N5°30'30"E				
L29	148.12	N3°43'31"E				
L30	73.24	N7°36'10"E				
L31	100.10	N20°16'25"E				

210.08

N11°19'21"E

3.0H:1V

FINISHED GRADE SLOPE

	WEST REALIGNMENT CURVE TABLE							
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	POINT OF CURVATURE	POINT OF TANGENT	
C20	149.18	100.00	85°28'25"	92.40	135.73	1+16.00	2+65.18	
C21	48.61	200.00	13°55'36"	24.43	48.49	2+87.77	3+36.39	
C22	43.31	200.00	12°24'25"	21.74	43.22	3+67.17	4+10.48	
C23	9.96	1000.00	0°34'15"	4.98	9.96	6+23.63	6+33.59	
C24	32.10	1000.00	1°50'21"	16.05	32.10	7+98.26	8+30.36	
C25	24.52	1000.00	1°24'17"	12.26	24.52	9+60.96	9+85.47	
C26	112.41	1000.00	6°26'27"	56.27	112.35	12+82.93	13+95.34	
C27	215.08	1000.00	12°19'24"	107.96	214.67	14+29.49	16+44.57	
C28	31.12	1000.00	1°46'59"	15.56	31.12	17+91.52	18+22.64	
C29	13.53	200.00	3°52'39"	6.77	13.53	19+70.76	19+84.30	
C30	44.23	200.00	12°40'15"	22.21	44.14	20+57.54	21+01.77	
C31	31.25	200.00	8°57'05"	15.65	31.21	22+01.87	22+33.12	

ENGINEERING DIVISION ACCEPTANCE BLOCK

EAS	EAST REALIGNMENT LINE TABLE					
LINE	LENGTH	BEARING				
L1	43.69	N36°52'02"E				
L2	21.92	N20°44'53"E				
L3	57.91	N2°08'50"E				
L4	124.93	N6°17'39"W				
L5	231.86	N10°22'12"E				
L6	273.19	N3°50'46"E				
L7	133.43	N1°03'09"E				
L8	108.29	N9°01'23"E				
L9	50.24	N19°55'00"E				
L10	287.77	N5°26'07"E				

- ALL EXISTING PERIMETER ROADS ARE TO BE GRADED AT 2% AWAY FROM THE RESERVOIR CREST TO PROVIDE DRAINAGE AWAY FROM THE RESERVOIR PER THE ENGINEER'S DIRECTION. SEE DETAILS D AND E, SHEET C-13.
- FOR EMBANKMENT SECTION POINTS AND ADDITIONAL EMBANKMENT POINTS SEE SHEETS C-09 AND
- CONTRACTOR TO USE ADDITIONAL POINTS (SEE TABLE ON SHEET C-10) TO FINALIZE NORTH AND SOUTH EMBANKMENT GRADING FOR THE EAST AND WEST EMBANKMENTS. GRADING WILL BE FIELD FIT WITHIN THESE POINTS TO ACHIEVE 2.8:1 MINIMUM SLOPES PER DESIGN.

	EAST REALIGNMENT CURVE TABLE								
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	POINT OF CURVATURE	POINT OF TANGENT		
C1	28.13	100.00	16°07'09"	14.16	28.04	0+43.69	0+71.82		
C2	64.93	200.00	18°36'02"	32.75	64.64	0+93.74	1+58.67		
C3	147.33	1000.00	8°26'29"	73.80	147.20	2+16.58	3+63.91		
C4	58.17	200.00	16°39'51"	29.29	57.96	4+88.84	5+47.00		
C5	113.87	1000.00	6°31'26"	56.99	113.80	7+78.86	8+92.73		
C6	48.76	1000.00	2°47'37"	24.38	48.75	11+65.92	12+14.67		
C7	139.11	1000.00	7°58'14"	69.67	139.00	13+48.10	14+87.21		
C8	38.03	200.00	10°53'37"	19.07	37.97	15+95.50	16+33.53		
C9	126.38	500.00	14°28'54"	63.53	126.04	16+83.77	18+10.15		

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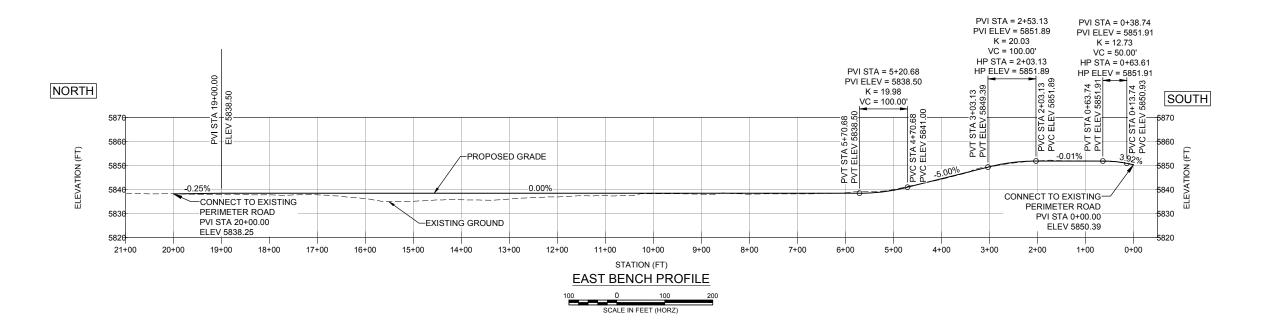
**KEY PLAN** 

PROJECT NUMBER

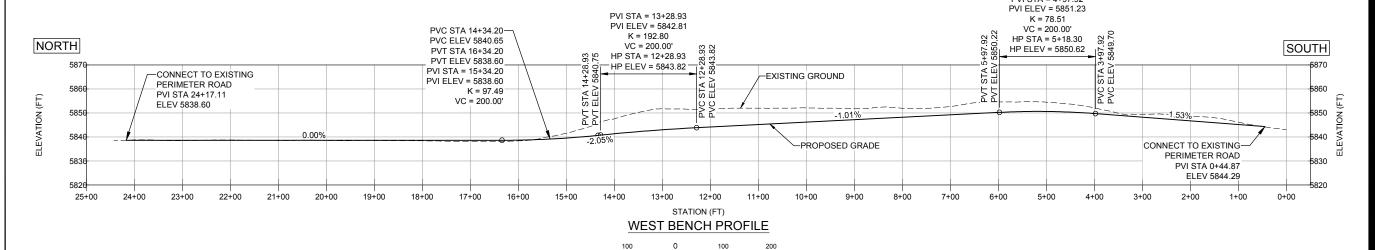
60567161

SHEET TITLE

EMBANKMENT GRADING PLAN

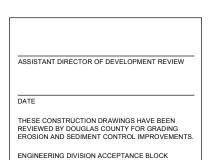


SCALE IN FEET (VERT)



SCALE IN FEET (HORZ)

SCALE IN FEET (VERT)



## PROFILE GRADING NOTES:

- 1. PROFILE ELEVATIONS SHOWN ARE AT THE CENTERLINE OF THE REALIGNED PERIMETER ROAD.
- ENDS OF PROPOSED REALIGNED PERIMETER ROADS ARE TO CONNECT TO THE EXISTING PERIMETER ROAD AND MATCH EXISTING CONSTRUCTION AND GRADES.

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SHEET TITLE

REALIGNED PERIMETER ROAD PROFILES (EAST AND WEST BENCHES)

SHEET NUMBER

C 00

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0+00	1,623,942.99	3,194,397.70	5,784.70	-190.35'
0+00	1,623,833.28	3,194,543.99	5,850.54	-7.50'
0+00	1,623,828.78	3,194,549.99	5,850.39	0.00'
	1,623,824.28	3,194,555.99	5,850.24	7.50'
0+00				
0+00	1,623,824.12	3,194,556.21	5,850.34	7.78'
0+50	1,623,990.47	3,194,394.43	5,784.29	-221.70'
0+50	1,623,980.31	3,194,409.92	5,784.29	-203.18'
0+50	1,623,873.01	3,194,573.56	5,851.98	-7.50'
0+50	1,623,868.90	3,194,579.83	5,851.83	0.00'
0+50	1,623,864.79	3,194,586.10	5,851.68	7.50'
	1,623,864.76	3,194,586.14	5,851.67	
0+50				7.55'
1+00	1,623,985.08	3,194,394.65	5,784.29	-216.71'
1+00	1,623,979.87	3,194,409.83	5,784.29	-200.66'
1+00	1,623,917.13	3,194,592.51	5,852.05	-7.50'
1+00	1,623,914.69	3,194,599.61	5,851.90	0.00'
1+00	1,623,912.25	3,194,606.70	5,851.75	7.50'
1+00	1,623,912.05	3,194,607.29	5,851.96	8.13'
	1,623,980.92	3,194,394.80	5,784.29	
1+50				-215.70'
1+50	1,623,979.71	3,194,409.80	5,784.29	-200.65'
1+50	1,623,964.11	3,194,602.32	5,852.05	-7.50'
1+50	1,623,963.51	3,194,609.80	5,851.90	0.00'
1+50	1,623,962.90	3,194,617.27	5,851.75	7.50'
1+50	1,623,962.70	3,194,619.77	5,852.58	10.00'
2+00	1,624,021.71	3,194,392.02	5,783.86	-219.99'
2+00	1,624,020.90	3,194,413.58	5,783.86	-198.42'
		3,194,604.36		
2+00	1,624,013.74		5,852.04	-7.50'
2+00	1,624,013.46	3,194,611.86	5,851.89	0.00'
2+00	1,624,013.18	3,194,619.35	5,851.74	7.50'
2+00	1,624,013.09	3,194,621.89	5,852.59	10.04'
2+50	1,624,064.34	3,194,391.83	5,783.40	-221.35'
2+50	1,624,064.24	3,194,416.04	5,783.40	-197.14'
2+50	1,624,063.47	3,194,605.67	5,851.49	-7.50'
		3,194,613.17		
2+50	1,624,063.44		5,851.34	0.00'
2+50	1,624,063.41	3,194,620.67	5,851.19	7.50'
2+50	1,624,063.41	3,194,622.06	5,851.65	8.88'
3+00	1,624,103.43	3,194,394.82	5,782.98	-217.54'
3+00	1,624,104.52	3,194,418.33	5,782.98	-194.01'
3+00	1,624,113.08	3,194,604.64	5,849.69	-7.50'
3+00	1,624,113.43	3,194,612.13	5,849.54	0.00'
3+00	1,624,113.77	3,194,619.62	5,849.39	7.50'
		3,194,635.08		
3+00	1,624,114.48		5,852.05	22.97'
3+50	1,624,143.04	3,194,398.12	5,782.55	-211.43'
3+50	1,624,145.22	3,194,420.75	5,782.55	-188.70'
3+50	1,624,162.58	3,194,601.12	5,847.19	-7.50'
3+50	1,624,163.30	3,194,608.58	5,847.04	0.00'
3+50	1,624,164.01	3,194,616.05	5,846.89	7.50'
3+50	1,624,165.49	3,194,631.41	5,850.19	22.93'
	1,624,190.54	3,194,399.55	5,782.04	
4+00				-204.88'
4+00	1,624,192.94	3,194,421.28	5,782.04	-183.02'
4+00	1,624,212.18	3,194,595.74	5,844.69	-7.50'
4+00	1,624,213.00	3,194,603.20	5,844.54	0.00'
4+00	1,624,213.83	3,194,610.65	5,844.39	7.50'
4+00	1,624,215.72	3,194,627.80	5,849.02	24.75'
4+50	1,624,240.63	3,194,397.62	5,781.51	-201.31'
4+50	1,624,243.24	3,194,421.28	5,781.51	-177.51'
4+50	1,624,261.88	3,194,590.26	5,842.19	
				-7.50'
4+50	1,624,262.70	3,194,597.72	5,842.04	0.00'
4+50	1,624,263.52	3,194,605.17	5,841.89	7.50'
4+50	1,624,265.65	3,194,624.47	5,848.37	26.91'
5+00	1,624,301.76	3,194,395.29	5,780.88	-197.54'
5+00	1,624,303.10	3,194,420.05	5,780.88	-172.74'
5+00	1,624,312.02	3,194,585.06	5,839.90	-7.50'
5+00	1,624,312.43	3,194,592.54	5,839.75	0.00'
5+00	1,624,312.83	3,194,600.03	5,839.60	
				7.50'
5+00	1,624,314.09	3,194,623.16	5,846.80	30.66'
5+50	1,624,397.55	3,194,402.76	5,779.93	-196.51'

