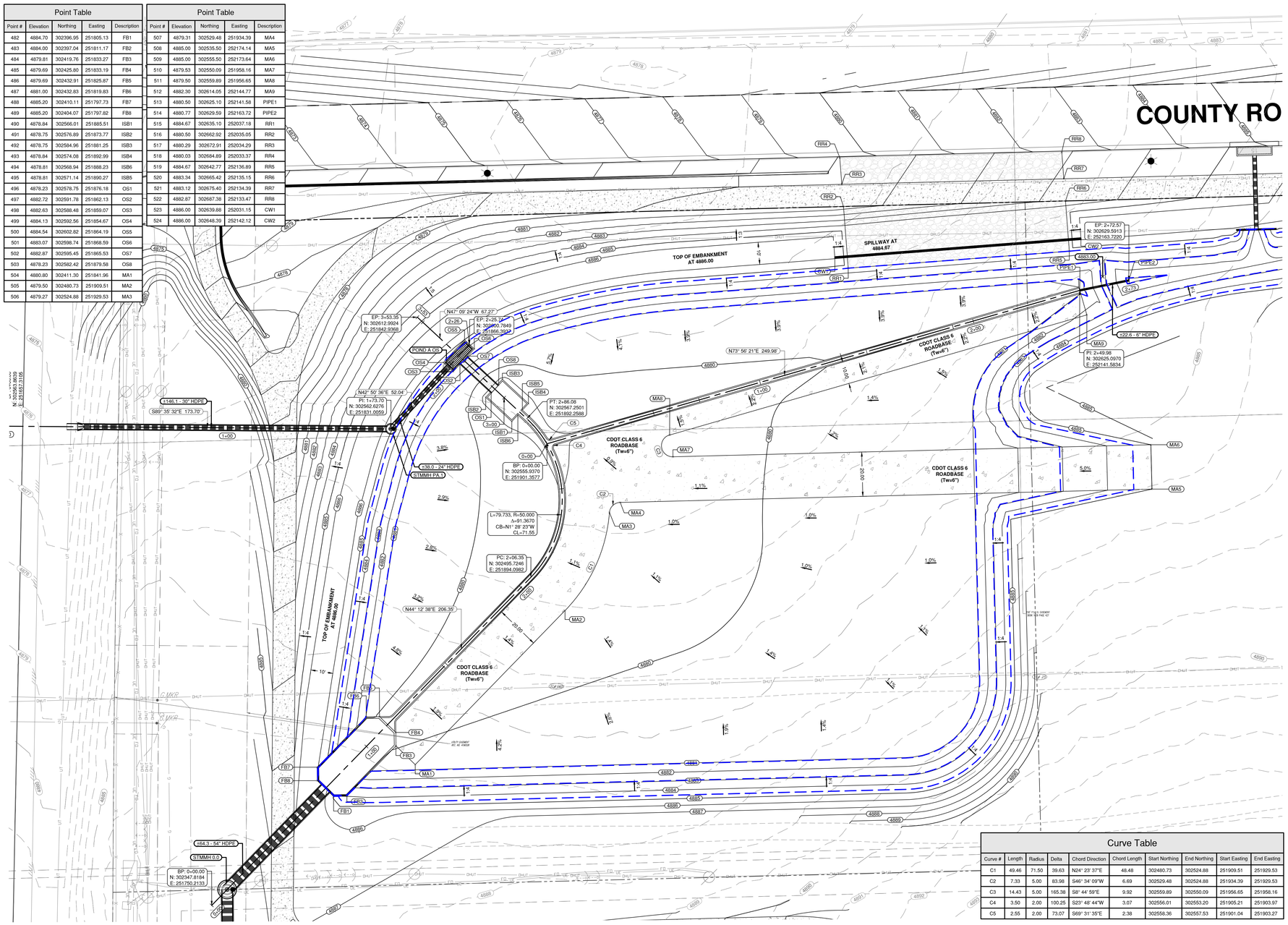
Point Table				
Point #	Elevation	Northing	Easting	Description
482	4884.70	302396.95	251805.13	FB1
483	4884.00	302397.04	251811.17	FB2
484	4879.81	302419.76	251833.27	FB3
485	4879.69	302425.80	251833.19	FB4
486	4879.69	302432.91	251825.87	FB5
487	4881.00	302432.83	251819.83	FB6
488	4885.20	302410.11	251797.73	FB7
489	4885.20	302404.07	251797.82	FB8
490	4878.84	302566.01	251885.51	ISB1
491	4878.75	302576.89	251873.77	ISB2
492	4878.75	302584.96	251881.25	ISB3
493	4878.84	302574.08	251892.99	ISB4
494	4878.81	302568.94	251888.23	ISB6
495	4878.81	302571.14	251890.27	ISB5
496	4878.23	302578.75	251876.16	OS1
497	4882.72	302591.76	251862.13	OS2
498	4882.63	302588.48	251859.07	OS3
499	4884.13	302592.56	251854.67	OS4
500	4884.54	302602.82	251864.19	OS5
501	4883.07	302598.74	251868.59	OS6
502	4882.87	302595.45	251865.53	OS7
503	4878.23	302582.42	251879.58	OS8
504	4880.80	302411.30	251841.96	MA1
505	4879.50	302480.73	251909.51	MA2
506	4879.27	302524.88	251929.53	MA3

Point Table				
Point #	Elevation	Northing	Easting	Description
507	4879.31	302529.48	251934.39	MA4
508	4885.00	302535.50	252174.14	MA5
509	4885.00	302555.50	252173.64	MA6
510	4879.53	302550.09	251958.16	MA7
511	4879.50	302559.89	251956.65	MA8
512	4882.30	302614.05	252144.77	MA9
513	4880.50	302625.10	252141.58	PIPE1
514	4880.77	302629.59	252163.72	PIPE2
515	4884.67	302635.10	252037.18	RR1
516	4880.50	302662.92	252035.05	RR2
517	4880.29	302672.91	252034.29	RR3
518	4880.03	302684.89	252033.37	RR4
519	4884.67	302642.77	252136.89	RR5
520	4883.34	302665.42	252135.15	RR6
521	4883.12	302675.40	252134.39	RR7
522	4882.87	302687.38	252133.47	RR8
523	4886.00	302639.88	252031.15	CW1
524	4886.00	302648.39	252142.12	CW2



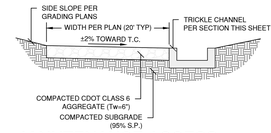
POND A - DETAILED GRADING PLAN

SCALE: 1"=20'

Curve Table									
Curve #	Length	Radius	Delta	Chord Direction	Chord Length	Start Northing	End Northing	Start Easting	End Easting
C1	49.46	71.50	39.63	N24° 23' 37"E	48.48	302480.73	302524.88	251909.51	251929.53
C2	7.33	5.00	83.98	S46° 34' 09"W	6.69	302529.48	302524.88	251934.39	251929.53
C3	14.43	5.00	165.38	S8° 44' 59"E	9.92	302559.89	302550.09	251956.65	251958.16
C4	3.50	2.00	100.25	S23° 48' 44"W	3.07	302556.01	302553.20	251905.21	251903.97
C5	2.55	2.00	73.07	S69° 31' 35"E	2.38	302558.36	302557.53	251901.04	251903.27

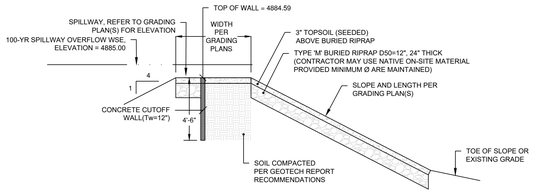
LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WATER SURFACE ELEVATION
- LOC — LIMITS OF CONSTRUCTION
- TRICKLE CHANNEL



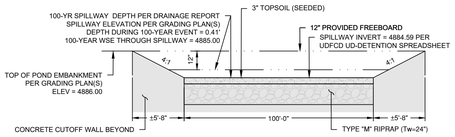
MAINTENANCE ACCESS

SCALE: NTS



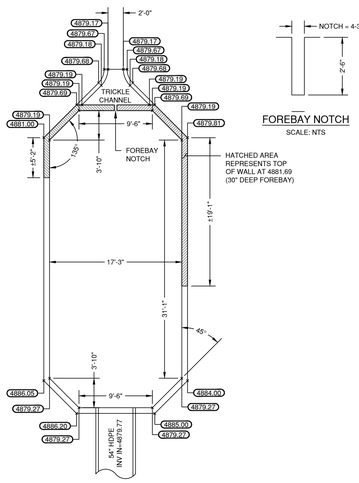
EMERGENCY SPILLWAY SECTION

SCALE: NTS



EMERGENCY SPILLWAY CROSS-SECTION

SCALE: NTS

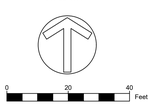


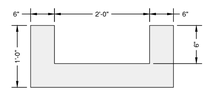
FOREBAY NOTCH

SCALE: NTS

FOREBAY - PLAN VIEW

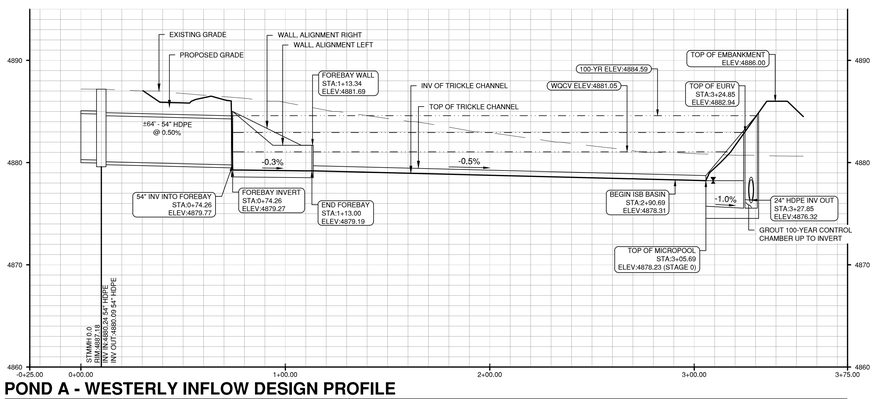
SCALE: NTS





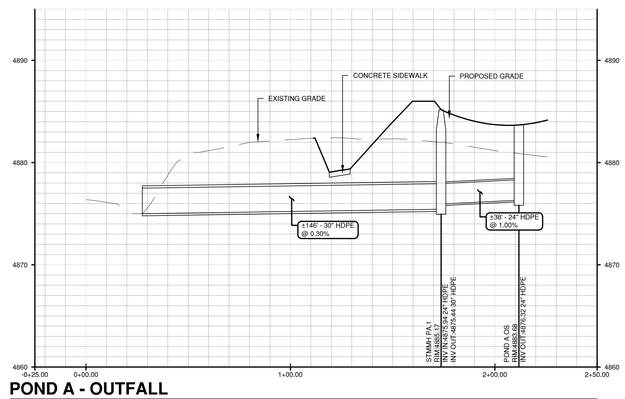
POND A TRICKLE CHANNEL

SCALE: NTS



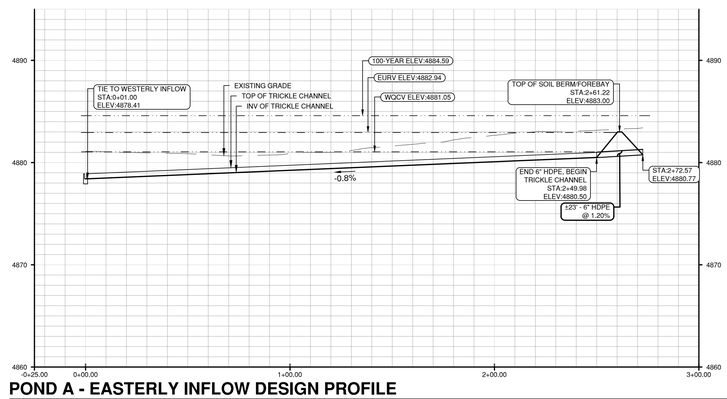
POND A - WESTERLY INFLOW DESIGN PROFILE

SCALE: 1"=30' (H); 1"=6' (V)



POND A - OUTFALL

SCALE: 1"=30' (H); 1"=6' (V)



POND A - EASTERLY INFLOW DESIGN PROFILE

SCALE: 1"=30' (H); 1"=6' (V)

ENGINEER IN CHARGE:

PRELIMINARY NOT FOR CONSTRUCTION

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1; RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500± WEST OF COUNTY RD 73.

