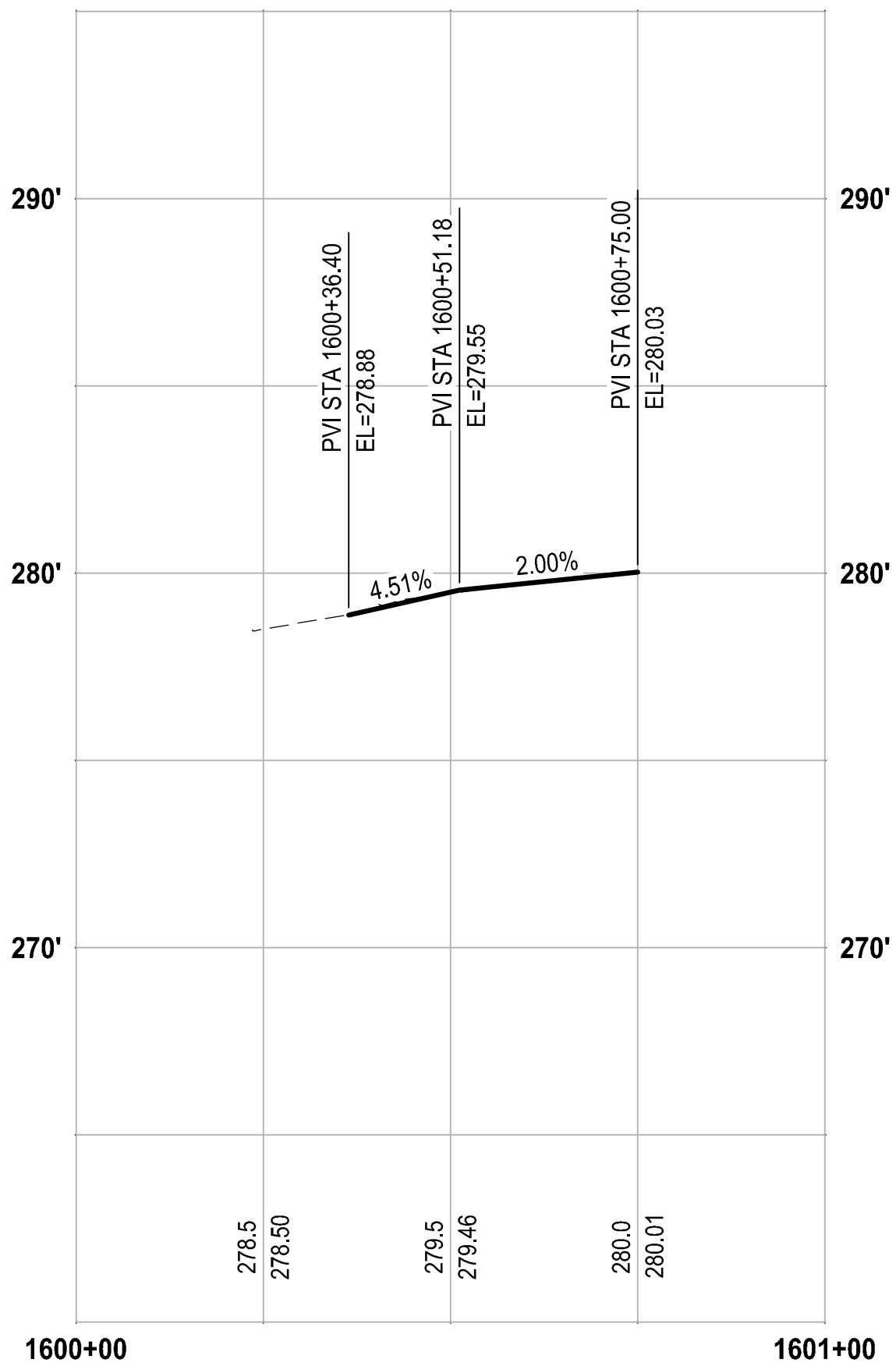
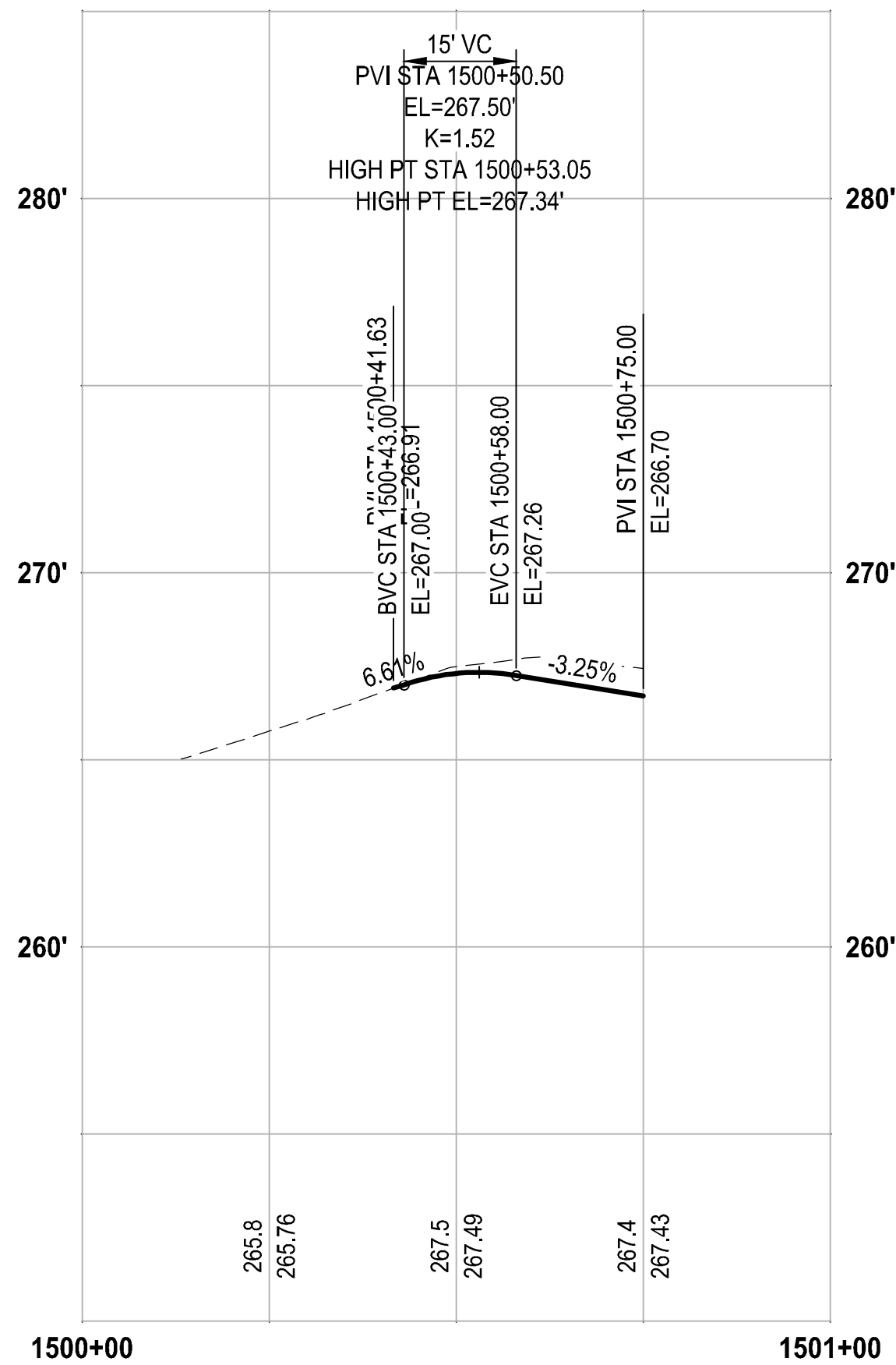
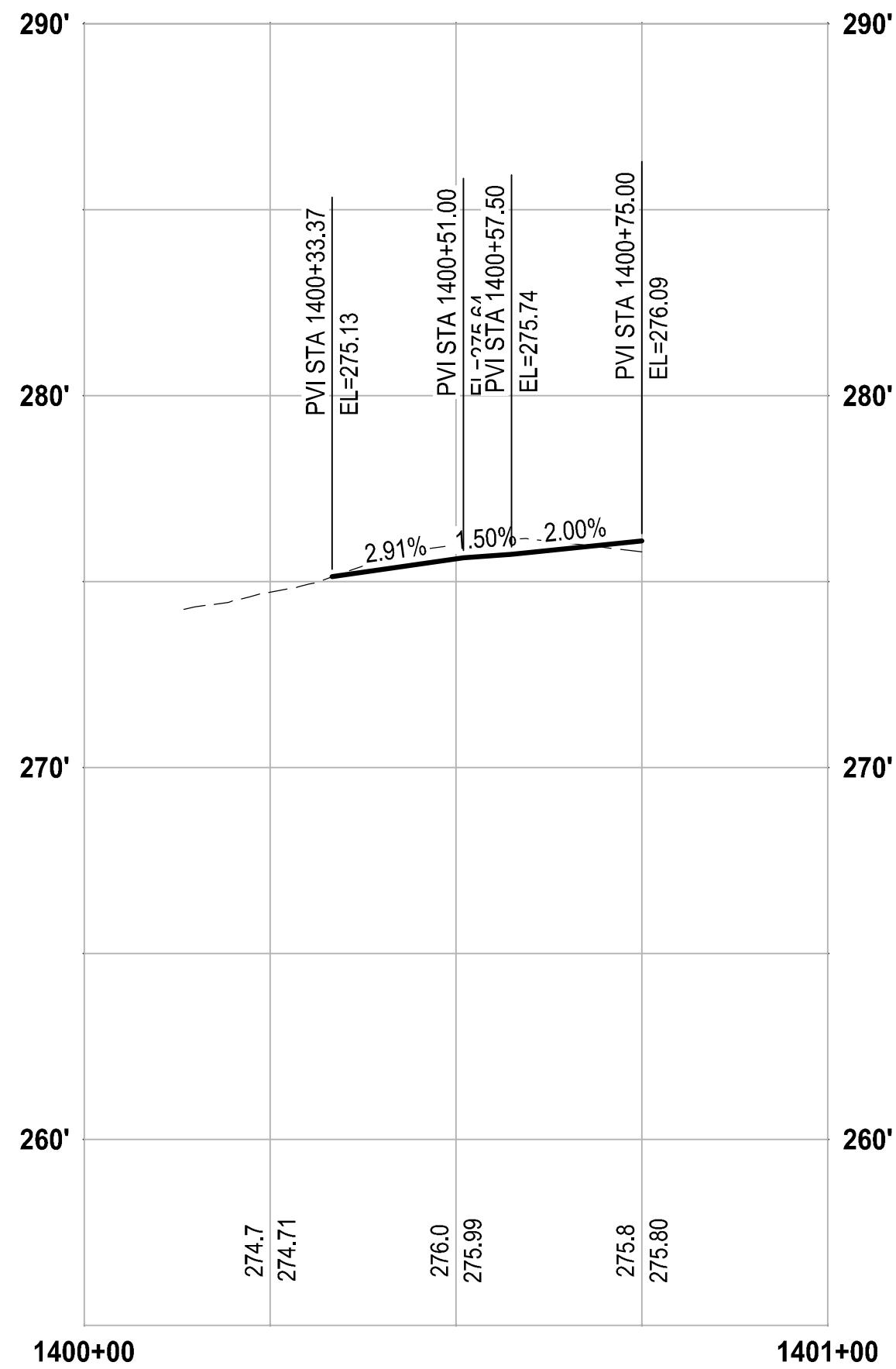
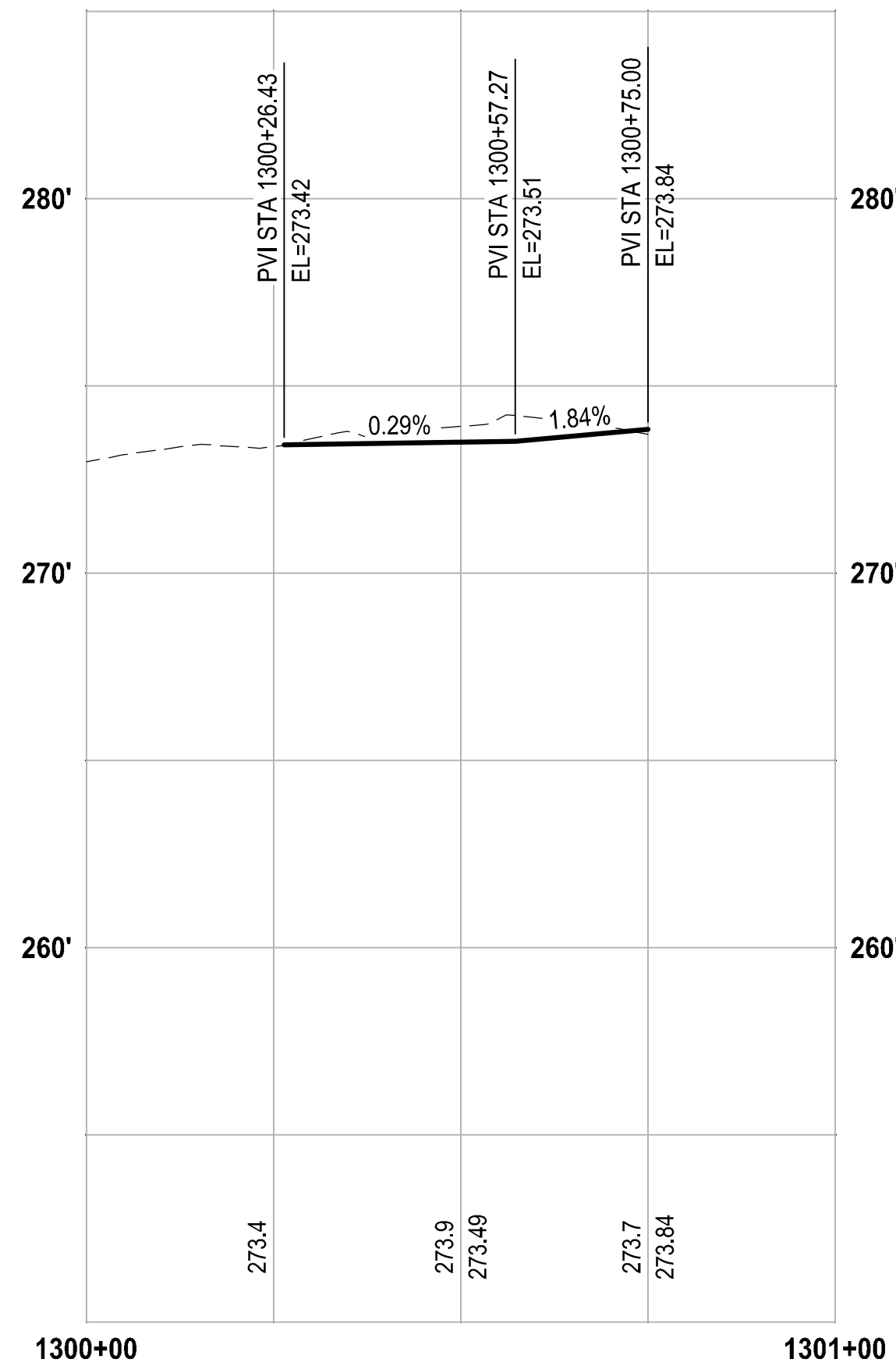
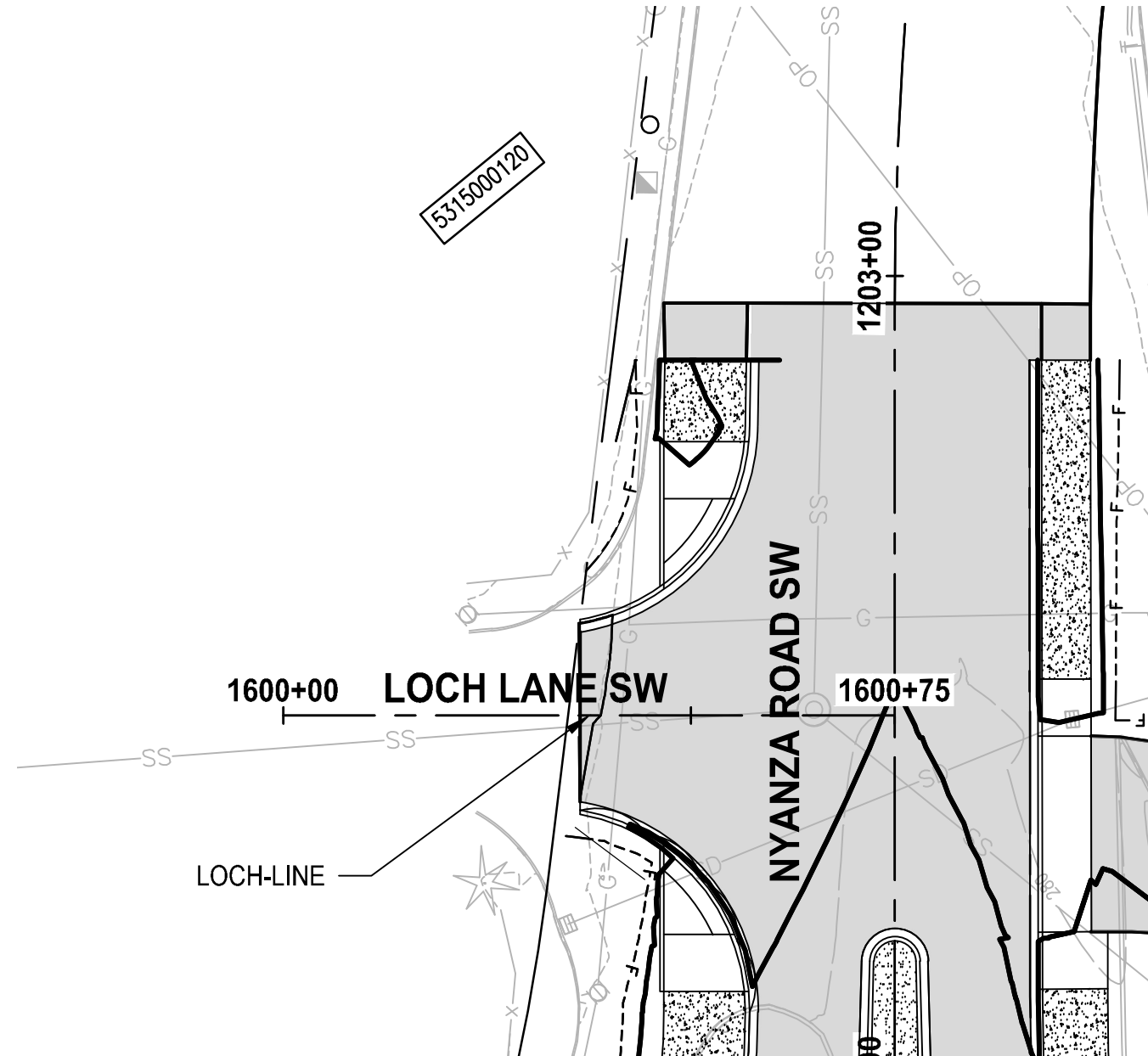
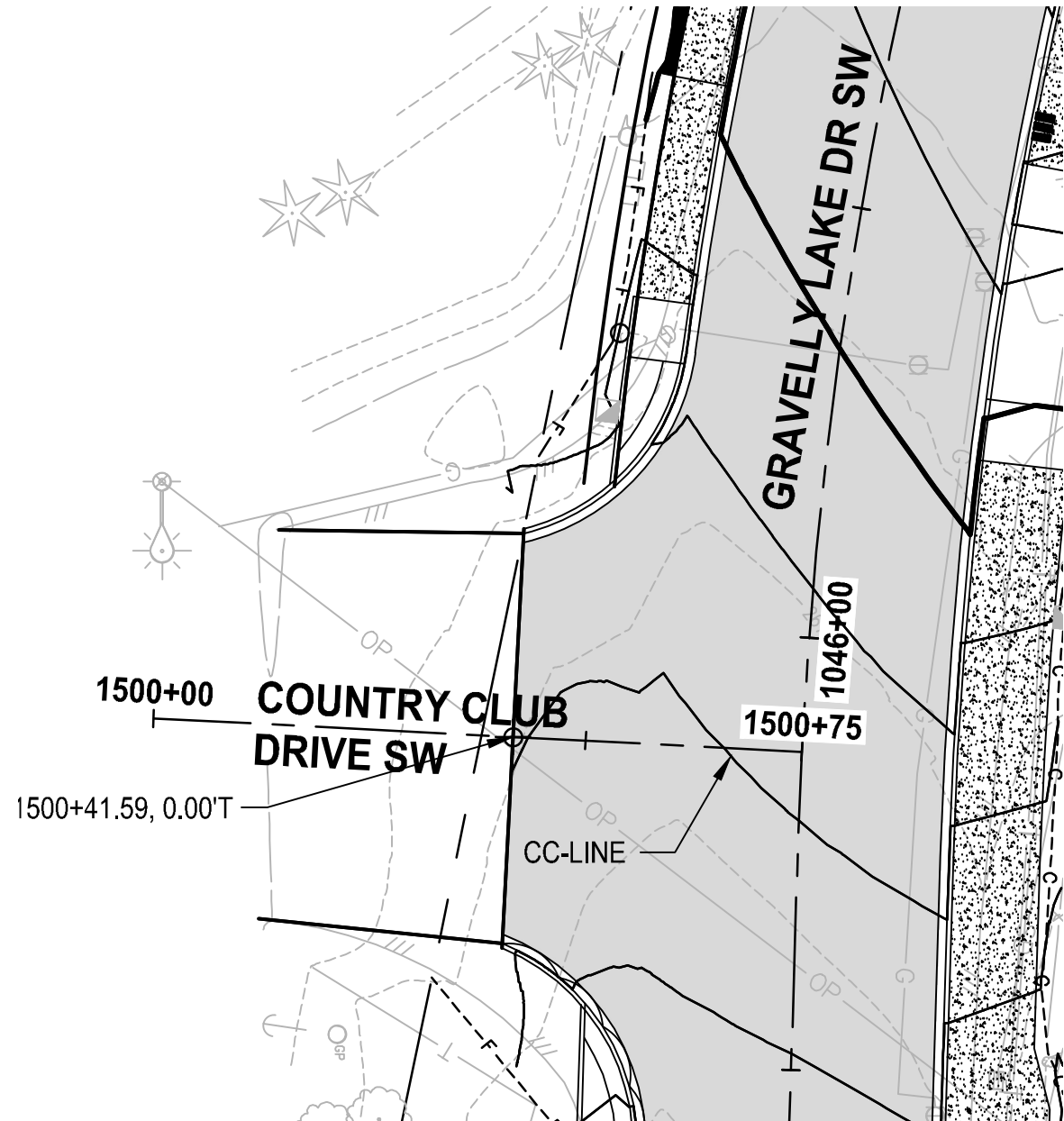
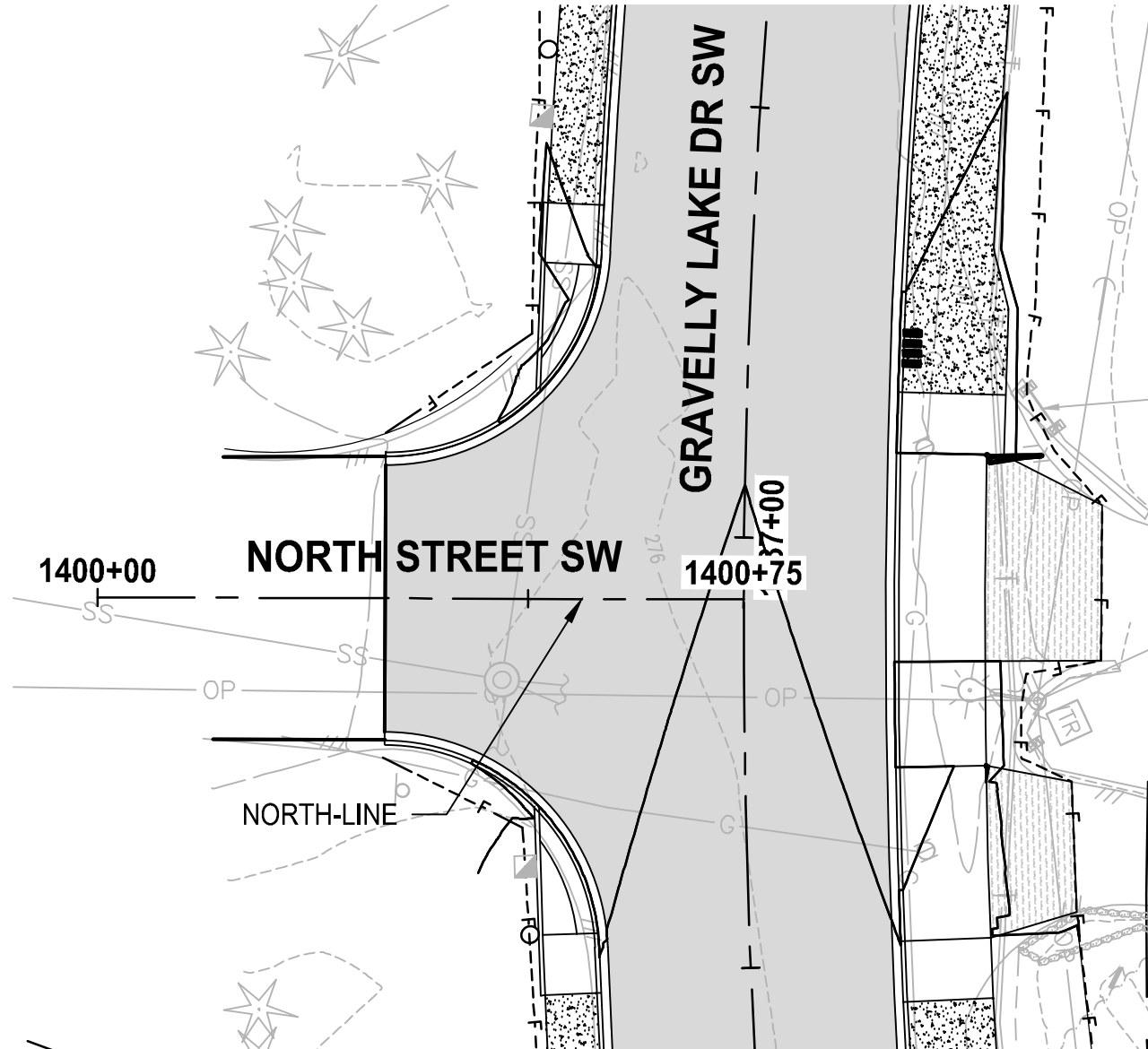
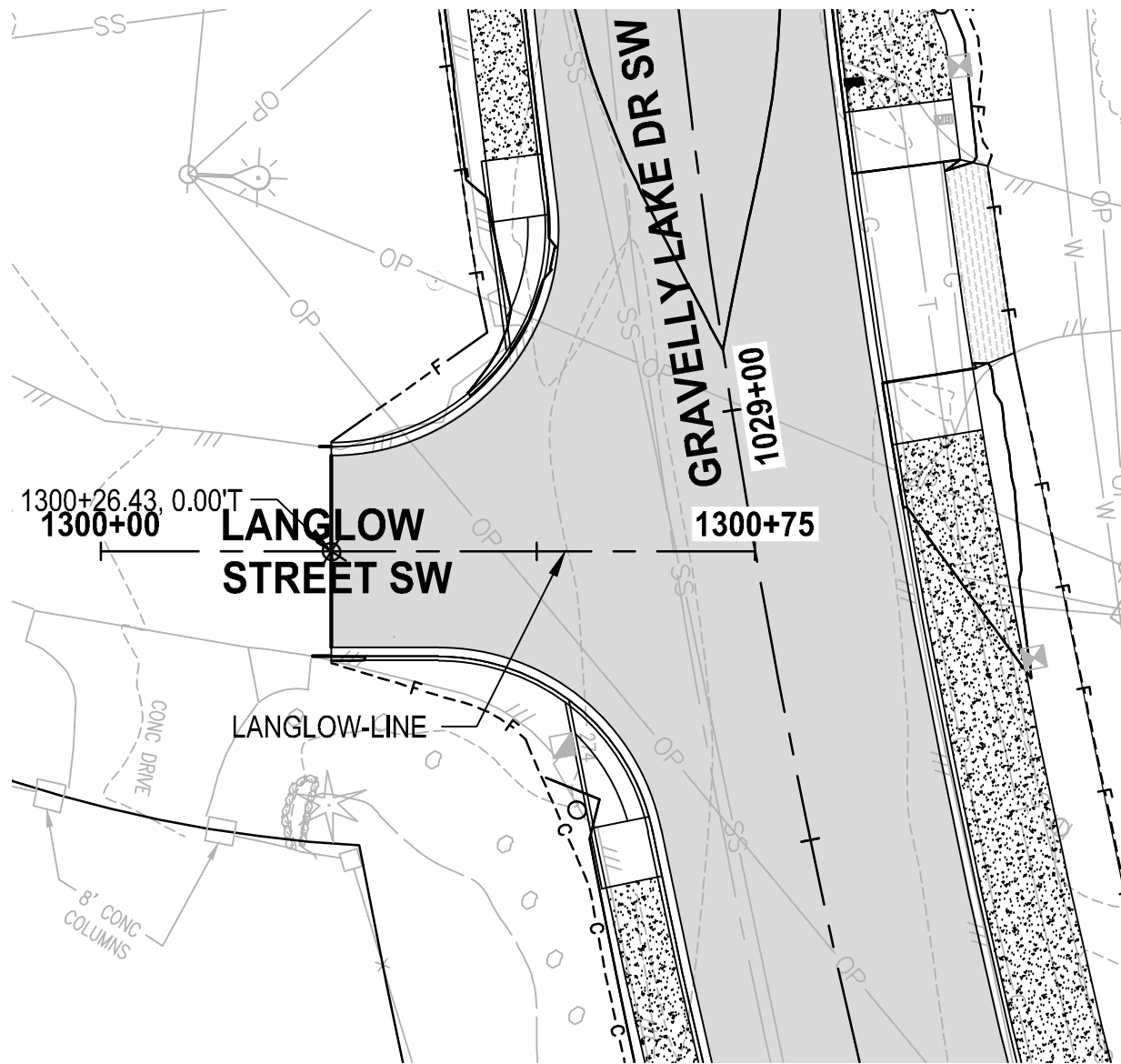
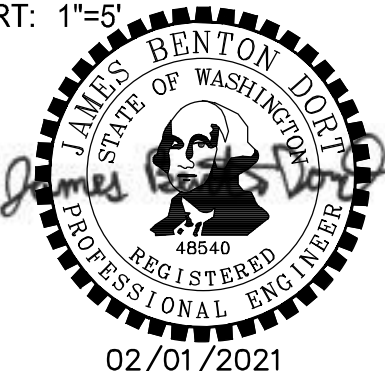