**EAST EMBANKMENT SECTION POINTS** STATION NORTHING EASTIN ELEVATION OFFSET 0+00 1,623,945.53 3,194,394.32 5,784.70 -194.59'

0+00 1,623,942.99 3,194,397.70 5,784.70 -190.35'

EA	ST EMBAN	KMENT SEC	TION POIN	TS
STATION	NORTHING	EASTIN	ELEVATION	OFFSET
5+50	1,624,393.20	3,194,426.52	5,779.93	-172.35'
5+50	1,624,363.53	3,194,588.68	5,838.76	-7.50'
5+50	1,624,362.18	3,194,596.06	5,838.61	0.00'
5+50	1,624,360.83	3,194,603.44	5,838.46	7.50'
5+50	1,624,357.09	3,194,623.86	5,845.43	28.26'
6+00	1,624,446.90	3,194,410.85	5,779.40	-197.43'
6+00	1,624,442.63	3,194,434.16	5,779.40	-173.73'
6+00	1,624,412.71	3,194,597.68	5,838.65	-7.50'
6+00	1,624,411.36	3,194,605.06	5,838.50	0.00'
6+00	1,624,410.01	3,194,612.44	5,838.35	7.50'
6+00	1,624,407.36	3,194,626.92	5,844.08	22.22'
6+50	1,624,496.21		5,778.87	-198.16'
6+50	1,624,492.07	3,194,441.80	5,778.87	-175.12'
6+50	1,624,461.89	3,194,606.68	5,838.65	
	1,624,460.54	3,194,614.06	5,838.50	-7.50'
6+50			*	0.00'
6+50		3,194,621.44	5,838.35	7.50'
6+50	1,624,457.20	3,194,632.34	5,842.76	18.59'
7+00	1,624,545.52	3,194,427.46	5,778.34	-198.85'
7+00		3,194,449.44	5,778.34	-176.50'
7+00	1,624,511.08	3,194,615.68	5,838.65	-7.50'
7+00	1,624,509.73	3,194,623.06	5,838.50	0.00'
7+00	1,624,508.38	3,194,630.44	5,838.35	7.50'
7+00	1,624,506.71	3,194,639.57	5,841.88	16.79'
7+50	1,624,594.68	3,194,436.58	5,777.82	-198.73'
7+50	1,624,590.93	3,194,457.08	5,777.82	-177.89'
7+50	1,624,560.26	3,194,624.68	5,838.65	-7.50'
7+50	1,624,558.91	3,194,632.06	5,838.50	0.00'
7+50	1,624,557.56	3,194,639.44	5,838.35	7.50'
7+50	1,624,556.19	3,194,646.93	5,840.97	15.12'
8+00	1,624,639.78	3,194,444.55	5,777.33	-198.82'
8+00	1,624,636.67	3,194,463.83	5,777.33	-179.29'
8+00	1,624,609.33	3,194,633.44	5,838.65	-7.50'
8+00	1,624,608.13	3,194,640.84	5,838.50	0.00'
	-	-		
8+00	1,624,606.94	3,194,648.24	5,838.35	7.50'
8+00	1,624,605.96	3,194,654.33	5,840.31	13.67'
8+50	1,624,679.60	3,194,448.78	5,776.89	-199.99'
8+50	1,624,677.47	3,194,468.11	5,776.89	-180.54'
8+50	1,624,658.50	3,194,640.11	5,838.65	-7.50'
8+50	1,624,657.67	3,194,647.56	5,838.50	0.00'
8+50	1,624,656.85	3,194,655.02	5,838.35	7.50'
8+50	1,624,656.46	3,194,658.58	5,839.55	11.09'
9+00	1,624,721.17	3,194,448.34	5,776.45	-203.94'
9+00	1,624,719.67	3,194,470.55	5,776.45	-181.69'
9+00	1,624,707.99	3,194,644.34	5,838.65	-7.50'
9+00	1,624,707.49	3,194,651.83	5,838.50	0.00'
9+00	1,624,706.98	3,194,659.31	5,838.35	7.50'
9+00	1,624,706.92	3,194,660.31	5,838.02	8.50'
9+50	1,624,771.21	3,194,449.41	5,775.92	-206.23'
9+50	1,624,769.66	3,194,472.43	5,775.92	-183.17'
9+50	1,624,757.88	3,194,647.70	5,838.65	-7.50'
9+50	1,624,757.37	3,194,655.18	5,838.50	0.00'
9+50	1,624,756.87	3,194,662.66	5,838.35	7.50'
9+50	1,624,756.83	3,194,663.22	5,838.16	8.06'
10+00	1,624,821.14	3,194,452.17	5,775.39	-206.83'
10+00	1,624,819.65	3,194,474.30	5,775.39	-184.65'
10+00	1,624,807.76	3,194,651.05	5,838.65	-7.50'
10+00	1,624,807.26	3,194,658.53	5,838.50	0.00'
10+00	1,624,806.76	3,194,666.02	5,838.35	7.50'
10+00	1,624,806.73	3,194,666.39	5,838.23	7.87'
	1,624,871.02	3,194,000.39	5,774.87	
10+50				-206.79'
10+50	1,624,869.63	3,194,476.18	5,774.87	-186.13'
10+50	1,624,857.65	3,194,654.40	5,838.65	-7.50'
10+50	1,624,857.15	3,194,661.89	5,838.50	0.00'
10+50	1,624,856.65	3,194,669.37	5,838.35	7.50'
10+50	1,624,856.27	3,194,674.99 3,194,459.98	5,836.47 5,774.34	13.13'
11+00	1,624,920.84			-205.73'

EA	ST EMBAN	KMENT SEC	TION POIN	TS
STATION	NORTHING	EASTIN	ELEVATION	OFFSET
11+00	1,624,907.54	3,194,657.76	5,838.65	-7.50'
11+00	1,624,907.04	3,194,665.24	5,838.50	0.00'
11+00	1,624,906.53	3,194,672.72	5,838.35	7.50'
11+00	1,624,906.03	3,194,680.26	5,835.83	15.06'
11+50	1,624,970.73	3,194,463.21	5,773.81	-205.85'
11+50	1,624,969.61	3,194,479.91	5,773.81	-189.11'
11+50	1,624,957.43	3,194,661.11	5,838.65	-7.50'
11+50	1,624,956.92	3,194,668.59	5,838.50	0.00'
11+50	1,624,956.42	3,194,676.08	5,838.35	7.50'
11+50	1,624,955.80	3,194,685.33	5,835.26	16.77'
12+00	1,625,013.73	3,194,463.16	5,773.35	-208.32'
12+00	1,625,013.14	3,194,480.84	5,773.35	-190.64'
12+00	1,625,007.09	3,194,663.87	5,838.65	-7.50'
12+00	1,625,006.84	3,194,671.37	5,838.50	0.00'
12+00	1,625,006.60	3,194,678.86	5,838.35	7.50'
12+00	1,625,006.13	3,194,692.85	5,833.69	21.49'
12+50	1,625,060.73	3,194,460.41	5,772.85	-212.02'
12+50	1,625,060.36	3,194,480.65	5,772.85	-191.78'
12+50	1,625,056.97	3,194,664.90	5,838.65	-7.50'
12+50	1,625,056.83	3,194,672.39	5,838.50	0.00'
12+50	1,625,056.70	3,194,679.89	5,838.35	7.50'
12+50	1,625,056.42	3,194,694.90	5,833.35	7.50 22.51'
	1,625,036.42	3,194,694.90	5,772.32	
13+00				-216.09'
13+00	1,625,110.37 1,625,106.96	3,194,480.09 3,194,665.81	5,772.32 5,838.65	-193.25' -7.50'
13+00			, , , , , , , , , , , , , , , , , , ,	
13+00	1,625,106.82	3,194,673.31	5,838.50	0.00'
13+00	1,625,106.69	3,194,680.81	5,838.35	7.50'
13+00	1,625,106.30	3,194,701.59	5,831.42	28.28'
13+50	1,625,161.27	3,194,454.63	5,771.79	-219.65'
13+50	1,625,160.76	3,194,479.58	5,771.79	-194.69'
13+50	1,625,156.97	3,194,666.74	5,838.65	-7.50'
13+50	1,625,156.82	3,194,674.23	5,838.50	0.00'
13+50	1,625,156.66	3,194,681.73	5,838.35	7.50'
13+50	1,625,156.18	3,194,705.51	5,830.42	31.28'
14+00	1,625,222.31	3,194,455.55	5,771.16	-221.49'
14+00	1,625,220.54	3,194,480.74	5,771.16	-196.24'
14+00	1,625,207.29	3,194,669.01	5,838.65	-7.50'
14+00	1,625,206.76	3,194,676.50	5,838.50	0.00'
14+00	1,625,206.23	3,194,683.98	5,838.35	7.50'
14+00	1,625,204.47	3,194,709.04	5,829.98	32.62'
14+50	1,625,283.41	3,194,458.78	5,770.53	-224.09'
14+50	1,625,280.30	3,194,484.56	5,770.53	-198.12'
14+50	1,625,257.43	3,194,673.81	5,838.65	-7.50'
14+50	1,625,256.53	3,194,681.25	5,838.50	0.00'
14+50	1,625,255.63	3,194,688.70	5,838.35	7.50'
14+50	1,625,252.40	3,194,715.39	5,829.39	34.39'
15+00	1,625,341.71	3,194,463.60	5,769.92	-227.62'
15+00	1,625,337.35	3,194,491.01	5,769.92	-199.87'
15+00	1,625,307.19	3,194,681.00	5,838.65	-7.50'
15+00	1,625,306.01	3,194,688.41	5,838.50	0.00'
15+00	1,625,304.83	3,194,695.82	5,838.35	7.50'
15+00	1,625,300.59	3,194,722.55	5,829.33	34.57'
15+50	1,625,391.57	3,194,468.39	5,769.40	-230.72'
15+50	1,625,386.97	3,194,497.38	5,769.40	-201.36'
15+50	1,625,356.57	3,194,688.84	5,838.65	-7.50'
15+50	1,625,355.39	3,194,696.25	5,838.50	0.00'
15+50	1,625,354.21	3,194,703.66	5,838.35	7.50'
15+50	1,625,349.34	3,194,734.33	5,828.00	38.55'
16+00	1,625,446.54	3,194,474.51	5,768.82	-233.40'
16+00	1,625,441.12	3,194,504.33	5,768.82	-203.09'
16+00	1,625,406.11	3,194,696.76	5,838.65	-7.50'
16+00	1,625,404.76	3,194,704.14	5,838.50	0.00'
16+00	1,625,403.42	3,194,711.52	5,838.35	7.50'
16+00	1,625,398.61	3,194,737.95	5,829.40	34.36'
16+50	1,625,531.36	3,194,501.06	5,767.93	-231.26'
16+50	1,625,522.61	3,194,525.21	5,767.93	-205.57'

STATION	NORTHING	EASTIN	ELEVATION	OFFSET
16+50	1,625,452.58	3,194,718.49	5,838.50	0.00'
16+50	1,625,450.03	3,194,725.54	5,838.35	7.50'
16+50	1,625,443.18	3,194,744.43	5,831.65	27.60'
17+00	1,625,570.66	3,194,517.55	5,767.47	-229.00
17+00	1,625,563.76	3,194,538.71	5,767.47	-206.75
17+00	1,625,502.00	3,194,728.14	5,838.65	-7.50'
17+00	1,625,499.68	3,194,735.27	5,838.50	0.00'
17+00	1,625,497.35	3,194,742.40	5,838.35	7.50'
17+00	1,625,496.28	3,194,745.68	5,837.20	10.95'
17+50	1,625,597.35	3,194,522.12	5,767.16	-231.59
17+50	1,625,592.15	3,194,545.94	5,767.16	-207.21
17+50	1,625,549.51	3,194,741.04	5,838.65	-7.50'
17+50	1,625,547.91	3,194,748.37	5,838.50	0.00'
17+50	1,625,546.31	3,194,755.69	5,838.35	7.50'
17+50	1,625,545.55	3,194,759.17	5,837.16	11.06'
18+00	1,625,623.96	3,194,525.33	5,766.86	-232.80
18+00	1,625,621.11	3,194,549.91	5,766.86	-208.05
18+00	1,625,598.07	3,194,749.13	5,838.65	-7.50'
18+00	1,625,597.21	3,194,756.58	5,838.50	0.00'
18+00	1,625,596.35	3,194,764.03	5,838.35	7.50'
18+00	1,625,595.95	3,194,767.48	5,837.19	10.97'
18+50	1,625,669.02	3,194,529.69	5,766.37	-232.78
18+50	1,625,666.85	3,194,552.48	5,766.37	-209.89
18+50	1,625,647.68	3,194,753.96	5,838.65	-7.50'
18+50	1,625,646.97	3,194,761.42	5,838.50	0.00'
18+50	1,625,646.26	3,194,768.89	5,838.35	7.50'
18+50	1,625,645.97	3,194,771.96	5,837.32	10.58'
19+00	1,625,718.60	3,194,536.49	5,765.84	-230.70
19+00	1,625,716.77	3,194,555.74	5,765.84	-211.37
19+00	1,625,697.46	3,194,758.69	5,838.65	-7.50'
19+00	1,625,696.75	3,194,766.16	5,838.50	0.00'
19+00	1,625,696.04	3,194,773.62	5,838.35	7.50'
19+00	1,625,695.82	3,194,775.89	5,837.59	9.77'
19+50	1,625,768.73	3,194,537.50	5,765.32	-234.44
19+50	1,625,766.68	3,194,559.00	5,765.32	-212.85
19+50	1,625,747.23	3,194,763.43	5,838.53	-7.50'
	4 505 545 50			