ELEVATION = 4721.56 (NAVD 88)

PIONEER VILLAGE PA'S 1-4, 17 AND 21

TOWN OF KEENESBURG
WELD COUNTY, COLORADO

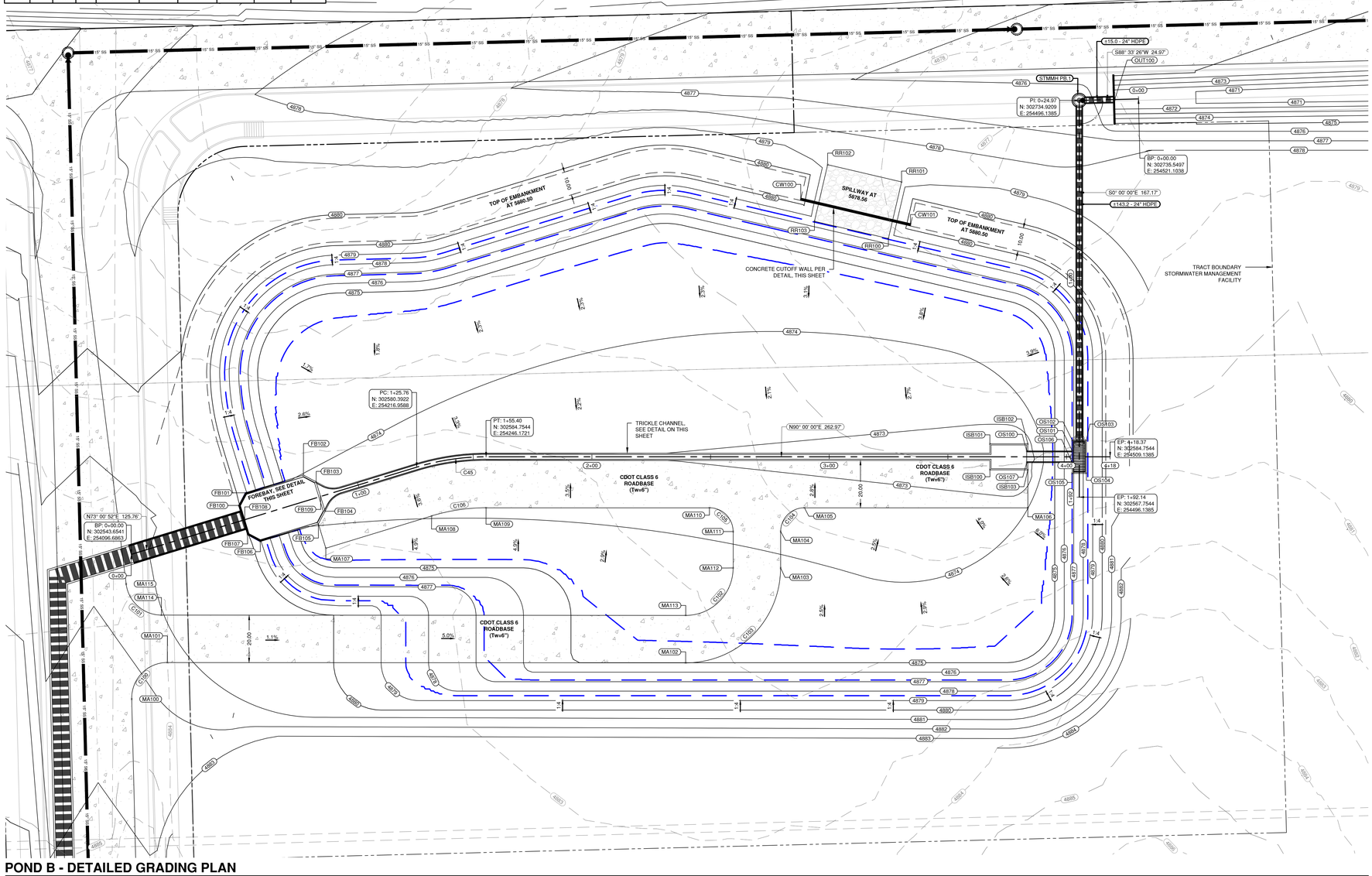
POND A DETAILED GRADING PLAN

REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	AS NOTED
SHEET NUMBER	C7.00

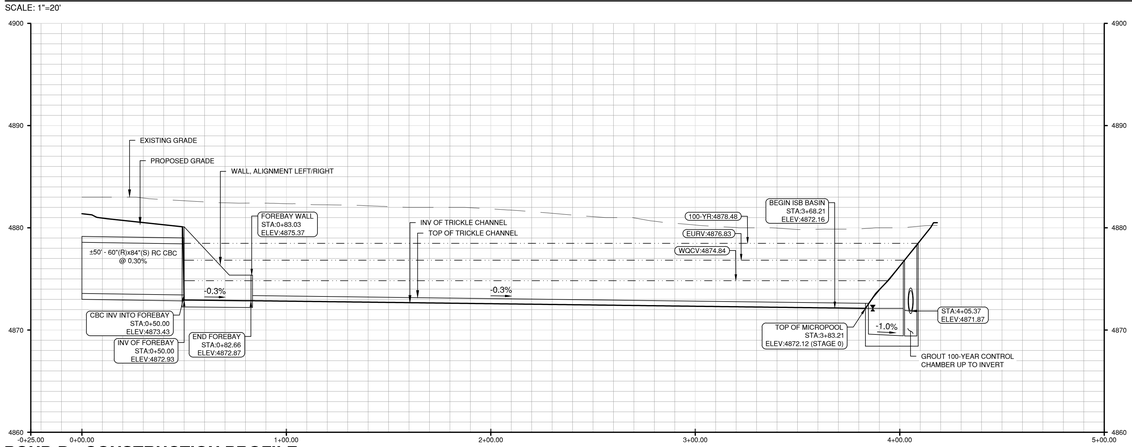
Curve Table

Curve #	Length	Radius	Delta	Chord Direction	Chord Length	Start Northing	End Northing	Start Easting	End Easting
C100	23.94	15.00	91.46	S44° 17' 59"W	21.48	302498.04	302482.66	254111.87	254096.87
C101	21.68	15.00	82.80	S48° 34' 12"E	19.84	302531.17	302518.04	254094.53	254109.40
C102	31.42	20.00	90.00	N45° 01' 44"E	28.28	302517.93	302537.92	254330.30	254350.31
C103	62.83	40.00	90.00	N45° 01' 44"E	56.57	302497.93	302537.91	254330.29	254370.31
C104	15.70	10.00	89.97	S45° 00' 52"W	14.14	302563.25	302553.26	254380.32	254370.32
C105	15.71	10.00	90.03	N44° 59' 08"W	14.15	302553.25	302563.25	254350.32	254340.32
C106	23.27	78.50	16.99	S81° 30' 26"W	23.19	302563.25	302559.83	254246.17	254223.24



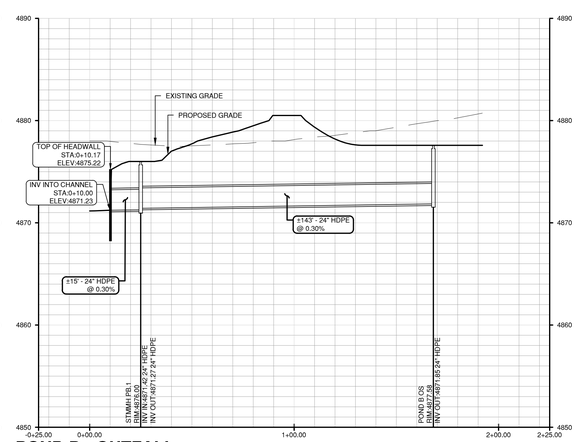
POND B - DETAILED GRADING PLAN

SCALE: 1"=20'



POND B - CONSTRUCTION PROFILE

SCALE: 1"=30' (H); 1"=6' (V)

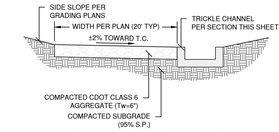


POND B - OUTFALL

SCALE: 1"=30' (H); 1"=6' (V)

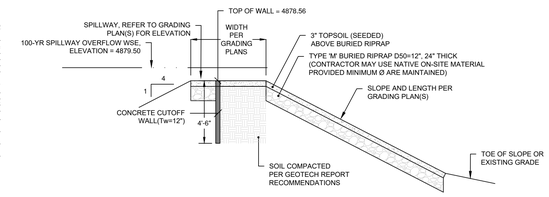
LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WATER SURFACE ELEVATION
- LOC — LIMITS OF CONSTRUCTION
- TRICKLE CHANNEL



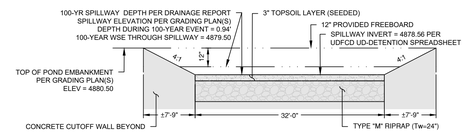
MAINTENANCE ACCESS

SCALE: NTS



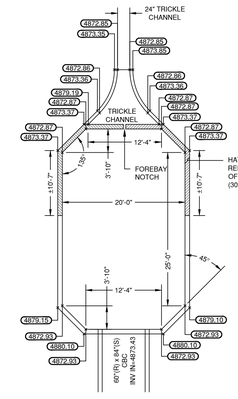
EMERGENCY SPILLWAY SECTION

SCALE: NTS



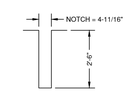
EMERGENCY SPILLWAY CROSS-SECTION

SCALE: NTS



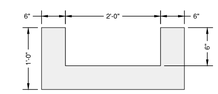
FOREBAY - PLAN VIEW

SCALE: NTS



FOREBAY NOTCH

SCALE: NTS



POND B TRICKLE CHANNEL

SCALE: NTS

Point Table

Point #	Elevation	Northing	Easting	Description
525	4881.42	302482.66	254096.87	MA100
526	4880.93	302498.04	254111.87	MA101
527	4875.02	302497.93	254330.29	MA102
528	4874.12	302537.91	254370.31	MA103
529	4873.73	302553.26	254370.32	MA104
530	4873.39	302563.25	254380.32	MA105
531	4873.98	302563.25	254474.48	MA106
532	4874.58	302546.21	254178.66	MA107
533	4873.96	302559.83	254223.24	MA108
534	4873.85	302563.25	254246.17	MA109
535	4873.58	302563.25	254340.32	MA110
536	4873.84	302553.25	254350.32	MA111
537	4874.20	302537.92	254350.31	MA112
538	4874.62	302517.93	254330.30	MA113
539	4880.71	302518.04	254109.40	MA114
540	4880.75	302531.17	254094.53	MA115
541	4880.10	302564.24	254141.89	FB100
542	4879.15	302569.57	254144.73	FB101
543	4873.37	302577.05	254169.23	FB102
544	4873.37	302574.22	254174.56	FB103
545	4873.37	302561.82	254178.35	FB104
546	4873.37	302556.49	254175.52	FB105
547	4879.10	302549.01	254151.01	FB106
548	4880.10	302561.84	254145.68	FB107
549	4872.93	302558.26	254144.51	FB108

Point Table

Point #	Elevation	Northing	Easting	Description
550	4872.87	302568.02	254176.46	FB109
551	4872.70	302579.25	254458.48	ISB100
552	4872.70	302590.25	254458.48	ISB101
553	4872.65	302590.25	254474.48	ISB102
554	4872.65	302579.25	254474.48	ISB103
555	4872.12	302587.25	254473.98	OS100
556	4876.83	302587.25	254493.14	OS101
557	4878.33	302591.75	254499.14	OS103
558	4876.83	302591.75	254493.14	OS102
559	4878.33	302577.75	254499.14	OS104
560	4876.83	302577.75	254493.14	OS105
561	4876.83	302582.25	254493.14	OS106
562	4871.23	302735.30	254511.11	OUT100
563	4872.13	302582.25	254473.98	OS107
564	4880.50	302693.30	254378.76	CW100
565	4880.50	302682.52	254425.02	CW101
566	4878.56	302676.72	254415.71	RR100
567	4878.56	302700.60	254421.28	RR101
568	4878.56	302707.86	254390.11	RR102
569	4878.56	302683.98	254384.55	RR103

ENGINEER IN CHARGE:

PRELIMINARY NOT FOR CONSTRUCTION

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1; RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500' WEST OF COUNTY RD 73.