LAYOUT: PP22 ROADWAY PLAN & PROFILES LANGLOW N ST CC LOCH LANGLOW N ST CC LOCH PATH: \\computer\projects\19000\19182.00.00 - JBLM North Access Imp\Civil\07-CAD\DWG PLOTTED BY: bbeals DATE: Wednesday, February 3, 2021 3:47:16 PM



PROFILE

HORIZ: 1"=20'
VERT: 1"=5'



REVISIONS	DATE	BY	DESIGNED
			B. HARRINGTON
			DRAWN
			R. BEALS
			CHECKED
			B. DORT
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.
FILE NAME PS3047013-PP20-22
JOB No. 214-3047-013
DATE FEBRUARY 2021

PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

ROADWAY PLAN & PROFILES LANGLOW, N ST, CC, LOCH
--

DRAWING NO. 46 OF 153
PP22



1. CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THIS WORK
2. SEE PP SHEETS FOR DRIVEWAY INFORMATION

- 1 INSTALL CEMENT CONCRETE TRAFFIC CURB AND GUTTER PER COL STD PLAN FR-04
- 2 INSTALL TRUCK BARRIER CURB PER COL STD PLAN FR-04 WITH WEEP HOLES PER SECTION
- 3 INSTALL ROUNDBABOUT TRUCK APRON CEMENT CONCRETE CURB AND GUTTER PER WSDOT STD PLAN F-10.18-01 (CURB 1)
- 4 INSTALL TRAFFIC BARRIER CURB PER COL STD PLAN FR-04
- 5 INSTALL SPLITTER ISLAND PER DETAILS ON SHEET RAB14
- 6 INSTALL CEMENT CONCRETE TRUCK APRON PER DETAIL AND SECTION
- 7 INSTALL TRAFFIC BARRIER CURB PER COL STD PLAN FR-04 AND SECTION
- 8 INSTALL ROUNDBABOUT CEMENT CONCRETE CURB & GUTTER, TYPE CURB 2 PER WSDOT STD PLAN F-10.18-01
- 9 INSTALL SIDEWALK BUFFER PER DETAIL AND SECTION

						BOTTOM FACE OF CURB/FLOWLINE											
CURVE/ LINE #	LENGTH	BEARING / DELTA	RADIUS	BEGIN STA	OFFSET	BEGIN	1/8	1/4	3/8	1/2	5/8	3/4	7/8	END	END STA	OFFSET	
C615	8.62	9.88	50.00	257+93.04	20.75 RT	266.18				266.13				266.07	258+01.62	20.01 RT	
L210	47.46	N81° 54' 14.82"E		258+01.62	20.01 RT	266.07		265.91		265.71		265.50		265.26	258+46.18	15.44 RT	
C616	16.03	3.50	262.00	258+46.18	15.44 RT	265.26				265.09				264.90	258+61.38	15.09 RT	
C617	53.18	30.47	100.00	258+61.38	15.09 RT	264.90	264.74	264.57	264.40	264.22	264.09	264.02	264.01	264.07	259+15.58	26.13 RT	
C618	33.29	54.50	35.00	259+15.58	26.13 RT	264.07		264.23		264.37		264.44		264.43	902+00.54	28.53 LT	
C619	98.52	22.14	255.00	902+00.54	28.53 LT	264.43	264.37	264.52	264.92	265.58	266.35	267.04	267.55	267.91	901+05.49	12.00 LT	
C620	37.61	5.23	412.00	901+05.49	12.00 LT	267.91		268.07		268.13		268.09		268.02	900+68.98	12.00 LT	
C621	47.22	6.97	388.00	900+68.98	12.00 RT	268.00		268.12		268.10		267.93		267.61	901+17.48	12.02 RT	
L211	41.00	N7° 15' 12.47"E		901+17.48	12.02 RT	267.61		267.21		266.71		266.13		265.54	901+57.38	14.25 RT	
C622	35.86	20.55	100.00	901+57.38	14.25 RT	265.54		265.08		264.71		264.44		264.26	901+94.19	23.41 RT	
C623	39.96	45.79	50.00	901+94.19	23.41 RT	264.26		264.18		264.09		263.94		263.72	260+24.36	28.97 RT	
C624	74.40	14.21	300.00	260+24.36	28.97 RT	263.72	263.48	263.24	263.02	262.92	262.94	263.08	263.23	263.39	260+93.60	14.96 RT	
C625	32.53	4.52	412.00	260+93.60	14.96 RT	263.39		263.53		263.65		263.77		263.87	261+24.79	15.04 RT	
C626	4.37	5.00	50.00	261+24.79	15.04 RT	263.87				263.89				263.92	261+28.97	15.30 RT	
L212	34.88	N88° 16' 52.94"E		261+28.97	15.30 RT	263.92		264.01		264.08		264.13		264.19	261+61.77	20.63 RT	
C627	10.29	11.79	50.00	261+61.77	20.63 RT	264.19				264.21				264.25	261+71.39	21.77 RT	
C628	5.97	6.84	50.00	261+67.36	22.61 LT	264.20				264.17				264.15	261+61.02	21.96 LT	
L213	23.04	S66° 46' 03.71"W		261+61.02	21.96 LT	264.15				264.08				264.00	261+37.16	17.13 LT	
C629	13.29	15.23	50.00	261+37.16	17.13 LT	264.00				263.93				263.85	261+23.39	15.39 LT	
C630	37.41	7.44	288.00	261+23.39	15.39 LT	263.85		263.72		263.58		263.41		263.24	260+84.34	15.03 LT	
C631	64.17	36.77	100.00	260+84.34	15.03 LT	263.24	263.09	262.96	262.88	262.83	262.82	262.85	262.90	262.91	260+19.52	31.98 LT	
C632	21.03	24.09	50.00	260+19.52	31.98 LT	262.91				262.86				262.74	902+91.41	35.51 RT	
C633	159.03	30.37	300.00	902+91.41	35.51 RT	262.74	262.36	261.76	260.72	259.26	258.07	257.45	257.39	257.40	904+46.69	12.02 RT	
L214	14.14	N0° 40' 09.79"E		904+46.69	12.02 RT	257.40				257.52				257.62	904+60.70	12.00 RT	
L215	5.41	N0° 40' 09.79"E		904+60.70	12.00 LT	257.75				257.72				257.70	904+55.29	12.00 LT	
C634	20.45	4.92	238.00	904+55.29	12.00 LT	257.70				257.60				257.49	904+34.33	12.45 LT	
C635	76.92	16.82	262.00	904+34.33	12.45 LT	257.49	257.40	257.37	257.44	257.65	257.96	258.37	258.90	259.53	903+61.17	14.88 LT	

BOTTOM FACE OF CURB/FLOWLINE																
CURVE/ LINE #	LENGTH	BEARING / DELTA	RADIUS	BEGIN STA	OFFSET	BEGIN	1/8	1/4	3/8	1/2	5/8	3/4	7/8	END	END STA	OFFSET
C636	48.57	27.83	100.00	903+61.17	14.88 LT	259.53	260.00	260.48	260.92	261.30	261.62	261.89	262.17	262.44	903+11.88	26.04 LT
C637	34.45	49.34	40.00	903+11.88	26.04 LT	262.44		262.82		263.09		263.24		263.31	259+25.16	29.41 LT
C638	127.11	24.28	300.00	259+25.16	29.41 LT	263.31	263.52	263.88	264.29	264.71	265.12	265.54	265.91	266.19	257+99.61	15.86 LT
C639	8.40	9.62	50.00	257+99.61	15.86 LT	266.19				266.25				266.29	257+91.24	16.34 LT

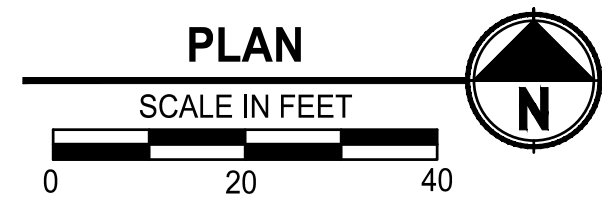
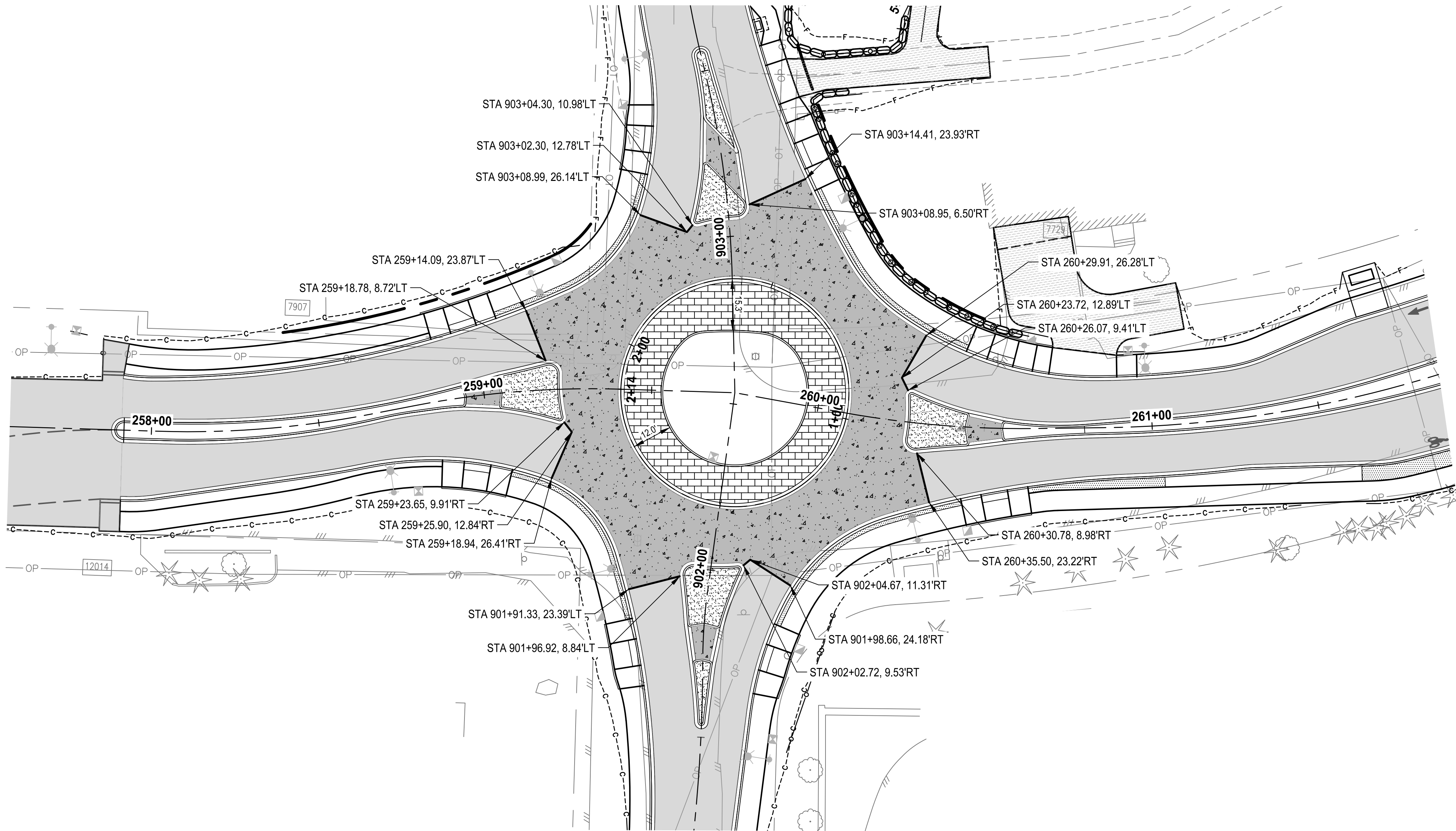
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FILE NAME	PS3047013-RAB-07
JOB No.	214-3047-013
DATE	FEBRUARY 2021



WASHINGTON & INTERLAAKEN ROUNDABOUT GRADING PLAN

RAB1

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DATE: Tuesday, February 2, 2021 4:38:45 PM
PLOTTED BY: taylokat
LAYOUT: RAB2



GENERAL NOTES

1. CONTRACTOR SHALL PREPARE JOINTING PLAN PER WSDOT STD PLAN A-40.10-04 AND A-40.15-00
2. SEE SPECIFICATIONS FOR ADDITIONAL PAVEMENT INFORMATION

LEGEND

- 10" CEMENT CONC. PAVEMENT
3" CSTC
- 6" HMA CLA 1/2 IN PG 58H-22
4" CSTC



Know what's below.
Call before you dig.

HORIZTONTAL DATUM

HORIZONTAL DATUM IS NAD 1983,
WASHINGTON STATE PLANE SOUTH ZONE
PER CONTROL PROVIDED BY AHBL FOR
WASHINGTON BLVD. MAPPING.

VERTICAL DATUM

VERTICAL DATUM IS NAVD88 PER
CONTROL PROVIDED BY AHBL FOR
WASHINGTON BLVD. MAPPING.

REVISIONS	DATE	BY	DESIGNED
			S.M. CRAIG
			DRAWN
			C. WOODCOCK
			CHECKED
			K. HOUSE
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME
PS3047013-RAB-07
JOB No.
214-3047-013
DATE
FEBRUARY 2021

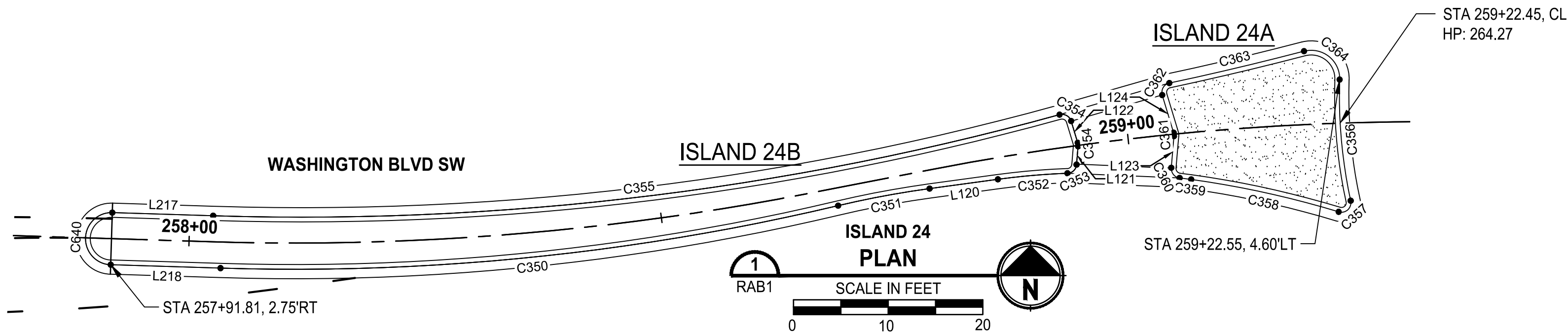


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

WASHINGTON & INTERLAAKEN ROUNDABOUT PAVING PLAN

DRAWING NO. 48 OF 153
RAB2

LAYOUT: RAB3
PATH: U:\PSO\Projects\Clients\3047-3047-013_JBLM North Access Road\99Sves\CADD\DWG
PLOTED BY: taylokt DATE: Tuesday, February 2, 2021 4:28:19 PM

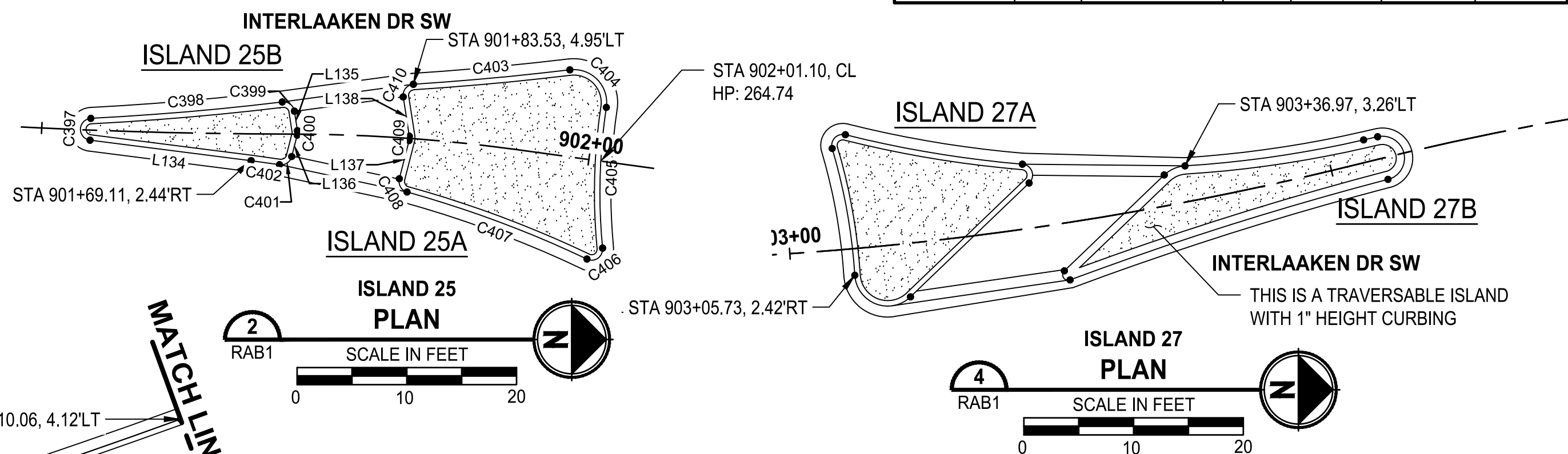


SPLITTER ISLAND 24B				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
L218	11.60	S88° 12' 48.20"E		266.56	266.48	266.39
C350	65.74	15.13	249.00	266.39	265.75	264.98
C351	9.83	5.57	101.00	264.98	264.87	264.75
L120	7.28	N82° 14' 05.28"E		264.75	264.67	264.59
C352	7.38	5.63	75.00	264.59	264.52	264.45
C353	1.45	83.05	1.00	264.45	264.45	264.45
L121	1.94	N4° 49' 03.31"E		264.45	264.47	264.48
C354	0.38	21.68	1.00	264.48	264.48	264.48
L122	2.40	N16° 51' 56.72"W		264.48	264.45	264.42
C354	1.55	88.55	1.00	264.42	264.41	264.42
C355	90.35	17.20	301.00	264.42	265.46	266.41
L217	10.65	N88° 12' 48.20"W		266.41	266.49	266.56
C640	8.64	180.00	2.75	266.56	266.65	266.56

SPLITTER ISLAND 24A				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C356	12.88	14.07	52.44	264.06	264.23	264.19
C357	2.08	119.10	1.00	264.19	264.18	264.18
C358	15.96	8.96	102.00	264.18	264.21	264.27
C359	1.24	0.94	75.00	264.27	264.28	264.28
C360	1.53	87.88	1.00	264.28	264.29	264.31
L123	3.35	N4° 49' 03.31"E		264.31	264.33	264.36
C361	0.38	21.68	1.00	264.36	264.36	264.36
L124	4.14	N16° 51' 56.72"W		264.36	264.30	264.24
C362	1.66	94.89	1.00	264.24	264.22	264.19
C363	14.62	2.71	309.65	264.19	264.09	263.99
C364	5.58	106.49	3.00	263.99	264.03	264.06

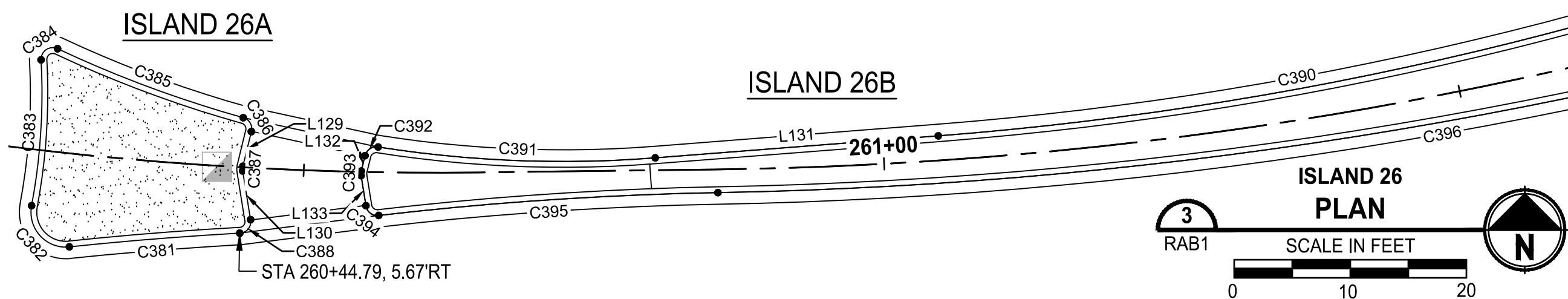
SPLITTER ISLAND 25B				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
L134	14.80	N7° 15' 12.47"E		265.20	265.54	265.95
C397	2.96	169.81	1.00	265.95	266.02	265.95
C398	17.51	3.92	256.00	265.95	265.47	265.09
C399	1.54	88.02	1.00	265.09	265.07	265.07
L135	1.81	S81° 09' 23.49"W		265.07	265.08	265.10
C400	0.41	23.22	1.00	265.10	265.10	265.10
L136	2.02	N75° 37' 10.06"W		265.10	265.09	265.08
C401	1.47	84.35	1.00	265.08	265.08	265.10
C402	2.61	1.48	101.00	265.10	265.15	265.20

SPLITTER ISLAND 25A				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C403	14.33	3.12	263.16	264.74	264.65	264.64
C404	5.52	105.39	3.00	264.64	264.67	264.70
C405	12.87	14.05	52.48	264.70	264.70	264.57
C406	2.11	120.92	1.00	264.57	264.56	264.55
C407	17.52	9.94	101.00	264.55	264.61	264.75
C408	1.55	88.90	1.00	264.75	264.77	264.79
L137	3.60	N75° 37' 10.06"W		264.79	264.81	264.84
C409	0.41	23.22	1.00	264.84	264.84	264.84
L138	3.62	S81° 09' 23.49"W		264.84	264.81	264.78
C410	1.66	95.13	1.00	264.78	264.76	264.74