19+50 1,625,746.52 3,194,770.89 5,838.38

19+50 1,625,745.81 3,194,778.36 5,838.23

19+50 1,625,745.74 3,194,779.11 5,837.97 8.26'

0.00'

7.50'

PROJECT

CHAMBERS RESERVOIR REMEDIATION DESIGN (PHASE I) 9165 S. CHAMBERS ROAD, PARKER, CO 80134

CLIENT



CONSULTANT

AECOM 804 COLORADO AVE. Suite 201 GLENWOOD SPRINGS, CO. 81601

www.aecom.com

CONSULTANTS

REGISTRATION

ISSUE/REVISION

1 07/15/2019 ISSUED FOR CONSTRUCTION I/R DATE DESCRIPTION

**KEY PLAN** 

PROJECT NUMBER

60567161

**ISSUED FOR** 

CONSTRUCTION

SHEET TITLE

EAST EMBANKMENT SECTION POINTS

SHEET NUMBER

16+50 1,625,455.14 3,194,711.43 5,838.65 -7.50'

Last Plotted: 2019-07-15	sname: M:/DCS/PROJECTS/WTR/60567161_ACWWA_WO7/900_CAD_GIS/910_CAD/20-SHEETS/C-EMBANKMENT GRADING PLAN.DWG	
Last Plotted: 2	ACW	
st saved by: PAUL HUN I EK(2019-07-14) L	name: M:\DCS\PROJECTS\WTR\60567161_	

WES	T EMBANK	MENT SEC	TION POIN	NTS	W
STATION	NORTHING	EASTING	ELEVATION	OFFSET	STATIC
0+50	1,623,764.82	3,194,159.42	5,844.26	-7.63'	6+50
0+50	1,623,764.95	3,194,159.43	5,844.21	-7.50'	6+50
0+50	1,623,772.41	3,194,160.19	5,844.36	0.00'	6+50
0+50	1,623,779.87	3,194,160.95	5,844.51	7.50'	6+50
1+00	1,623,763.58	3,194,109.03	5,847.13	-13.96'	6+50
1+00	1,623,770.01	3,194,109.69	5,844.98	-7.50'	6+50
1+00	1,623,777.47	3,194,110.44	5,845.13	0.00'	6+50
1+00	1,623,784.93	3,194,111.20	5,845.28	7.50'	7+00
1+00	1,623,787.51	3,194,111.47	5,845.33	10.09'	7+00
1+50	1,623,773.65	3,194,055.07	5,848.60	-16.05'	7+00
1+50	1,623,781.37	3,194,058.73	5,845.75	-7.50'	7+00
1+50	1,623,788.16	3,194,061.93	5,845.90	0.00'	7+00
1+50	1,623,794.94	3,194,065.13	5,846.05	7.50'	7+00
1+50	1,623,800.98	3,194,067.99	5,846.18	14.18'	7+00
2+00	1,623,810.40	3,194,011.04	5,849.28	-15.80'	7+50
2+00	1,623,815.29	3,194,017.75	5,846.51	-7.50'	7+50
2+00	1,623,819.70	3,194,023.81	5,846.66	0.00'	7+50
2+00	1,623,824.12	3,194,029.87	5,846.81	7.50'	7+50
2+00	1,623,829.39	3,194,037.11	5,846.99	16.46'	7+50
2+50	1,623,861.22	3,193,971.33	5,856.26	-34.43'	7+50
2+50	1,623,864.70	3,193,998.04	5,847.28	-7.50'	7+50
2+50	1,623,865.66	3,194,005.48	5,847.43	0.00'	8+00
2+50	1,623,866.63	3,194,012.92	5,847.58	7.50'	8+00
2+50	1,623,867.90	3,194,022.66	5,847.78	17.33'	8+00
3+00	1,623,914.22	3,193,969.03	5,857.57 5,848.05	-36.07'	8+00
3+00	1,623,915.33 1,623,915.62	3,193,997.58 3,194,005.07	5,848.20	-7.50'	8+00
3+00	1,623,915.91	3,194,003.07	5,848.35	0.00'	8+00
3+00	1,623,916.16	3,194,012.37	5,848.48	7.50' 13.99'	8+00
3+00 3+50	1,623,958.49	3,193,968.65	5,856.13	-29.46'	8+50
3+50	1,623,963.29	3,193,990.07	5,848.81	-7.50'	8+50
3+50	1,623,964.93	3,193,997.39	5,848.96	0.00'	8+50 8+50
3+50	1,623,966.58	3,194,004.71	5,849.11	7.50'	8+50
3+50	1,623,969.68	3,194,018.56	5,849.40	21.70'	8+50
4+00	1,624,012.24	3,193,955.07	5,857.38	-34.09'	8+50
4+00	1,624,012.69	3,193,963.07	5,857.23	-26.08'	9+00
4+00	1,624,013.86	3,193,983.74	5,849.62	-5.37'	9+00
4+00	1,624,014.17	3,193,989.10	5,849.73	0.00'	9+00
4+00	1,624,014.59	3,193,996.59	5,849.88	7.50'	9+00
4+00	1,624,029.48	3,194,259.73	5,756.00	271.06'	9+00
4+00	1,624,031.41	3,194,293.71	5,756.00	305.10'	9+00
4+50	1,624,064.02	3,193,954.90	5,860.34	-33.73'	9+00
4+50	1,624,064.05	3,193,962.90	5,860.18	-25.73'	9+50
4+50	1,624,064.15	3,193,986.12	5,850.28	-2.50'	9+50
4+50	1,624,064.16	3,193,988.62	5,850.33	0.00'	9+50
4+50	1,624,064.19	3,193,996.12	5,850.48	7.50'	9+50
4+50	1,624,065.29	3,194,260.68	5,756.00	272.06'	9+50
4+50	1,624,065.43	3,194,295.37	5,756.00	306.75'	9+50
5+00	1,624,114.02	3,193,954.73	5,861.20	-33.69'	9+50
5+00	1,624,114.05	3,193,962.73	5,861.04	-25.69'	10+00
5+00	1,624,114.15	3,193,985.91	5,850.55	-2.50'	10+00
5+00	1,624,114.16	3,193,988.41	5,850.60	0.00'	10+00
5+00	1,624,114.19	3,193,995.91	5,850.75	7.50'	10+00
5+00	1,624,115.29	3,194,261.25	5,756.00	272.83'	10+00
5+00	1,624,115.44	3,194,297.27	5,756.00	308.86'	10+00
5+50	1,624,164.02	3,193,954.56	5,862.00	-33.65'	10+00
5+50	1,624,164.05	3,193,962.56	5,861.84	-25.65'	10+50
5+50	1,624,164.15	3,193,985.71	5,850.51	-2.50'	10+50
5+50	1,624,164.16	3,193,988.21	5,850.56	0.00'	10+50
5+50	1,624,164.19	3,193,995.71	5,850.71	7.50'	10+50
5+50	1,624,165.29	3,194,260.92	5,756.00	272.72'	10+50
5+50	1,624,165.45	3,194,298.35	5,756.00	310.15'	10+50
6+00	1,624,214.02	3,193,954.39	5,861.95	-33.61'	10+50
6+00	1,624,214.05	3,193,962.39	5,861.79	-25.61'	11+00
6+00	1,624,214.15	3,193,985.50	5,850.15	-2.50'	11+00
	1,624,214.16	3,193,988.00	5,850.20	0.00'	11+00
6+00		2 402 625 55	E 050 05	l = ·	
6+00	1,624,214.19	3,193,995.50	5,850.35	7.50'	11+00
		3,193,995.50 3,194,259.70 3,194,299.03	5,850.35 5,756.00 5,756.00	7.50' 271.70' 311.03'	11+00 11+00 11+00

STATION	NORTHING	EASTING	ELEVATION	NT:
6+50	1,624,263.69	3,193,954.22	5,860.78	-3
6+50	1,624,263.80	3,193,962.22	5,860.62	-2
6+50	1,624,264.12	3,193,985.08	5,849.64	-2
6+50	1,624,264.16	3,193,987.58	5,849.69	0.
6+50	1,624,264.26	3,193,995.08	5,849.84	7.
6+50	1,624,267.97	3,194,257.84	5,756.00	27
6+50	1,624,268.52	3,194,296.75	5,756.00	30
7+00	1,624,313.69	3,193,954.05	5,859.16	-3
7+00	1,624,313.80	3,193,962.05	5,859.00	-2
7+00	1,624,314.12	3,193,984.37	5,849.13	-2
7+00	1,624,314.15	3,193,986.87	5,849.18	0.
7+00	1,624,314.26	3,193,994.37	5,849.33	7.
7+00	1,624,317.95	3,194,255.71	5,756.00	26
7+00	1,624,318.47	3,194,293.24	5,756.00	30
7+50	1,624,363.69	3,193,953.88	5,857.23	-3
7+50	1,624,363.80	3,193,961.88	5,857.07	-2
7+50	1,624,364.11	3,193,983.67	5,848.63	-2
7+50	1,624,364.15	3,193,986.17	5,848.68	0.
7+50	1,624,364.25	3,193,993.67	5,848.83	7.
7+50	1,624,367.92	3,194,253.59	5,756.00	2
7+50	1,624,368.43	3,194,289.41	5,756.00	30
8+00	1,624,413.75	3,193,953.71	5,857.23	-3
8+00	1,624,413.85	3,193,961.71	5,857.07	-2
8+00	1,624,414.11	3,193,982.96	5,848.12	-2
8+00	1,624,414.14	3,193,985.46	5,848.17	0.
8+00	1,624,414.23	3,193,992.96	5,848.32	7.
8+00	1,624,417.43	3,194,251.47	5,756.00	2
8+00	1,624,417.84	3,194,284.48	5,756.00	2
8+50	1,624,464.72	3,193,953.54	5,857.97	-3
8+50	1,624,464.58	3,193,961.54	5,857.81	-2
8+50	1,624,464.18	3,193,983.40	5,847.61	-2
8+50	1,624,464.14	3,193,985.90	5,847.66	0
8+50	1,624,464.00 1,624,459.38	3,193,993.40 3,194,250.47	5,847.81 5,756.00	7
8+50	1,624,458.77	3,194,283.94	5,756.00	2
8+50 9+00	1,624,514.73	3,193,953.37	5,857.55	-3
9+00	1,624,514.59	3,193,961.37	5,857.39	-:
9+00	1,624,514.17	3,193,984.30	5,847.11	-2
9+00	1,624,514.13	3,193,986.80	5,847.16	0
9+00	1,624,513.99	3,193,994.30	5,847.31	7
9+00	1,624,509.39	3,194,249.95	5,756.00	2
9+00	1,624,508.78	3,194,284.12	5,756.00	2
9+50	1,624,564.74	3,193,953.20	5,857.57	-3
9+50	1,624,564.60	3,193,961.20	5,857.41	-2
9+50	1,624,564.17	3,193,985.20	5,846.60	-2
9+50	1,624,564.12	3,193,987.70	5,846.65	0
9+50	1,624,563.99	3,193,995.20	5,846.80	7
9+50	1,624,559.41	3,194,249.43	5,756.00	2
9+50	1,624,558.77	3,194,284.97	5,756.00	2
10+00	1,624,613.89	3,193,953.03	5,857.06	-3
10+00	1,624,613.94	3,193,961.03	5,856.90	-2
10+00	1,624,614.10	3,193,985.44	5,846.09	-2
10+00	1,624,614.12	3,193,987.94	5,846.14	0
10+00	1,624,614.17	3,193,995.44	5,846.29	7.
10+00	1,624,615.82	3,194,248.29	5,756.00	2
10+00	1,624,616.04	3,194,282.28	5,756.00	2
10+50	1,624,663.89	3,193,952.86	5,856.85	-3
10+50	1,624,663.94	3,193,960.86	5,856.69	-2
10+50	1,624,664.10	3,193,985.12	5,845.58	-2
10+50	1,624,664.12	3,193,987.62	5,845.63	0
10+50	1,624,664.17	3,193,995.12	5,845.78	7.
10+50	1,624,665.81	3,194,246.54	5,756.00	2
10+50	1,624,665.99	3,194,274.68	5,756.00	2
11.00	1,624,713.89	3,193,952.69	5,856.46	-3
11+00				
11+00	1,624,713.94	3,193,960.69	5,856.30	-2
11+00 11+00 11+00		3,193,960.69 3,193,984.79	5,856.30 5,845.08	-: -:

1,624,714.12 3,193,987.29 5,845.13 0.00'

1,624,714.16 3,193,994.79 5,845.28 7.50'

1,624,715.80 3,194,244.79 5,756.00 257.51'

WES	T EMBANK	MENT SEC	TION POIN	NTS	WES	T EMBANK	MENT SEC	TION POIN	NTS
STATION	NORTHING	EASTING	ELEVATION	OFFSET	STATION	NORTHING	EASTING	ELEVATION	OFFSET
11+00	1,624,716.00	3,194,275.30	5,756.00	288.01'	16+00	1,625,204.99	3,194,130.01	5,784.07	160.96'
11+50	1,624,763.89	3,193,952.52	5,855.95	-34.45'	16+00	1,625,204.11	3,194,147.02	5,783.39	177.99'
11+50	1,624,763.94	3,193,960.52	5,855.79	-26.45'	16+50	1,625,265.24	3,193,951.24	5,833.11	-21.94'
11+50	1,624,764.10	3,193,984.47	5,844.57	-2.50'	16+50	1,625,264.51	3,193,958.82	5,832.92	-14.32'
11+50	1,624,764.11	3,193,986.97	5,844.62	0.00'	16+50	1,625,263.38	3,193,970.59	5,838.55	-2.50'
11+50	1,624,764.16	3,193,994.47	5,844.77	7.50'	16+50	1,625,263.14	3,193,973.08	5,838.60	0.00'
11+50	1,624,765.79	3,194,243.05	5,756.00	256.09'	16+50	1,625,262.42	3,193,980.54	5,838.75	7.50'
11+50	1,624,765.98 1,624,813.89	3,194,273.15 3,193,952.35	5,756.00 5,855.20	286.19'	16+50	1,625,247.51	3,194,135.17	5,783.28 5,782.47	162.85'
12+00 12+00	1,624,813.94	3,193,960.35	5,855.04	-34.29' -26.29'	16+50 17+00	1,625,245.56 1,625,315.53	3,194,155.37 3,193,950.65	5,832.90	183.14' -27.35'
12+00	1,624,814.10	3,193,984.14	5,844.06	-26.29	17+00	1.625.314.76	3,193,958.65	5,832.74	-19.31'
12+00	1,624,814.11	3,193,986.64	5,844.11	0.00'	17+00	1,625,313.15	3,193,975.39	5,838.55	-2.50'
12+00	1,624,814.16	3,193,994.14	5,844.26	7.50'	17+00	1,625,312.91	3,193,977.88	5,838.60	0.00'
12+00	1,624,815.78	3,194,241.30	5,756.00	254.67'	17+00	1,625,312.19	3,193,985.34	5,838.75	7.50'
12+00	1,624,815.95	3,194,268.74	5,756.00	282.11'	17+00	1,625,297.02	3,194,142.57	5,782.37	165.46'
12+50	1,624,863.89	3,193,952.18	5,854.88	-34.13'	17+00	1,625,295.15	3,194,162.04	5,781.59	185.02'
12+50	1,624,863.94	3,193,960.18	5,854.72	-26.13'	17+50	1,625,365.78	3,193,950.48	5,832.36	-32.35'
12+50	1,624,864.10	3,193,983.81	5,843.54	-2.50'	17+50	1,625,365.01	3,193,958.48	5,832.23	-24.31'
12+50	1,624,864.11	3,193,986.31	5,843.59	0.00'	17+50	1,625,363.40	3,193,975.21	5,838.45	-7.50'
12+50	1,624,864.16	3,193,993.81	5,843.74	7.50'	17+50	1,625,362.68	3,193,982.67	5,838.60	0.00'
12+50	1,624,865.77 1,624,865.94	3,194,239.52	5,756.00 5,756.00	253.22'	17+50	1,625,361.96	3,193,990.14	5,838.75 5,781.45	7.50'
12+50	· · ·	3,194,266.90 3,193,952.01		280.59'	17+50	1,625,346.54	3,194,149.96	,	168.06'
13+00 13+00	1,624,913.31 1,624,913.50	3,193,952.01	5,854.33 5,854.17	-33.84' -25.84'	17+50 18+00	1,625,344.88 1,625,414.85	3,194,167.23 3,193,960.06	5,780.76 5,831.78	185.41' -27.49'
13+00	1,624,914.05	3,193,983.34	5,842.92	-25.84	18+00	1,625,413.10	3,193,900.00	5,831.78	-27.49 -7.50'
13+00	1,624,914.11	3,193,985.84	5,842.97	0.00'	18+00	1,625,412.45	3,193,987.44	5,838.60	0.00'
13+00	1,624,914.29	3,193,993.34	5,843.12	7.50'	18+00	1,625,411.79	3,193,994.91	5,838.75	7.50'
13+00	1,624,920.04	3,194,237.23	5,756.00	251.46'	18+00	1,625,397.50	3,194,157.54	5,780.51	170.75'
13+00	1,624,920.73	3,194,266.43	5,756.00	280.66'	18+00	1,625,396.16	3,194,172.79	5,779.90	186.07'
13+50	1,624,961.72	3,193,951.85	5,852.80	-31.65'	18+50	1,625,462.88	3,193,982.36	5,838.08	-8.60'
13+50	1,624,962.31	3,193,959.85	5,852.61	-23.63'	18+50	1,625,462.81	3,193,983.46	5,838.45	-7.50'
13+50	1,624,963.86	3,193,980.92	5,842.16	-2.50'	18+50	1,625,462.32	3,193,990.94	5,838.60	0.00'
13+50	1,624,964.05	3,193,983.41	5,842.21	0.00'	18+50	1,625,461.84	3,193,998.43	5,838.75	7.50'
13+50	1,624,964.60	3,193,990.89	5,842.36	7.50'	18+50	1,625,451.05	3,194,164.13	5,779.52	173.56'
13+50	1,624,982.38	3,194,232.08	5,756.00	249.34'	18+50	1,625,450.11	3,194,178.52	5,778.95	187.97'
13+50	1,624,984.47 1,625,010.59	3,194,260.39 3,193,951.68	5,756.00 5,849.81	277.73'	19+00	1,625,513.03 1,625,512.22	3,193,981.75 3,193,994.19	5,838.04 5,838.60	-12.47'
14+00 14+00	1,625,010.55	3,193,951.08	5,849.57	-27.01' -18.96'	19+00 19+00	1,625,511.73	3,193,994.19	5,838.75	0.00' 7.50'
14+00	1,625,011.55	3,193,939.08	5.841.28	-2.50'	19+00	1,625,500.77	3,194,001.08	5,778.61	176.16'
14+00	1,625,013.80	3,193,978.50	5,841.33	0.00'	19+00	1,625,500.00	3,194,181.83	5,778.13	188.03'
14+00	· ·	3,193,985.95	·	7.50'	19+50	1,625,562.99		5,838.04	-13.47'
14+00	1,625,043.09	3,194,223.62	5,756.00	246.86'	19+50	1,625,562.11	3,193,997.44	5,838.60	0.00'
14+00	1,625,046.59	3,194,252.89	5,756.00	276.34'	19+50	1,625,561.62	3,194,004.92	5,838.75	7.50'
14+50	1,625,061.37	3,193,951.51	5,845.37	-21.37'	19+50	1,625,550.53	3,194,175.28	5,777.69	178.21'
14+50	1,625,062.16	3,193,959.51	5,845.15	-13.33'	19+50	1,625,548.73	3,194,203.03	5,776.58	206.03'
14+50	1,625,063.22	3,193,970.29	5,840.29	-2.50'	20+00	1,625,613.70	3,193,988.43	5,838.04	-13.89'
14+50	1,625,063.47	3,193,972.78	5,840.34	0.00'	20+00	1,625,611.86	3,194,002.20	5,838.60	0.00'
14+50	1,625,064.21	3,193,980.24	5,840.49	7.50'	20+00	1,625,610.87	3,194,009.64	5,838.75	7.50'
14+50	1,625,087.46	3,194,215.68	5,756.00 5,756.00	244.09'	20+00	1,625,588.25	3,194,179.07	5,777.00	178.44'
14+50	1,625,090.05 1,625,112.47	3,194,241.92 3,193,951.34	5,756.00	270.46'	20+00	1,625,583.29 1,625,663.17	3,194,216.27 3,193,995.73	5,775.49 5,838.05	215.97'
15+00 15+00	1,625,112.47	3,193,951.34	5,841.25	-17.79' -9.79'	20+50	1,625,661.42	3,193,993.73	5,838.60	-13.20' 0.00'
15+00	1,625,113.21	3,193,966.61	5,839.47	-2.50'	20+50	1,625,660.43	3,194,008.82	5,838.75	7.50'
15+00	1,625,113.33	3,193,969.11	5,839.52	0.00'	20+50	1,625,637.26	3,194,189.84	5,776.08	182.63'
15+00	1,625,113.69	3,193,976.60	5,839.67	7.50'	20+50	1,625,631.43	3,194,233.52	5,774.31	226.69'
15+00	1,625,123.25	3,194,173.72	5,769.19	204.86'	21+00	1,625,715.06	3,194,005.95	5,838.04	-14.76'
15+00	1,625,124.08	3,194,190.81	5,769.19	221.96'	21+00	1,625,710.07	3,194,019.84	5,838.60	0.00'
15+50	1,625,163.34	3,193,951.15	5,837.85	-16.79'	21+00	1,625,707.54	3,194,026.90	5,838.75	7.50'
15+50	1,625,163.32	3,193,959.16	5,837.69	-8.77'	21+00	1,625,647.84	3,194,193.03	5,775.87	184.03'
15+50	1,625,163.31	3,193,965.44	5,838.91	-2.50'	21+00	1,625,632.62	3,194,235.36	5,774.08	229.01'
15+50	1,625,163.31	3,193,967.94	5,838.96	0.00'	21+50	1,625,765.48	3,194,014.14	5,838.03	-24.54'
15+50	1,625,163.30	3,193,975.44	5,839.11	7.50'	21+50	1,625,756.98	3,194,037.16	5,838.60	0.00'
15+50	1,625,163.06	3,194,127.49	5,784.84	159.56'	21+50	1,625,754.38	3,194,044.20	5,838.75	7.50'
15+50	1,625,163.04	3,194,137.63	5,784.43	169.69'	21+50	1,625,693.15	3,194,209.95	5,774.99	184.20'
16+00	1,625,214.22	3,193,951.14	5,835.24	-18.15'	21+50	1,625,675.04	3,194,258.99 3,194,024.91	5,772.90	236.48'
16+00 16+00	1,625,213.82 1,625,213.42	3,193,958.99 3,193,966.77	5,835.07 5,838.61	-10.29' -2.50'	22+00 22+00	1,625,814.80 1,625,803.88	3,194,024.91	5,838.02 5,838.60	-31.53' 0.00'
16+00	1,625,213.42	3,193,969.27	5,838.66	0.00'	22+00	1,625,801.28	3,194,054.48	5,838.75	7.50'
16+00	1,625,212.90	3,193,976.76	5,838.81	7.50'	22+00	1,625,738.40	3,194,231.74	5,774.07	188.96'
10.00	_,0_0,212.50	-,100,0.70	_,555.51	7.50	[22 100	_,023,730.40	-,10 +,201.74	-,	100.30