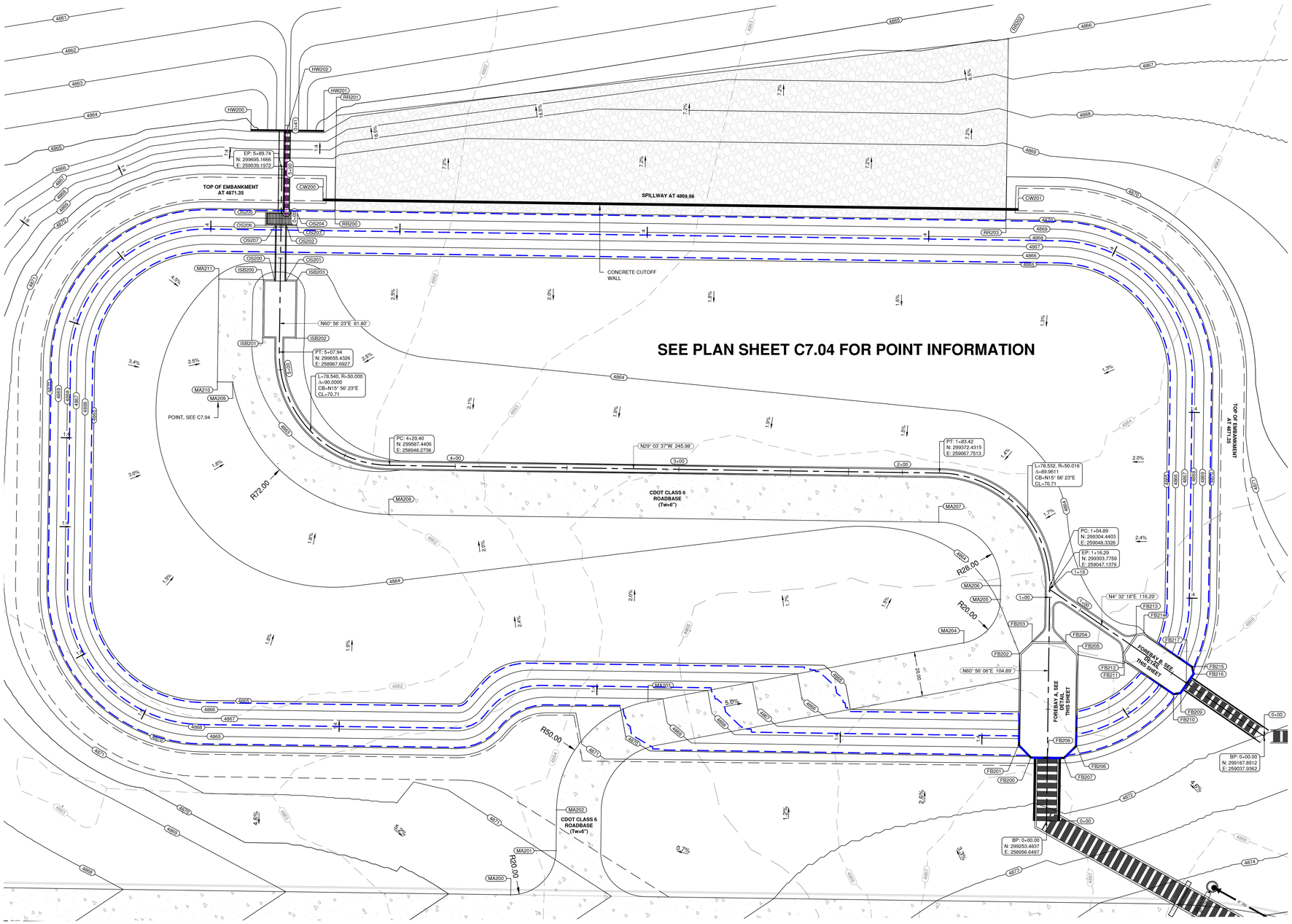
ELEVATION = 4721.56 (NAVD 88)

PIONEER VILLAGE PA'S 1-4, 17 AND 21
TOWN OF KEENESBURG
WELD COUNTY, COLORADO

POND B DETAILED GRADING PLAN

REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	AS NOTED
SHEET NUMBER	C7.01

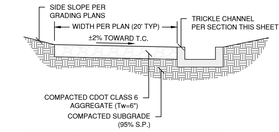


POND C - DETAILED GRADING PLAN

SCALE: 1"=20'

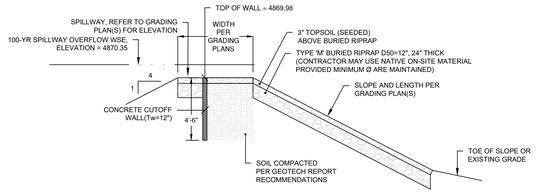
LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WATER SURFACE ELEVATION
- LOC — LIMITS OF CONSTRUCTION
- TRICKLE CHANNEL



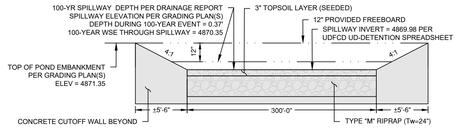
MAINTENANCE ACCESS

SCALE: NTS



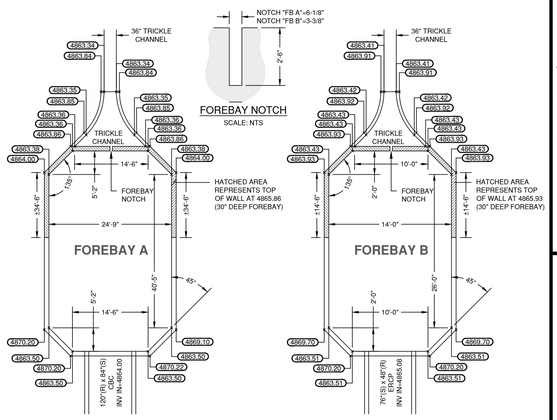
EMERGENCY SPILLWAY SECTION

SCALE: NTS



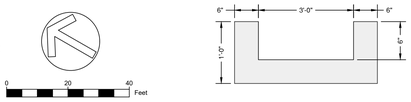
EMERGENCY SPILLWAY CROSS-SECTION

SCALE: NTS



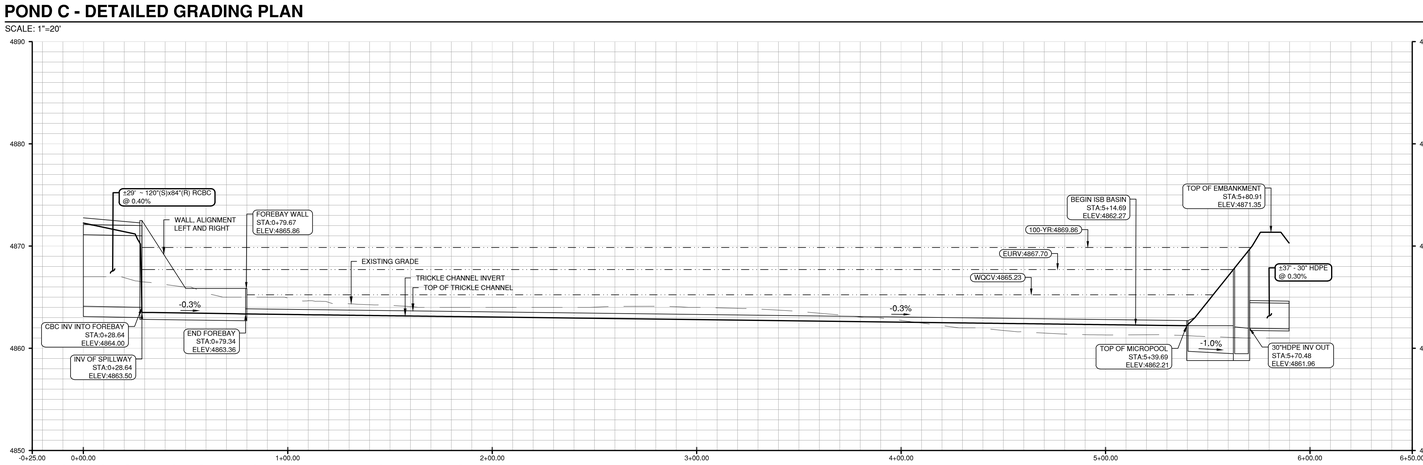
FOREBAY - PLAN VIEW

SCALE: NTS



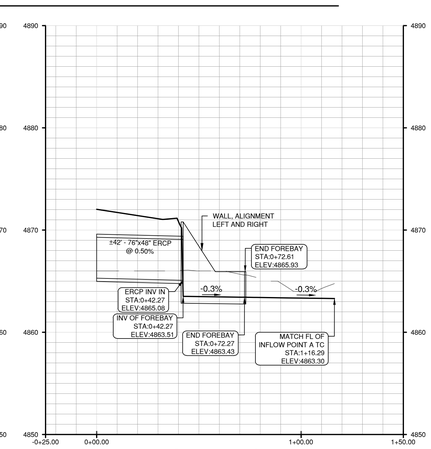
POND C TRICKLE CHANNEL

SCALE: NTS



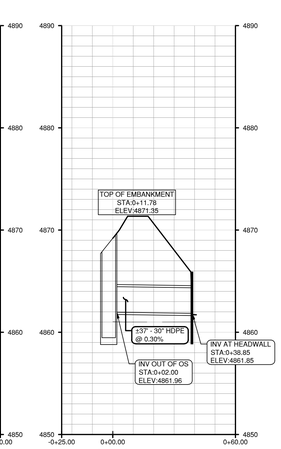
POND C - CONSTRUCTION PROFILE (A NETWORK INFLOW)

SCALE: 1"=30' (H); 1"=6' (V)



POND C - B NETWORK INFLOW

SCALE: 1"=30' (H); 1"=6' (V)



POND C - OUTFALL PIPE

SCALE: 1"=30' (H); 1"=6' (V)

ENGINEER IN CHARGE:

PRELIMINARY NOT FOR CONSTRUCTION

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1; RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500' WEST OF COUNTY RD 73.

ELEVATION = 4721.56 (NAVD 88)

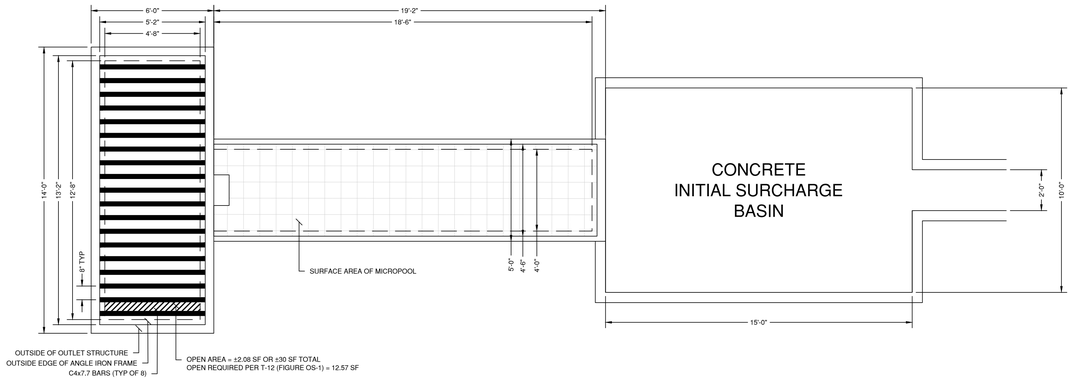
PIONEER VILLAGE PA'S 1-4, 17 AND 21

TOWN OF KEENESBURG
WELD COUNTY, COLORADO

POND B DETAILED GRADING PLAN

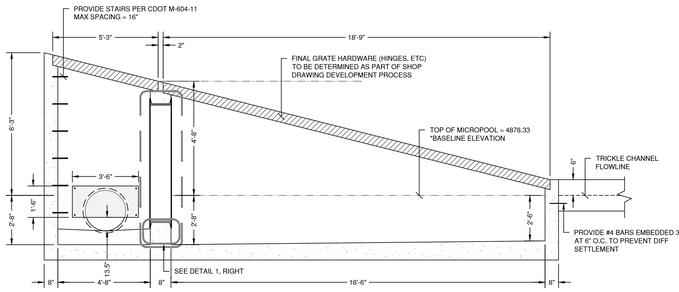
REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	AS NOTED
SHEET NUMBER	C7.02