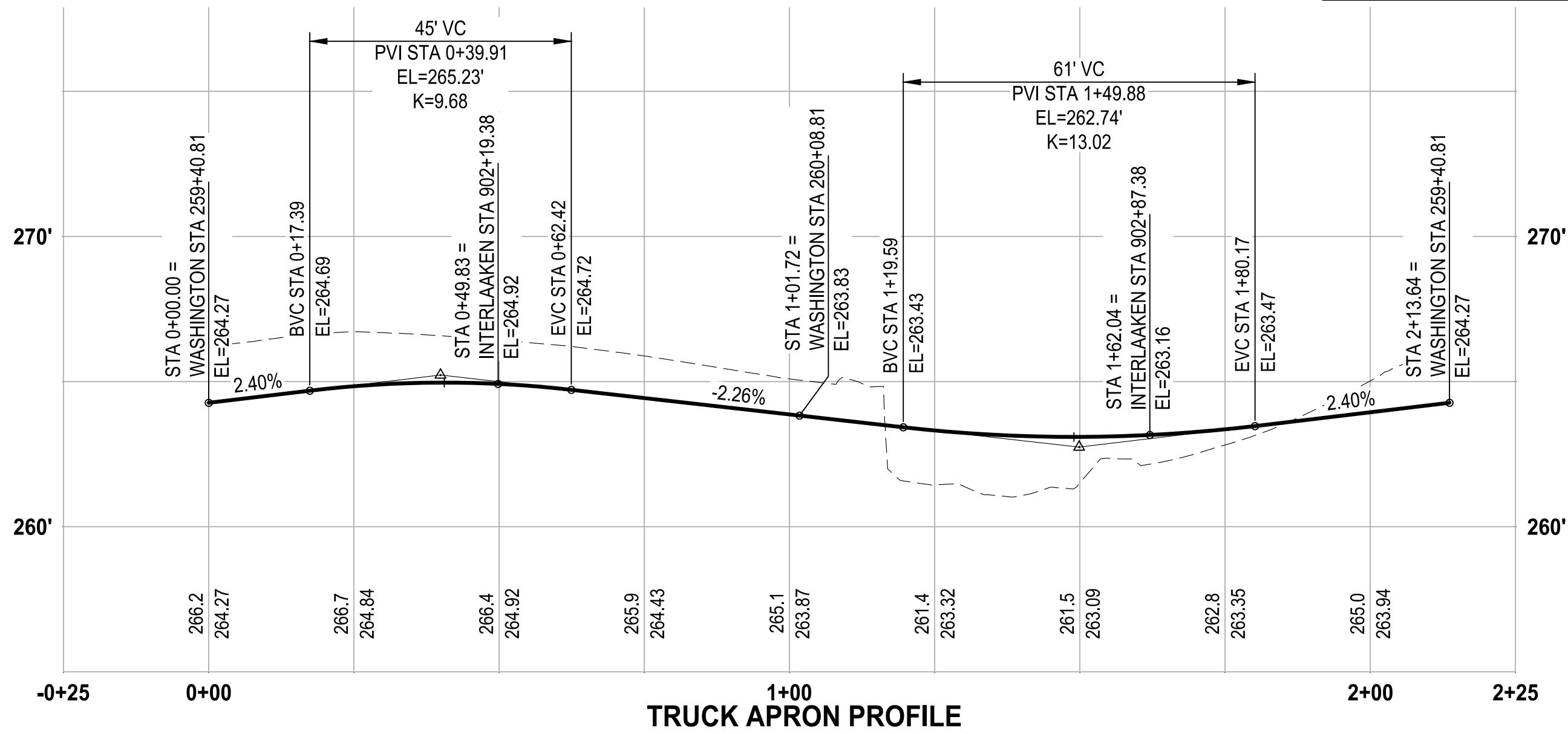
SPLITTER ISLAND 27A				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C366	11.77	12.86	52.44	262.75	262.79	262.83
C367	2.11	120.66	1.00	262.83	262.80	262.76
C368	16.38	9.29	101.00	262.76	262.43	262.09
C369	2.29	131.36	1.00	262.09	262.06	262.09
L125	14.99	N43° 49' 47.48"W		262.09	262.38	262.55
C370	6.81	130.13	3.00	262.55	262.64	262.75

SPLITTER ISLAND 27B				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C371	16.47	9.34	101.00	261.37	260.87	260.31
C372	1.31	0.30	249.00	260.31	260.26	260.22
C373	6.21	177.97	2.00	260.22	260.11	260.21
C374	30.40	5.79	301.00	260.21	261.19	261.96
C375	1.37	156.63	0.50	261.96	261.98	261.99
L126	12.62	S43° 49' 47.48"E		261.99	261.77	261.48
C376	2.11	40.22	3.00	261.48	261.43	261.37



SPLITTER ISLAND 26A				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C381	14.72	2.73	309.45	263.20	263.30	263.47
C382	5.58	106.58	3.00	263.47	263.50	263.54
C383	12.61	13.78	52.44	263.54	263.44	263.35
C384	2.06	118.28	1.00	263.35	263.33	263.31
C385	17.07	9.54	102.50	263.31	263.20	263.17
C386	1.54	88.18	1.00	263.17	263.17	263.18
L129	3.07	S13° 46' 14.34"W		263.18	263.22	263.25
C387	0.40	22.94	1.00	263.25	263.25	263.25
L130	4.25	S9° 10' 17.64"E		263.25	263.22	263.20
C388	1.67	95.94	1.00	263.20	263.19	263.20

SPLITTER ISLAND 26B				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C389	41.69	3.54	675.39	264.85	264.72	264.58
C390	62.70	11.94	301.00	264.58	264.27	263.83
L131	24.45	S85° 33' 18.39"W		263.83	263.64	263.46
C391	23.94	13.38	102.50	263.46	263.29	263.18
C392	1.49	85.17	1.00	263.18	263.19	263.20
L132	1.36	S13° 46' 14.34"W		263.20	263.21	263.22
C393	0.40	22.94	1.00	263.22	263.22	263.22
L133	2.62	S9° 10' 17.64"E		263.22	263.20	263.18
C394	1.53	87.46	1.00	263.18	263.17	263.17
C395	29.29	5.58	301.00	263.17	263.29	263.52
C396	125.14	17.97	399.00	263.52	264.41	264.86



REVISIONS	DATE	BY	DESIGNED
			S.M. CRAIG
			DRAWN
			C. WOODCOCK
			CHECKED
			K. HOUSE
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

FILE NAME
PS3047013-RAB-07

JOB No.
214-3047-013

DATE
FEBRUARY 2021



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TACOMA, WA 98402
P 253.627.4367
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PROJECT NAME

**JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1**

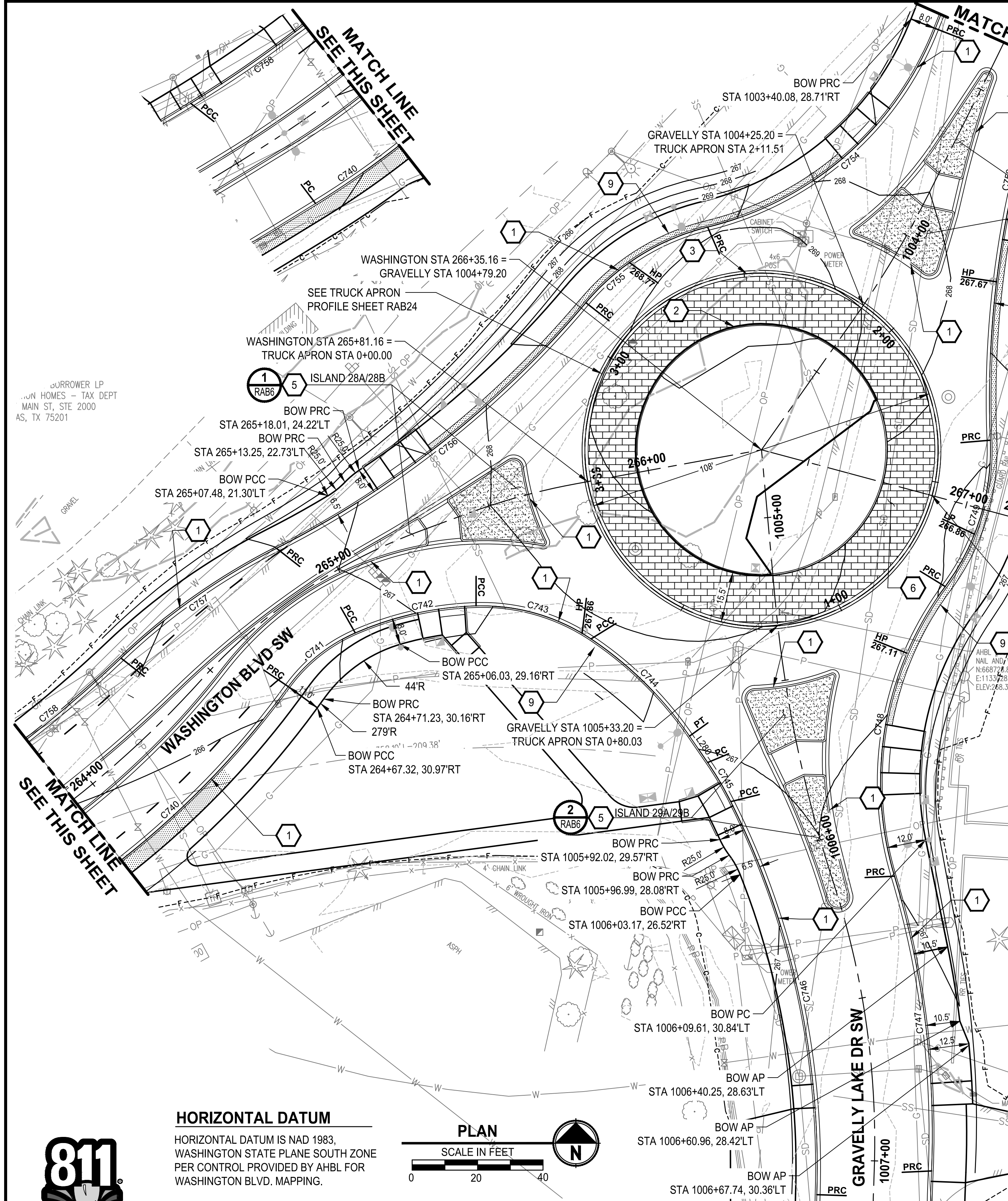
LAKEWOOD, WASHINGTON

**WASHINGTON & INTERLAAKEN
ROUNDAABOUT GRADING
DETAILS**

DRAWING NO.
49 OF 153

RAB3

DATE: Wednesday, February 3, 2021 8:42:22 AM
PLOT BY: taylokat
PATH: U:\PSO\Projects\Clients\3047-3047-013, JBLM North Access\99Sves\CADD\DWG



HORIZONTAL DATUM

HORIZONTAL DATUM IS NAD 1983, WASHINGTON STATE PLANE SOUTH ZONE PER CONTROL PROVIDED BY AHB FOR WASHINGTON BLVD. MAPPING.

VERTICAL DATUM

VERTICAL DATUM IS NAVD88 PER CONTROL PROVIDED BY AHB FOR WASHINGTON BLVD. MAPPING.



Know what's below.
Call before you dig.

REVISIONS	DATE	BY	DESIGNED S.M. CRAIG
			DRAWN C. WOODCOCK
			CHECKED K. HOUSE
			APPROVED A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.
FILE NAME PS3047013-RAB-08
JOB No. 214-3047-013
DATE FEBRUARY 2021



PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

GRAVELLY LAKE & WASHINGTON ROUNDABOUT GRADING PLAN
RAB4

DRAWING NO. 50 OF 153
RAB4

GENERAL NOTES

- CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THIS WORK
- SEE PP SHEETS FOR DRIVEWAY INFORMATION

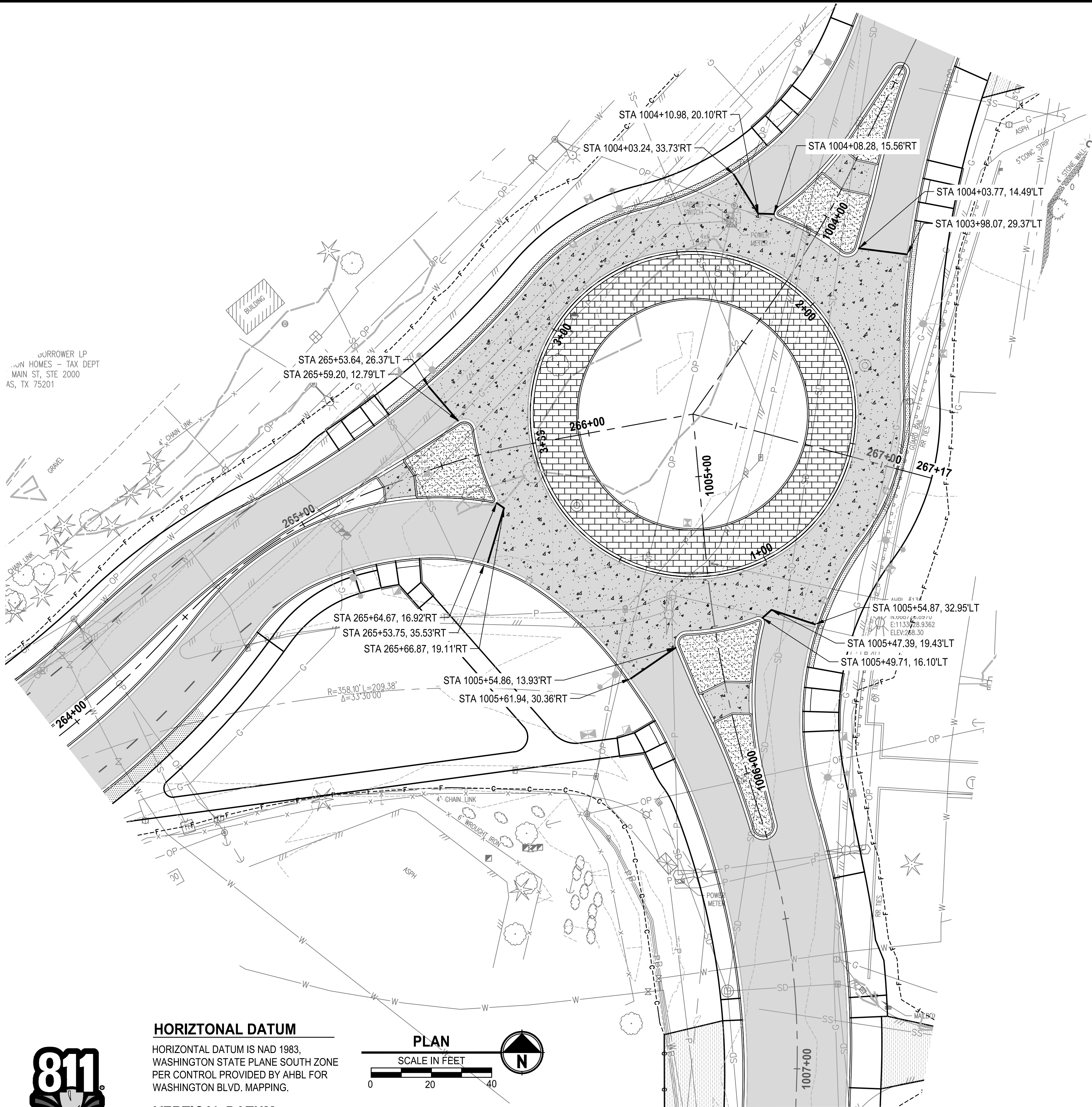
CONSTRUCTION NOTES

- INSTALL CEMENT CONCRETE TRAFFIC CURB AND GUTTER PER COL STD PLAN FR-04
- INSTALL TRUCK BARRIER CURB PER COL STD PLAN FR-04 WITH WEEP HOLES PER SECTION **A** (RAB13)
- INSTALL ROUNDABOUT TRUCK APRON CEMENT CONCRETE CURB AND GUTTER PER WSDOT STD PLAN F-10.18-01 (CURB 1)
- INSTALL TRAFFIC BARRIER CURB PER COL STD PLAN FR-04
- INSTALL SPLITTER ISLAND PER DETAILS ON SHEET RAB14
- INSTALL CEMENT CONCRETE TRUCK APRON PER DETAIL AND SECTION **A** (RAB13)
- INSTALL TRAFFIC BARRIER CURB PER COL STD PLAN FR-04 AND SECTION **B** (RAB13)
- INSTALL ROUNDABOUT CEMENT CONCRETE CURB & GUTTER, TYPE CURB 2 PER WSDOT STD PLAN F-10.18-01
- INSTALL SIDEWALK BUFFER PER DETAIL **C** (RAB13) AND SECTION **2** (RAB13)

ROUNDABOUT LINE/CURVE TABLE

						BOTTOM FACE OF CURB/FLOWLINE											
CURVE #	LENGTH	BEARING / DELTA	RADIUS	BEGIN STA	OFFSET	BEGIN	1/8	1/4	3/8	1/2	5/8	3/4	7/8	END	END STA	OFFSET	
C740	104.97	22.44	268.00	263+63.45	23.22 RT	265.39	265.48	265.56	265.64	265.72	265.80	265.88	265.99	266.15	264+64.48	20.24 RT	
C741	26.55	30.43	50.00	264+64.48	20.24 RT	266.15		266.24		266.34		266.46		266.59	264+94.19	19.32 RT	
C742	38.08	21.82	100.00	264+94.19	19.32 RT	266.59		266.79		266.99		267.19		267.39	265+35.76	27.37 RT	
C743	37.15	35.48	60.00	265+35.76	27.37 RT	267.39		267.59		267.76		267.85		267.86	265+72.23	47.40 RT	
C744	42.55	21.67	112.50	265+72.23	47.40 RT	267.86		267.78		267.60		267.33		267.09	1005+61.46	31.68 RT	
L280	9.79	N34° 33' 03.24"W		1005+61.46	31.68 RT	267.09				267.00				266.92	1005+69.81	27.77 RT	
C745	13.90	7.97	100.00	1005+69.81	27.77 RT	266.92				266.82				266.74	1005+82.23	23.50 RT	
C746	124.22	28.47	250.00	1005+82.23	23.50 RT	266.74	266.63	266.55	266.47	266.39	266.32	266.24	266.16	266.08	1007+10.88	17.28 RT	
C747	91.20	19.14	273.00	1007+02.51	17.51 LT	266.12	266.17	266.22	266.28	266.33	266.38	266.43	266.48	266.54	1006+17.31	18.36 LT	
C748	93.20	53.40	100.00	1006+17.31	18.36 LT	266.54	266.59	266.71	266.84	266.96	267.07	267.11	267.07	266.96	267+00.24	25.78 RT	
C749	47.71	39.05	70.00	267+00.24	25.78 RT	266.96		266.88		266.87		266.95		267.10	267+01.94	20.98 LT	
C750	159.28	30.42	300.00	267+01.94	20.98 LT	267.10	267.40	267.65	267.63	267.45	267.28	267.10	266.93	266.75	1002+92.68	14.99 LT	
C751	57.75	10.85	305.00	1002+92.68	14.99 LT	266.75	266.69	266.63	266.57	266.50	266.44	266.32	266.16	266.09	1002+36.26	17.24 LT	
L281	36.79	S17° 28' 21.93"W		1001+76.40	17.50 RT	266.01		266.04		266.08		266.11		266.14	1002+12.86	17.95 RT	
C752	58.11	6.90	482.50	1002+12.86	17.95 RT	266.14	266.17	266.20	266.10	266.13	266.19	266.26	266.33	266.40	1002+72.42	20.21 RT	
L282	48.47	S24° 22' 23.74"W		1002+72.42	20.21 RT	266.40		266.52		266.65		266.77		266.89	1003+22.27	21.47 RT	
C753	16.66	2.96	323.00	1003+22.27	21.47 RT	266.89				266.98				267.06	1003+39.40	20.74 RT	
C754	95.98	54.99	100.00	1003+39.40	20.74 RT	267.06	267.19	267.34	267.53	267.74	267.99	268.24	268.46	268.63	1004+33.14	52.72 RT	
C755	44.54	36.46	70.00	1004+33.14	52.72 RT	268.63		268.72		268.77		268.76		268.70	265+90.47	53.88 LT	
C756	121.57	23.22	300.00	265+90.47	53.88 LT	268.70	268.54	268.28	267.96	267.64	267.33	267.03	266.75	266.50	264+87.90	15.42 LT	
C757	58.40	16.73	200.00	264+87.90	15.42 LT	266.50	266.40	266.30	266.21	266.12	266.04	265.97	265.91	265.86	264+33.57	22.44 LT	
C758	80.40	12.06	382.00	264+33.57	22.44 LT	265.86	265.76	265.69	265.62	265.56	265.49	265.43	265.37	265.30	263+47.53	23.00 LT	

PATH: U:\PSO\Projects\Clients\3047-City of Lakewood\214-3047-013_JBLM North Access\99Sves\CADD\DWG LAYOUT: RAB5 DATE: Wednesday, February 3, 2021 8:35:53 AM PLOTTED BY: tayokat



GENERAL NOTES

- CONTRACTOR SHALL PREPARE JOINTING PLAN PER WSDOT STD PLAN A-40.10-04 AND A-40.15-00
- SEE SPECIFICATIONS FOR ADDITIONAL PAVEMENT INFORMATION

LEGEND

- 10" CEMENT CONC. PAVEMENT
3" CSTC
- 6" HMA CLA 1/2 IN PG 58H-22
4" CSTC



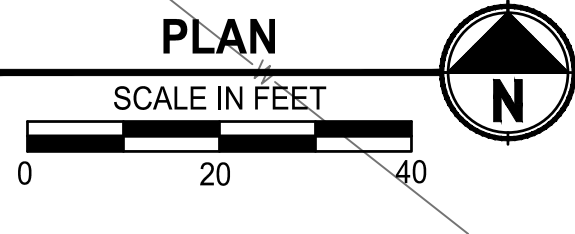
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HORIZONTAL DATUM

HORIZONTAL DATUM IS NAD 1983, WASHINGTON STATE PLANE SOUTH ZONE PER CONTROL PROVIDED BY AHB FOR WASHINGTON BLVD. MAPPING.

VERTICAL DATUM

VERTICAL DATUM IS NAVD88 PER CONTROL PROVIDED BY AHB FOR WASHINGTON BLVD. MAPPING.



REVISIONS	DATE	BY	DESIGNED
			S.M. CRAIG
			DRAWN
			C. WOODCOCK
			CHECKED
			K. HOUSE
			APPROVED
			A. FISHER

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FILE NAME PS3047013-RAB-08
JOB No. 214-3047-013
DATE FEBRUARY 2021