	WE	ST EMBANK	(MENT SEC	TION POIN	NTS
ET	STATION	NORTHING	EASTING	ELEVATION	OFFSET
l'	16+00	1,625,204.99	3,194,130.01	5,784.07	160.96'
	16+00	1,625,204.11	3,194,147.02	5,783.39	177.99'
'	16+50	1,625,265.24	3,193,951.24	5,833.11	-21.94'
	16+50	1,625,264.51	3,193,958.82	5,832.92	-14.32'
	16+50	1,625,263.38	3,193,970.59	5,838.55	-2.50'
	16+50	1,625,263.14	3,193,973.08	5,838.60	0.00'
9'	16+50	1,625,262.42	3,193,980.54	5,838.75	7.50'
)'	16+50	1,625,247.51	3,194,135.17	5,783.28	162.85'
_	16+50	1,625,245.56	3,194,155.37	5,782.47	183.14'
'	17+00	1,625,315.53	3,193,950.65	5,832.90	-27.35'
	17+00	1,625,314.76	3,193,958.65	5,832.74	-19.31'
	17+00	1,625,313.15	3,193,975.39	5,838.55	-2.50'
	17+00	1,625,312.91	3,193,977.88	5,838.60	0.00'
'	17+00	1,625,312.19	3,193,985.34	5,838.75	7.50'
'	17+00	1,625,297.02	3,194,142.57	5,782.37	165.46'
	17+00	1,625,295.15	3,194,162.04	5,781.59	185.02'
	17+50	1,625,365.78	3,193,950.48	5,832.36	-32.35'
	17+50	1,625,365.01	3,193,958.48	5,832.23	-24.31'
_	17+50	1,625,363.40	3,193,975.21	5,838.45	-7.50'
_	17+50	1,625,362.68	3,193,982.67	5,838.60	0.00'
'	17+50	1,625,361.96	3,193,990.14	5,838.75	7.50'
<u>'</u>	17+50	1,625,346.54	3,194,149.96	5,781.45	168.06'
4	17+50	1,625,344.88	3,194,167.23	5,780.76	185.41'
_	18+00	1,625,414.85	3,193,960.06	5,831.78	-27.49'
	18+00	1,625,413.10	3,193,979.97	5,838.45	-7.50'
_	18+00	1,625,412.45	3,193,987.44	5,838.60	0.00'
	18+00	1,625,411.79	3,193,994.91	5,838.75	7.50'
'	18+00	1,625,397.50	3,194,157.54	5,780.51	170.75'
'	18+00	1,625,396.16	3,194,172.79	5,779.90	186.07'
	18+50	1,625,462.88	3,193,982.36	5,838.08	-8.60'
	18+50	1,625,462.81	3,193,983.46	5,838.45	-7.50'
_	18+50	1,625,462.32	3,193,990.94	5,838.60	0.00'
_	18+50	1,625,461.84	3,193,998.43	5,838.75	7.50'
_	18+50	1,625,451.05	3,194,164.13	5,779.52	173.56'
'	18+50	1,625,450.11	3,194,178.52	5,778.95	187.97'
_	19+00	1,625,513.03	3,193,981.75	5,838.04	-12.47'
	19+00	1,625,512.22	3,193,994.19	5,838.60	0.00'
_	19+00	1,625,511.73	3,194,001.68	5,838.75	7.50'
_	19+00	1,625,500.77	3,194,169.98	5,778.61	176.16'
_	19+00	1,625,500.00	3,194,181.83	5,778.13	188.03'
_	19+50	1,625,562.99	3,193,984.00	5,838.04	-13.47'
_	19+50	1,625,562.11	3,193,997.44	5,838.60	0.00'
_	19+50	1,625,561.62	3,194,004.92	5,838.75	7.50'
_	19+50	1,625,550.53	3,194,175.28	5,777.69	178.21'
_	19+50	1,625,548.73	3,194,203.03	5,776.58	206.03'
_	20+00	1,625,613.70	3,193,988.43	5,838.04	-13.89'
_	20+00	1,625,611.86	3,194,002.20	5,838.60	0.00'
$\perp$	20+00	1,625,610.87	3,194,009.64	5,838.75	7.50'
_	20+00	1,625,588.25	3,194,179.07	5,777.00	178.44'
_	20+00	1,625,583.29	3,194,216.27	5,775.49	215.97'
_	20+50	1,625,663.17	3,193,995.73	5,838.05	-13.20'
_	20+50	1,625,661.42	3,194,008.82	5,838.60	0.00'
$\dashv$	20+50	1,625,660.43	3,194,016.25	5,838.75	7.50'
$\dashv$	20+50	1,625,637.26	3,194,189.84	5,776.08	182.63'
_	20+50	1,625,631.43	3,194,233.52	5,774.31	226.69'
	21+00	1,625,715.06	3,194,005.95	5,838.04	-14.76'
_	21+00	1,625,710.07	3,194,019.84	5,838.60	0.00'
_	21+00	1,625,707.54	3,194,026.90	5,838.75	7.50'
$\dashv$	21+00	1,625,647.84	3,194,193.03	5,775.87	184.03'
$\dashv$	21+00	1,625,632.62	3,194,235.36	5,774.08	229.01'
_	21+50	1,625,765.48	3,194,014.14	5,838.03	-24.54'
_	21+50	1,625,756.98	3,194,037.16	5,838.60	0.00'
_	21+50	1,625,754.38	3,194,044.20	5,838.75	7.50'
_	21+50	1,625,693.15	3,194,209.95	5,774.99	184.20'
_	21+50	1,625,675.04	3,194,258.99	5,772.90	236.48'
	22+00	1,625,814.80	3,194,024.91	5,838.02	-31.53'
$\dashv$	22+00	1,625,803.88	3,194,054.48	5,838.60	0.00'
_	22+00	1,625,801.28	3,194,061.52	5,838.75	7.50'
	22+00	1,625,738.40	3,194,231.74	5,774.07	188.96'

WES	WEST EMBANKMENT SECTION POINTS						
STATION	NORTHING	EASTING	ELEVATION	OFFSET			
22+00	1,625,720.31	3,194,280.73	5,771.98	241.18'			
22+50	1,625,858.28	3,194,036.68	5,838.02	-30.86'			
22+50	1,625,852.23	3,194,066.95	5,838.60	0.00'			
22+50	1,625,850.75	3,194,074.30	5,838.75	7.50'			
22+50	1,625,814.29	3,194,256.40	5,772.61	193.22'			
22+50	1,625,802.20	3,194,316.79	5,770.14	254.80'			

	ADDITIONAL EMBANKMENT POINTS							
	PT#	NORTHING	EASTING	ELEV	DESCRIPTION			
	1001	1625796.63	3194560.95	5765.00	EAST CUT INNER			
	1002	1625801.83	3194540.69	5765.42	EAST CUT END			
	1003	1625808.21	3194531.28	5764.77	EAST CUT OUT			
	1004	1625814.52	3194529.91	5764.61	DAYLIGHT			
	1005	1625827.93	3194592.87	5780.00	DAYLIGHT			
	1006	1625835.96	3194630.60	5790.00	DAYLIGHT			
	1007	1625848.76	3194690.70	5810.12	DAYLIGHT			
	1008	1625845.04	3194717.76	5819.80	DAYLIGHT			
	1009	1625819.20	3194761.63	5837.00	DAYLIGHT			
	1010	1625797.96	3194768.25	5838.35	DAYLIGHT			
	1011	1625784.74	3194782.06	5838.15	DAYLIGHT			
	1012	1623833.48	3194543.65	5850.39	DAYLIGHT			
	1013	1623916.68	3194387.25	5784.85	DAYLIGHT			
	1014	1624026.25	3194259.62	5756.00	WEST CUT INNER			
1	1015	1624025.90	3194293.74	5756.00	WEST CUT OUT			
	1016	1623778.78	3194171.70	5843.75	DAYLIGHT			
	1017	1625893.07	3194045.55	5838.02	DAYLIGHT			
	1018	1625885.90	3194081.34	5838.64	DAYLIGHT			
	1019	1625945.89	3194106.54	5838.26	DAYLIGHT			
	1020	1625937.13	3194214.10	5800.00	DAYLIGHT			
1	1021	1625934.67	3194244.29	5790.00	DAYLIGHT			
	1022	1625931.25	3194286.25	5780.00	DAYLIGHT			
+	1023	1625927.35	3194334.10	5770.68	DAYLIGHT			
+	1024	1625836.57	3194328.05	5769.39	WEST CUT OUT			
	1025	1625849.26	3194265.41	5771.94	WEST CUT INNER			
-	1026	1625920.56	3194317.63	5770.33	WEST CUT INNER			
1	1027	1623946.38	3194246.78	5780.00	GRADE BREAK			

**ISSUED FOR** CONSTRUCTION

PROJECT

CHAMBERS RESERVOIR REMEDIATION DESIGN (PHASE I) 9165 S. CHAMBERS ROAD, PARKER, CO 80134

CLIENT



13031 E Caley Ave, Centennial, CO 8011 303-790-4830 • acwwa.com

## CONSULTANT

AECOM 804 COLORADO AVE. Suite 201 GLENWOOD SPRINGS, CO. 81601

www.aecom.com

CONSULTANTS

REGISTRATION

ISSUE/REVISION

1	07/15/2019	ISSUED FOR CONSTRUCTION
I/R	DATE	DESCRIPTION

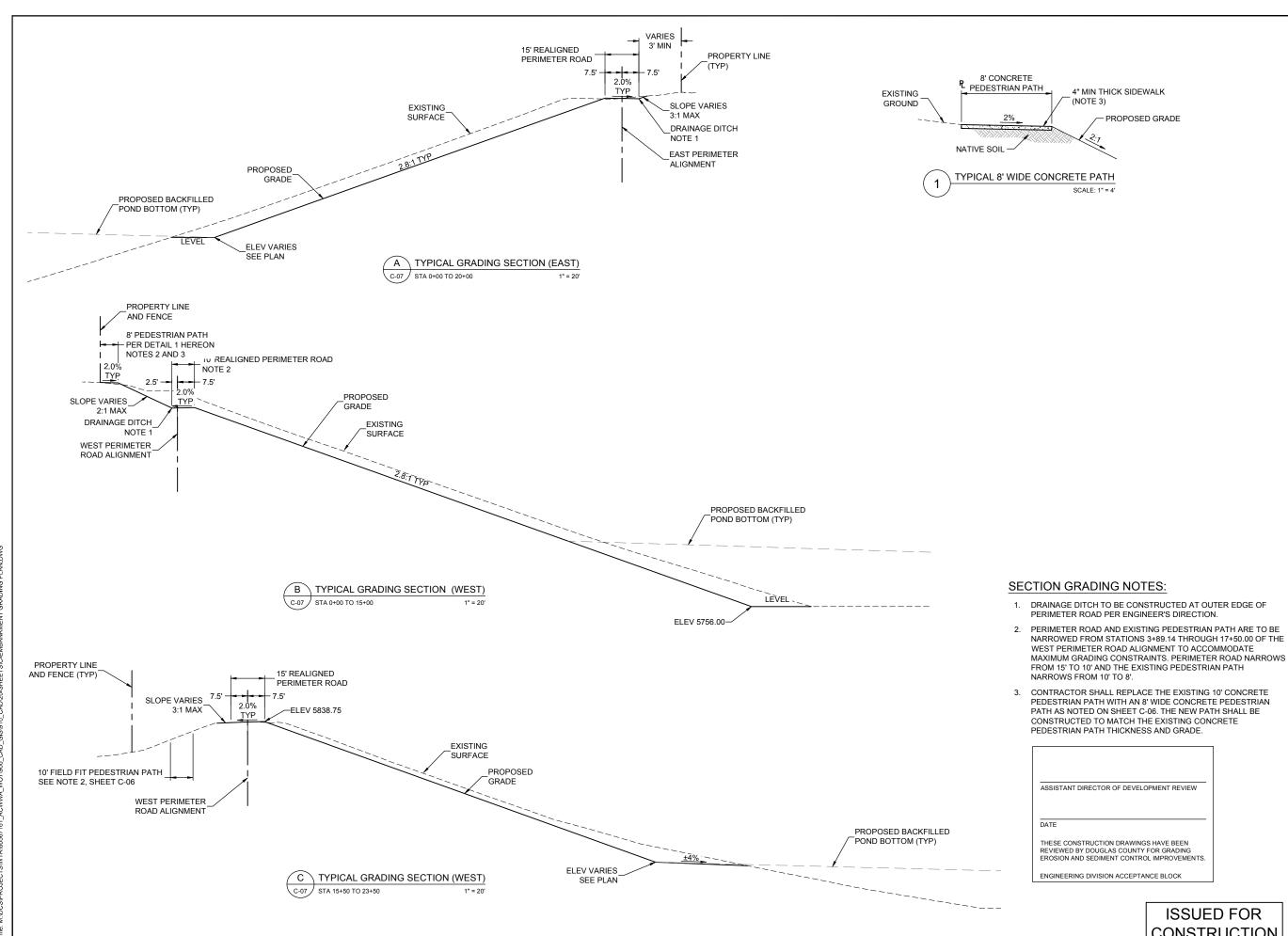
**KEY PLAN** 

PROJECT NUMBER

60567161

SHEET TITLE

WEST EMBANKMENT SECTION POINTS AND ADDITIONAL EMBANKMENT POINTS



4" MIN THICK SIDEWALK

PROPOSED GRADE

(NOTE 3)