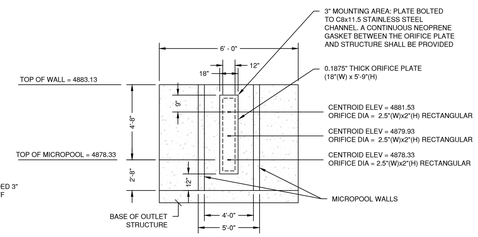
POND A ~ OUTLET STRUCTURE - PLAN VIEW

SCALE: NTS



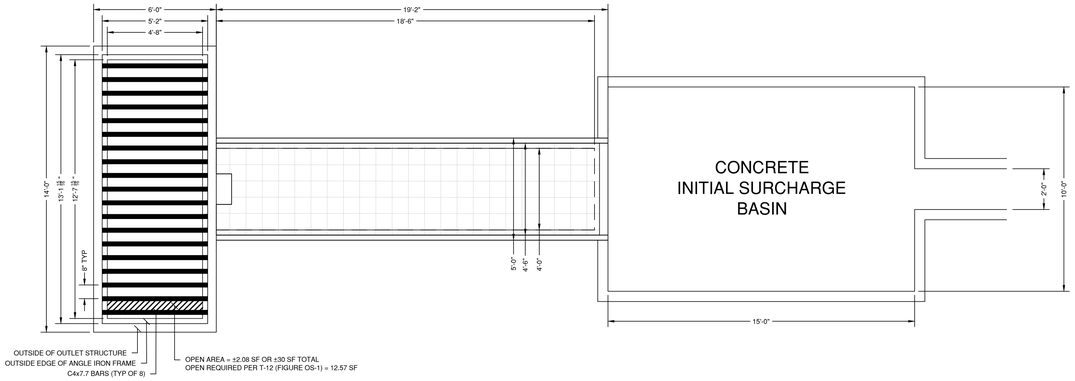
POND A ~ OUTLET STRUCTURE - SECTION A-A

SCALE: NTS



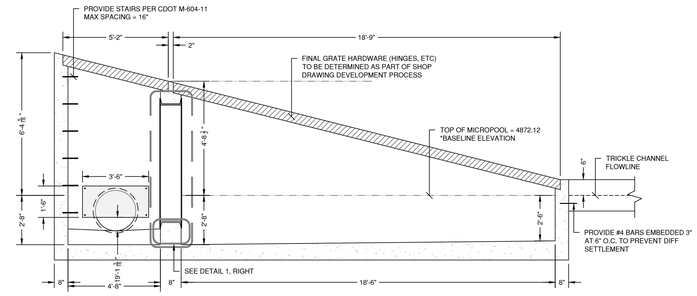
POND A ~ ORIFICE PLATE DETAILS

SCALE: NTS



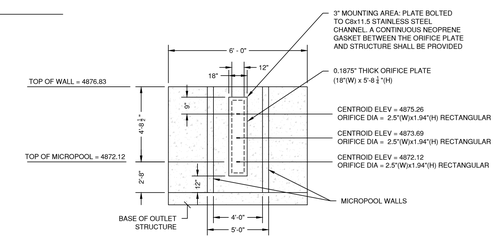
POND B ~ OUTLET STRUCTURE - PLAN VIEW

SCALE: NTS



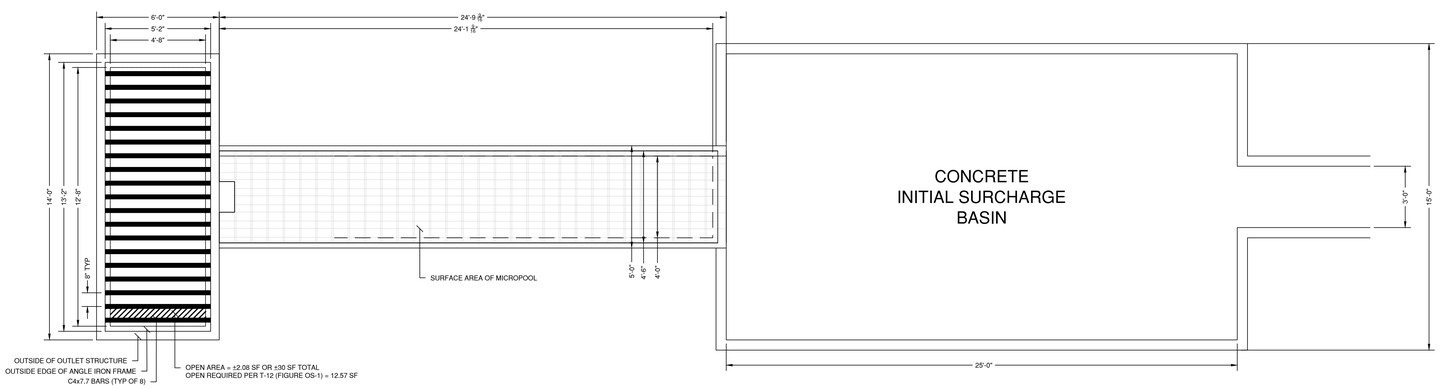
POND B ~ OUTLET STRUCTURE - SECTION A-A

SCALE: NTS



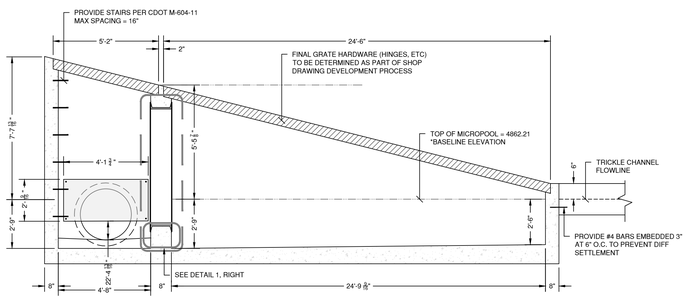
POND B ~ ORIFICE PLATE DETAILS

SCALE: NTS



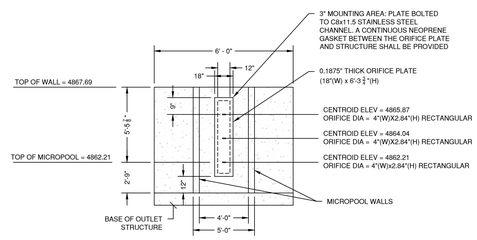
POND C ~ OUTLET STRUCTURE - PLAN VIEW

SCALE: NTS



POND C ~ OUTLET STRUCTURE - SECTION A-A

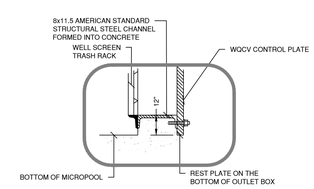
SCALE: NTS



POND C ~ ORIFICE PLATE DETAILS

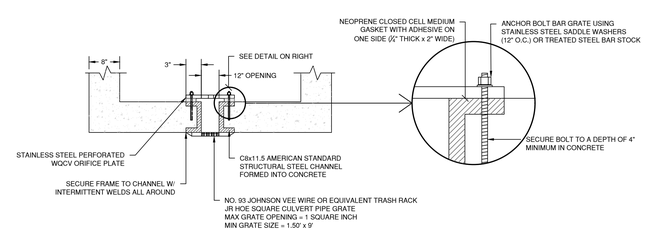
SCALE: NTS

APPLICABLE TO ALL OUTLET STRUCTURES



DETAIL 1

SCALE: NTS



POND A, B AND C ORIFICE PLATE INSTALLATION DETAILS

SCALE: NTS

ENGINEER IN CHARGE:

PRELIMINARY
NOT FOR CONSTRUCTION

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1; RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500' WEST OF COUNTY RD 73.

ELEVATION = 4721.56 (NAVD 88)

PIONEER VILLAGE
PA'S 1-4, 17 AND 21
TOWN OF KEENESBURG
WELD COUNTY, COLORADO

POND OUTLET STRUCTURE DETAILS

REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	1" = 10'
SHEET NUMBER	C7.03

Stage - Storage Description	Stage (ft)	Optional Override Stage (ft)	Length (ft)	Width (ft)	Area (ft^2)	Optional Override Area (ft^2)	Area (acre)	Volume (ft^3)	Volume (ac-ft)
Top of Micropool	--	0.00	--	--	--	0	0.000		
4879	--	0.77	--	--	--	888	0.020	342	0.008
4880	--	1.77	--	--	--	18,406	0.423	9,989	0.229
4881	--	2.77	--	--	--	53,622	1.231	46,002	1.056
4882	--	3.77	--	--	--	57,524	1.321	101,575	2.332
4883	--	4.77	--	--	--	62,952	1.445	161,813	3.715
4884	--	5.77	--	--	--	68,243	1.567	227,411	5.221
4885	--	6.77	--	--	--	74,017	1.699	298,541	6.854

POND A STAGE VS STORAGE TABLE

SCALE: NTS

Stage - Storage Description	Stage (ft)	Optional Override Stage (ft)	Length (ft)	Width (ft)	Area (ft^2)	Optional Override Area (ft^2)	Area (acre)	Volume (ft^3)	Volume (ac-ft)
Top of Micropool	--	0.00	--	--	--	0	0.000		
4873	--	0.88	--	--	--	3,785	0.087	1,665	0.038
4874	--	1.88	--	--	--	22,821	0.524	14,968	0.344
4875	--	2.88	--	--	--	49,735	1.142	51,246	1.176
4876	--	3.88	--	--	--	54,046	1.241	103,137	2.368
4877	--	4.88	--	--	--	58,452	1.342	159,386	3.659
4878	--	5.88	--	--	--	62,956	1.445	220,090	5.053
4879	--	6.88	--	--	--	67,561	1.551	285,348	6.551
4880	--	7.88	--	--	--	72,280	1.659	355,269	8.156

POND B STAGE VS STORAGE TABLE

SCALE: NTS

Top of Micropool	--	0.00	--	--	--	0	0.000		
4863	--	0.79	--	--	--	2,680	0.062	1,058	0.024
4864	--	1.79	--	--	--	37,698	0.865	21,247	0.488
4865	--	2.79	--	--	--	91,521	2.101	85,856	1.971
4866	--	3.79	--	--	--	98,660	2.265	180,947	4.154
4867	--	4.79	--	--	--	102,931	2.363	281,742	6.468
4868	--	5.79	--	--	--	107,997	2.479	387,206	8.889
4869	--	6.79	--	--	--	113,712	2.610	498,061	11.434
4869.71	--	7.50	--	--	--	118,652	2.724	580,550	13.328
4870	--	7.79	--	--	--	121,268	2.784	615,339	14.126
4871	--	8.79	--	--	--	124,198	2.851	738,072	16.944
4871.2	--	8.99	--	--	--	125,693	2.886	763,061	17.517

POND C STAGE VS STORAGE TABLE

SCALE: NTS

Point Table

Point #	Elevation	Northing	Easting	Description
570	4870.38	299444.86	258808.71	MA200
571	4871.10	299437.09	258835.91	MA201
572	4871.35	299445.96	258851.87	MA202
573	4869.00	299434.64	258914.25	MA203
574	4864.43	299325.19	259007.29	MA204
575	4863.99	299320.67	259032.25	MA205
576	4863.96	299323.67	259037.64	MA206
577	4863.89	299361.75	259048.52	MA207
578	4863.39	299576.75	258929.04	MA208
579	4863.24	299666.82	258945.63	MA209
580	4863.39	299672.79	258942.31	MA210
581	4863.91	299695.13	258982.52	MA211
582	4862.75	299677.65	258992.24	ISB200
583	4862.81	299665.02	258969.51	ISB201
584	4862.81	299651.91	258976.80	ISB202
585	4862.75	299664.54	258999.52	ISB203
586	4862.21	299673.04	258994.23	OS200
587	4862.21	299668.67	258996.66	OS201
588	4868.18	299680.67	259018.25	OS202
589	4868.20	299676.78	259020.52	OS203
590	4869.70	299679.69	259025.76	OS204
591	4869.70	299691.93	259018.96	OS205
592	4868.20	299689.02	259013.72	OS206
593	4868.20	299685.08	259015.91	OS207
594	4871.35	299672.34	259036.43	CW200
595	4869.98	299665.30	259035.04	RR200
596	4864.78	299685.91	259072.12	RR201
598	4869.98	299403.07	259180.76	RR203
599	4871.35	299400.53	259187.47	CW201
600	4870.20	299273.64	258977.36	FB200
601	4868.80	299281.24	258979.50	FB201
602	4864.00	299301.16	259015.42	FB202
603	4863.86	299299.00	259022.99	FB203
604	4863.86	299285.78	259030.33	FB204
605	4864.00	299278.21	259028.17	FB205
606	4869.10	299258.26	258992.27	FB206
607	4870.20	299260.42	258984.70	FB207
608	4863.50	299267.40	258961.68	FB208
609	4870.20	299229.66	259035.93	FB209
610	4869.70	299232.29	259033.69	FB210
611	4863.93	299258.82	259035.80	FB211
612	4863.93	299261.06	259038.42	FB212
613	4863.93	299260.22	259049.01	FB213
614	4863.93	299257.60	259051.25	FB214
615	4869.70	299231.06	259049.14	FB215
616	4870.20	299228.82	259046.52	FB216
617	4863.51	299229.99	259041.28	FB217
618	4865.90	299715.85	259047.46	HW200
619	4865.90	299687.36	259063.29	HW201
620	4861.73	299701.77	259055.67	HW202

ENGINEER IN CHARGE:

PRELIMINARY NOT FOR CONSTRUCTION

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1; RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500± WEST OF COUNTY RD 73.