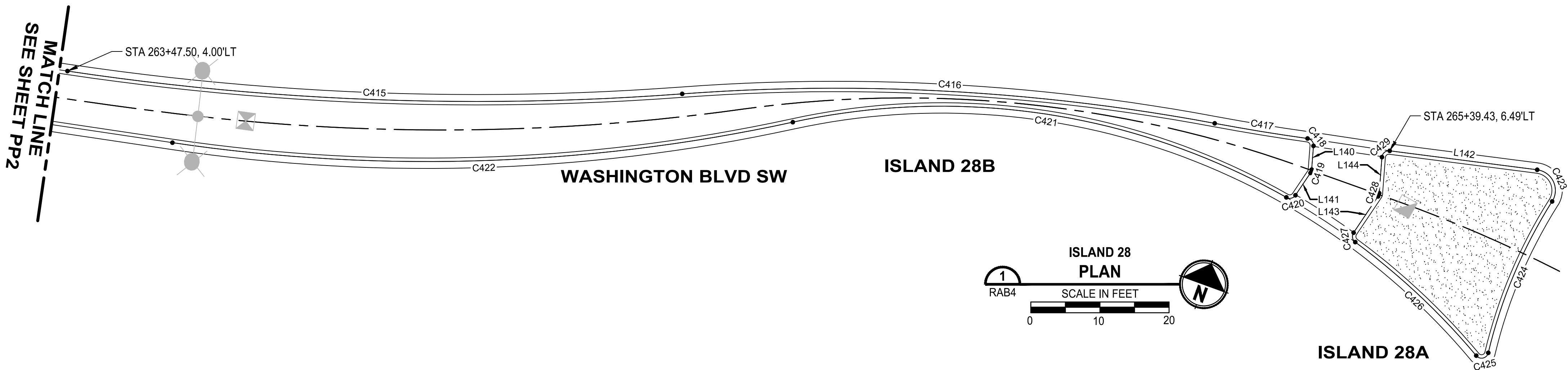


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

GRAVELLY LAKE & WASHINGTON ROUNDABOUT PAVING PLAN

DRAWING NO. 51 OF 153
RAB5

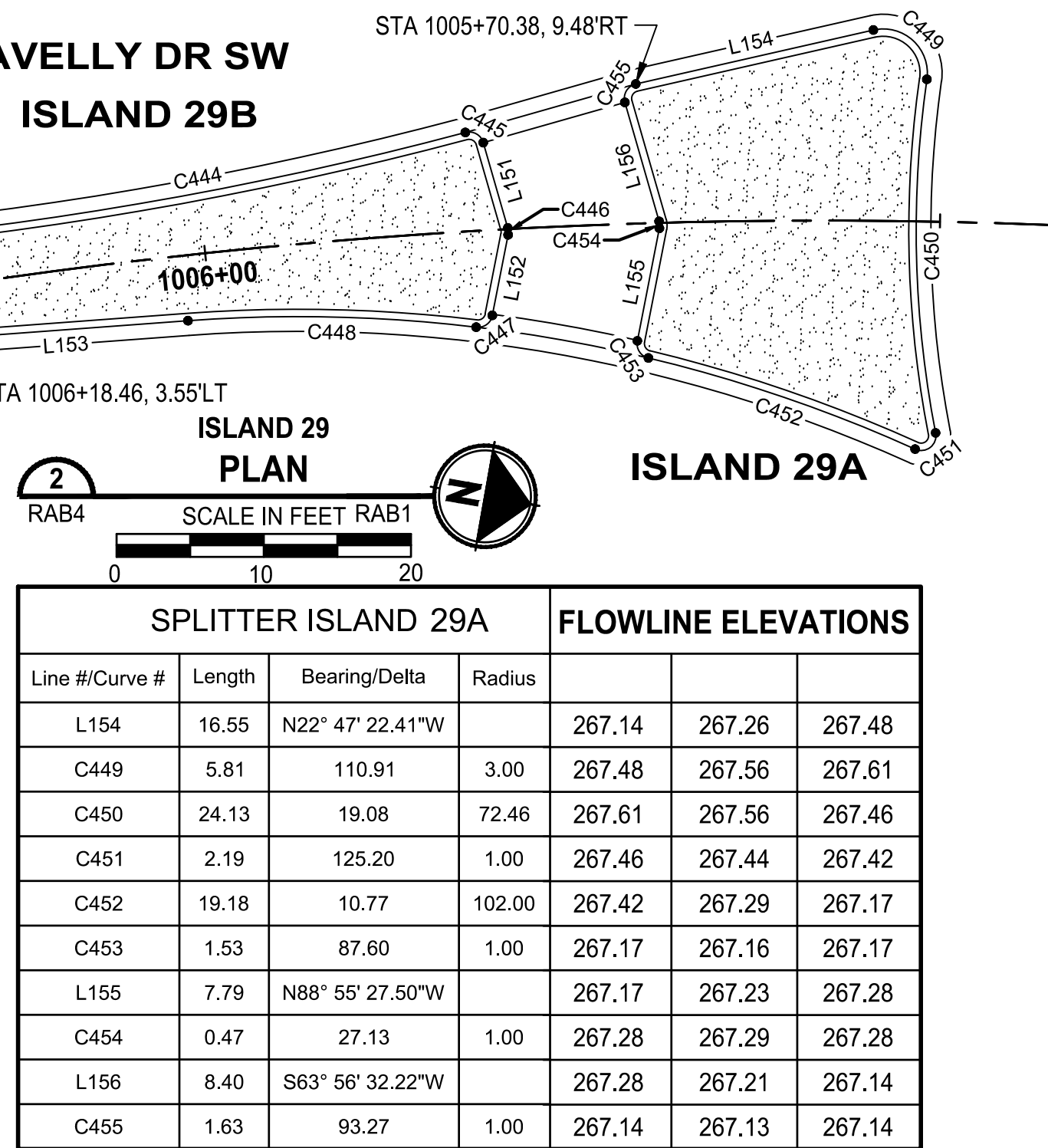
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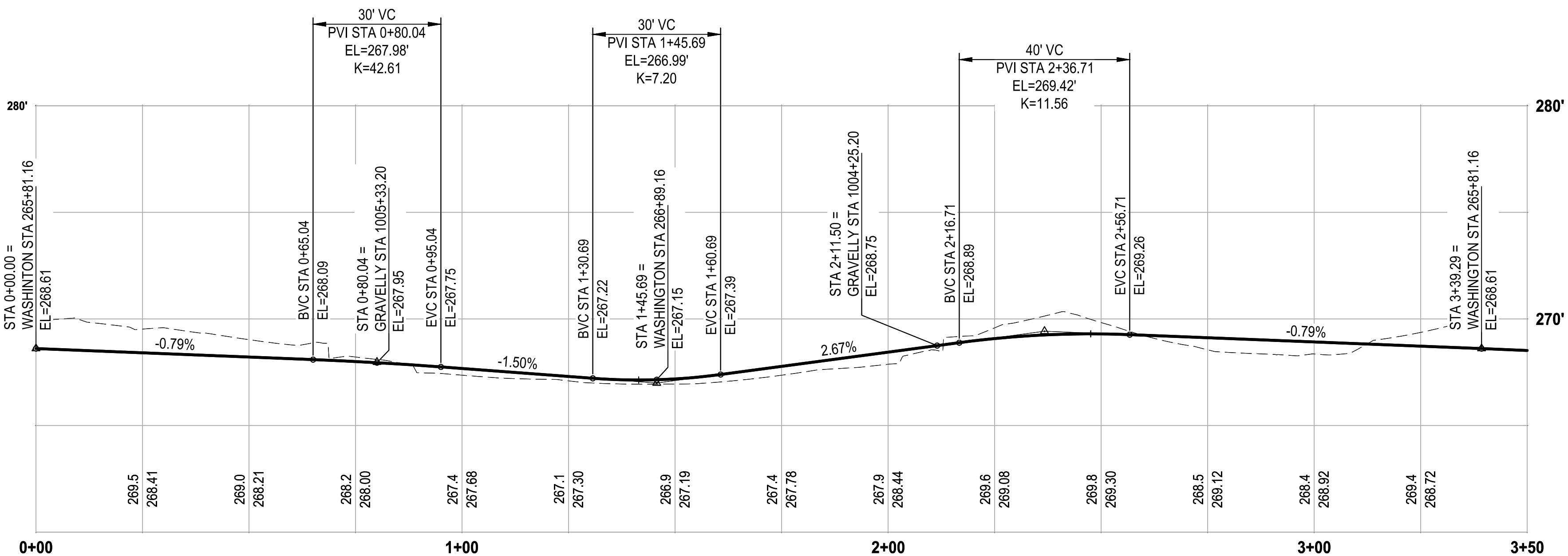
SPLITTER ISLAND 28B				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C415	89.17	12.74	401.00	265.68	265.98	266.24
C416	77.36	14.82	299.00	266.24	266.61	267.24
C417	13.61	2.59	301.00	267.24	267.36	267.49
C418	1.51	86.40	1.00	267.49	267.50	267.52
L140	3.44	N35° 36' 46.46"W		267.52	267.55	267.58
C419	0.52	29.60	1.00	267.58	267.58	267.58
L141	3.89	N6° 00' 35.34"W		267.58	267.55	267.51
C420	1.49	85.62	1.00	267.51	267.49	267.48
C421	73.85	41.89	101.00	267.48	266.82	266.36
C422	90.28	20.77	249.00	266.36	266.05	265.78

SPLITTER ISLAND 28A				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
L142	21.51	N57° 19' 41.74"E		267.71	267.91	268.14
C423	6.02	114.98	3.00	268.14	268.22	268.27
C424	23.88	18.87	72.49	268.27	268.22	268.14
C425	2.21	126.57	1.00	268.14	268.13	268.11
C426	24.06	13.65	101.00	268.11	267.90	267.69
C427	1.53	87.63	1.00	267.69	267.68	267.69
L143	6.32	N6° 00' 35.34"W		267.69	267.74	267.79
C428	0.52	29.60	1.00	267.79	267.79	267.79
L144	5.22	N35° 36' 46.46"W		267.79	267.75	267.71
C429	1.62	92.94	1.00	267.71	267.70	267.71

SPLITTER ISLAND 29B				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C443	11.17	177.73	3.60	266.83	266.88	266.83
C444	36.90	8.42	251.00	266.83	266.92	267.02
C445	1.55	88.86	1.00	267.02	267.03	267.04
L151	6.03	N63° 56' 32.22"E		267.04	267.10	267.16
C446	0.47	27.13	1.00	267.16	267.16	267.15
L152	5.57	S88° 55' 27.50"E		267.15	267.11	267.07
C447	1.50	85.72	1.00	267.07	267.06	267.05
C448	19.61	11.02	102.00	267.05	266.96	266.90
L153	16.76	S14° 13' 18.41"E		266.90	266.86	266.83

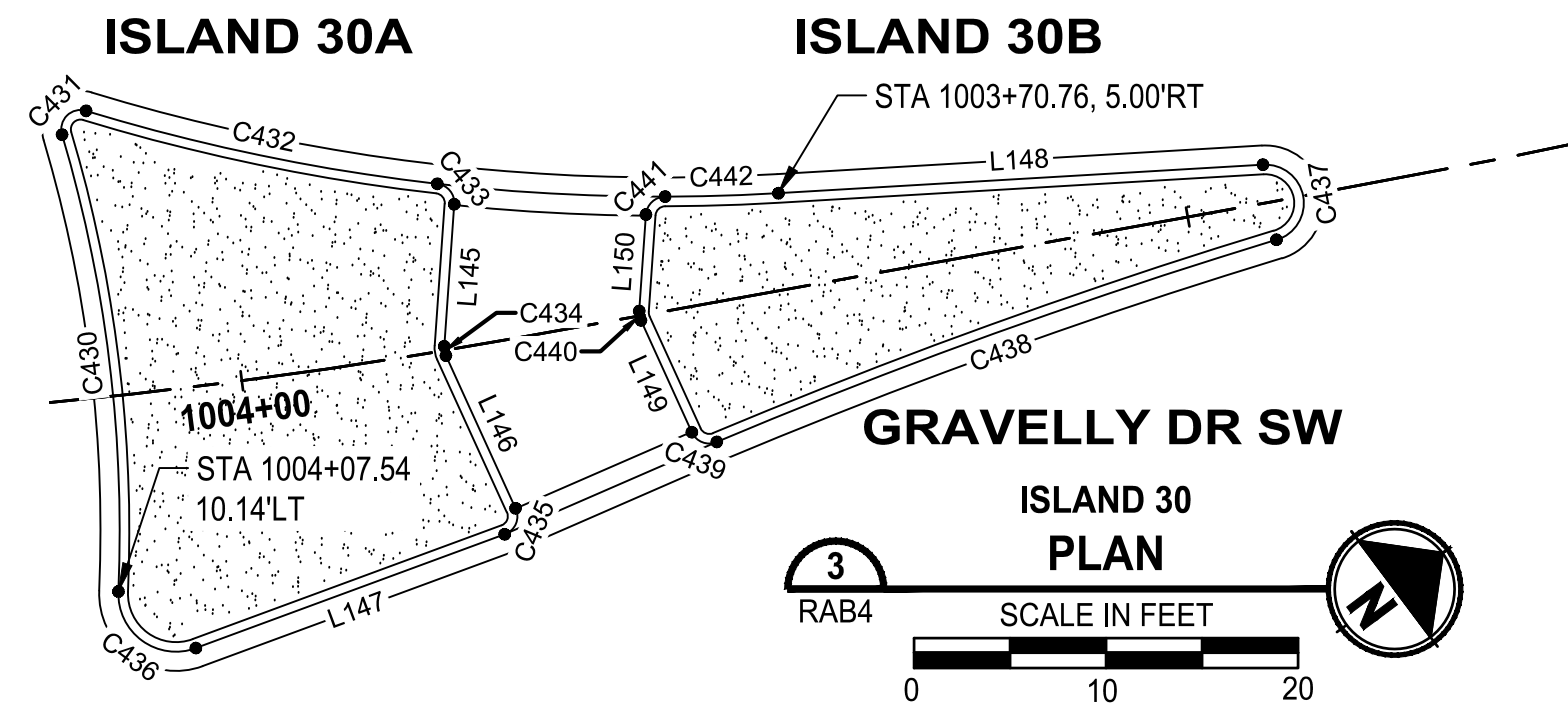


SPLITTER ISLAND 29A				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
L154	16.55	N22° 47' 22.41"W		267.14	267.26	267.48
C449	5.81	110.91	3.00	267.48	267.56	267.61
C450	24.13	19.08	72.46	267.61	267.56	267.46
C451	2.19	125.20	1.00	267.46	267.44	267.42
C452	19.18	10.77	102.00	267.42	267.29	267.17
C453	1.53	87.60	1.00	267.17	267.16	267.17
L155	7.79	N88° 55' 27.50"W		267.17	267.23	267.28
C454	0.47	27.13	1.00	267.28	267.29	267.28
L156	8.40	S63° 56' 32.22"W		267.28	267.21	267.14
C455	1.63	93.27	1.00	267.14	267.13	267.14

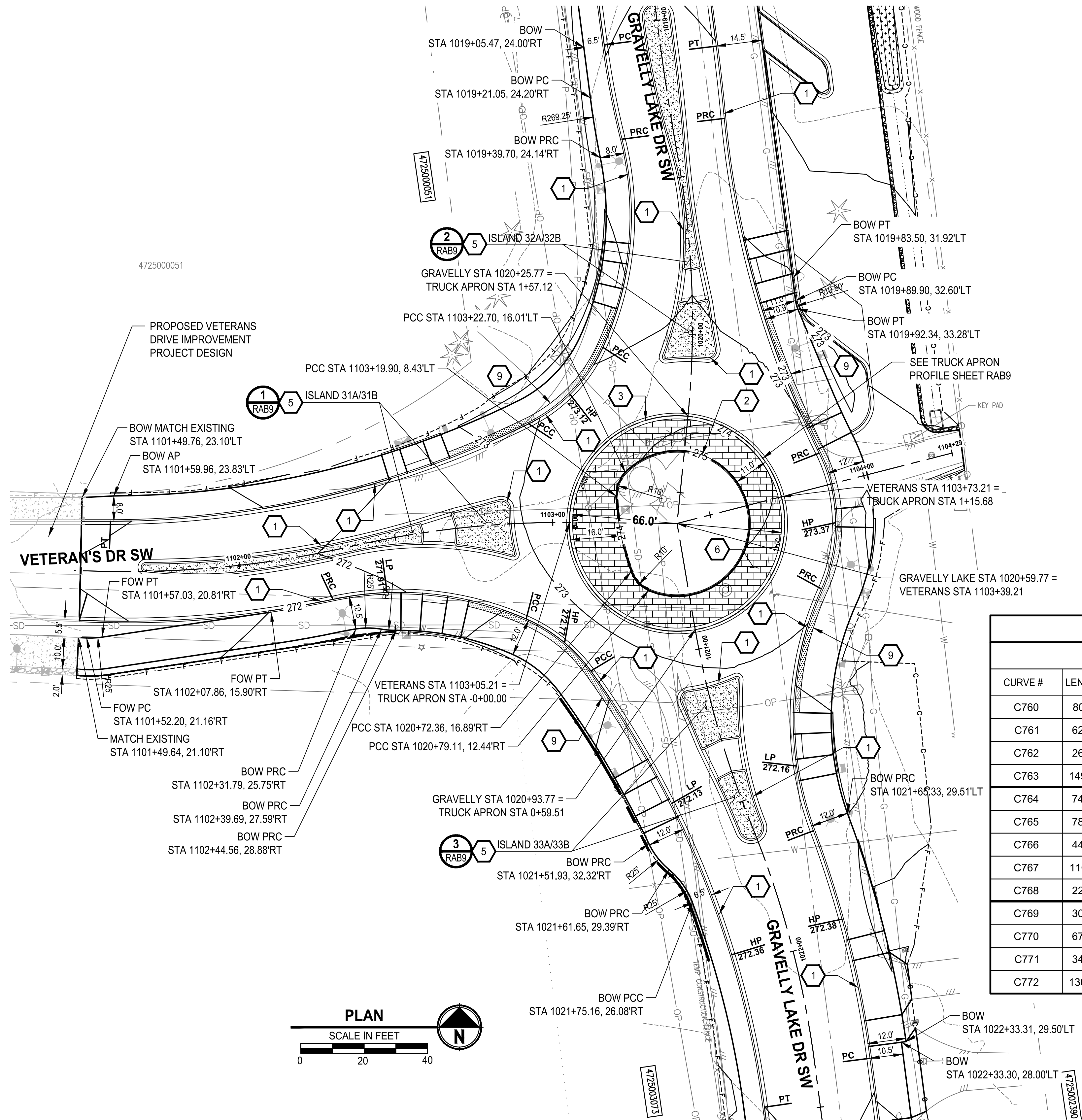


TRUCK APRON PROFILE

HORIZ: 1=20
VERT: 1=4



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GENERAL NOTES

1. CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THIS WORK
2. SEE PP SHEETS FOR DRIVEWAY INFORMATION

CONSTRUCTION NOTES

1. INSTALL CEMENT CONCRETE TRAFFIC CURB AND GUTTER PER COL STD PLAN FR-04
2. INSTALL TRUCK BARRIER CURB PER COL STD PLAN FR-04 WITH WEEP HOLES PER SECTION **A**
3. INSTALL ROUNDABOUT TRUCK APRON CEMENT CONCRETE CURB AND GUTTER PER WSDOT STD PLAN F-10.18-01 (CURB 1)
4. INSTALL TRAFFIC BARRIER CURB PER COL STD PLAN FR-04
5. INSTALL SPLITTER ISLAND PER DETAILS ON SHEET RAB14
6. INSTALL CEMENT CONCRETE TRUCK APRON PER DETAIL **A** AND SECTION **B**
7. INSTALL TRAFFIC BARRIER CURB PER COL STD PLAN FR-04 AND SECTION **B**
8. INSTALL ROUNDABOUT CEMENT CONCRETE CURB & GUTTER, TYPE CURB 2 PER WSDOT STD PLAN F-10.18-01
9. INSTALL SIDEWALK BUFFER PER DETAIL **2** AND SECTION **C**

ROUNDABOUT LINE/CURVE TABLE

						BOTTOM FACE OF CURB/FLOWLINE											
CURVE #	LENGTH	BEARING / DELTA	RADIUS	BEGIN STA	OFFSET	BEGIN	1/8	1/4	3/8	1/2	5/8	3/4	7/8	END	END STA	OFFSET	
C760	80.51	14.79	312.00	1101+49.77	15.60 RT	270.84	270.94	271.05	271.16	271.28	271.39	271.50	271.62	271.73	1102+26.88	15.14 RT	
C761	62.33	35.71	100.00	1102+26.88	15.14 RT	271.73	271.82	271.91	272.00	272.11	272.22	272.36	272.50	272.64	1102+90.29	30.19 RT	
C762	26.52	30.39	50.00	1102+90.29	30.19 RT	272.64		272.73		272.76		272.75		272.68	1021+00.15	34.74 RT	
C763	149.72	28.59	300.00	1021+00.15	34.74 RT	272.68	272.36	272.16	272.14	272.26	272.35	272.34	272.22	272.00	1022+47.74	17.50 RT	
C764	74.16	13.16	323.00	1022+36.74	17.50 LT	272.14	272.23	272.30	272.35	272.37	272.38	272.37	272.33	272.28	1021+66.59	17.50 LT	
C765	78.38	44.91	100.00	1021+66.59	17.50 LT	272.28	272.22	272.17	272.20	272.33	272.56	272.81	273.04	273.21	1020+87.77	41.42 LT	
C766	44.25	50.71	50.00	1020+87.77	41.42 LT	273.21	273.28	273.33	273.36	273.37	273.35	273.32	273.27	273.21	1020+33.15	42.33 LT	
C767	110.41	21.09	300.00	1020+33.15	42.33 LT	273.21	272.99	272.82	272.70	272.61	272.52	272.43	272.34	272.22	1019+34.04	16.51 LT	
C768	22.94	2.13	617.50	1019+34.04	16.51 LT	272.22				272.12				272.02	1019+10.46	17.47 LT	
C769	30.30	6.63	262.00	1019+05.48	17.50 RT	271.96		272.18		272.13		272.33		272.26	1019+35.14	16.38 RT	
C770	67.23	38.52	100.00	1019+35.14	16.38 RT	272.26	272.30	272.35	272.40	272.44	272.50	272.58	272.70	272.86	1020+04.76	28.15 RT	
C771	34.33	39.33	50.00	1020+04.76	28.15 RT	272.86		273.04		273.12		273.07		272.91	1102+93.41	31.27 LT	
C772	136.68	26.10	300.00	1102+93.41	31.27 LT	272.91	272.46	272.16	271.95	271.74	271.54	271.33	271.12	270.92	1101+58.97	15.82 LT	

HORIZONTAL DATUM

HORIZONTAL DATUM IS NAD 1983, WASHINGTON STATE PLANE SOUTH ZONE PER CONTROL PROVIDED BY ABL FOR WASHINGTON BLVD. MAPPING.

VERTICAL DATUM

VERTICAL DATUM IS NAVD88 PER CONTROL PROVIDED BY ABL FOR WASHINGTON BLVD. MAPPING.



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PROJECT NAME

JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1

LAKEWOOD, WASHINGTON

GRAVELLY LAKE & VETERANS
ROUNDABOUT GRADING PLAN

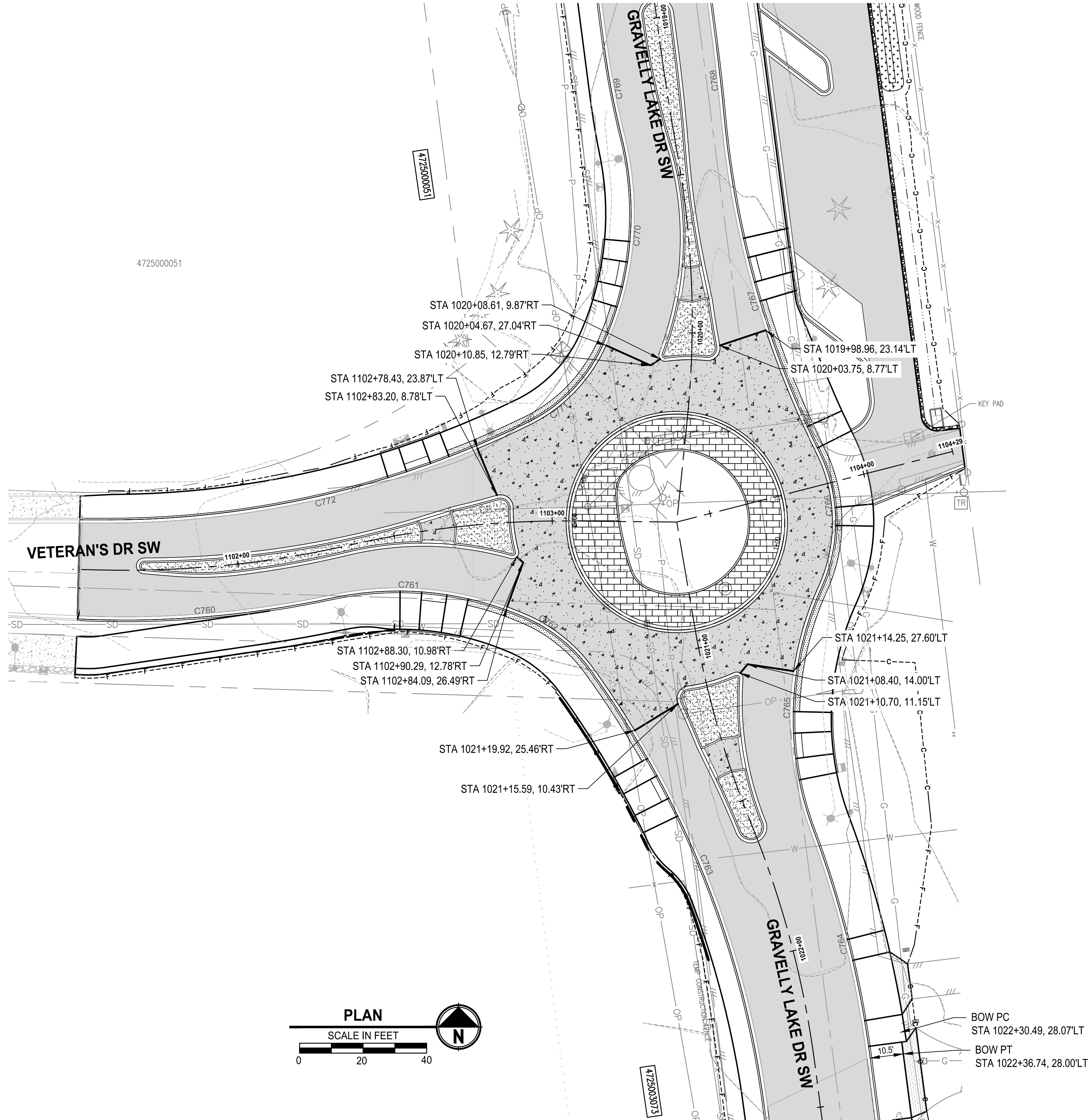
DRAWING NO.
53 OF 153

RAB7

REVISIONS	DATE	BY	DESIGNED
			S.M. CRAIG
			DRAWN
			C. WOODCOCK
			CHECKED
			K. HOUSE
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY.
FILE NAME
PS3047013-RAB-09
JOB No.
214-3047-013
DATE
FEBRUARY 2021

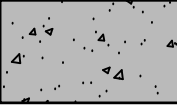
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GENERAL NOTES

1. CONTRACTOR SHALL PREPARE JOINTING PLAN PER WSDOT STD PLAN A-40.10-04 AND A-40.15-00
2. SEE SPECIFICATIONS FOR ADDITIONAL PAVEMENT INFORMATION

LEGEND

-  10" CEMENT CONC. PAVEMENT
3" CSTC
-  6" HMA CLA 1/2 IN PG 58H-22
4" CSTC

HORIZTONTAL DATUM

HORIZONTAL DATUM IS NAD 1983,
WASHINGTON STATE PLANE SOUTH ZONE
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VERTICAL DATUM

VERTICAL DATUM IS NAVD88 PER
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REVISIONS	DATE	BY	DESIGNED
			S.M. CRAIG
			DRAWN
			C. WOODCOCK
			CHECKED
			K. HOUSE
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.	
FILE NAME	PS3047013-RAB-09
JOB No.	214-3047-013
DATE	FEBRUARY 2021

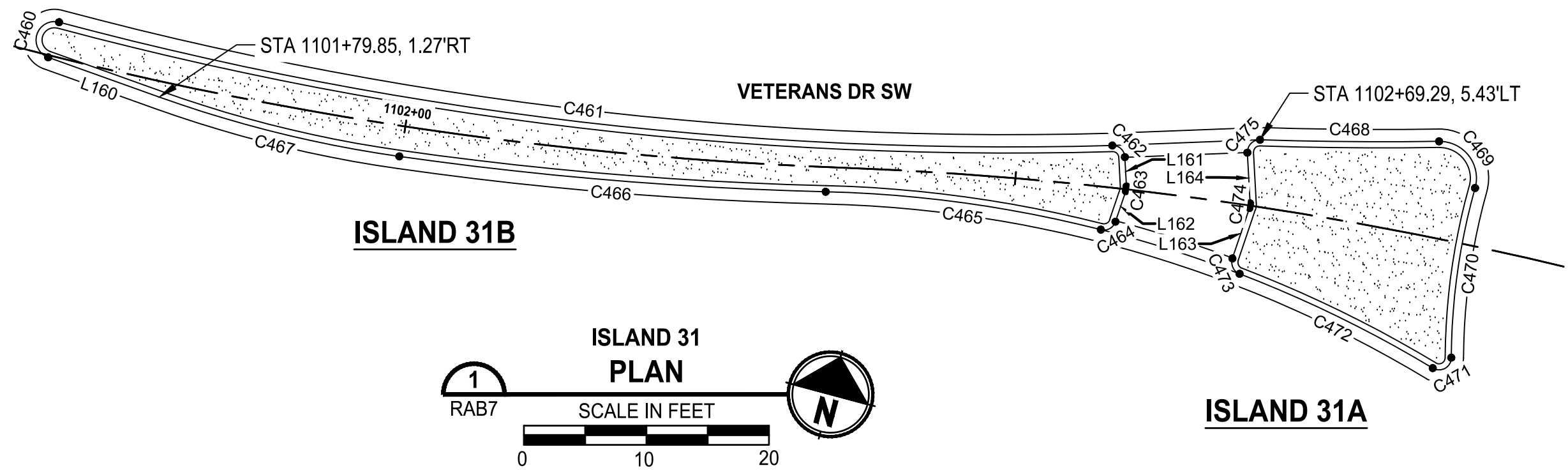


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

GRAVELLY LAKE & VETERANS ROUNDAABOUT PAVING PLANS

DRAWING NO. 54 OF 153
RAB8

PATH: U:\PSO\Projects\Clients\3047-City of Lakewood\214-3047-013_JBLM North Access\99Sves\CADD\DWG LAYOUT: RAB9 DATE: Wednesday, February 3, 2021 9:03:59 AM PLOTTED BY: taylokat



SPLITTER ISLAND 32A				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C476	5.58	106.51	3.00	273.17	273.23	273.29
C477	12.88	14.07	52.44	273.29	273.32	273.28
C478	2.08	119.10	1.00	273.28	273.27	273.24
C479	17.18	9.65	102.00	273.24	273.05	272.95
C480	1.52	86.99	1.00	272.95	272.95	272.96
L165	3.49	S81° 46' 37.30"E		272.96	272.99	273.03
C481	0.38	21.94	1.00	273.03	273.03	273.03
L166	3.99	N76° 16' 47.51"E		273.03	272.98	272.94
C482	1.67	95.78	1.00	272.94	272.93	272.93
C483	14.65	2.71	309.57	272.93	273.02	273.17