SCALE: 1" = 4"

CHAMBERS RESERVOIR REMEDIATION DESIGN (PHASE I) 9165 S. CHAMBERS ROAD, PARKER, CO 80134

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CONSULTANT

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CONSULTANTS

REGISTRATION

ISSUE/REVISION

1 07/15/2019 ISSUED FOR CONSTRUCTION DATE DESCRIPTION

**KEY PLAN** 

PROJECT NUMBER

60567161

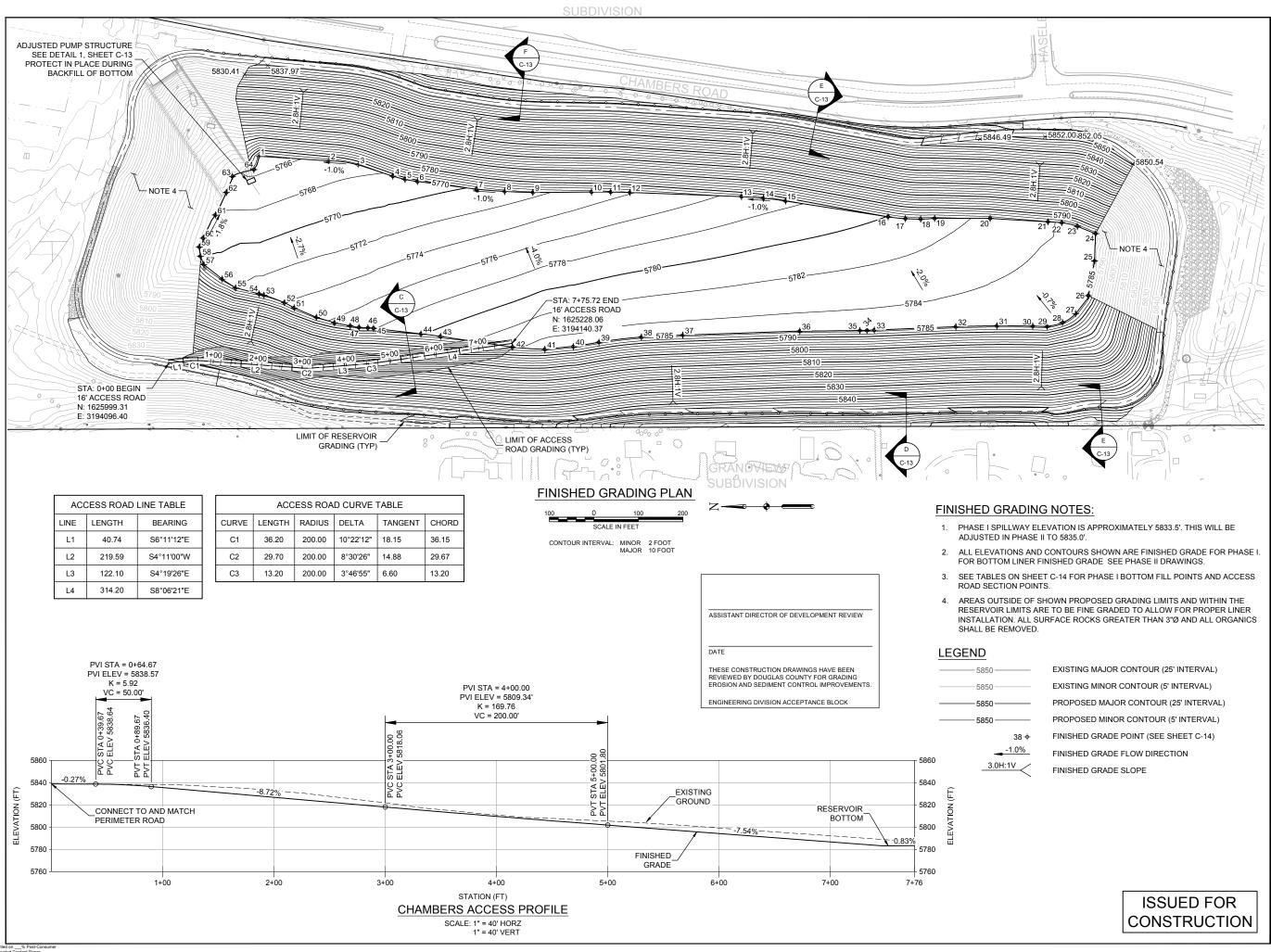
SHEET TITLE

TYPICAL EMBANKMENT **GRADING SECTIONS** 

SHEET NUMBER

**ISSUED FOR** 

CONSTRUCTION



**AECO**M

PROJE

CHAMBERS RESERVOIR REMEDIATION DESIGN (PHASE I) 9165 S. CHAMBERS ROAD, PARKER, CO 80134

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REGISTRATION

ISSUE/REVISION

1 07/15/2019 ISSUED FOR CONSTRUCTION

I/R DATE DESCRIPTION

KEY PLAN

PROJECT NUMBER

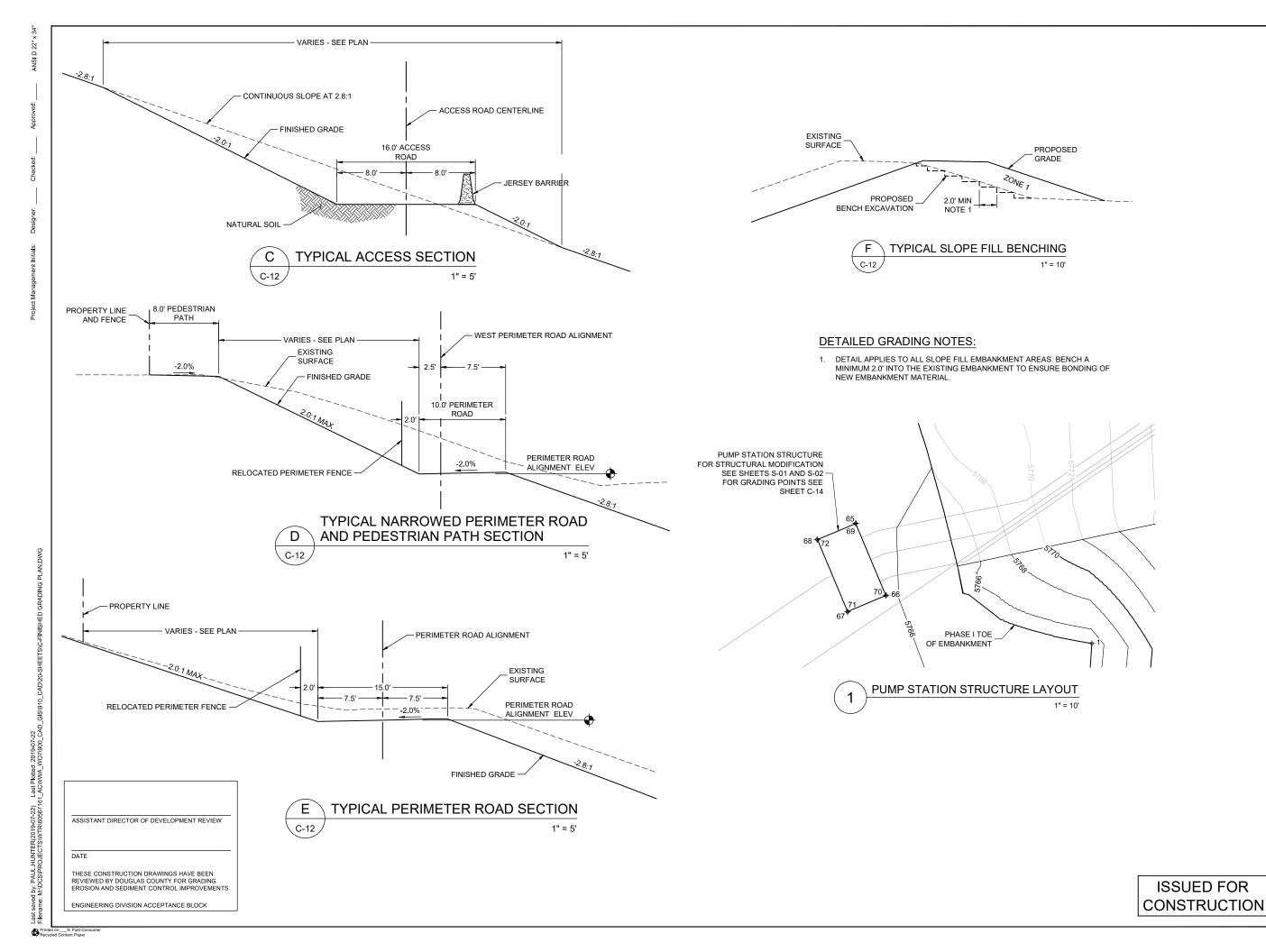
60567161

SHEET TITLE

FINISHED GRADING PLAN

SHEET NUMBER

C-12



| AECOM

PROJEC

CHAMBERS RESERVOIR REMEDIATION DESIGN (PHASE I) 9165 S. CHAMBERS ROAD, PARKER, CO 80134

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GLENWOOD SPRINGS, CO. 81601

CONSULTANT

AECOM 804 COLORADO AVE. Suite 201

www.aecom.com

CONSULTANTS

REGISTRATION

ISSUE/REVISION

1 07/15/2019 ISSUED FOR CONSTRUCTION

DATE DESCRIPTION

KEY PLAN

PROJECT NUMBER

60567161

SHEET TITLE

DETAILED GRADING SECTIONS AND DETAILS

SHEET NUMBER

C 12

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	GRADING PLAN DWO
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	BOTTOM FILL POINT TABLE						
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION			
1	1625796.63	3194560.95	5765.00	LOW POINT			
2	1625639.98	3194550.72	5766.66	BOTTOM FG			
3	1625573.81	3194541.66	5767.36	BOTTOM FG			
4	1625495.83	3194516.32	5768.23	BOTTOM FG			
5	1625468.45	3194509.08	5768.53	BOTTOM FG			
6	1625440.53	3194504.25	5768.83	BOTTOM FG			
7	1625307.62	3194487.20	5770.24	BOTTOM FG			
8	1625244.45	3194481.95	5770.91	BOTTOM FG			
9	1625181.09	3194479.68	5771.58	BOTTOM FG			
10	1625049.36	3194480.77	5772.97	BOTTOM FG			
11	1625006.17	3194480.70	5773.42	BOTTOM FG			
12	1624963.00	3194479.68	5773.88	BOTTOM FG			
13	1624712.40	3194470.28	5776.53	BOTTOM FG			
14	1624662.77	3194466.78	5777.05	BOTTOM FG			
15	1624613.41	3194460.55	5777.58	BOTTOM FG			
16	1624382.94	3194424.94	5780.04	BOTTOM FG			
17	1624343.94	3194420.66	5780.45	BOTTOM FG			
18	1624309.73	3194419.89	5780.81	BOTTOM FG			
19	1624278.12	3194421.27	5781.15	BOTTOM FG			
20	1624153.42	3194421.29	5782.46	BOTTOM FG			
21	1624023.69	3194413.73	5783.83	BOTTOM FG			
22	1623992.70	3194411.70	5784.16	BOTTOM FG			
23	1623957.73	3194403.56	5784.54	BOTTOM FG			
24	1623916.68	3194387.25	5785.00	BOTTOM FG			
25	1623919.02	3194325.72	5785.00	BOTTOM FG			
26	1623933.02	3194247.87	5785.00	BOTTOM FG			
27	1623961.52	3194207.39	5785.00	BOTTOM FG			
28	1623990.81	3194187.30	5785.00	BOTTOM FG			
29	1624025.44	3194178.40	5785.00	BOTTOM FG			
30	1624058.04	3194179.32	5785.00	BOTTOM FG			
31	1624138.08	3194180.00	5785.00	BOTTOM FG			
32	1624230.63	3194177.98	5785.00	BOTTOM FG			
33	1624413.77	3194170.39	5785.00	BOTTOM FG			
34	1624430.13	3194169.73	5785.00	BOTTOM FG			
35	1624446.37	3194169.42	5785.00	BOTTOM FG			
36	1624581.22	3194168.02	5785.00	BOTTOM FG			