ELEVATION = 4721.56 (NAVD 88)

PIONEER VILLAGE
PA'S 1-4, 17 AND 21
TOWN OF KEENESBURG
WELD COUNTY, COLORADO

POND C HORIZONTAL CONTROL AND STAGE VS STORAGE INFORMATION

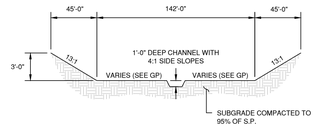
REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	1" = 10'

SHEET NUMBER
C7.04

TRIBUTARY AND LOW-FLOW CHANNEL - STATION 0+00 TO 12+00 PLAN VIEW

SCALE: 1" = 40'



TRIBUTARY AND LOW-FLOW CHANNEL SECTION

SCALE: N/A

TRIBUTARY PLAN AND PROFILE NOTES

1. REFER TO ROADWAY PLAN AND PROFILES FOR ALL ROADWAY AND UTILITY DESIGN INFORMATION (SERIES C5.XX DRAWINGS)
2. SEE PLAN SHEET C5.00 FOR STANDARD ROADWAY CROSS SECTIONS.
3. REFER TO PLAN SHEET C6.00 FOR OVERLOT GRADING TEMPLATE(S)

LEGEND

- RIGHT OF WAY / PROPERTY LINE
- 36" W — EXISTING WATERMAINS
- WATER — PROPOSED WATERMAINS
- SSWR — PROPOSED GRAVITY SEWER
- SS-FM — PROPOSED SANITARY SEWER FORCEMAIN
- X" HDPE (TYPE S) STORM DRAIN
- VERTICAL CURB AND GUTTER
- LIGHT DUTY ASPHALT PAVEMENT
- PROPOSED CONCRETE
- 6000 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 6000 — PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 100-YEAR STORM WATER SURFACE ELEVATION

Line Table: Alignments

Line #	Length	Direction	Start Point	End Point
L1	50.00	S7° 53' 01.57"E	(258815.80,304000.82)	(258822.66,303951.30)

Curve Table: Alignments

Curve #	Radius	Length	Chord Direction	Start Point	End Point
C1	306.33	144.60	S5° 38' 22.17"W	(258822.66,303951.30)	(258808.58,303808.72)
C2	158.93	145.67	S7° 05' 42.15"E	(258808.58,303808.72)	(258825.95,303669.17)
C3	181.51	317.92	S16° 49' 28.24"W	(258825.95,303669.17)	(258745.25,303402.30)
C4	145.71	224.50	S22° 51' 47.88"W	(258745.25,303402.30)	(258666.40,303215.30)
C5	159.89	234.73	S20° 46' 57.88"W	(258666.40,303215.30)	(258590.39,303015.03)
C6	104.85	165.48	S17° 37' 35.46"W	(258590.39,303015.03)	(258545.32,302873.19)

ENGINEER IN CHARGE:

COLORADO LICENSED PROFESSIONAL ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION
FINAL DRAFT

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1; RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500' WEST OF COUNTY RD 73.

ELEVATION = 4721.56 (NAVD 88)

PIONEER VILLAGE PA'S 1-4, 17 AND 21

TOWN OF KEENESBURG
WELD COUNTY, COLORADO

TRIBUTARY AND LOW-FLOW CHANNEL PLAN

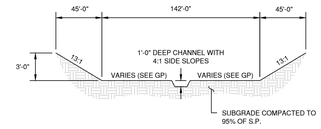
REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	VARIES
SHEET NUMBER	C7.05

0 20 40 FEET

TRIBUTARY AND LOW-FLOW CHANNEL - STATION 12+00 TO 24+00 PLAN VIEW

SCALE: 1" = 40'



TRIBUTARY AND LOW-FLOW CHANNEL SECTION

SCALE: N/A

TRIBUTARY PLAN AND PROFILE NOTES

1. REFER TO ROADWAY PLAN AND PROFILES FOR ALL ROADWAY AND UTILITY DESIGN INFORMATION (SERIES C5.XX DRAWINGS)
2. SEE PLAN SHEET C5.00 FOR STANDARD ROADWAY CROSS SECTIONS.
3. REFER TO PLAN SHEET C6.00 FOR OVERLOT GRADING TEMPLATE(S)

LEGEND

- RIGHT OF WAY / PROPERTY LINE
- 36" W — EXISTING WATERMAINS
- WATER — PROPOSED WATERMAINS
- SSWR — PROPOSED GRAVITY SEWER
- SS-FM — PROPOSED SANITARY SEWER FORCEMAIN
- X" HDPE (TYPE S) STORM DRAIN
- VERTICAL CURB AND GUTTER
- LIGHT DUTY ASPHALT PAVEMENT
- PROPOSED CONCRETE
- 6000 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 6000 — PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 100-YEAR STORM WATER SURFACE ELEVATION

Curve Table: Alignments

Curve #	Radius	Length	Chord Direction	Start Point	End Point
C7	401.32	255.40	S9° 21' 23.78"E	(258545.32,302873.19)	(258586.15,302625.42)
C8	177.16	289.27	S37° 54' 03.00"E	(258586.15,302625.42)	(258744.75,302421.69)
C9	105.66	153.87	S42° 57' 27.53"E	(258744.75,302421.69)	(258840.59,302318.77)
C10	310.63	200.06	S19° 41' 23.09"E	(258840.59,302318.77)	(258906.83,302133.64)
C11	2324.95	136.44	S39° 49' 17.70"E	(258906.83,302133.64)	(258994.20,302028.86)
C12	178.25	290.35	S5° 09' 43.83"W	(258994.20,302028.86)	(258970.87,301770.62)

ENGINEER IN CHARGE:

COLORADO DO NOT PRELIMINARY NOT FOR CONSTRUCTION FINAL DESIGN

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1; RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500' WEST OF COUNTY RD 73.

ELEVATION = 4721.56 (NAVD 88)

PIONEER VILLAGE PA'S 1-4, 17 AND 21

TOWN OF KEENESBURG
WELD COUNTY, COLORADO

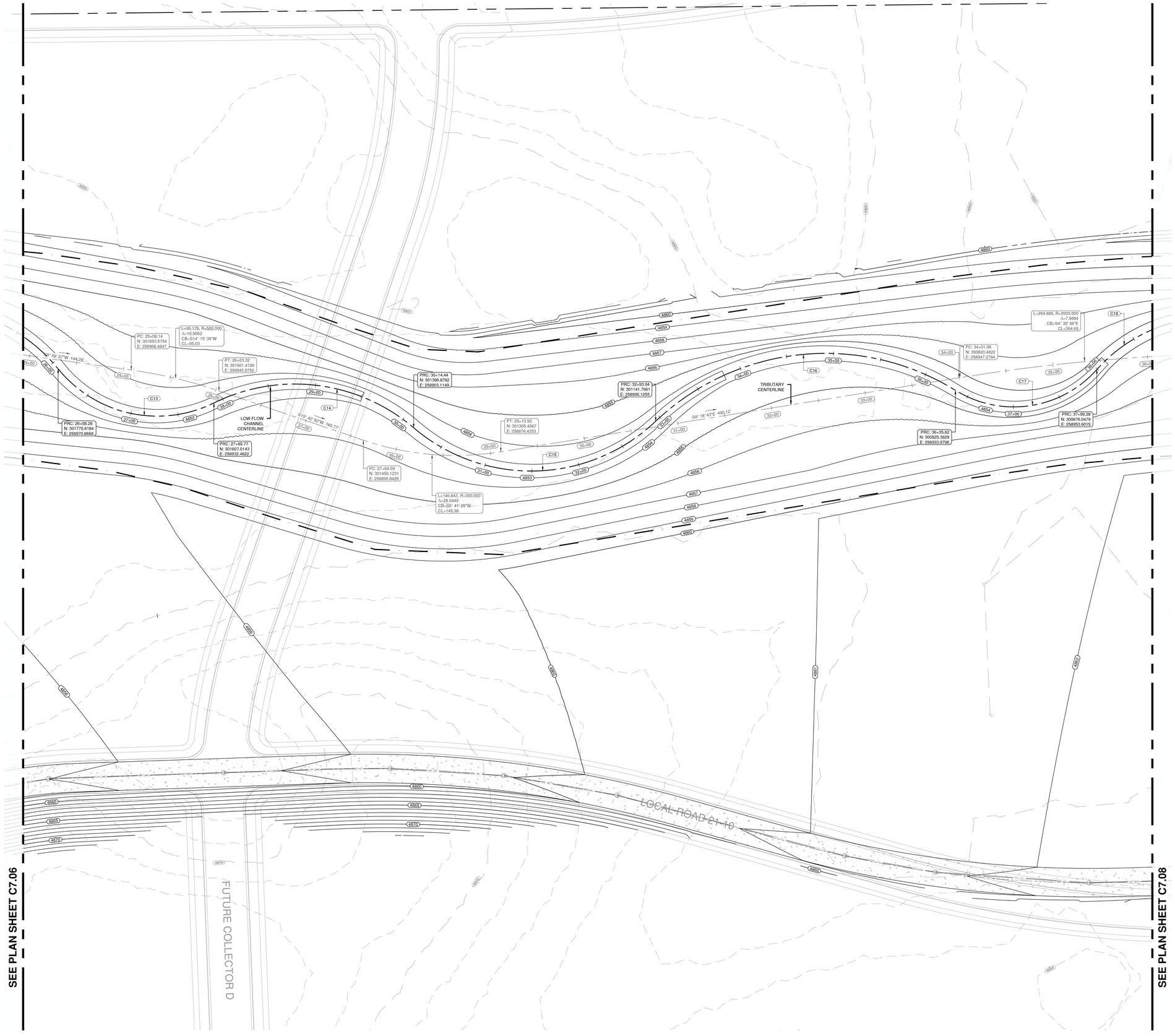
TRIBUTARY AND LOW-FLOW CHANNEL PLAN

REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	VARIES
SHEET NUMBER	C7.06

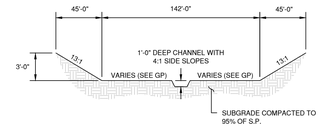
0 20 40 FEET

811



TRIBUTARY AND LOW-FLOW CHANNEL - STATION 24+00 TO 36+00 PLAN VIEW

SCALE: 1" = 40'



TRIBUTARY AND LOW-FLOW CHANNEL SECTION

SCALE: N/A

TRIBUTARY PLAN AND PROFILE NOTES

1. REFER TO ROADWAY PLAN AND PROFILES FOR ALL ROADWAY AND UTILITY DESIGN INFORMATION (SERIES C5.XX DRAWINGS)
2. SEE PLAN SHEET C5.00 FOR STANDARD ROADWAY CROSS SECTIONS.
3. REFER TO PLAN SHEET C6.00 FOR OVERLOT GRADING TEMPLATE(S)

LEGEND

- RIGHT OF WAY / PROPERTY LINE
- 36" W — EXISTING WATERMAINS
- WATER — PROPOSED WATERMAINS
- SSWR — PROPOSED GRAVITY SEWER
- SS-FM — PROPOSED SANITARY SEWER FORCEMAIN
- X" HDPE (TYPE S) STORM DRAIN
- VERTICAL CURB AND GUTTER
- LIGHT DUTY ASPHALT PAVEMENT
- PROPOSED CONCRETE
- 6000 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 6000 — PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 100-YEAR STORM WATER SURFACE ELEVATION

Curve Table: Alignments

Curve #	Radius	Length	Chord Direction	Start Point	End Point
C13	134.61	181.48	S13° 12' 13.91"W	(258970.87,301770.62)	(258932.48,301607.01)
C14	192.85	224.67	S7° 57' 20.79"W	(258932.48,301607.01)	(258903.11,301396.88)
C15	190.62	279.51	S0° 40' 34.06"E	(258903.11,301396.88)	(258906.13,301141.77)
C16	259.97	341.67	S5° 01' 52.67"E	(258906.13,301141.77)	(258933.98,300825.38)
C17	116.90	163.66	S7° 29' 07.82"E	(258933.98,300825.38)	(258953.60,300676.05)
C18	162.97	267.65	S0° 32' 32.54"E	(258953.60,300676.05)	(258955.86,300437.49)

ENGINEER IN CHARGE:

COLORADO DO NOT PRELIMINARY NOT FOR CONSTRUCTION FINAL DRAWING

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1; RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500' WEST OF COUNTY RD 73.