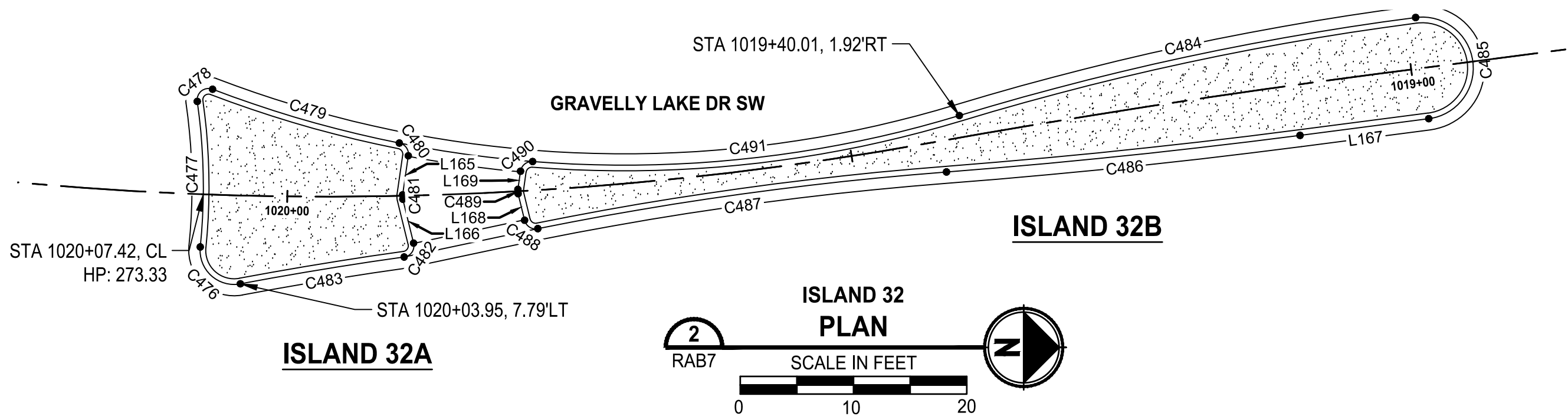
SPLITTER ISLAND 32B				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C484	41.25	9.45	250.00	272.58	272.39	272.13
C485	14.14	180.00	4.50	272.13	272.15	272.13
L167	11.46	S7° 23' 44.74"E		272.13	272.21	272.28
C486	31.38	2.97	604.50	272.28	272.44	272.57
C487	36.44	6.94	301.00	272.57	272.70	272.82
C488	1.53	87.64	1.00	272.82	272.83	272.85
L168	2.41	S76° 16' 47.51"W		272.85	272.87	272.90
C489	0.38	21.94	1.00	272.90	272.90	272.90
L169	1.62	N81° 46' 37.30"W		272.90	272.88	272.86
C490	1.51	86.33	1.00	272.86	272.85	272.84
C491	38.11	21.41	102.00	272.84	272.71	272.58

SPLITTER ISLAND 31B				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
L160	9.63	S85° 19' 58.14"E		271.43	271.39	271.34
C460	4.59	175.27	1.50	271.34	271.30	271.29
C461	86.85	16.53	301.00	271.29	271.83	272.36
C462	1.54	88.50	1.00	272.36	272.37	272.39
L161	2.40	N18° 05' 31.33"W		272.39	272.41	272.44
C463	0.38	21.81	1.00	272.44	272.44	272.44
L162	2.64	N3° 42' 59.77"E		272.44	272.41	272.39
C464	1.49	85.56	1.00	272.39	272.37	272.36
C465	22.71	12.88	101.00	272.36	272.21	272.08
C466	34.94	6.70	299.00	272.08	271.86	271.65
C467	20.22	11.58	100.00	271.65	271.54	271.43

SPLITTER ISLAND 31A				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C468	14.62	2.71	309.65	272.51	272.64	272.80
C469	5.58	106.49	3.00	272.80	272.89	272.94
C470	14.01	15.31	52.44	272.94	272.91	272.86
C471	2.11	120.66	1.00	272.86	272.85	272.82
C472	17.56	9.96	101.00	272.82	272.65	272.52
C473	1.53	87.70	1.00	272.52	272.51	272.52
L163	4.34	N3° 42' 59.77"E		272.52	272.56	272.60
C474	0.38	21.81	1.00	272.60	272.60	272.60
L164	4.14	N18° 05' 31.33"W		272.60	272.56	272.52
C475	1.66	94.94	1.00	272.52	272.51	272.52

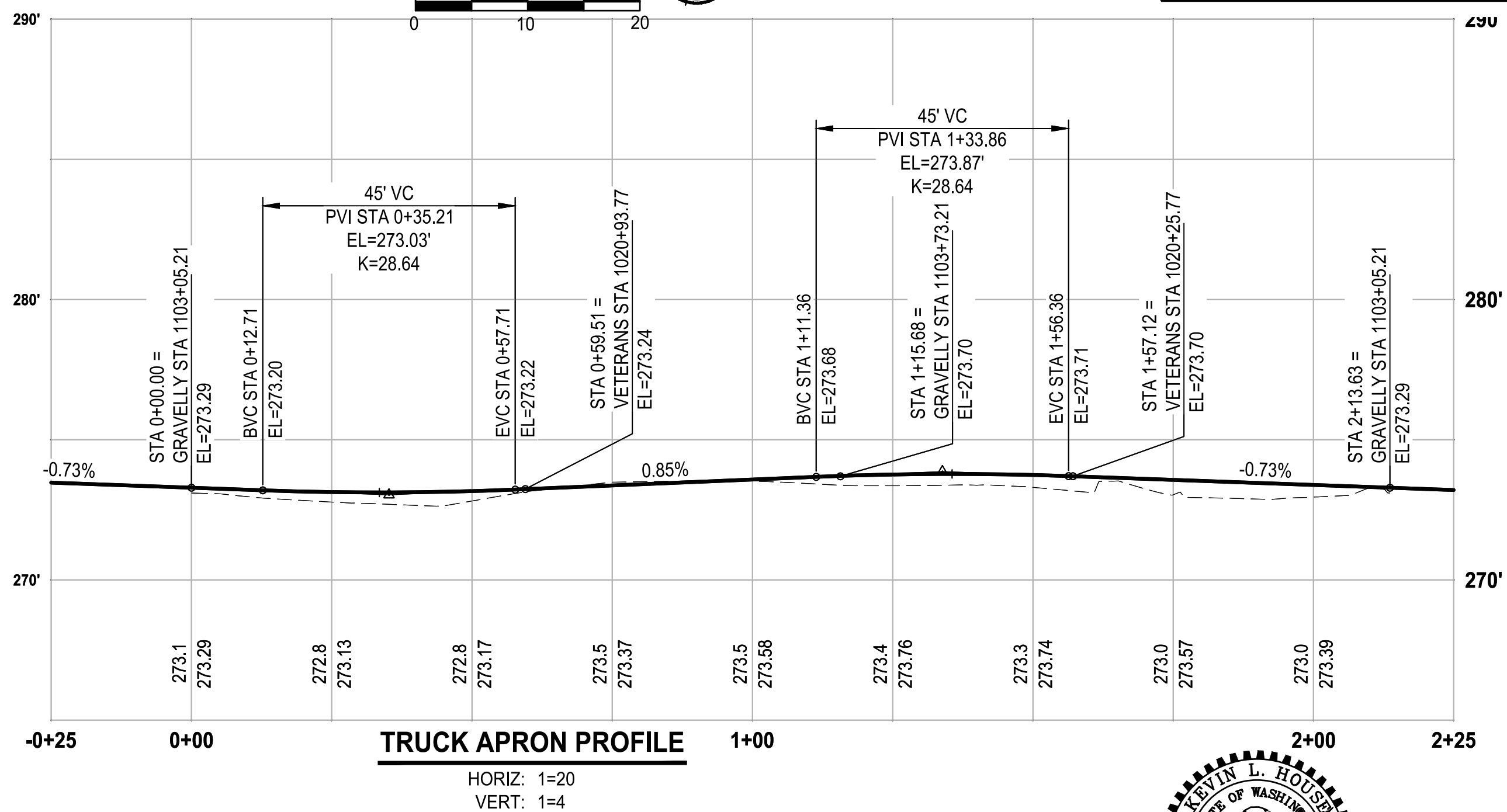
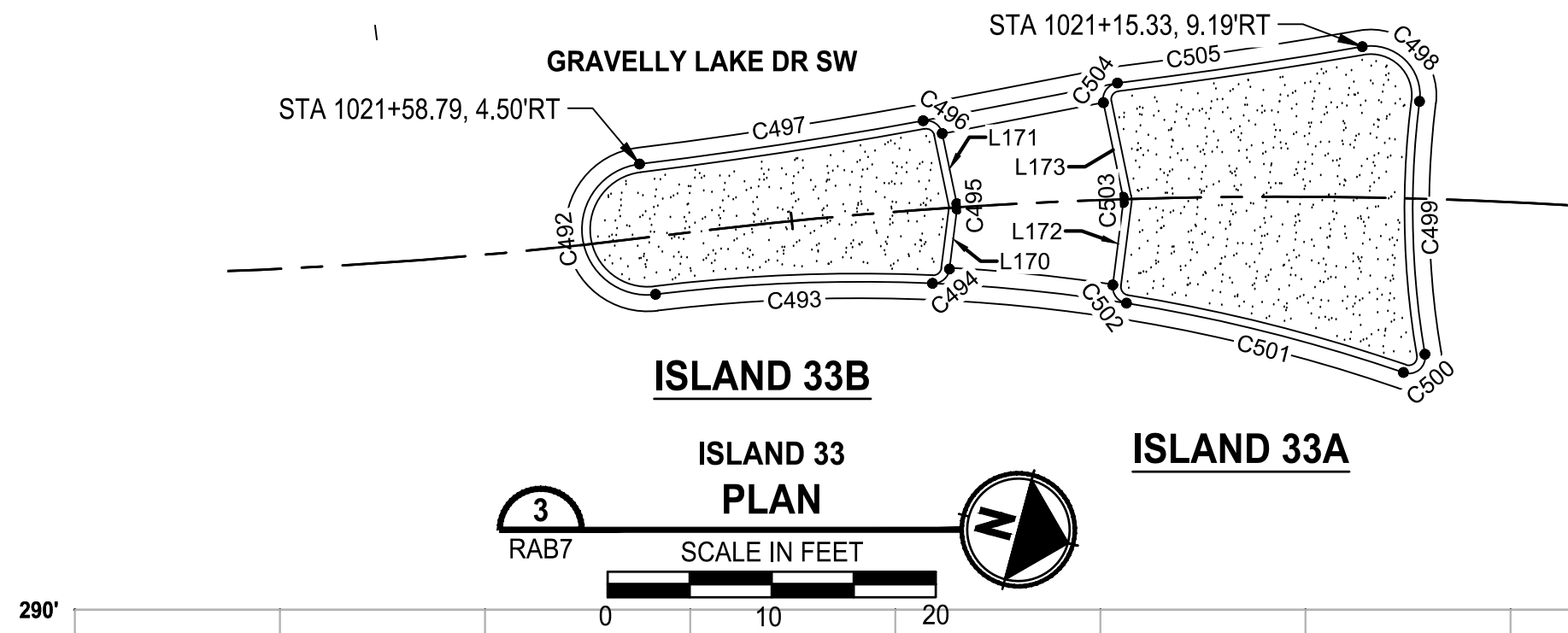
GENERAL NOTE:

- ALL ELEVATIONS ARE FROM BOTTOM/FACE OF CURB



SPLITTER ISLAND 33A				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C498	5.61	107.09	3.00	272.69	272.77	272.83
C499	15.47	16.92	52.39	272.83	272.89	272.92
C500	2.07	118.63	1.00	272.92	272.90	272.87
C501	17.42	9.79	102.00	272.87	272.63	272.53
C502	1.54	88.08	1.00	272.53	272.52	272.53
L172	5.06	N82° 14' 34.81"E		272.53	272.58	272.62
C503	0.33	18.99	1.00	272.62	272.62	272.62
L173	5.89	N63° 15' 04.00"E		272.62	272.56	272.50
C504	1.65	94.70	1.00	272.50	272.49	272.49
C505	15.09	2.80	308.80	272.49	272.56	272.69

SPLITTER ISLAND 33B				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C492	12.57	180.00	4.00	272.50	272.61	272.52
C493	16.91	9.50	102.00	272.52	272.48	272.47
C494	1.49	85.24	1.00	272.47	272.48	272.49
L170	3.68	S82° 14' 34.81"W		272.49	272.52	272.56
C495	0.33	18.99	1.00	272.56	272.56	272.56
L171	4.37	S63° 15' 04.00"W		272.56	272.51	272.47
C496	1.55	88.60	1.00	272.47	272.46	272.45
C497	17.49	3.33	301.00	272.45	272.46	272.50



REVISIONS	DATE	BY	DESIGNED
			S.M. CRAIG
			DRAWN
			C. WOODCOCK
			CHECKED
			K. HOUSE
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.	
FILE NAME	PS3047013-RAB-09
JOB No.	214-3047-013
DATE	FEBRUARY 2021



PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

GRAVELLY LAKE & VETERANS ROUNDAUT GRADING DETAILS

DRAWING NO. 55 OF 153
RAB9

5315000090

5315000090

SSMH#2822 RIM=279.84
8" PVC NE
8" PVC OR TILE SE
8" PVC NW
C.O.C.=267.91
LADDER SW

BEGIN WALL
STA 1056+11.14, 28.79'LT
SEE 6 RAB13

BOW PCC
STA 1056+27.68, 32.54'LT

BOW PRC
STA 1056+33.27, 35.36'LT

BOW PRC
STA 1056+37.88, 37.91'LT

END WALL
STA 1201+32.81, 53.82'LT
SEE 6 RAB13

ISLAND 35B/34A

GRAVELLY STA 1056+71.12 =
TRUCK APRON STA 2+70.18

NYANZA STA 1201+27.00 =
TRUCK APRON STA 1+74.98

GRAVELLY STA 1057+14.12
NYANZA STA 1200+84.00

GRAVELLY STA 1057+57.12 =
TRUCK APRON STA 1+05.24

ISLAND 35A/35B

BOW PRC
STA 1055+97.25, 39.28'RT

BOW PRC
STA 1055+92.17, 37.50'RT

BOW PCC
STA 1055+83.36, 34.73'RT

NYANZA STA 1200+41.00 =
TRUCK APRON STA 0+53.02

SEE TRUCK APRON
PROFILE SHEET RAB12

BOW PRC
STA 1201+94.30, 30.63'LT

BOW PRC
STA 1201+89.40, 32.00'LT

ISLAND 36A/36B

BOW PCC
STA 1201+97.86, 26.46'RT

BOW PRC
STA 1201+91.77, 27.72'RT

BOW PRC
STA 1201+86.77, 28.99'RT

BOW PRC
STA 1058+25.20, 40.91'LT

BOW PRC
STA 1058+29.97, 39.19'LT

BOW PRC
STA 1058+37.66, 36.62'LT

STOCKED STONE
COLUMN (TYP)

PLAN

SCALE IN FEET

0 20 40

811

Know what's below.
Call before you dig.

HORIZONTAL DATUM

HORIZONTAL DATUM IS NAD 1983,
WASHINGTON STATE PLANE SOUTH ZONE
PER CONTROL PROVIDED BY AHBL FOR
WASHINGTON BLVD. MAPPING.

VERTICAL DATUM

VERTICAL DATUM IS NAVD88 PER
CONTROL PROVIDED BY AHBL FOR
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ONE INCH AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

FILE NAME
PS3047013-RAB-10

JOB No.
214-3047-013

DATE
FEBRUARY 2021

DESIGNED
S.M. CRAIG

DRAWN
C. WOODCOCK

CHECKED
K. HOUSE

APPROVED
A. FISHER

CITY OF LAKEWOOD, WA

KEVIN L. HOUSE
STATE OF WASHINGTON
41824
REGISTERED
PROFESSIONAL ENGINEER

02/01/2021

Parametrix
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PUYALLUP, WA 98374
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WWW.PARAMETRIX.COM

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TACOMA, WA 98402
P 253.627.4367
WWW.BCRADESIGN.COM

PROJECT NAME

JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1

LAKEWOOD, WASHINGTON

DRAWING NO.
56 OF 153

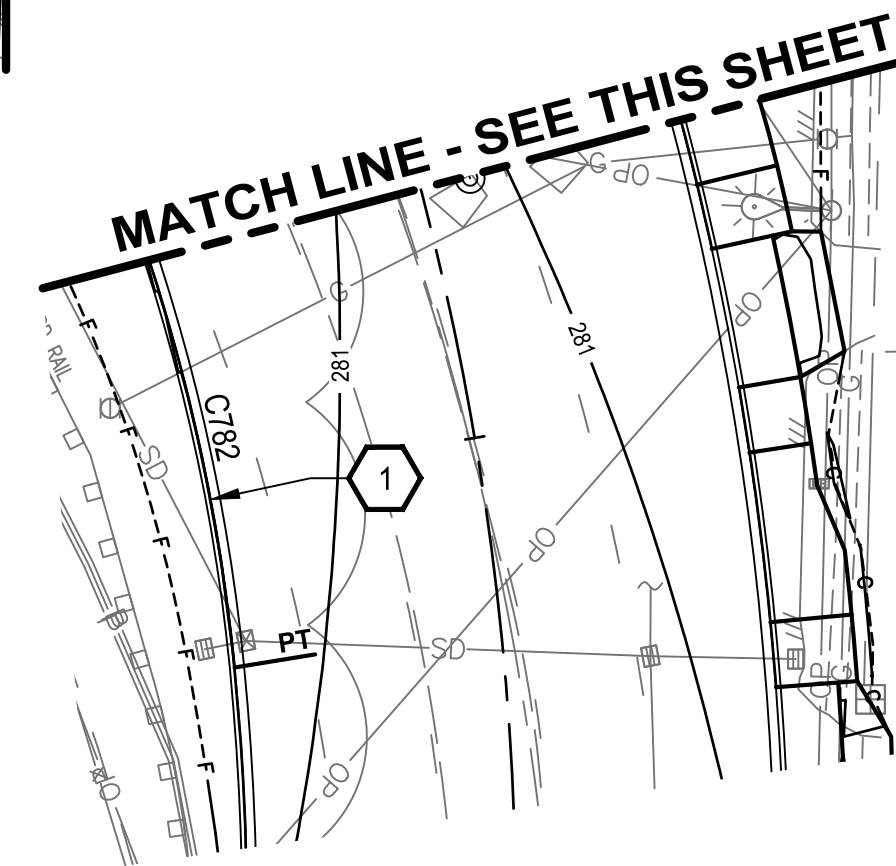
RAB10

GENERAL NOTES

1. CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THIS WORK
2. SEE PP SHEETS FOR DRIVEWAY INFORMATION

CONSTRUCTION NOTES

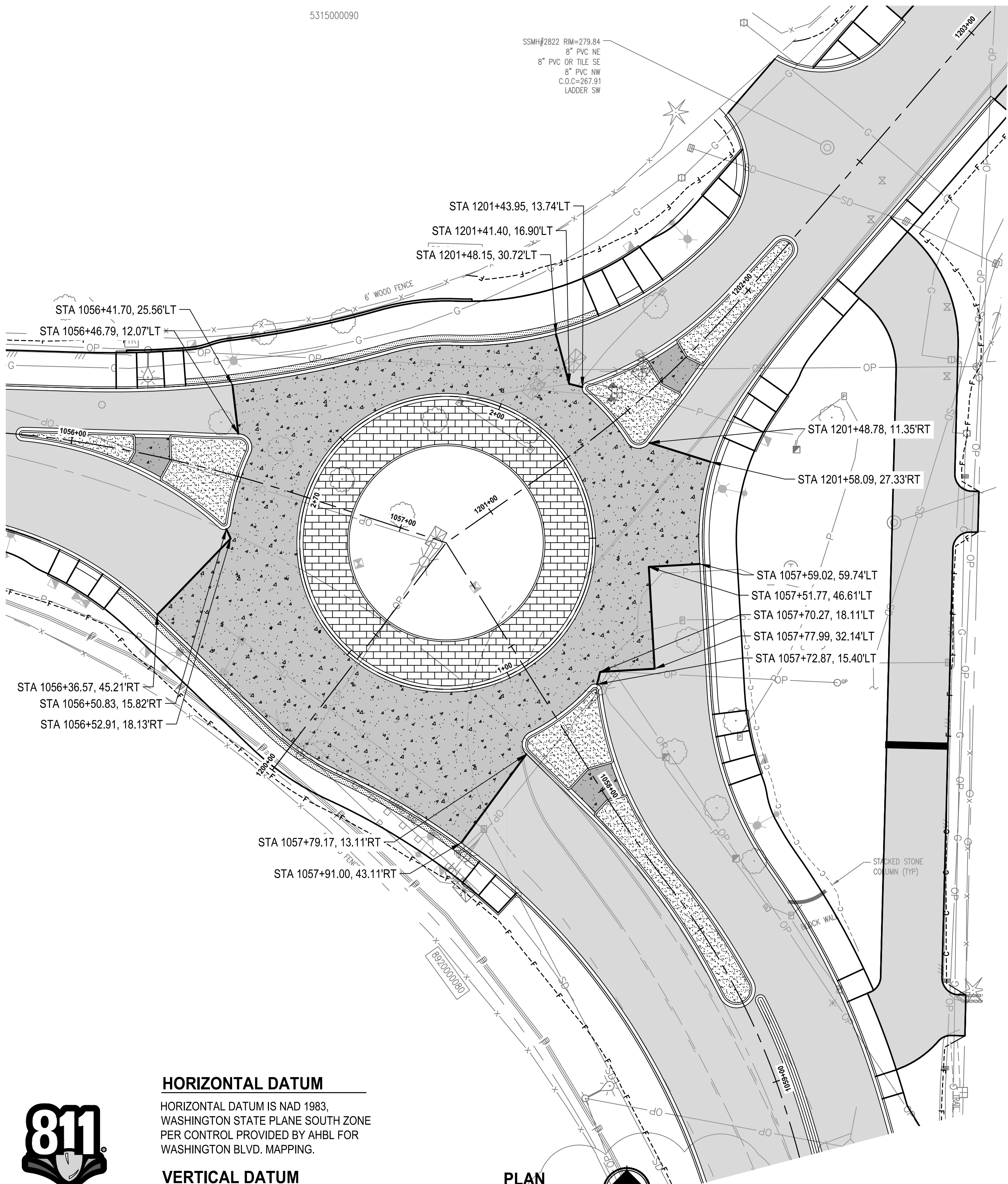
1. INSTALL CEMENT CONCRETE TRAFFIC CURB AND GUTTER PER COL STD PLAN FR-04
2. INSTALL TRUCK BARRIER CURB PER COL STD PLAN FR-04 WITH WEEP HOLES PER SECTION A RAB13
3. INSTALL ROUNDABOUT TRUCK APRON CEMENT CONCRETE CURB AND GUTTER PER WSDOT STD PLAN F-10.18-01 (CURB 1)
4. INSTALL TRAFFIC BARRIER CURB PER COL STD PLAN FR-04
5. INSTALL SPLITTER ISLAND PER DETAILS ON SHEET RAB14
6. INSTALL CEMENT CONCRETE TRUCK APRON PER DETAIL A RAB13 AND SECTION B RAB13
7. INSTALL TRAFFIC BARRIER CURB PER COL STD PLAN FR-04 AND SECTION B RAB13
8. INSTALL ROUNDABOUT CEMENT CONCRETE CURB & GUTTER, TYPE CURB 2 PER WSDOT STD PLAN F-10.18-01
9. INSTALL SIDEWALK BUFFER PER DETAIL C RAB13 AND SECTION C RAB13



ROUNDABOUT LINE/CURVE TABLE

						BOTTOM FACE OF CURB/FLOWLINE											
CURVE/LINE #	LENGTH	BEARING / DELTA	RADIUS	BEGIN STA	OFFSET	BEGIN	1/8	1/4	3/8	1/2	5/8	3/4	7/8	END	END STA	OFFSET	
L285	64.92	S86° 03' 15.59"E		1054+95.78	19.08 RT	279.60	279.63	279.66	279.69	279.71	279.73	279.75	279.77	279.79	1055+59.90	25.24 RT	
C780	69.83	40.01	100.00	1055+59.90	25.24 RT	279.79	279.82	279.86	279.89	279.93	279.96	279.99	279.98	279.95	1056+33.73	44.87 RT	
L286	48.77	S46° 02' 35.43"E		1056+33.73	44.87 RT	279.95	279.90	279.84	279.79	279.73	279.68	279.63	279.62	279.63	1056+81.36	67.47 RT	
C781	25.29	19.32	75.00	1056+81.36	67.47 RT	279.63		279.68		279.77		279.86		279.95	1057+55.18	62.76 RT	
C782	208.53	59.74	200.00	1057+55.18	62.76 RT	279.95	280.13	280.07	280.08	280.23	280.39	280.57	280.71	280.83	1059+71.37	28.00 RT	
C783	66.43	17.15	222.00	1059+05.73	28.00 LT	280.55	280.52	280.49	280.45	280.42	280.39	280.37	280.32	280.29	1058+47.14	27.33 LT	
C784	55.45	31.77	100.00	1058+47.14	27.33 LT	280.29	280.26	280.23	280.20	280.19	280.22	280.29	280.39	280.54	1057+92.68	42.31 LT	
L287	40.93	S3° 16' 24.57"E		1057+92.68	42.31 LT	280.54		280.81		281.07		281.24		281.31	1201+41.12	46.41 RT	
C785	48.85	37.32	75.00	1201+41.12	46.41 RT	281.31	281.31	281.26	281.18	281.06	280.91	280.73	280.57	280.42	1201+77.48	20.44 RT	
C786	35.58	6.79	300.00	1201+77.48	20.44 RT	280.42		280.24		280.10		280.00		279.94	1202+11.67	17.61 RT	
L288	78.03	S40° 50' 20.64"W		1202+11.67	17.61 RT	279.94	279.89	279.84	279.79	279.74	279.69	279.64	279.60	279.55	1202+89.70	17.51 RT	
C787	35.09	80.42	25.00	1202+34.51	38.59 LT	278.95		279.55		279.75		279.90		280.03	1202+09.80	17.81 LT	
C788	89.09	51.06	99.96	1202+09.80	17.81 LT	280.03	280.18	280.33	281.50	280.70	280.90	281.00	280.99	280.94	1201+19.98	46.76 LT	
C789	18.96	18.41	59.00	1201+19.98	46.76 LT	280.94				280.90				280.86	1056+81.16	48.94 LT	
C790	92.45	17.66	300.00	1056+81.16	48.94 LT	280.86	280.82	280.79	280.70	280.61	280.52	280.40	280.32	280.26	1056+00.02	15.62 LT	
L289	102.83	S88° 14' 26.60"E		1056+00.02	15.62 LT	280.26	280.19	280.12	280.05	279.97	279.89	279.80	279.72	279.65	1054+99.08	17.47 LT	

PATH: U:\PSO\Projects\Clients\3047-City of Lakewood\214-3047-013 JBLM North Access\995vcs\CADD\DWG PLOTTED BY: toy/skat DATE: Friday, February 5, 2021 12:39:23 PM LAYOUT: RAB11



GENERAL NOTES

1. CONTRACTOR SHALL PREPARE JOINTING PLAN PER WSDOT STD PLAN A-40.10-04 AND A-40.15-00
2. SEE SPECIFICATIONS FOR ADDITIONAL PAVEMENT INFORMATION

LEGEND

- 10" CEMENT CONC. PAVEMENT
3" CSTC
- 6" HMA CLA 1/2 IN PG 58H-22
4" CSTC



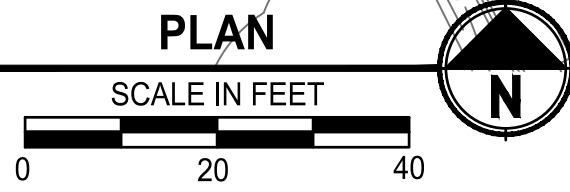
Know what's below.
Call before you dig.