BOTTOM FILL POINT TABLE						
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION		
37	1624844.17	3194159.08	5785.00	BOTTOM FG		
38	1624937.21	3194154.71	5785.00	BOTTOM FG		
39	1625032.68	3194143.08	5785.00	BOTTOM FG		
40	1625090.18	3194133.22	5785.00	BOTTOM FG		
41	1625154.20	3194127.26	5785.00	BOTTOM FG		
42	1625226.97	3194132.14	5783.75	BOTTOM FG		
43	1625388.47	3194156.23	5780.68	BOTTOM FG		
44	1625432.46	3194161.95	5779.87	BOTTOM FG		
45	1625539.40	3194174.52	5777.89	BOTTOM FG		
46	1625552.00	3194175.30	5777.66	BOTTOM FG		
47	1625571.96	3194176.50	5777.30	BOTTOM FG		
48	1625591.69	3194179.80	5776.93	BOTTOM FG		
49	1625627.05	3194186.76	5776.27	BOTTOM FG		
50	1625667.67	3194199.01	5775.50	BOTTOM FG		
51	1625717.44	3194220.38	5774.50	BOTTOM FG		
52	1625739.16	3194232.15	5774.05	BOTTOM FG		
53	1625785.45	3194248.92	5773.15	BOTTOM FG		
54	1625796.64	3194251.86	5772.94	BOTTOM FG		
55	1625849.26	3194265.41	5771.94	BOTTOM FG		
56	1625879.38	3194285.04	5771.29	BOTTOM FG		
57	1625920.56	3194317.63	5770.33	BOTTOM FG		
58	1625928.36	3194336.38	5769.97	BOTTOM FG		
59	1625930.67	3194357.26	5769.65	BOTTOM FG		
60	1625922.00	3194377.15	5769.24	BOTTOM FG		
61	1625894.59	3194428.97	5768.12	BOTTOM FG		
62	1625869.83	3194479.87	5767.04	BOTTOM FG		
63	1625856.31	3194515.61	5766.32	BOTTOM FG		
64	1625808.25	3194531.13	5765.60	BOTTOM FG		
65	1625824.44	3194506.40	5766.25	BOTTOM FG		
66	1625807.74	3194513.46	5766.08	BOTTOM FG		
67	1625803.93	3194504.52	5766.34	BOTTOM FG		
68	1625820.66	3194497.46	5766.49	BOTTOM FG		
69	1625824.34	3194506.39	5767.50	STRUCTURE TOV		
70	1625807.74	3194513.36	5767.50	STRUCTURE TOV		
71	1625804.03	3194504.53	5767.50	STRUCTURE TOV		
72	1625820.63	3194497.56	5767.50	STRUCTURE TOW		

STATION	NORTHING	EASTING	ELEVATION	OFFSE1
0+33	1625967.42	3194108.48	5838.37	-8.58'
0+33	1625967.36	3194107.91	5838.66	-8.00'
0+33	1625966.50	3194099.95	5838.66	0.00'
0+33	1625965.64	3194092.00	5838.66	8.00'
0+33	1625965.60	3194091.64	5838.84	8.36'
0+50	1625950.47	3194116.03	5835.28	-14.49'
0+50	1625950.07	3194109.55	5838.52	-8.00'
0+50	1625949.58	3194101.57	5838.52	0.00'
0+50	1625949.08	3194093.59	5838.52	8.00'
0+50	1625949.04	3194092.93	5838.85	8.66'
1+00	1625897.36	3194131.24	5823.70	-31.59'
1+00	1625899.08	3194107.71	5835.49	-8.00'
1+00	1625899.66	3194099.73	5835.49	0.00'
1+00	1625900.24	3194091.76	5835.49	8.00'
1+00	1625900.71	3194085.40	5838.68	14.38'
1+50	1625847.77	3194123.73	5821.28	-27.72'
1+50	1625849.21	3194104.07	5831.14	-8.00'
1+50	1625849.79	3194096.09	5831.14	0.00'
1+50	1625850.38	3194088.11	5831.14	8.00'
1+50	1625851.48	3194072.99	5838.72	23.16'
2+00	1625798.69	3194109.39	5822.28	-17.00
2+00	1625799.34	3194100.42	5826.78	-8.00'
2+00	1625799.93	3194092.44	5826.78	0.00'
2+00	1625800.51	3194084.46	5826.78	8.00'
2+00	1625802.25	3194060.63	5838.72	31.89'
2+50	1625748.49	3194110.30	5815.63	-21.57
2+50	1625749.48	3194096.77	5822.42	-8.00'
2+50	1625750.06	3194088.79	5822.42	0.00'
2+50	1625750.64	3194080.81	5822.42	8.00'
2+50	1625752.29	3194058.27	5833.72	30.61'
3+00	1625698.78	3194110.54	5809.36	-25.40
3+00	1625699.75	3194093.16	5818.06	-8.00'
3+00	1625700.19	3194085.18	5818.06	0.00'
3+00	1625700.64	3194077.19	5818.06	8.00'
3+00	1625701.68	3194058.43	5827.45	26.78'
3+50	1625652.59	3194117.75	5802.47	-30.61
3+50	1625650.88	3194095.20	5813.77	-8.00'
3+50	1625650.28	3194087.23	5813.77	0.00'
3+50	1625649.67	3194079.25	5813.77	8.00'
3+50	1625648.67	3194065.98	5820.43	21.31'

	ACCESS ROAD SECTION POINTS							
FSET	STATION	NORTHING	EASTING	ELEVATION	OFFSET			
8.58'	4+00	1625602.73	3194121.60	5798.29	-30.69'			
3.00'	4+00	1625601.02	3194098.97	5809.64	-8.00'			
0.00'	4+00	1625600.42	3194091.00	5809.64	0.00'			
3.00'	4+00	1625599.82	3194083.02	5809.64	8.00'			
3.36'	4+00	1625598.63	3194067.36	5817.49	23.71'			
4.49'	4+50	1625552.41	3194116.73	5798.63	-22.03'			
3.00'	4+50	1625551.23	3194102.75	5805.65	-8.00'			
0.00'	4+50	1625550.56	3194094.77	5805.65	0.00'			
3.00'	4+50	1625549.89	3194086.80	5805.65	8.00'			
3.66'	4+50	1625547.79	3194061.83	5818.18	33.06'			
1.59'	5+00	1625503.66	3194120.01	5796.45	-18.70'			
3.00'	5+00	1625502.15	3194109.42	5801.80	-8.00'			
0.00'	5+00	1625501.02	3194101.50	5801.80	0.00'			
3.00'	5+00	1625499.89	3194093.58	5801.80	8.00'			
4.38'	5+00	1625496.19	3194067.56	5814.94	34.27'			
7.72'	5+50	1625454.06	3194126.36	5793.03	-18.00'			
3.00'	5+50	1625452.65	3194116.47	5798.03	-8.00'			
0.00'	5+50	1625451.52	3194108.55	5798.03	0.00'			
3.00'	5+50	1625450.39	3194100.63	5798.03	8.00'			
3.16'	5+50	1625446.59	3194073.90	5811.53	35.00'			
7.00'	6+00	1625404.54	3194133.27	5789.34	-17.85'			
3.00'	6+00	1625403.15	3194123.52	5794.26	-8.00'			
0.00'	6+00	1625402.02	3194115.60	5794.26	0.00'			
3.00'	6+00	1625400.89	3194107.68	5794.26	8.00'			
1.89'	6+00	1625397.14	3194081.34	5807.56	34.60'			
1.57'	6+50	1625355.40	3194142.88	5784.27	-20.44'			
3.00'	6+50	1625353.65	3194130.57	5790.49	-8.00'			
0.00'	6+50	1625352.52	3194122.65	5790.49	0.00'			
3.00'	6+50	1625351.39	3194114.73	5790.49	8.00'			
0.61'	6+50	1625348.04	3194091.21	5802.37	31.76'			
5.40'	7+00	1625305.45	3194146.75	5782.11	-17.23'			
3.00'	7+00	1625304.15	3194137.62	5786.72	-8.00'			
0.00'	7+00	1625303.02	3194129.70	5786.72	0.00'			
3.00'	7+00	1625301.89	3194121.78	5786.72	8.00'			
6.78'	7+00	1625298.95	3194101.10	5797.17	28.88'			
0.61'	7+50	1625254.74	3194145.31	5782.82	-8.65'			
3.00'	7+50	1625254.65	3194144.67	5783.15	-8.00'			
0.00'	7+50	1625253.52	3194136.75	5783.15	0.00'			
3.00'	7+50	1625252.39	3194128.83	5783.15	8.00'			
1.31'	7+50	1625250.04	3194112.29	5791.50	24.71'			