ELEVATION = 4721.56 (NAVD 88)

PIONEER VILLAGE PA'S 1-4, 17 AND 21

TOWN OF KEENESBURG
WELD COUNTY, COLORADO

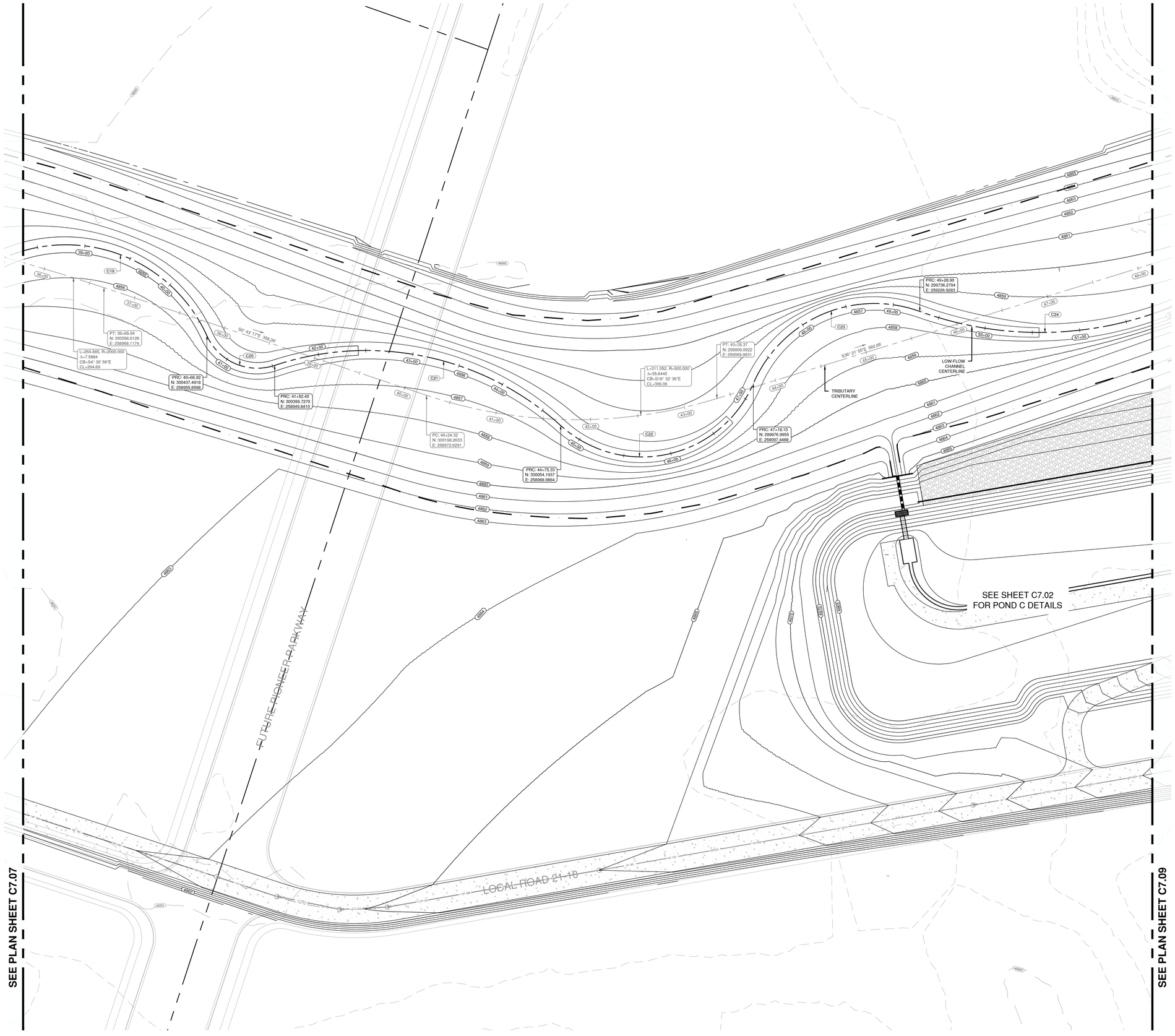
TRIBUTARY AND LOW-FLOW CHANNEL PLAN

REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	VARIES
SHEET NUMBER	C7.07

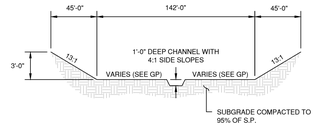
0 30 60 FEET

811



TRIBUTARY AND LOW-FLOW CHANNEL - STATION 36+00 TO 48+00 PLAN VIEW

SCALE: 1" = 40'



TRIBUTARY AND LOW-FLOW CHANNEL SECTION

SCALE: N/A

TRIBUTARY PLAN AND PROFILE NOTES

1. REFER TO ROADWAY PLAN AND PROFILES FOR ALL ROADWAY AND UTILITY DESIGN INFORMATION (SERIES C5.XX DRAWINGS)
2. SEE PLAN SHEET C5.00 FOR STANDARD ROADWAY CROSS SECTIONS.
3. REFER TO PLAN SHEET C6.00 FOR OVERLOT GRADING TEMPLATE(S)

LEGEND

- RIGHT OF WAY / PROPERTY LINE
- 36" W — EXISTING WATERMAINS
- WATER — PROPOSED WATERMAINS
- SSWR — PROPOSED GRAVITY SEWER
- SS-FM — PROPOSED SANITARY SEWER FORCEMAIN
- X" HDPE (TYPE S) STORM DRAIN
- VERTICAL CURB AND GUTTER
- LIGHT DUTY ASPHALT PAVEMENT
- PROPOSED CONCRETE
- 6000 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 6000 — PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 100-YEAR STORM WATER SURFACE ELEVATION

Curve Table: Alignments

Curve #	Radius	Length	Chord Direction	Start Point	End Point
C19	162.97	267.65	S0° 32' 32.54"E	(258953.60,300676.05)	(258955.86,300437.49)
C20	58.19	85.48	S4° 25' 32.70"W	(258955.86,300437.49)	(258949.84,300359.73)
C21	304.77	322.93	S7° 18' 03.84"E	(258949.84,300359.73)	(258988.99,300054.19)
C22	127.56	242.77	S31° 28' 12.66"E	(258988.99,300054.19)	(259097.45,299877.00)
C23	139.22	210.80	S42° 37' 01.94"E	(259097.45,299877.00)	(259226.93,299736.27)
C24	370.73	481.68	S36° 27' 44.08"E	(259226.93,299736.27)	(259493.47,299375.56)

ENGINEER IN CHARGE:

COLORADO DO PROFESSIONAL ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1: RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500' WEST OF COUNTY RD 73.

ELEVATION = 4721.56 (NAVD 88)

PIONEER VILLAGE PA'S 1-4, 17 AND 21

TOWN OF KEENESBURG
WELD COUNTY, COLORADO

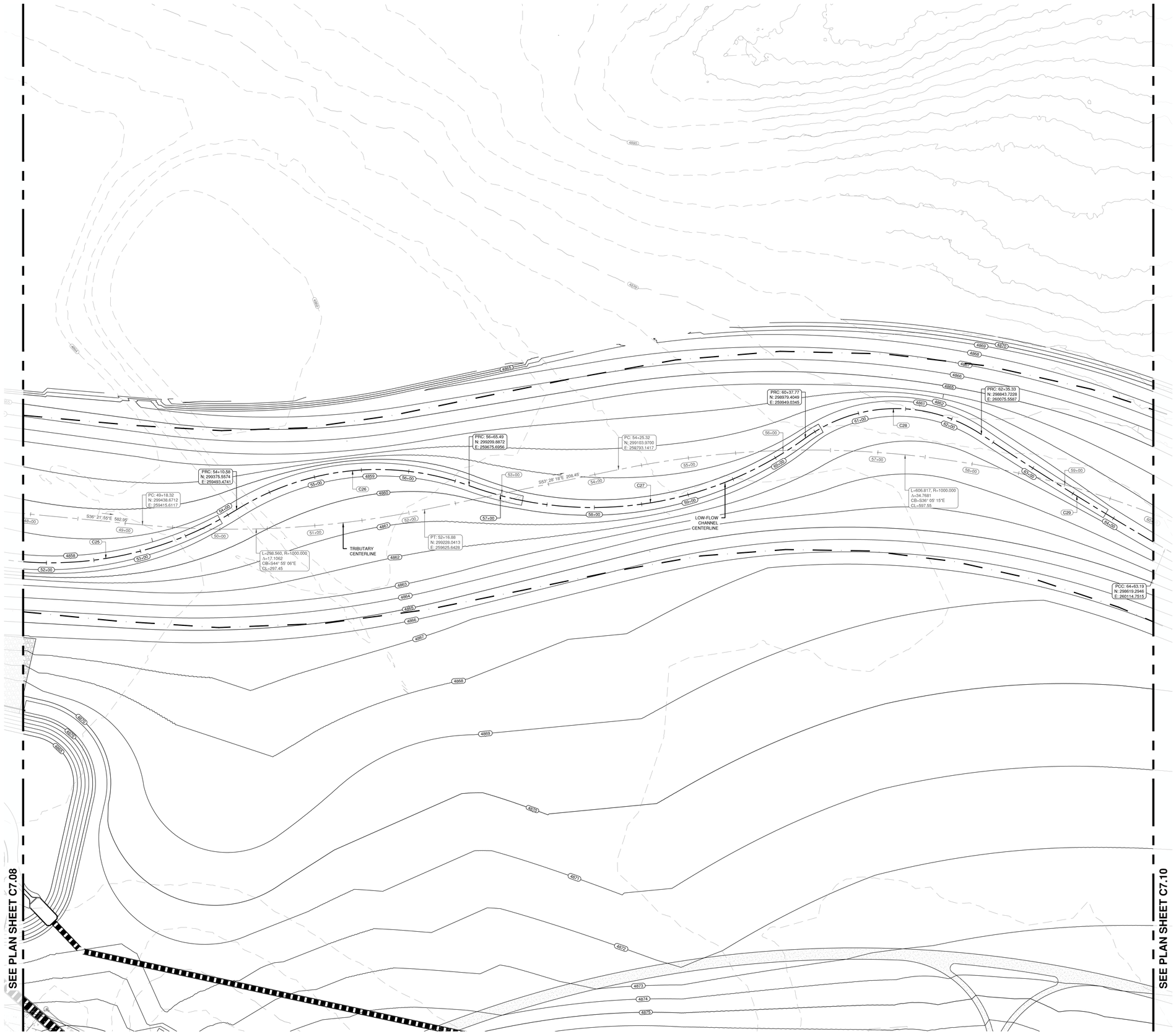
TRIBUTARY AND LOW-FLOW CHANNEL PLAN

REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	VARIES
SHEET NUMBER	C7.08

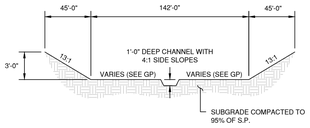
0 20 40 FEET

811



TRIBUTARY AND LOW-FLOW CHANNEL - STATION 48+00 TO 60+00 PLAN VIEW

SCALE: 1" = 40'



TRIBUTARY AND LOW-FLOW CHANNEL SECTION

SCALE: N/A

TRIBUTARY PLAN AND PROFILE NOTES

1. REFER TO ROADWAY PLAN AND PROFILES FOR ALL ROADWAY AND UTILITY DESIGN INFORMATION (SERIES C5.XX DRAWINGS)
2. SEE PLAN SHEET C5.00 FOR STANDARD ROADWAY CROSS SECTIONS.
3. REFER TO PLAN SHEET C6.00 FOR OVERLOT GRADING TEMPLATE(S)

LEGEND

- RIGHT OF WAY / PROPERTY LINE
- 36" W — EXISTING WATERMAINS
- WATER — PROPOSED WATERMAINS
- SSWR — PROPOSED GRAVITY SEWER
- SS-FM — PROPOSED SANITARY SEWER FORCEMAIN
- X" HDPE (TYPE S) STORM DRAIN
- VERTICAL CURB AND GUTTER
- LIGHT DUTY ASPHALT PAVEMENT
- PROPOSED CONCRETE
- 6000 — EXISTING MAJOR CONTOUR
- 6000 — EXISTING MINOR CONTOUR
- 6000 — PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 100-YEAR STORM WATER SURFACE ELEVATION

Curve Table: Alignments

Curve #	Radius	Length	Chord Direction	Start Point	End Point
C25	370.73	481.68	S36° 27' 44.08"E	(259226.93,299736.27)	(259493.47,299375.56)
C26	281.30	254.91	S47° 43' 25.84"E	(259493.47,299375.56)	(259675.70,299209.89)
C27	379.57	372.29	S49° 51' 43.36"E	(259675.70,299209.89)	(259949.03,298979.40)
C28	161.88	197.55	S42° 59' 58.84"E	(259949.03,298979.40)	(260075.56,298843.72)
C29	3497.08	227.86	S9° 54' 21.26"E	(260075.56,298843.72)	(260114.75,298619.29)

ENGINEER IN CHARGE:

COLORADO LICENSED PROFESSIONAL ENGINEER — PRELIMINARY NOT FOR CONSTRUCTION — FINAL DRAFT

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1; RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500± WEST OF COUNTY RD 73.