HORIZONTAL DATUM

HORIZONTAL DATUM IS NAD 1983,
WASHINGTON STATE PLANE SOUTH ZONE
PER CONTROL PROVIDED BY AHBL FOR
WASHINGTON BLVD. MAPPING.

VERTICAL DATUM

VERTICAL DATUM IS NAVD88 PER
CONTROL PROVIDED BY AHBL FOR
WASHINGTON BLVD. MAPPING.



REVISIONS	DATE	BY	DESIGNED
			S.M. CRAIG
			DRAWN
			C. WOODCOCK
			CHECKED
			K. HOUSE
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-RAB-10
JOB No. 214-3047-013
DATE FEBRUARY 2021

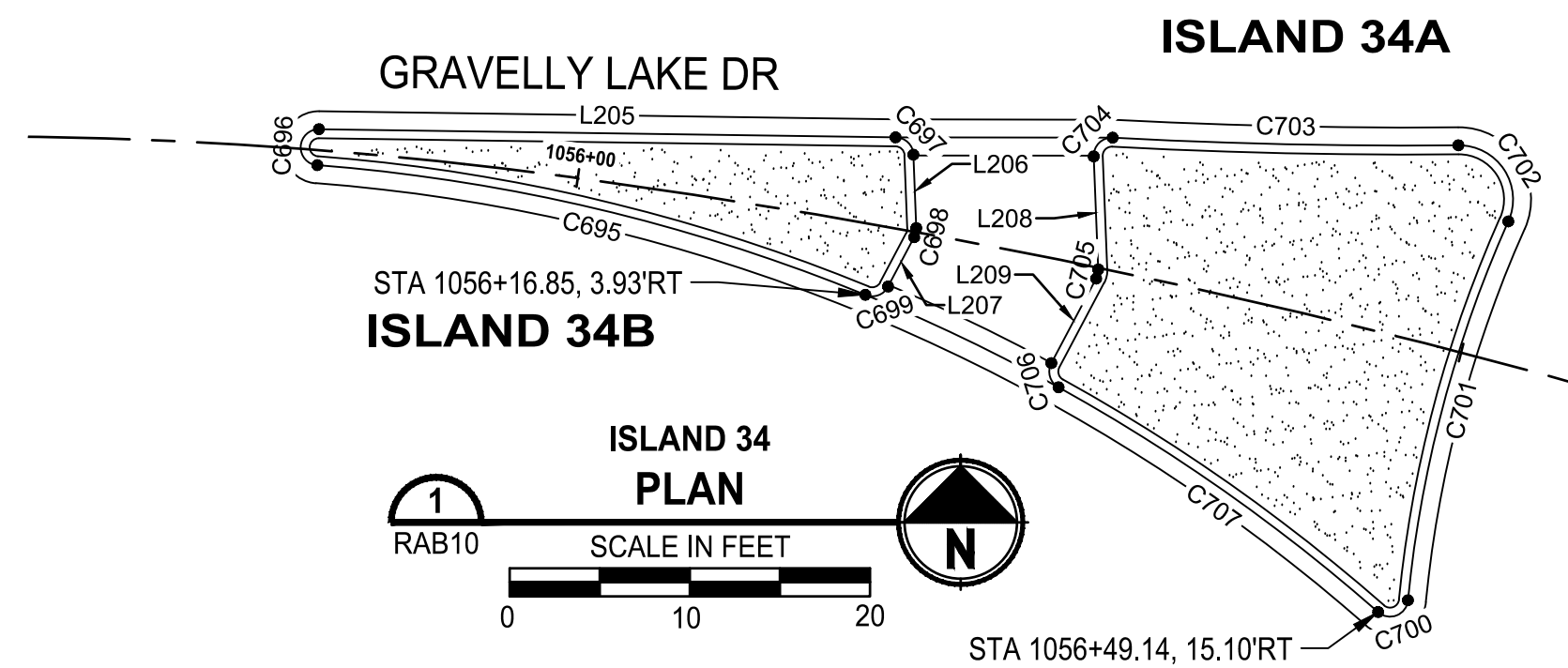


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

GRAVELLY LAKE & NYANZA ROUNDAABOUT PAVING PLAN
--

DRAWING NO. 57 OF 153
RAB11

PATH: U:\PSO\Projects\Clients\3047-City of Lakewood\214-3047-013 JBLM North Access\995Scs\cadd\DWG PLOTTED BY: toyfact DATE: Wednesday, February 3, 2021 9:41:06 AM LAYOUT: RAB12



SPLITTER ISLAND 34B				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C695	31.38	17.80	101.00	280.55	280.48	280.41
C696	3.08	176.41	1.00	280.41	280.42	280.41
L205	32.00	N88° 14' 26.60"W		280.41	280.47	280.55
C697	1.52	86.91	1.00	280.55	280.56	280.57
L206	4.07	N1° 20' 03.34"W		280.57	280.61	280.64
C698	0.53	30.17	1.00	280.64	280.64	280.63
L207	3.10	N28° 50' 18.91"E		280.63	280.60	280.58
C699	1.47	84.31	1.00	280.58	280.56	280.55

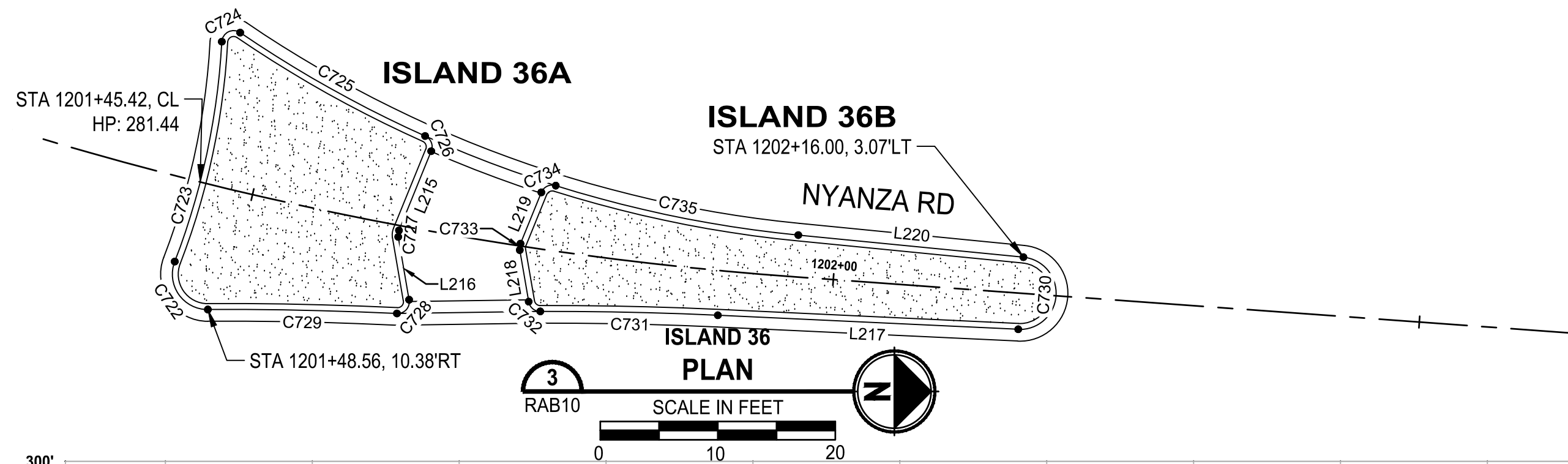
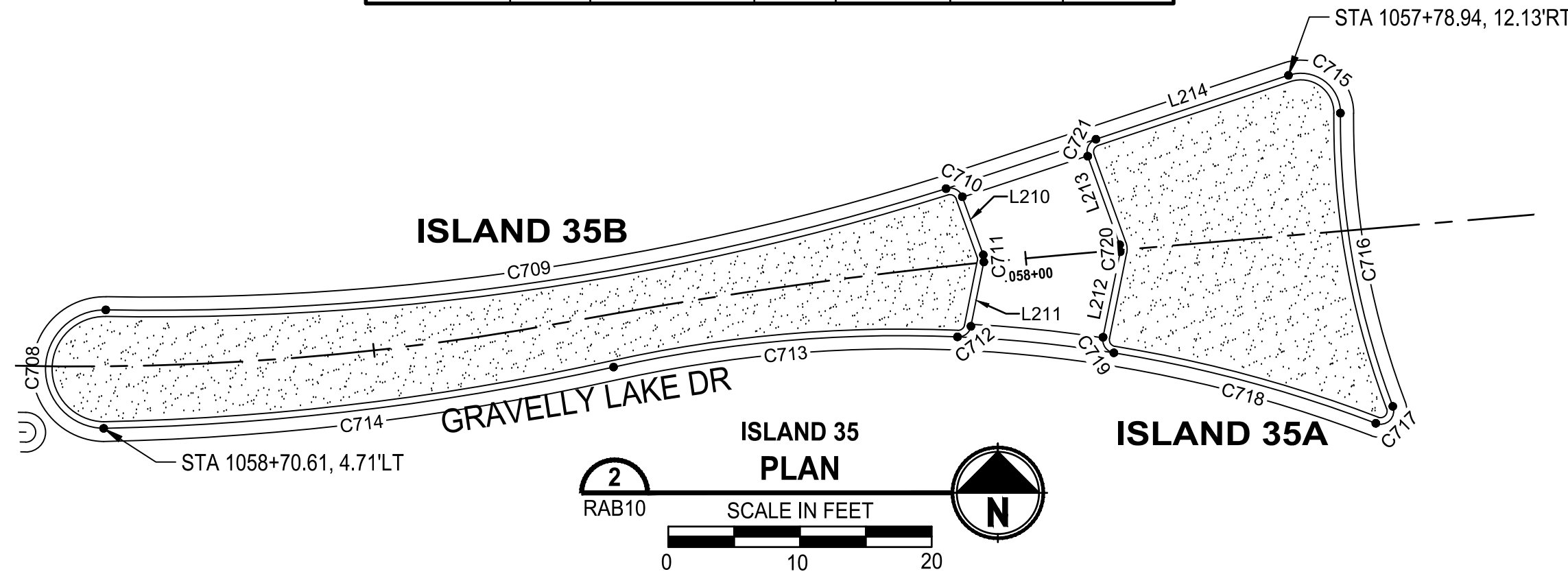
SPLITTER ISLAND 34A				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C700	2.19	125.63	1.00	280.82	280.84	280.87
C701	21.85	18.38	68.08	280.87	281.06	281.04
C702	6.00	114.59	3.00	281.04	280.98	280.90
C703	19.19	3.62	303.62	280.90	280.75	280.65
C704	1.66	95.35	1.00	280.65	280.65	280.66
L208	6.28	N1° 20' 03.34"W		280.66	280.71	280.76
C705	0.53	30.17	1.00	280.76	280.75	280.75
L209	5.31	N28° 50' 18.91"E		280.75	280.70	280.64
C706	1.55	88.94	1.00	280.64	280.63	280.63
C707	21.72	12.32	101.00	280.63	280.72	280.82

GENERAL NOTE:

1. ALL ELEVATIONS ARE FROM BOTTOM/FACE OF CURB

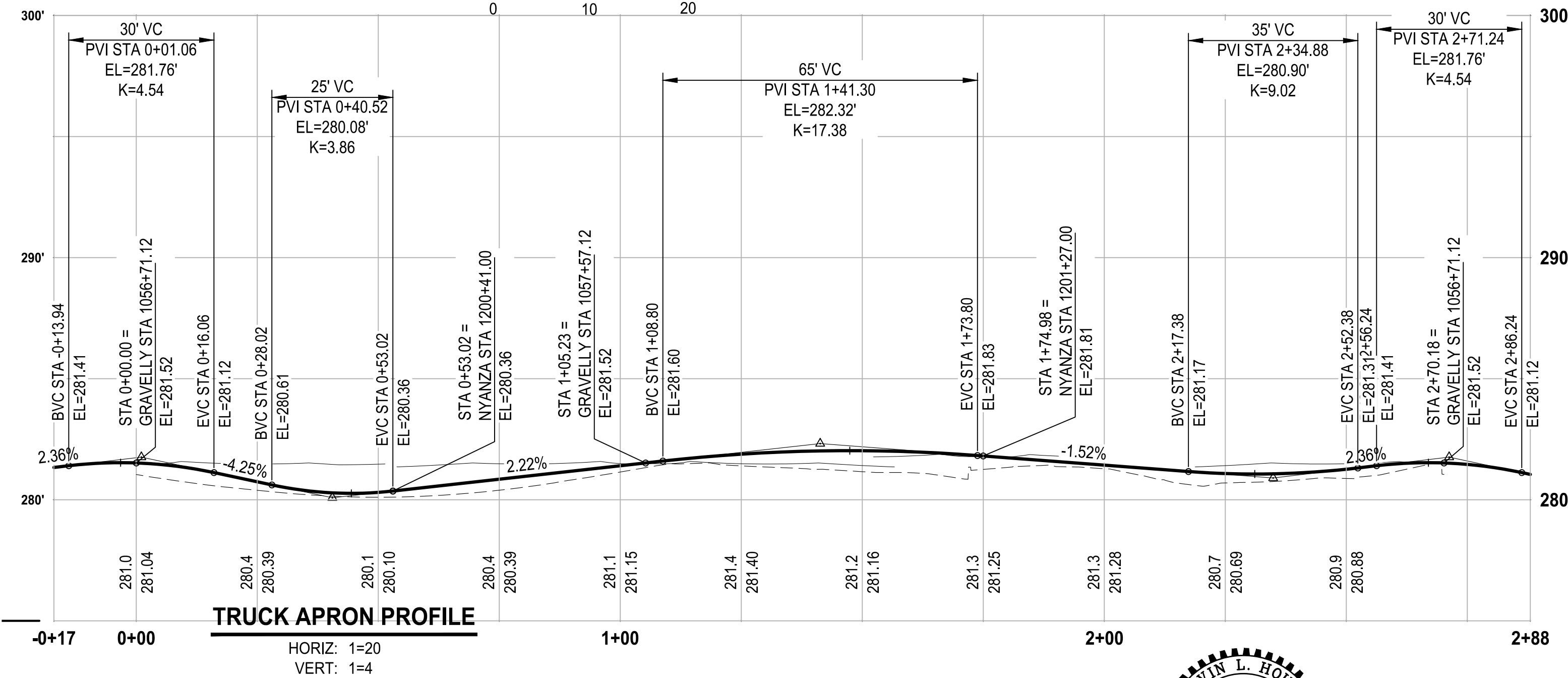
SPLITTER ISLAND 35A				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C715	5.70	108.88	3.00	280.88	280.93	281.00
C716	22.75	21.25	61.34	281.00	281.19	281.36
C717	2.30	131.67	1.00	281.36	281.34	281.31
C718	20.63	11.70	101.00	281.31	281.02	280.79
C719	1.61	92.13	1.00	280.79	280.80	280.81
L212	6.62	S74° 03' 49.80"W		280.81	280.84	280.88
C720	0.54	31.17	1.00	280.88	280.89	280.88
L213	7.15	N42° 53' 33.66"E		280.88	280.81	280.74
C721	1.60	91.45	1.00	280.74	280.73	280.72
L214	15.40	S45° 39' 24.05"E		280.72	280.79	280.88

SPLITTER ISLAND 35B				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C708	14.14	180.00	4.50	280.87	280.99	280.88
C709	64.74	18.45	201.00	280.88	280.77	280.68
C710	1.53	87.60	1.00	280.68	280.69	280.70
L210	4.69	S42° 53' 33.66"W		280.70	280.74	280.79
C711	0.54	31.17	1.00	280.79	280.80	280.80
L211	4.99	S74° 03' 49.80"W		280.80	280.76	280.72
C712	1.42	81.10	1.00	280.72	280.71	280.71
C713	26.29	14.91	101.00	280.71	280.69	280.73
C714	39.05	11.24	199.00	280.73	280.80	280.87



SPLITTER ISLAND 36A				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C722	5.83	111.36	3.00	281.32	281.39	281.40
C723	19.21	17.94	61.35	281.40	281.36	281.31
C724	2.11	121.16	1.00	281.31	281.28	281.26
C725	18.06	10.14	102.00	281.26	281.11	280.96
C726	1.54	88.01	1.00	280.96	280.96	280.97
L215	7.29	N31° 04' 30.91"W		280.97	281.04	281.09
C727	0.56	31.94	1.00	281.09	281.09	281.09
L216	5.42	N63° 01' 02.36"W		281.09	281.03	280.98
C728	1.79	102.51	1.00	280.98	280.97	280.98
C729	16.10	3.02	305.63	280.98	281.16	281.32

SPLITTER ISLAND 36B				FLOWLINE ELEVATIONS		
Line #/Curve #	Length	Bearing/Delta	Radius			
C730	9.51	177.07	3.08	280.25	280.27	280.24
L217	25.59	S39° 27' 06.75"W		280.24	280.37	280.54
C731	15.11	2.87	302.00	280.54	280.65	280.76
C732	1.40	80.40	1.00	280.76	280.78	280.80
L218	4.45	N63° 01' 02.36"W		280.80	280.85	280.91
C733	0.56	31.94	1.00	280.91	280.91	280.91
L219	4.71	N31° 04' 30.91"W		280.91	280.86	280.81
C734	1.49	85.31	1.00	280.81	280.80	280.78
C735	21.10	11.85	102.00	280.78	280.63	280.48
L220	19.26	N42° 22' 44.15"E		280.48	280.36	280.25



REVISIONS	DATE	BY	DESIGNED
			S.M. CRAIG
			DRAWN
			C. WOODCOCK
			CHECKED
			K. HOUSE
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.			
FILE NAME	PS3047013-RAB-10		
JOB No.	214-3047-013		
DATE	FEBRUARY 2021		

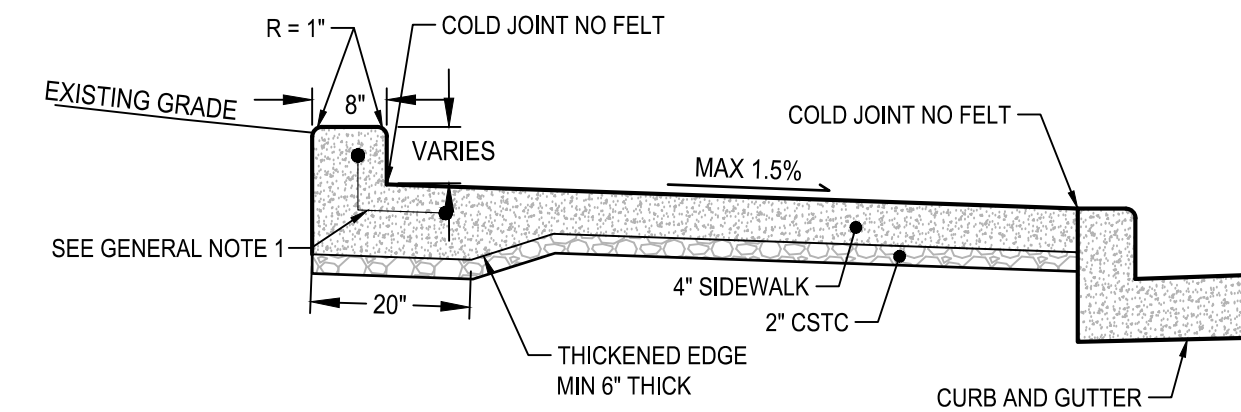
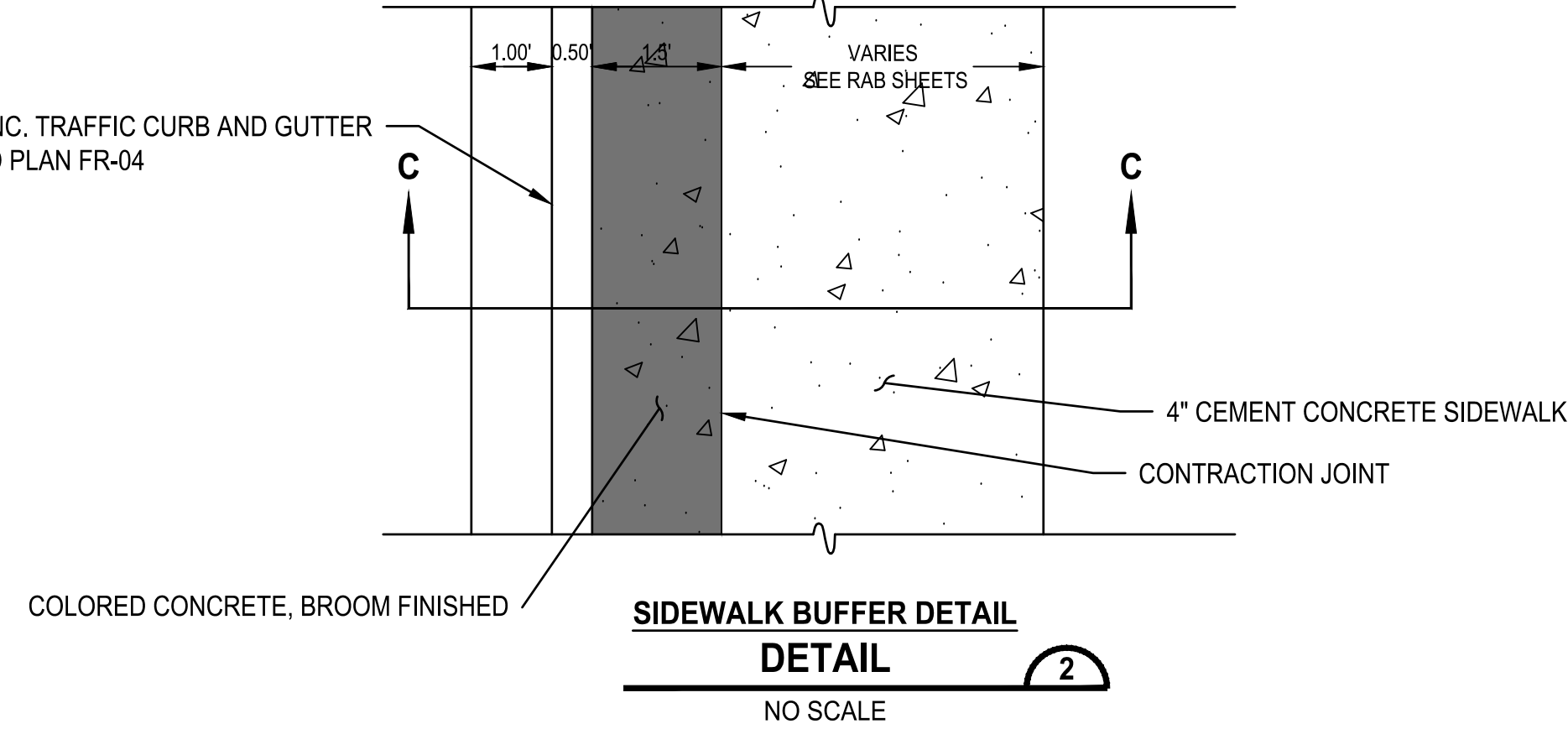
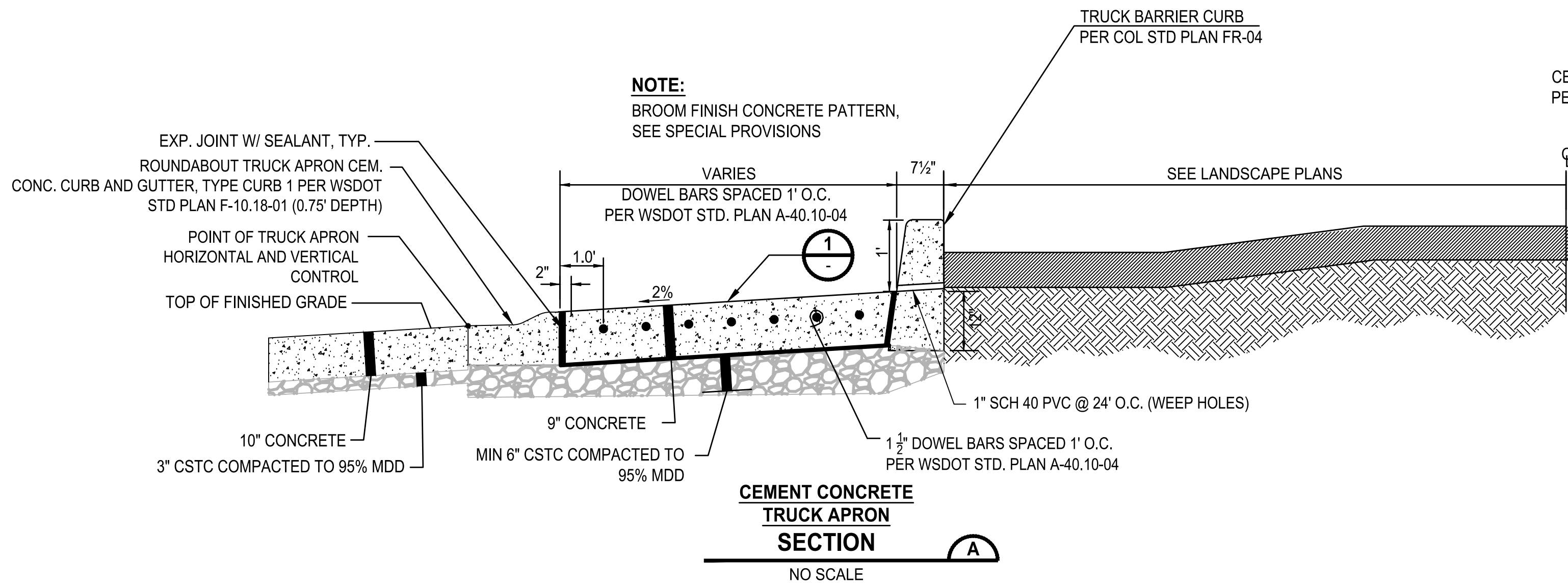


PROJECT NAME	
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1	
LAKEWOOD, WASHINGTON	

DRAWING NO.	
58 OF 153	
DRAWING TITLE	
GRAVELLY LAKE & NYANZA ROUNDABOUT GRADING DETAILS	

DRAWING NO.	
58 OF 153	
DRAWING TITLE	
RAB12	

LAYOUT: RAB13
PATH: U:\PSO\Projects\Clients\3047-City of Lakewood\214-3047-013 JBLM North Access\995\cadd\DWG
PLOTTED BY: toyfact DATE: Tuesday, February 2, 2021 4:41:56 PM



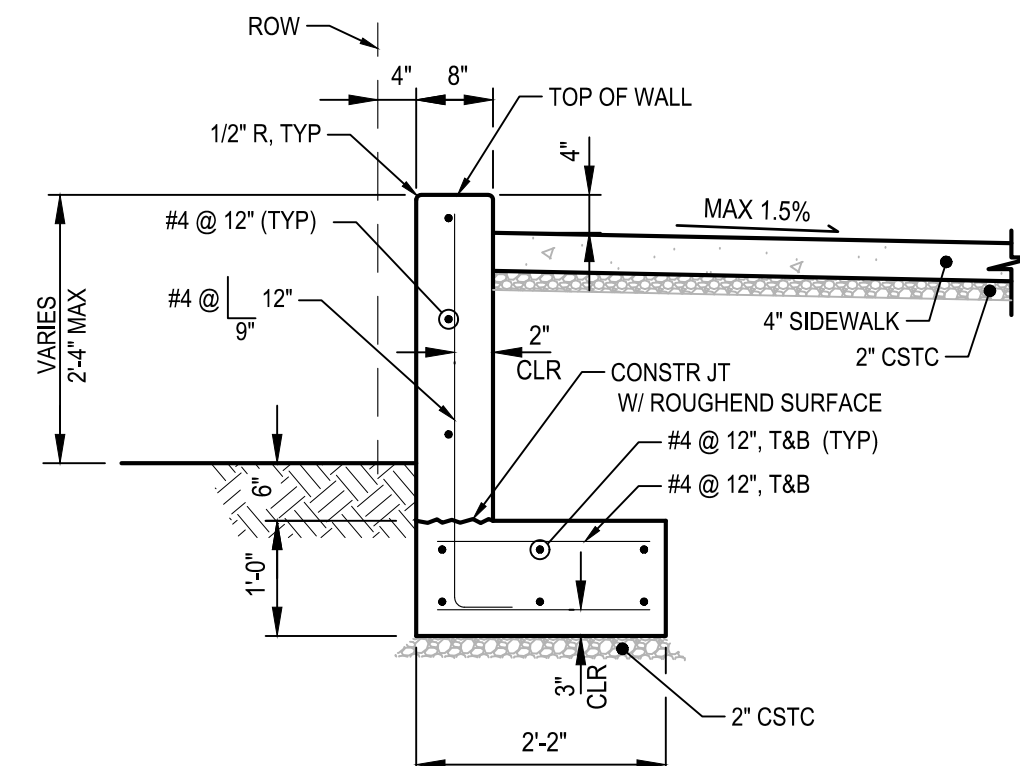
GENERAL NOTE

1. 6"x18" #4 EL DEPENDANT ON WALL HEIGHT;
SPACED 30" ON CENTER; (2) #4 LONGITUDINAL
CONTINUOUS EXPANSION JOINT @ 45' O.C.