ISSUED FOR CONSTRUCTION

PROJECT

CHAMBERS RESERVOIR REMEDIATION DESIGN (PHASE I) 9165 S. CHAMBERS ROAD, PARKER, CO 80134

CLIENT



## CONSULTANT

AECOM 804 COLORADO AVE. Suite 201 GLENWOOD SPRINGS, CO. 81601

www.aecom.com

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ISSUE/REVISION

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I/R	DATE	DESCRIPTION

**KEY PLAN** 

PROJECT NUMBER

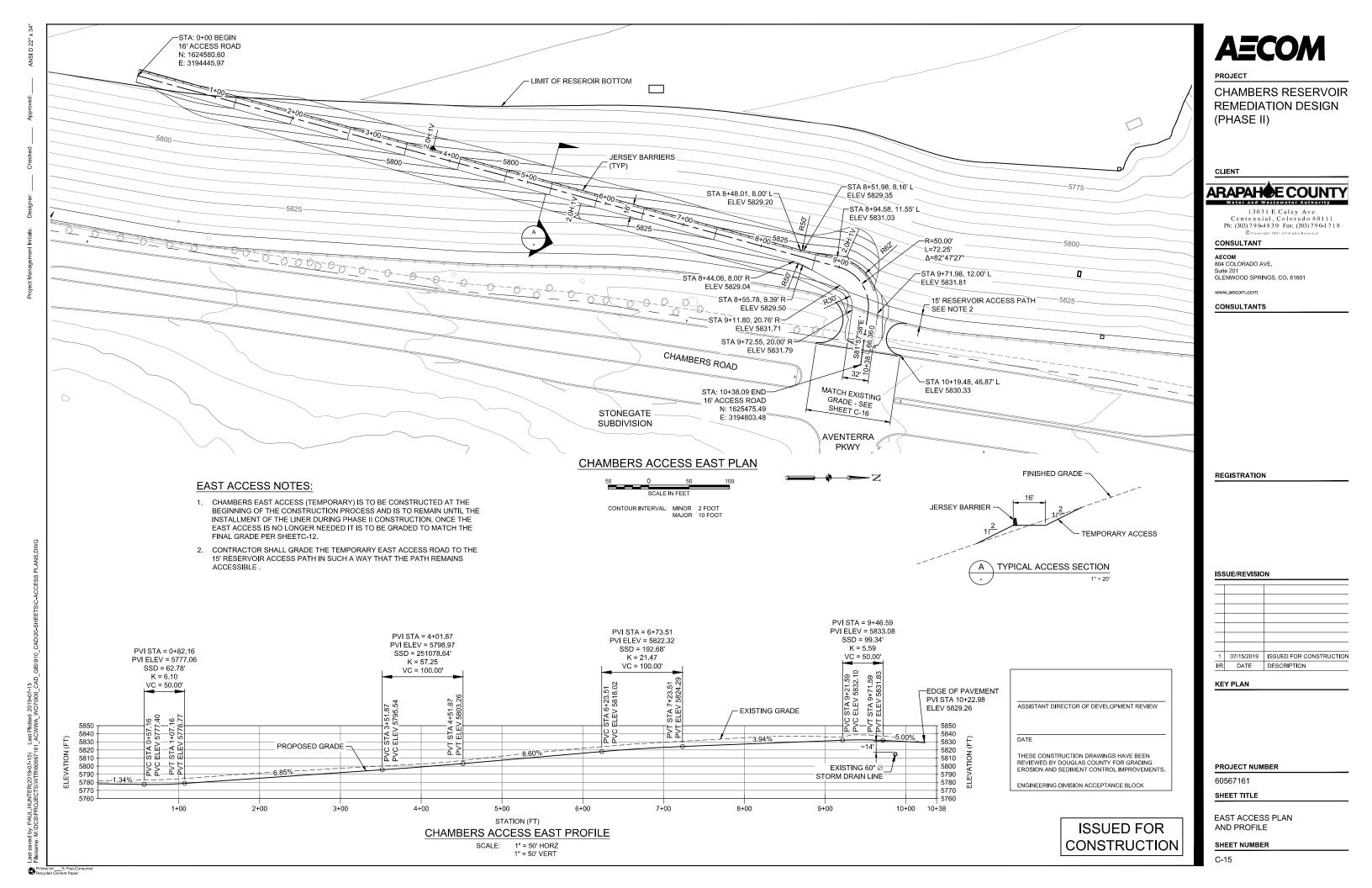
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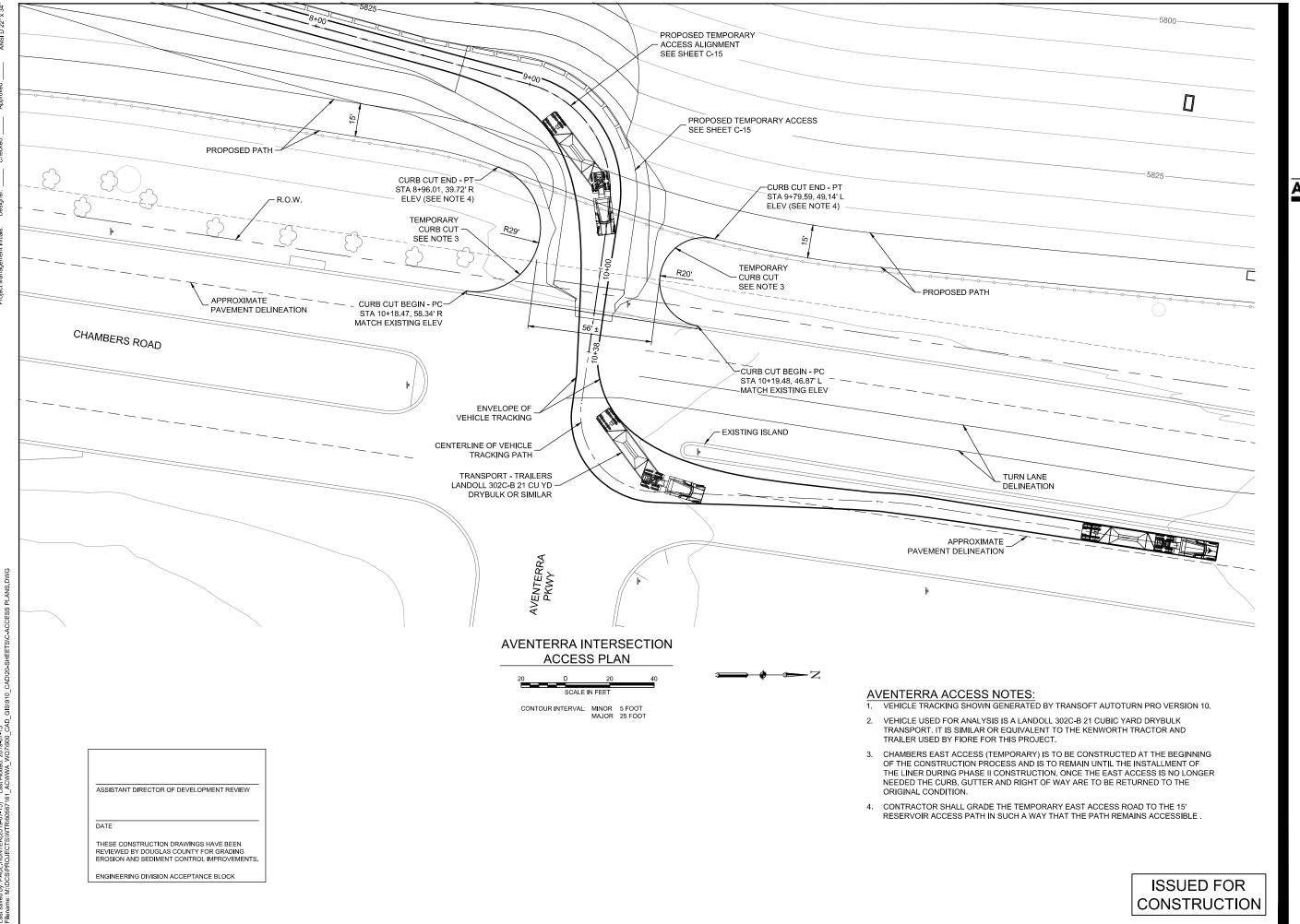
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FINISHED GRADE POINTS TABLES

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## ARAPAH E COUNTY

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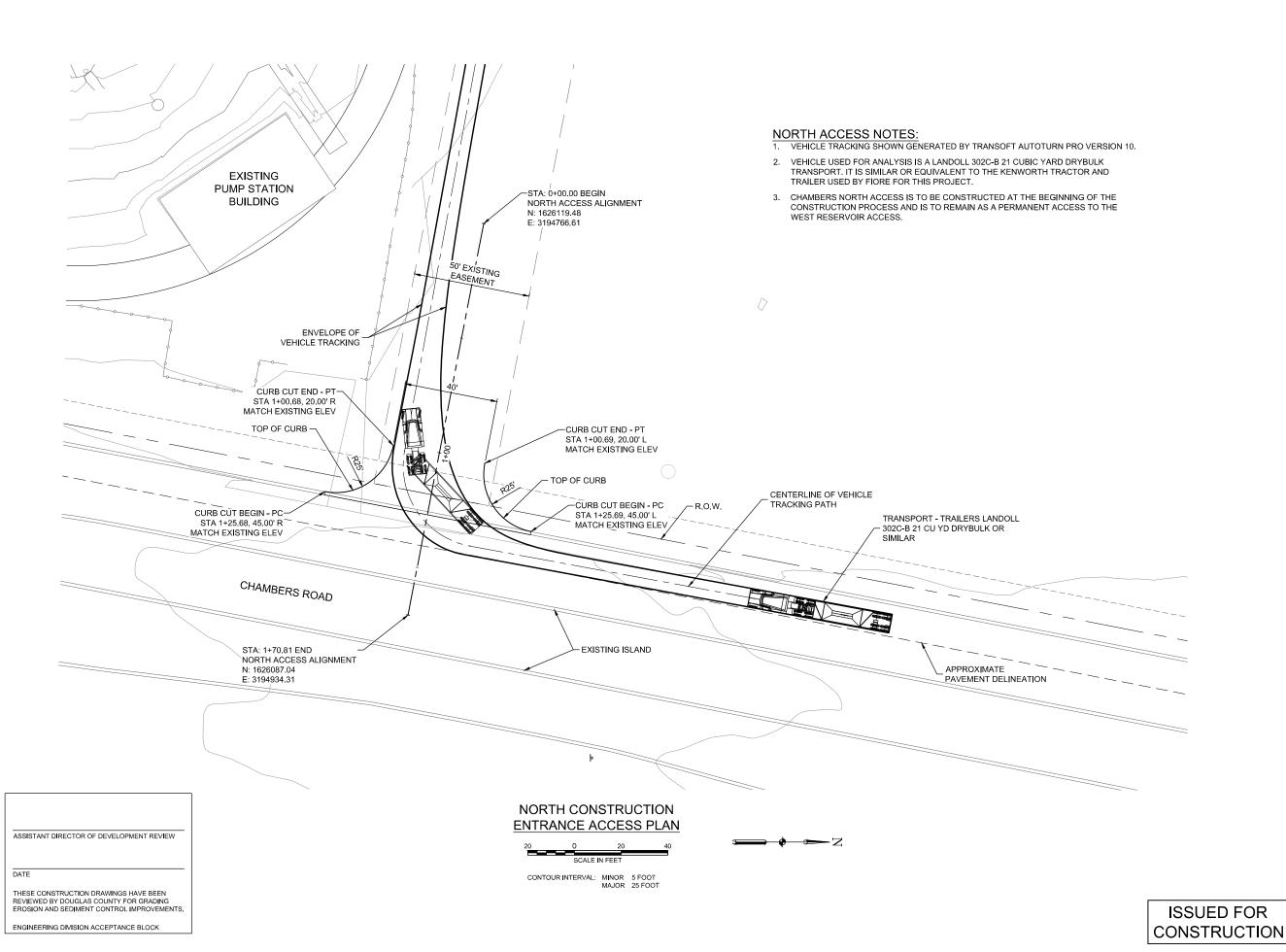
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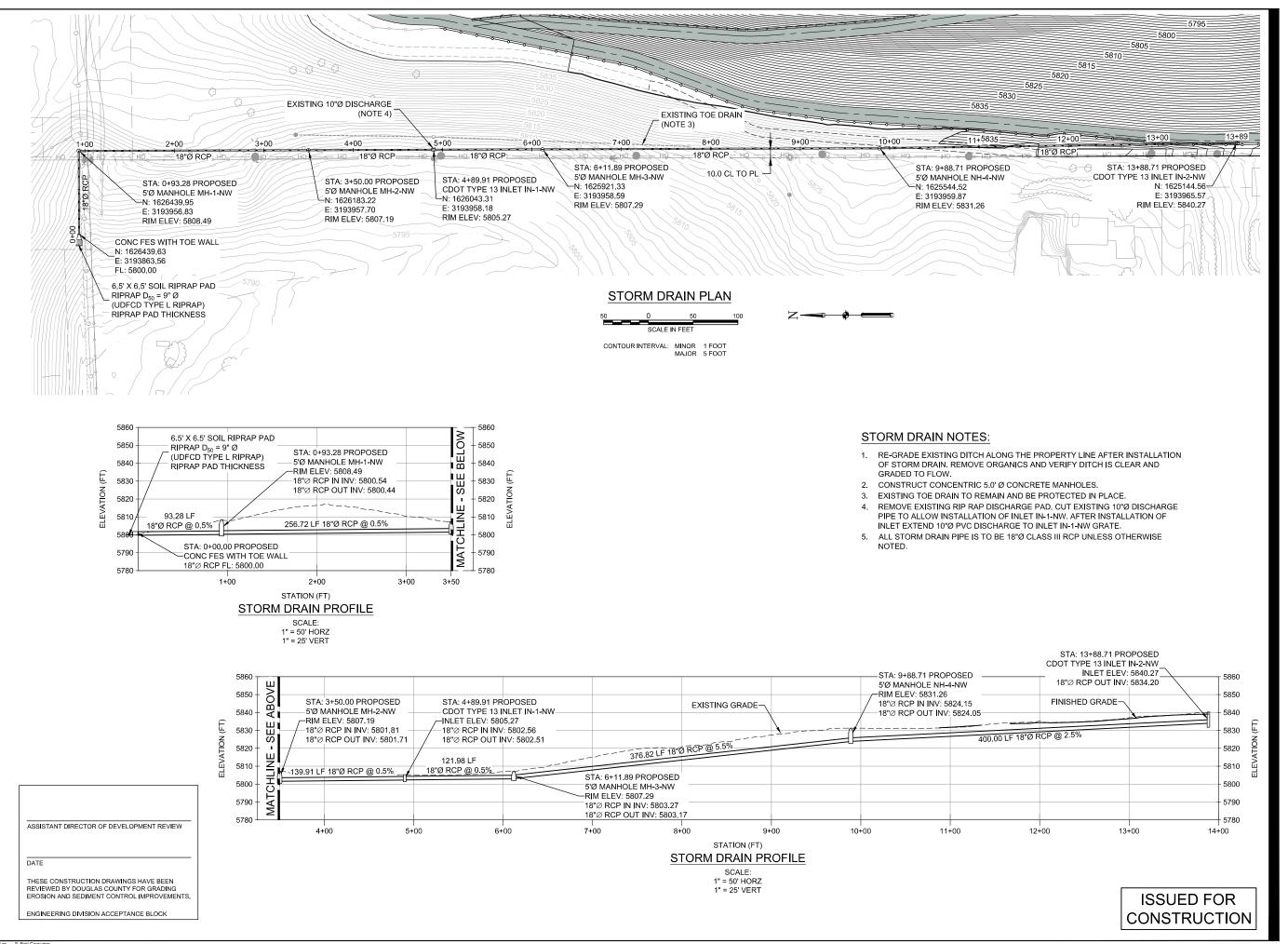
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STORM DRAIN PLAN AND PROFILE

SHEET NUMBER

C-18