ELEVATION = 4721.56 (NAVD 88)

PIONEER VILLAGE PA'S 1-4, 17 AND 21

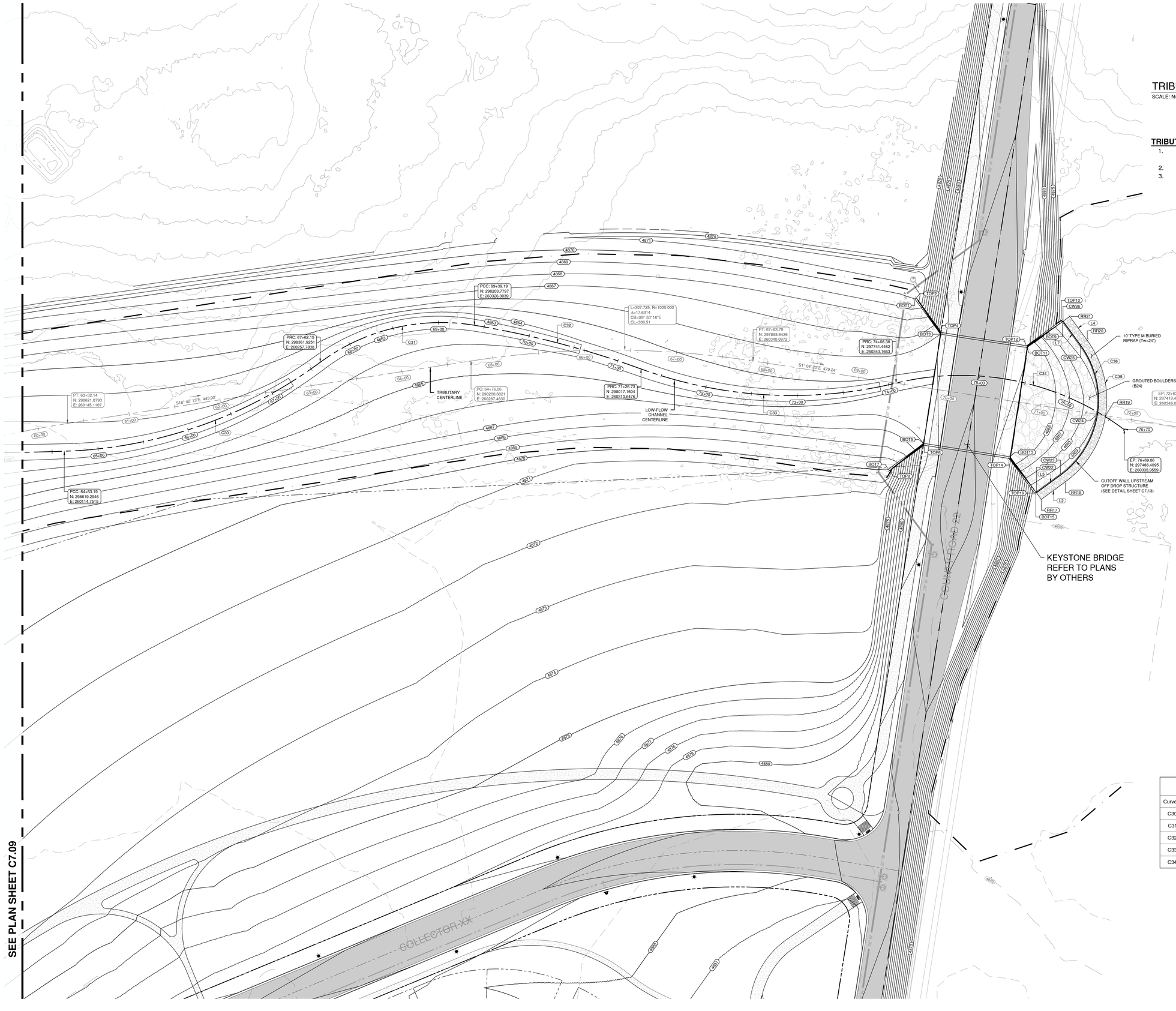
TOWN OF KEENESBURG
WELD COUNTY, COLORADO

TRIBUTARY AND LOW-FLOW CHANNEL PLAN

REV	DESCRIPTION	BY	DATE

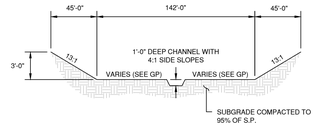
JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	VARIES
SHEET NUMBER	C7.09

0 20 40 FEET



TRIBUTARY AND LOW-FLOW CHANNEL - STATION 60+00 TO 72+63 PLAN VIEW

SCALE: 1" = 40'



TRIBUTARY AND LOW-FLOW CHANNEL SECTION

SCALE: N/A

TRIBUTARY PLAN AND PROFILE NOTES

1. REFER TO ROADWAY PLAN AND PROFILES FOR ALL ROADWAY AND UTILITY DESIGN INFORMATION (SERIES C5.XX DRAWINGS)
2. SEE PLAN SHEET C5.00 FOR STANDARD ROADWAY CROSS SECTIONS.
3. REFER TO PLAN SHEET C6.00 FOR OVERLOT GRADING TEMPLATE(S)

LEGEND

- RIGHT OF WAY / PROPERTY LINE
- 36" W — EXISTING WATERMAINS
- WATER — PROPOSED WATERMAINS
- SSWR — PROPOSED GRAVITY SEWER
- SS-FM — PROPOSED SANITARY SEWER FORCEMAIN
- X" HDPE (TYPE S) STORM DRAIN
- VERTICAL CURB AND GUTTER
- LIGHT DUTY ASPHALT PAVEMENT
- PROPOSED CONCRETE
- 5000 — EXISTING MAJOR CONTOUR
- 4900 — EXISTING MINOR CONTOUR
- 5000 — PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 100-YEAR STORM WATER SURFACE ELEVATION

Point Table

Point #	Elevation	Northing	Easting	Description
1	9763.72	297737.04	260436.73	BOT1
2	4893.72	297735.65	260438.17	TOP2
3	9763.72	297702.83	260403.77	BOT3
4	9763.72	297702.04	260405.79	TOP4
5	9763.72	297699.72	260281.81	TOP6
6	14612.03	297700.67	260283.53	BOT5
7	14633.72	297732.10	260248.20	TOP8
8	9763.72	297733.54	260249.58	BOT7
9	9763.72	297574.89	260439.76	BOT9
10	14635.88	297576.24	260441.09	TOP10
11	0.00	297607.85	260405.55	BOT11
12	9763.72	297608.71	260407.53	TOP12
13	9763.72	297572.78	260251.18	TOP16
14	9763.72	297571.39	260252.62	BOT15
15	9763.72	297606.39	260283.56	TOP14
16	9763.72	297605.60	260285.57	BOT13
17	9763.72	297564.19	260245.68	RR17
18	9763.72	297541.74	260268.98	RR18
19	9763.72	297510.99	260347.35	RR19
20	9763.72	297544.65	260424.52	RR20
21	9763.72	297567.95	260446.96	RR21
22	9763.72	297574.20	260440.48	CW26
23	9763.72	297550.90	260418.04	CW25
24	9763.72	297519.98	260347.18	CW24
25	9763.72	297548.22	260275.22	CW23
26	9763.72	297570.67	260251.92	CW22

Line Table

Line #	Length	Direction	Start Northing	End Northing	Start Easting	End Easting
L2	32.35	N46° 04' 19.45"W	297541.74	297564.19	260268.98	260245.68
L4	32.35	S43° 55' 39.82"W	297567.95	297544.65	260446.96	260424.52
L5	32.35	N46° 04' 19.45"W	297548.22	297570.67	260275.22	260251.92
L7	32.35	S43° 55' 39.82"W	297574.20	297550.90	260440.48	260418.04

Curve Table: Alignments

Curve #	Radius	Length	Chord Direction	Start Point	End Point
C30	495.34	298.96	S29° 03' 46.72"E	(260114.75,298619.29)	(260257.78,298361.93)
C31	221.21	177.04	S23° 25' 32.75"E	(260257.78,298361.93)	(260326.30,298203.78)
C32	1014.92	187.54	S4° 47' 43.97"W	(260326.30,298203.78)	(260310.65,298017.16)
C33	479.83	281.65	S6° 43' 35.72"E	(260310.65,298017.16)	(260343.17,297741.45)
C34	297.55	261.47	S1° 37' 56.08"W	(260343.17,297741.45)	(260335.96,297488.41)

0 20 40 FEET

ENGINEER IN CHARGE:

COLORADO DO NOT PRELIMINARY NOT FOR CONSTRUCTION FINAL DRAWINGS

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1; RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500± WEST OF COUNTY RD 73.

ELEVATION = 4721.56 (NAVD 88)

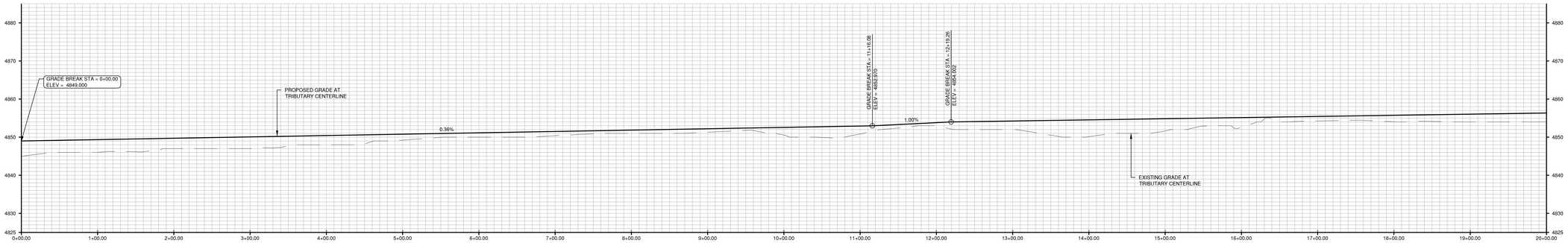
PIONEER VILLAGE PA'S 1-4, 17 AND 21

TOWN OF KEENESBURG
WELD COUNTY, COLORADO

TRIBUTARY AND LOW-FLOW CHANNEL PLAN

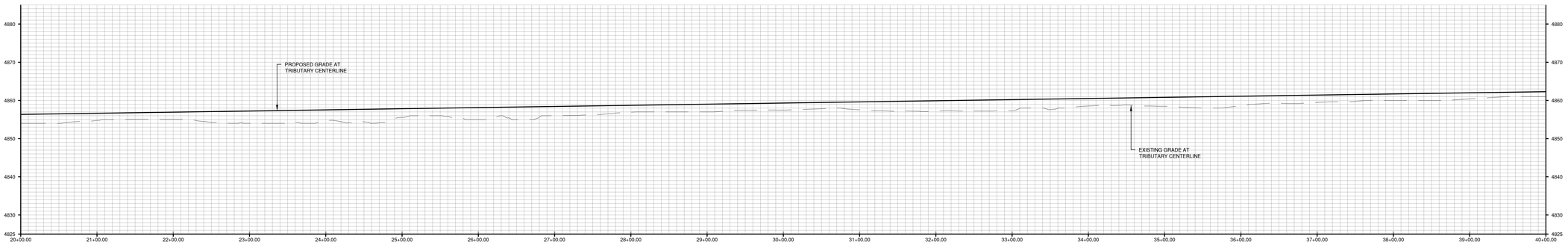
REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	VARIES
SHEET NUMBER	C7.10



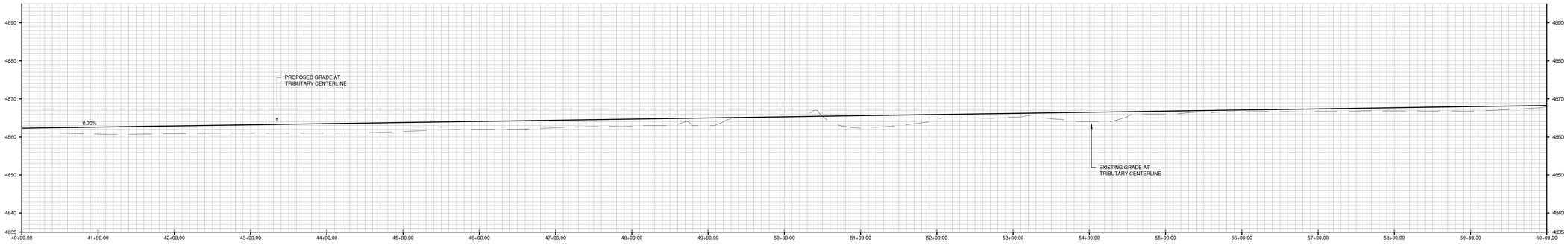
TRIBUTARY - STATION 0+00 TO 20+00 PROFILE VIEW