INTEGRAL CURB

NO SCALE

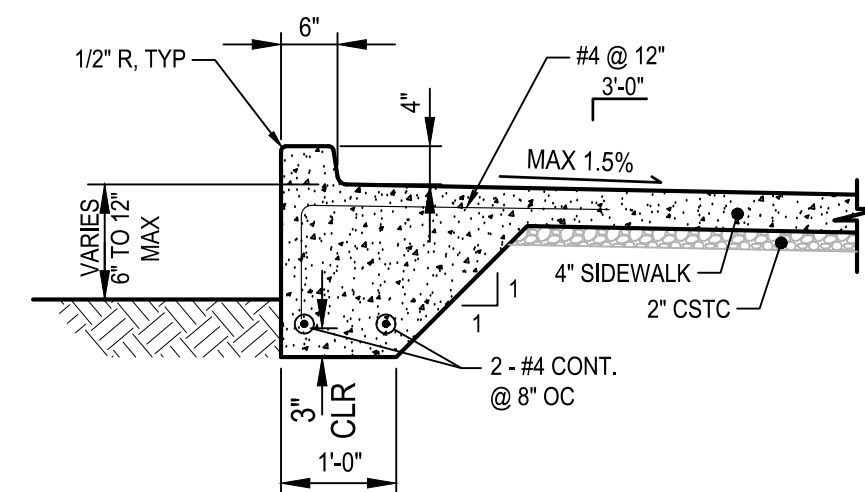
TYP



CIP FILL WALL

NO SCALE

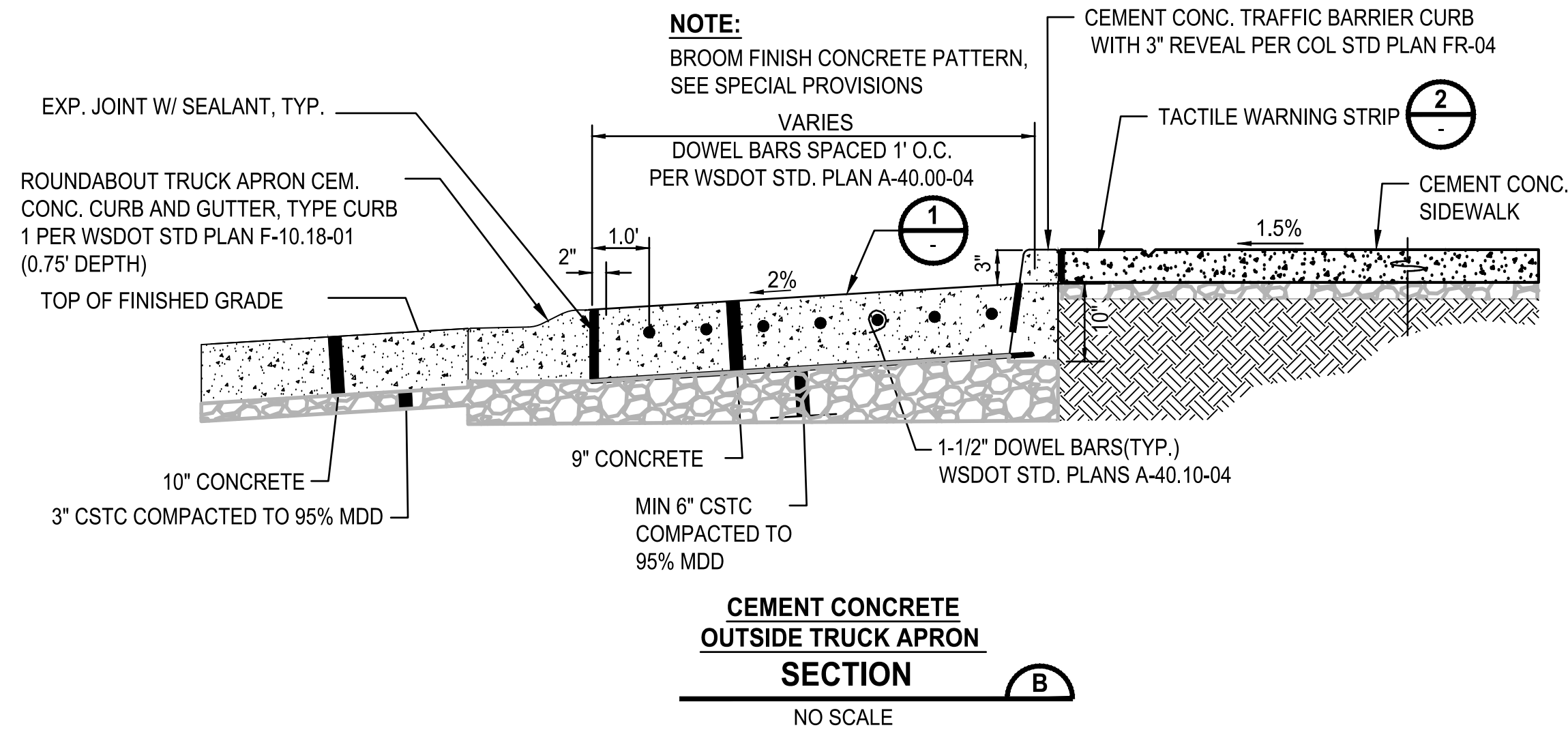
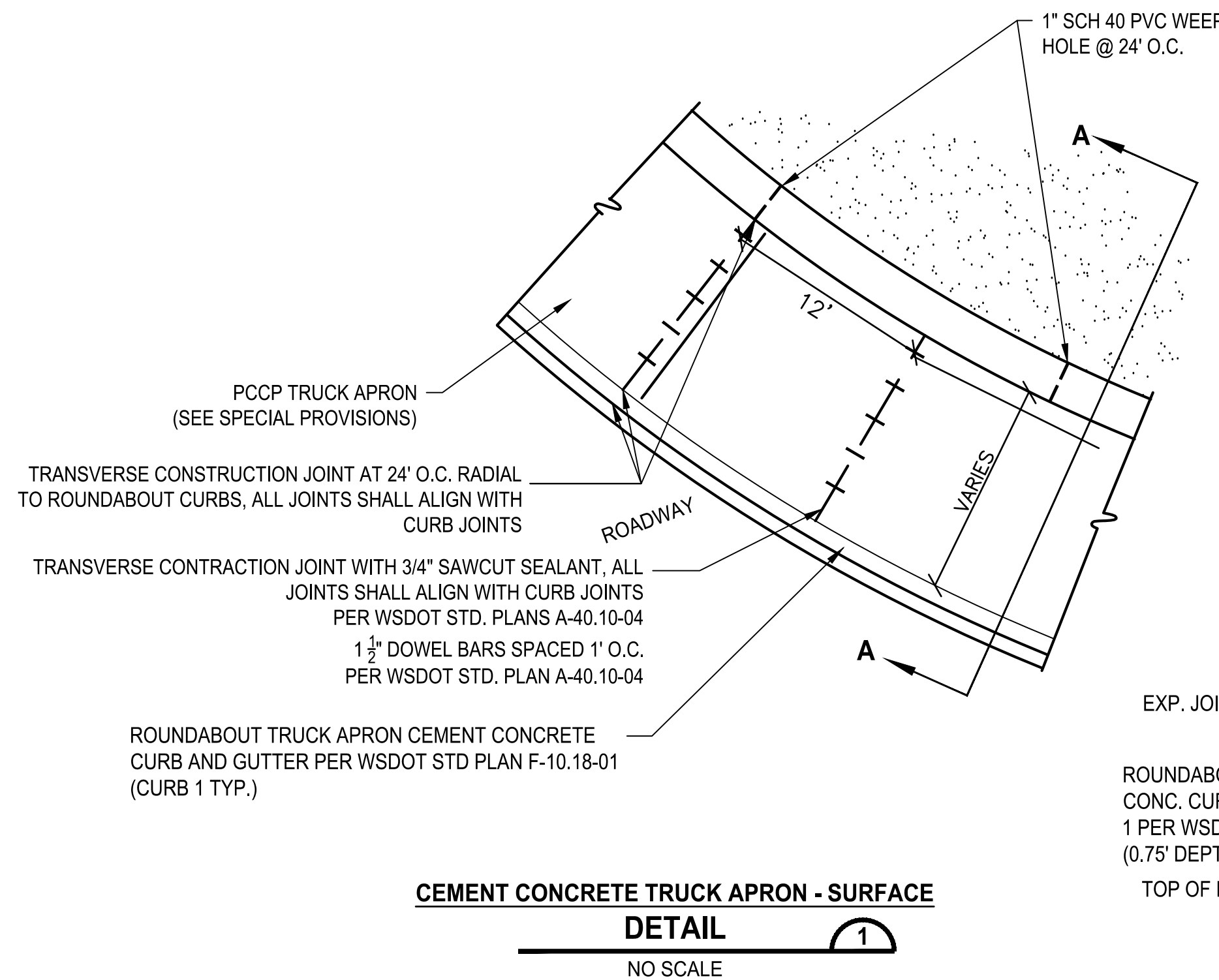
TYP



THICKENED EDGE

NO SCALE

TYP



REVISIONS	DATE	BY	DESIGNED
			S.M. CRAIG
			DRAWN
			C. WOODCOCK
			CHECKED
			K. HOUSE
			APPROVED
			A. FISHER

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FILE NAME
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214-3047-013
DATE
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PROJECT NAME

**JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1**

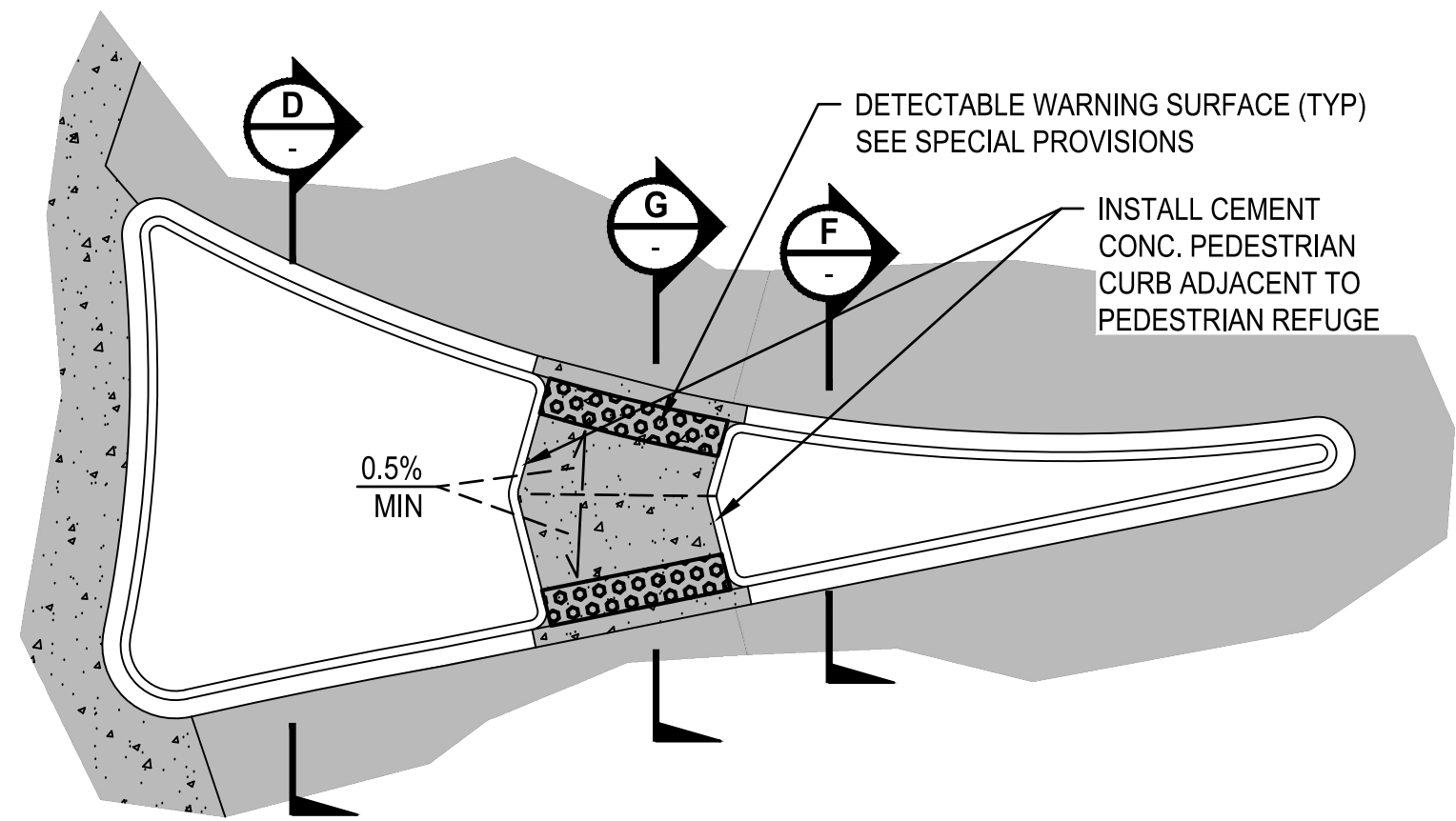
LAKEWOOD, WASHINGTON

ROUNABOUT DETAILS

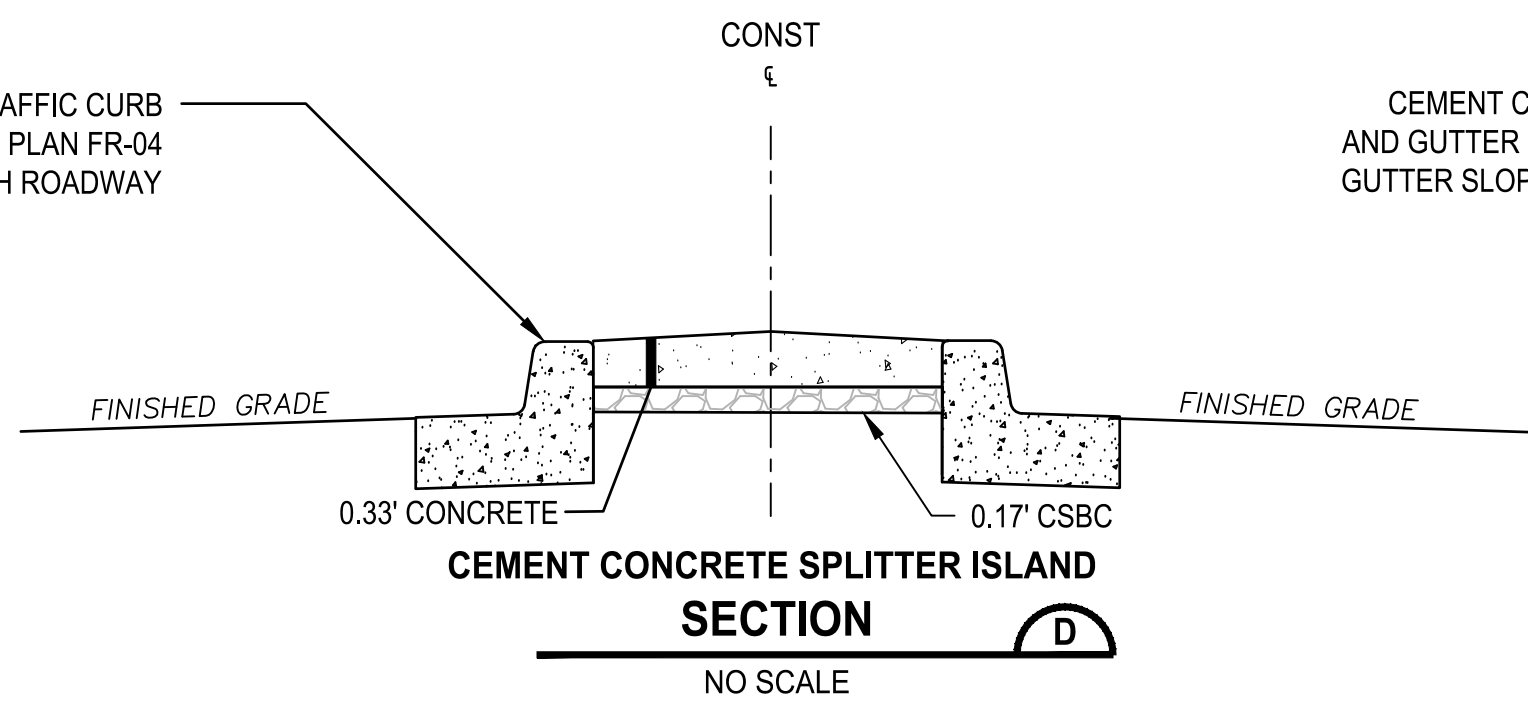
DRAWING NO.
59 OF 153

RAB13

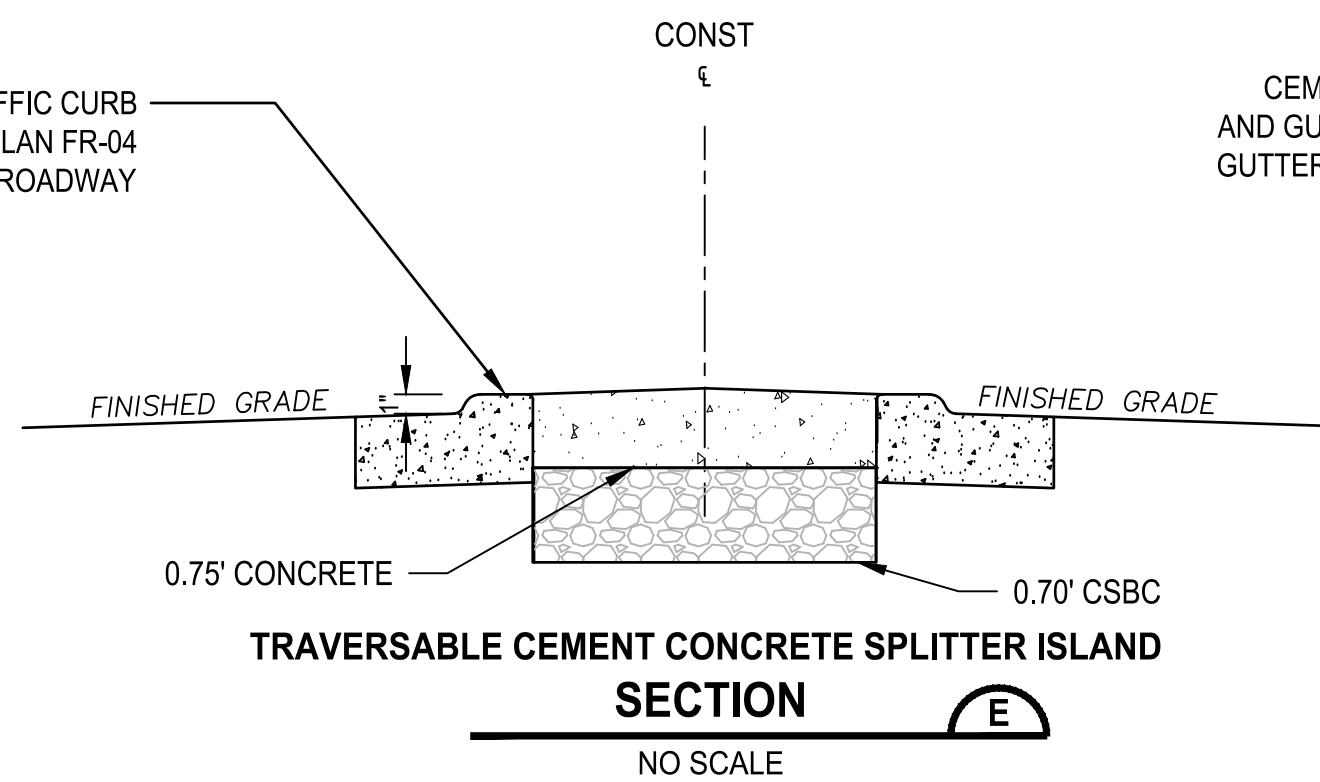
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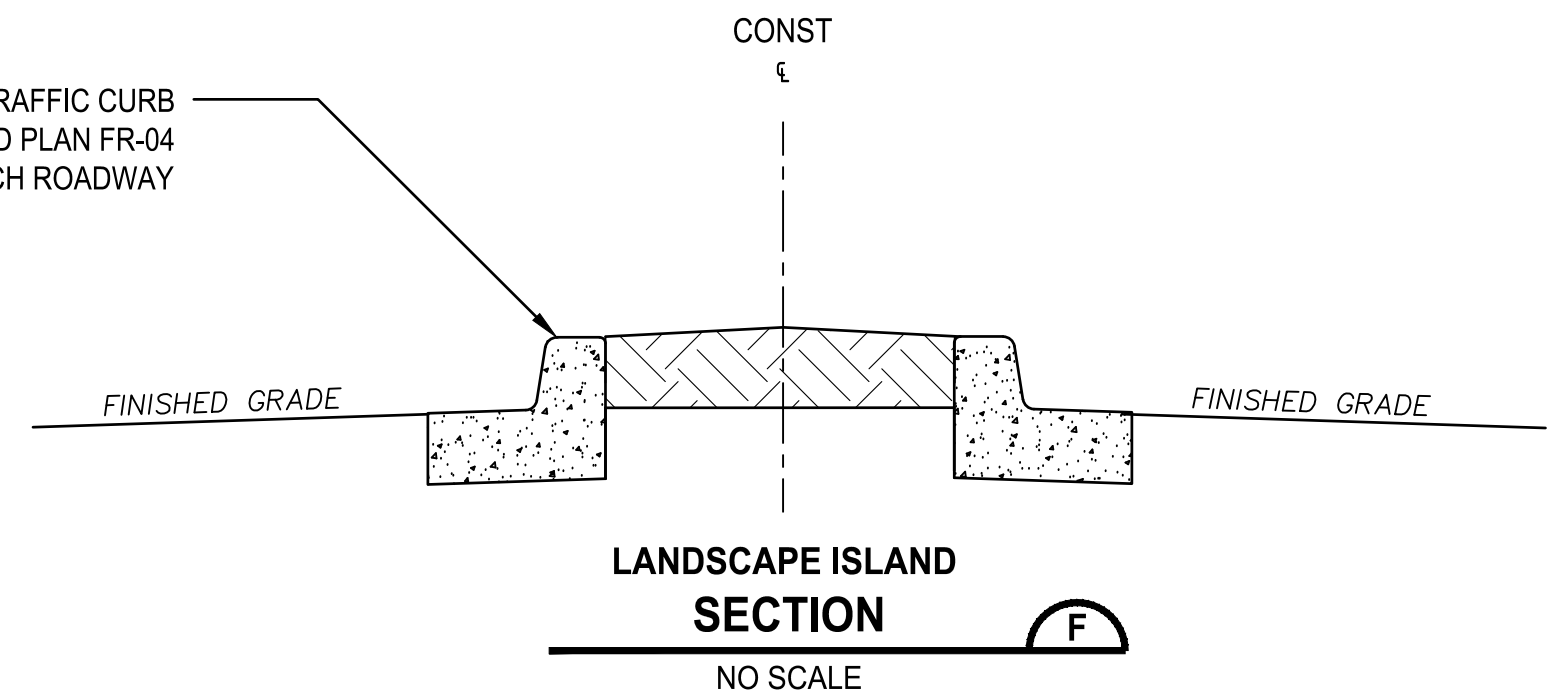
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DETAIL
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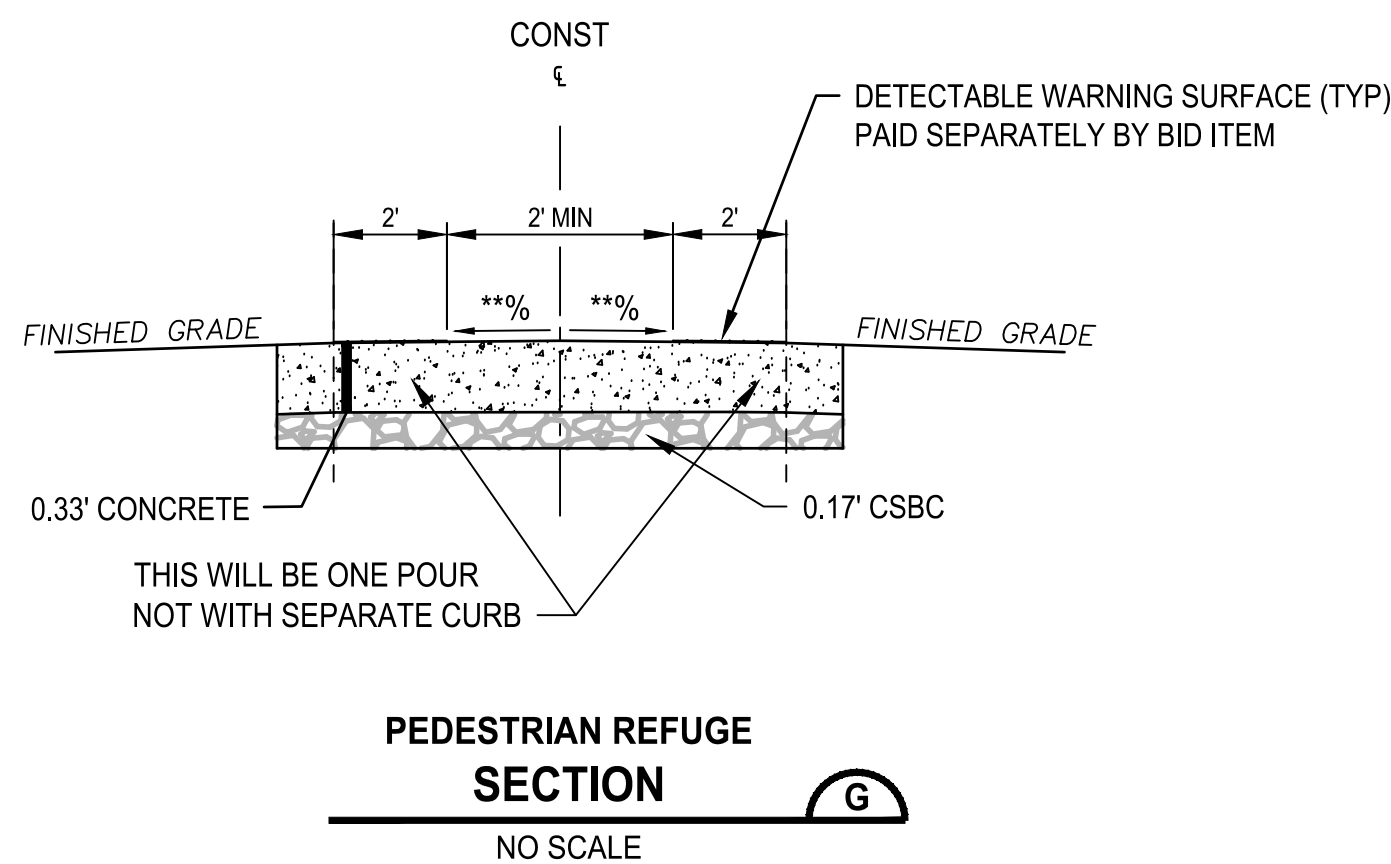
NOTE:
1. SEE RAB SHEETS FOR GRADING INFORMATION.