SCALE: 1" = 60' (H), 1" = 12' (V)



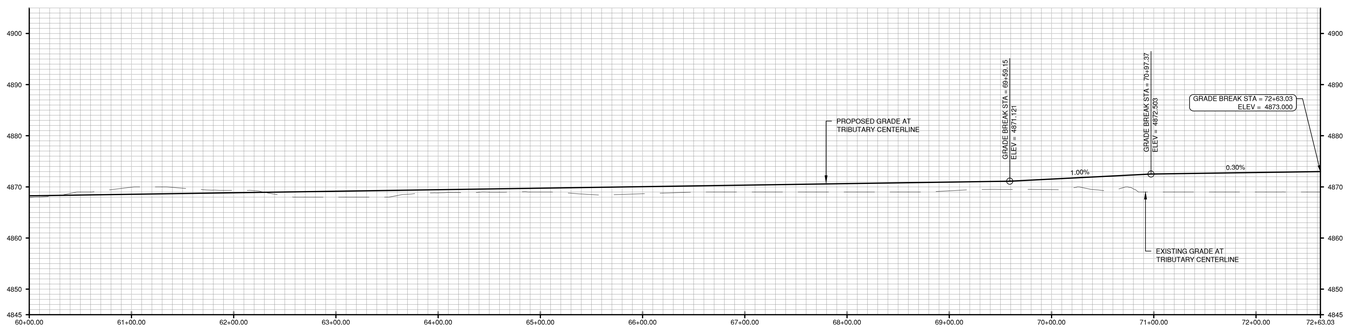
TRIBUTARY - STATION 20+00 TO 40+00 PROFILE VIEW

SCALE: 1" = 60' (H), 1" = 12' (V)



TRIBUTARY - STATION 40+00 TO 60+00 PROFILE VIEW

SCALE: 1" = 60' (H), 1" = 12' (V)



TRIBUTARY - STATION 60+00 TO 72+63 PROFILE VIEW

SCALE: 1" = 60' (H), 1" = 12' (V)

ENGINEER IN CHARGE:

COLORADO REGISTERED PROFESSIONAL ENGINEER
PRELIMINARY
NOT FOR CONSTRUCTION
FINAL DRAFT

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1; RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500' WEST OF COUNTY RD 73.

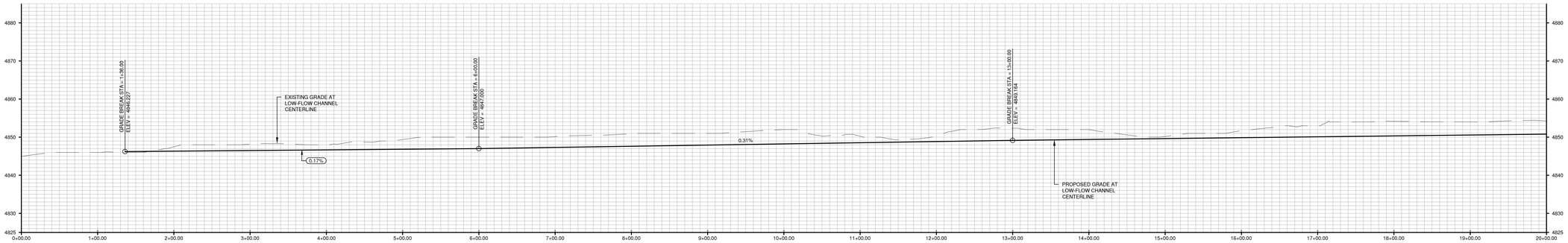
ELEVATION = 4721.56 (NAVD 88)

PIONEER VILLAGE
PA'S 1-4, 17 AND 21
TOWN OF KEENESBURG
WELD COUNTY, COLORADO

TRIBUTARY PROFILE

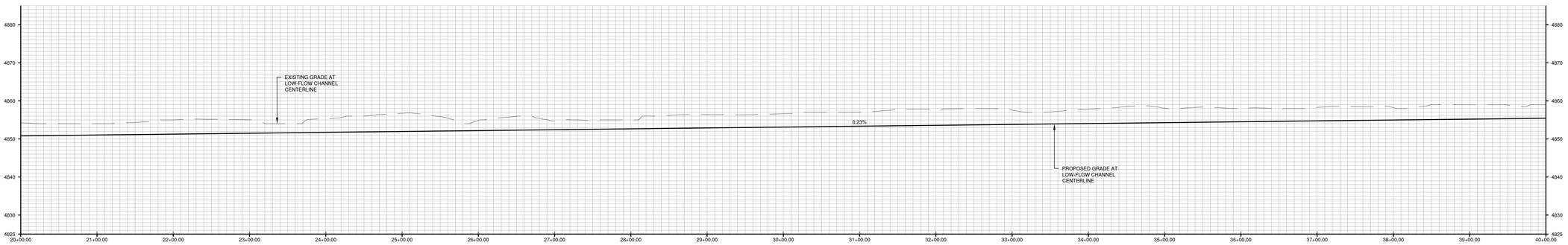
REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	VARIES
SHEET NUMBER	C7.11



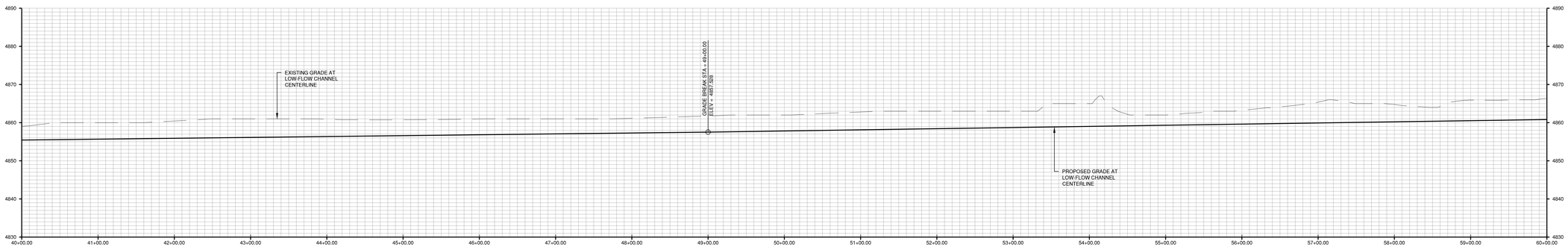
LOW-FLOW CHANNEL - STATION 0+00 TO 20+00 PROFILE VIEW

SCALE: 1" = 60' (H), 1" = 12' (V)



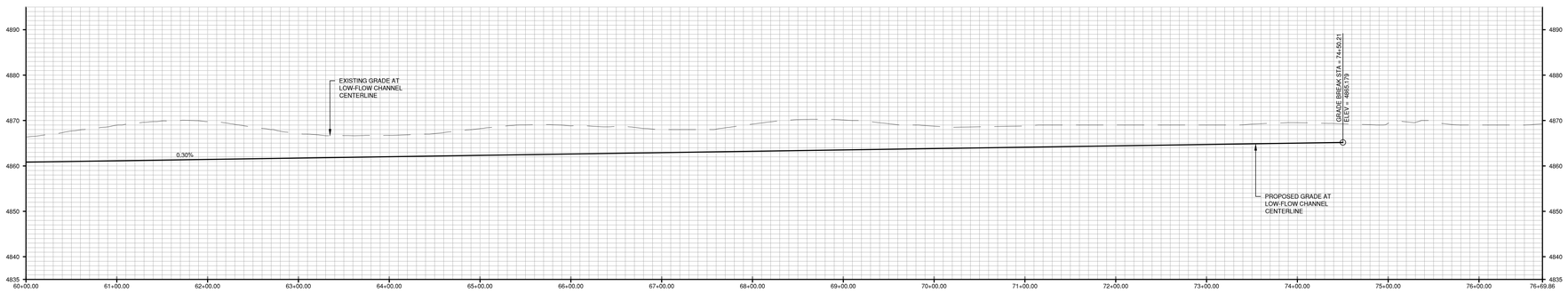
LOW-FLOW CHANNEL - STATION 20+00 TO 40+00 PROFILE VIEW

SCALE: 1" = 60' (H), 1" = 12' (V)



LOW-FLOW CHANNEL - STATION 40+00 TO 60+00 PROFILE VIEW

SCALE: 1" = 60' (H), 1" = 12' (V)



LOW-FLOW CHANNEL - STATION 60+00 TO 76+70 PROFILE VIEW

SCALE: 1" = 60' (H), 1" = 12' (V)

ENGINEER IN CHARGE:

COLORADO LICENSED PROFESSIONAL ENGINEER
PRELIMINARY
NOT FOR CONSTRUCTION
FINAL DRAFT

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1; RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500± WEST OF COUNTY RD 73.

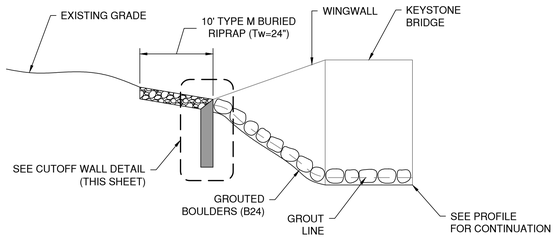
ELEVATION = 4721.56 (NAVD 88)

PIONEER VILLAGE
PA'S 1-4, 17 AND 21
TOWN OF KEENESBURG
WELD COUNTY, COLORADO

LOW-FLOW CHANNEL PROFILE

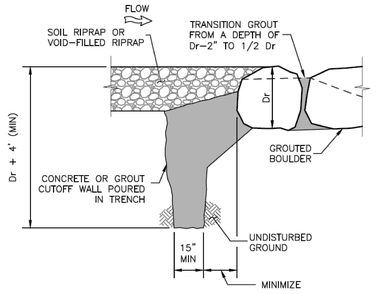
REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	VARIES
SHEET NUMBER	C7.12



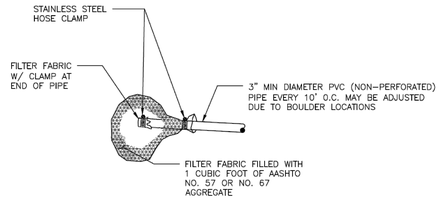
BASIC GROUTED STEPPED BOULDER DROP STRUCTURE

SCALE: N/A



CUTOFF WALL UPSTREAM OF DROP STRUCTURE

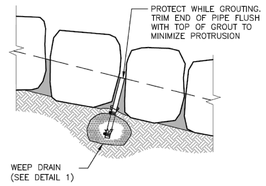
SCALE: N/A



NOTE: INSTALL WEEP DRAINS FOR DROPS AND WALLS 5' AND GREATER AT 10' O.C. AT ELEVATIONS AND LOCATIONS SHOWN ON THE DRAWINGS

WEEP DRAIN

SCALE: N/A



GROUTED BOULDERS

SCALE: N/A

CONTECH VEHICULAR BRIDGE

SCALE: N/A

ENGINEER IN CHARGE:

COLORADO LICENSED PROFESSIONAL ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION
FINAL DRAFT

CONTACT INFORMATION
88 INVERNESS CIRCLE EAST, SUITE E-101
ENGLEWOOD, CO 80112
(720) 206-6931
CPERDUE@STRATEGICSITEDESIGNS.COM
ATTENTION: CHRISTOPHER PERDUE, P.E., M.B.A.

STRATEGIC SITE DESIGNS

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE (NAD 83, 2011) REFERENCED TO THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 64 WEST, SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR SOUTH 00°30'28" EAST, A DISTANCE OF 2,612.70 FEET.

BENCHMARK

NGS ROGGEN RM 1: RECOVERED A 3 1/2" BRASS CAP LOCATED 200' SOUTH OF FRONTAGE RD I-76 AND 2500± WEST OF COUNTY RD 73.

ELEVATION = 4721.56 (NAVD 88)

PIONEER VILLAGE
PA'S 1-4, 17 AND 21
TOWN OF KEENESBURG
WELD COUNTY, COLORADO

DETIALS

REV	DESCRIPTION	BY	DATE

JOB NO:	1903-001
ORIGINAL ISSUE:	03/15/2021
DESIGN BY:	CLP
CHECKED BY:	CLP
SCALE:	VARIES

SHEET NUMBER
C7.13