NOTE:
1. SEE RAB SHEETS FOR GRADING INFORMATION.



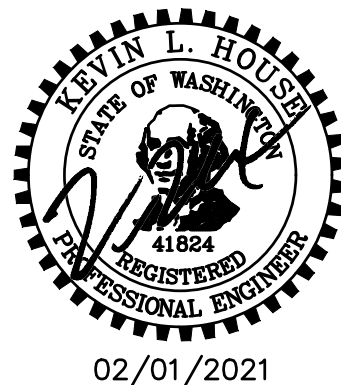
NOTE:
1. SEE RAB SHEETS FOR GRADING INFORMATION.
2. SEE LS AND RD SHEETS SHEETS FOR MEDIAN FILL.



NOTE:
1. SEE RAB SHEETS FOR GRADING INFORMATION.
** 0.5% MINIMUM SLOPE, 1.5% MAXIMUM SLOPE

REVISIONS	DATE	BY	DESIGNED
			S.M. CRAIG
			DRAWN
			C. WOODCOCK
			CHECKED
			K. HOUSE
			APPROVED
			A. FISHER

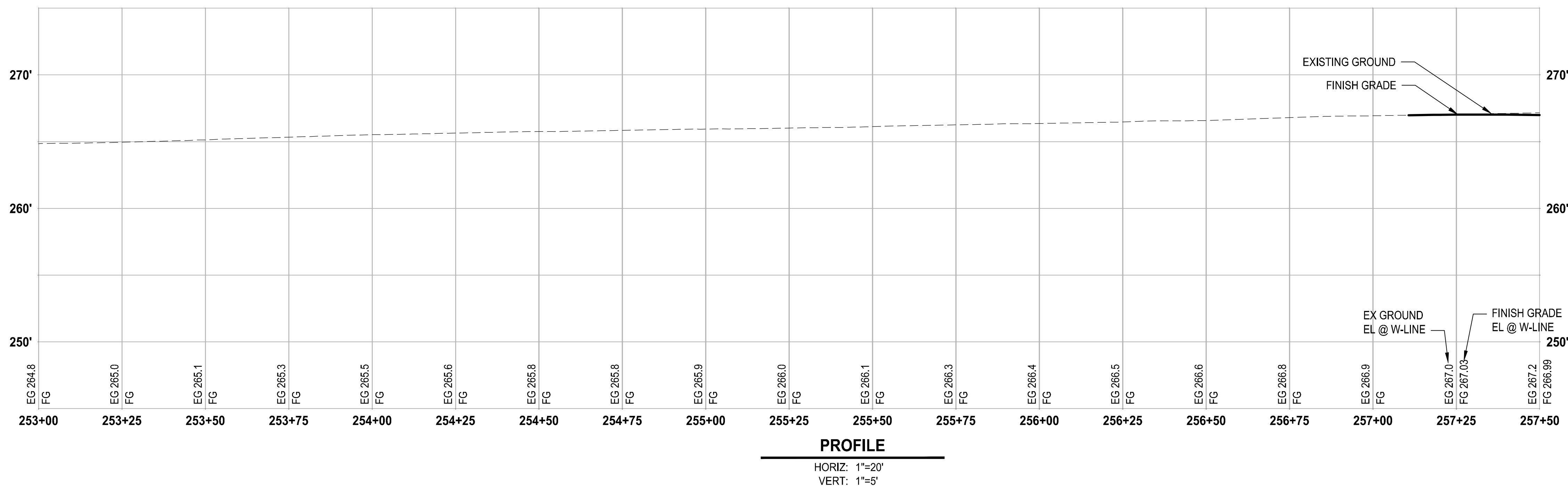
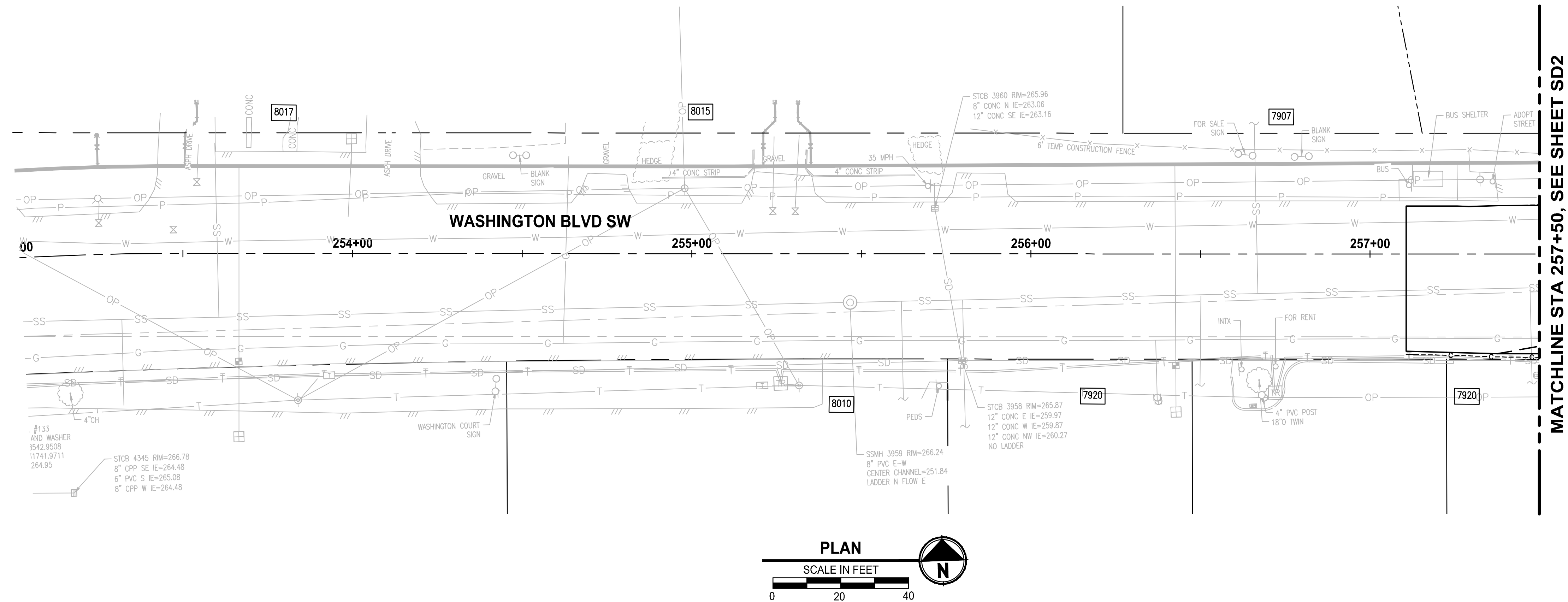
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FILE NAME PS3047013-RAB-DT
JOB No. 214-3047-013
DATE FEBRUARY 2021



PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

ROUNDABOUT DETAILS

DRAWING NO. 60 OF 153
RAB14



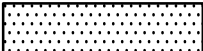
△STORM DRAINAGE AND UTILITY NOTES

1. CONNECT TO EXISTING DRAINAGE STRUCTURE
2. CONNECT TO EXISTING STORM PIPE
3. PRESERVE AND PROTECT EXISTING CATCH BASIN
4. PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
5. WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
6. REMOVE EXISTING STORM PIPE
7. FLOW SPLITTER MANHOLE PER SPECIFICATIONS
8. ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
9. UTILITY TO BE RELOCATED BY OTHERS
10. SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
11. NOT USED
12. ADJUST EXISTING VALVE CASING TO FINISHED GRADE
13. ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

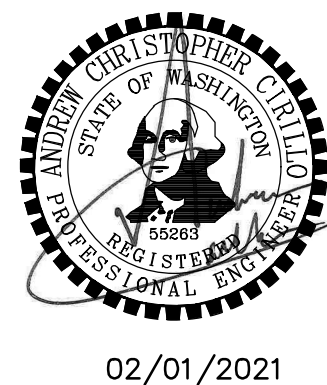
1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - B. CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- | | |
|---|---|
|  | REMOVE EXISTING DRAINAGE STRUCTURE |
|  | PLUG EXISTING PIPE |
|  | CATCH BASIN TYPE 1 |
|  | CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW |
|  | CATCH BASIN TYPE 2 |
|  | MANHOLE TYPE 1 |
|  | STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED |
|  | INFILTRATION TRENCH PER DETAIL  |
|  | BIOFILTRATION SWALE PER DETAIL  |
|  | COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL  |

▷	REVISIONS	DATE	BY	DESIGNED S. PODGORSKI
				DRAWN R. BEALS
				CHECKED A. EPSTEIN
				APPROVED A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY	
FILE NAME	PS3047013-SD1-2
JOB No.	214-3047-013
DATE	FEBRUARY 2021



PROJECT NAME

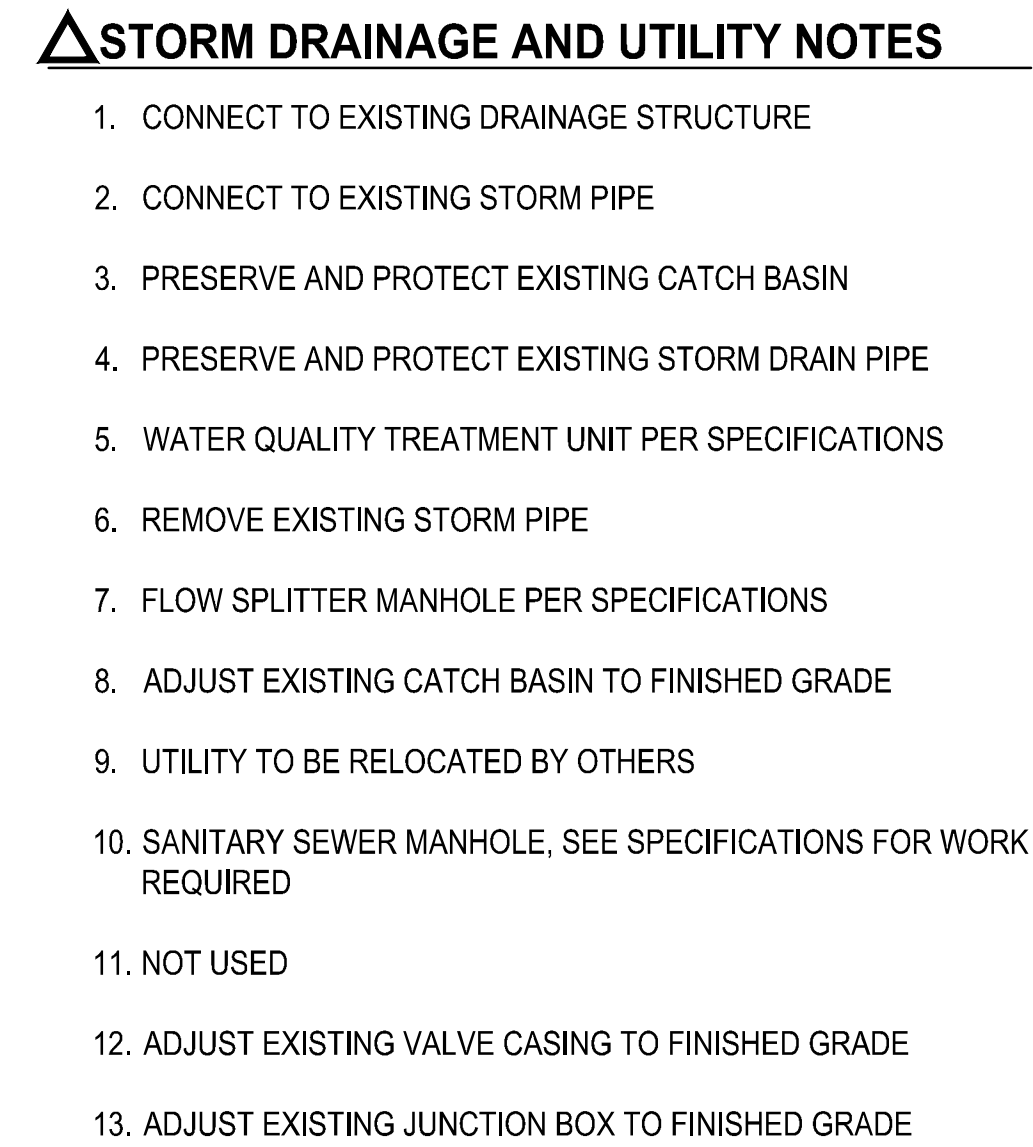
**JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1**

LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

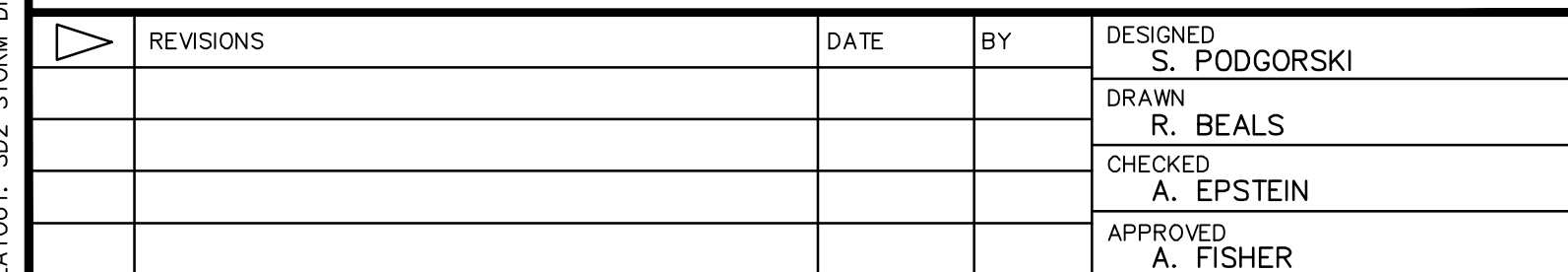
DRAWING NO.
61 OF 153

SD1

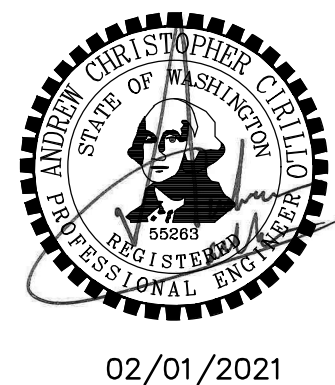


1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - B. CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

	REMOVE EXISTING DRAINAGE STRUCTURE
1	PLUG EXISTING PIPE
	CATCH BASIN TYPE 1
	CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
	CATCH BASIN TYPE 2
	MANHOLE TYPE 1
	STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
	INFILTRATION TRENCH PER DETAIL
	BIOFILTRATION SWALE PER DETAIL
	COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL



 ONE INCH AT FULL SCALE IF NOT, SCALE ACCORDINGLY	
FILE NAME	PS3047013-SD1-2
JOB No.	214-3047-013
DATE	FEBRUARY 2021



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WWW.PARAMETRIX.COM

b bcra
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TACOMA, WA 98402
P 253.627.4367
WWW.BCRADESIGN.COM

PROJECT NAME

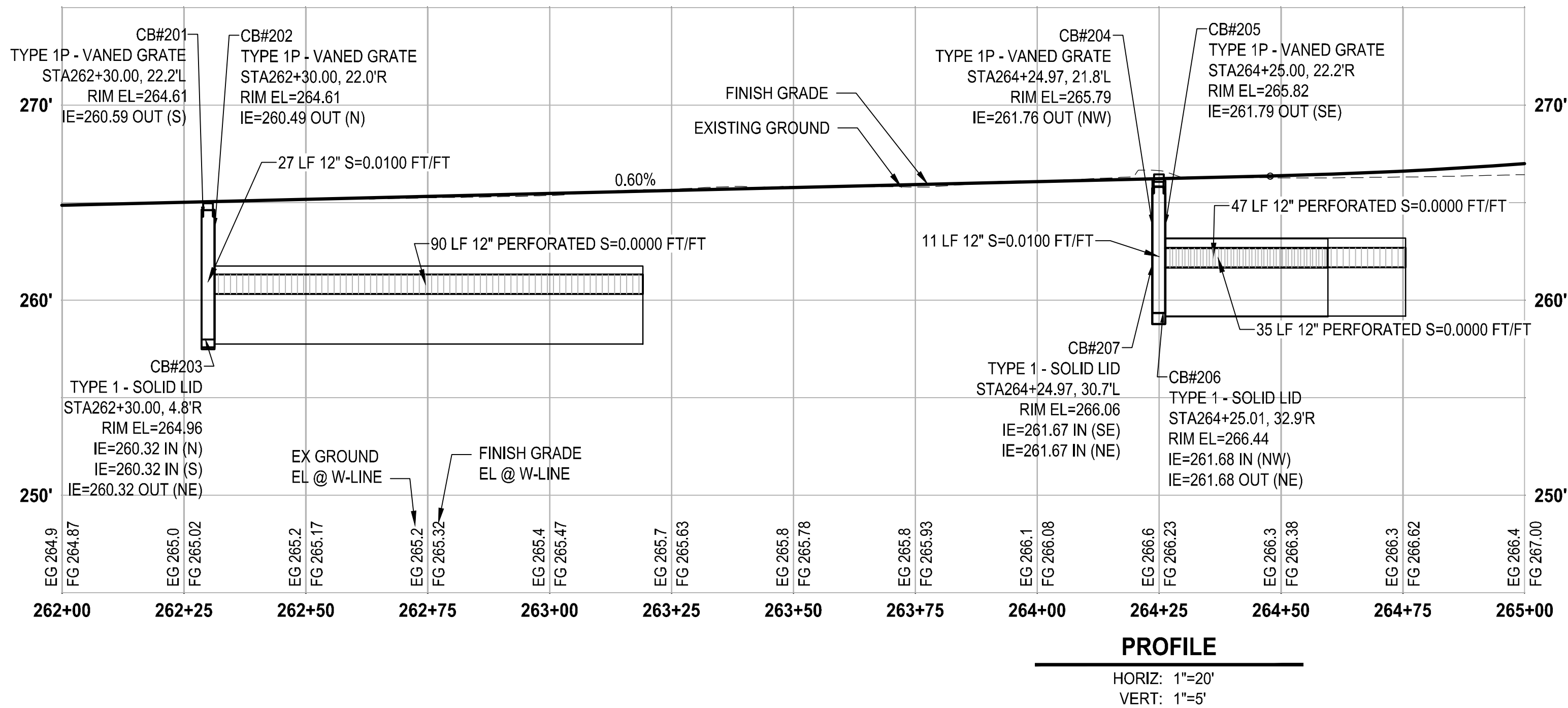
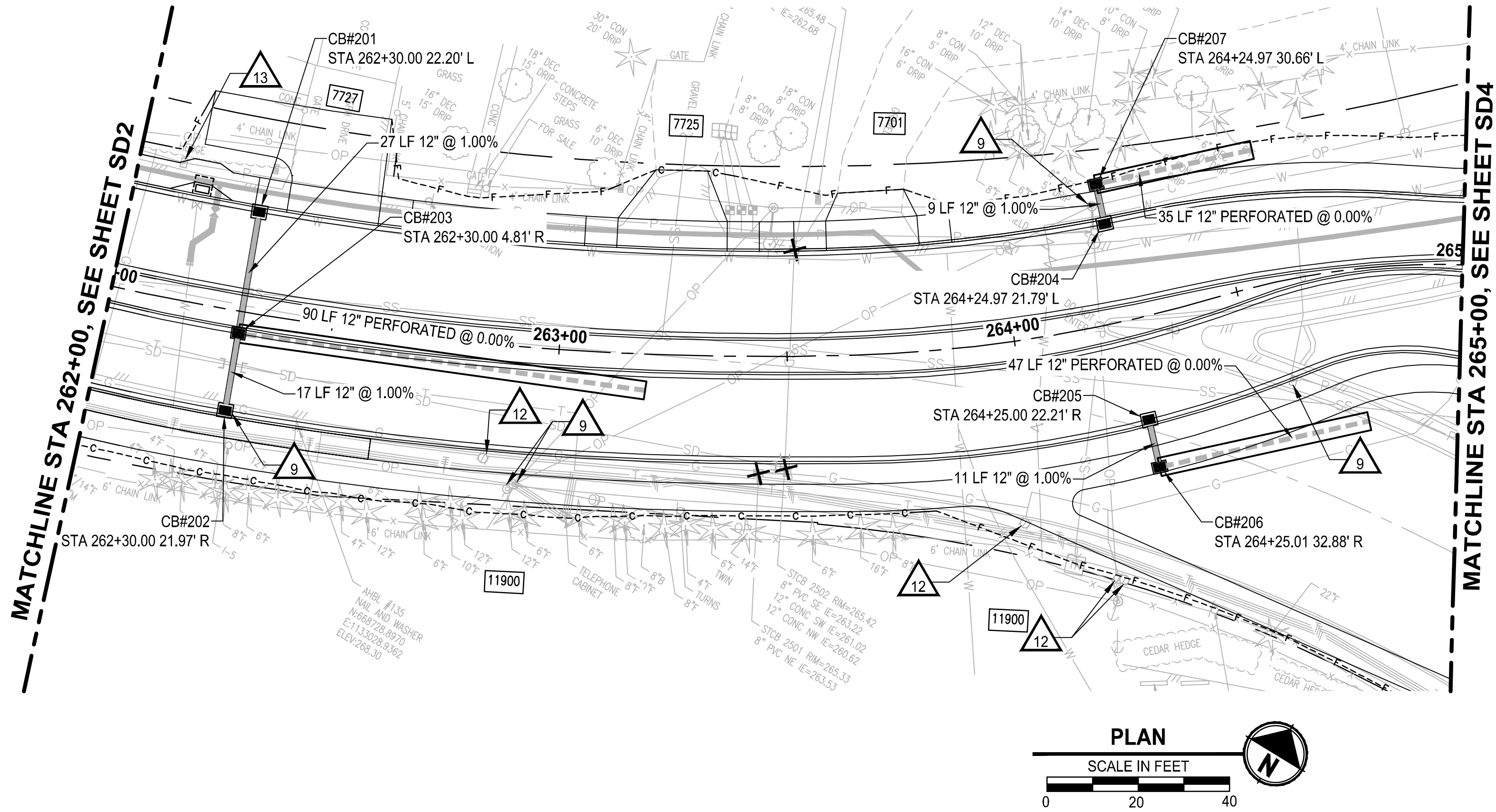
**JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1**

LAKEWOOD, WASHINGTON

DRAWING NO.
62 OF 153

SD2

LAYOUT: SD3 STORM DRAIN PLAN AND PROFILE PATH: \\Jupiter\projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG PLOTTED BY: bbeals DATE: Tuesday, February 2, 2021 4:16:03 PM



STORM DRAINAGE AND UTILITY NOTES

- CONNECT TO EXISTING DRAINAGE STRUCTURE
- CONNECT TO EXISTING STORM PIPE
- PRESERVE AND PROTECT EXISTING CATCH BASIN
- PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
- WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
- REMOVE EXISTING STORM PIPE
- FLOW SPLITTER MANHOLE PER SPECIFICATIONS
- ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
- UTILITY TO BE RELOCATED BY OTHERS
- SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
- NOT USED
- ADJUST EXISTING VALVE CASING TO FINISHED GRADE
- ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

- REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
- SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
- ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
- CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
- SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- REMOVE EXISTING DRAINAGE STRUCTURE
- PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- INFILTRATION TRENCH PER DETAIL
- BIOFILTRATION SWALE PER DETAIL
- COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			CHECKED
			A. EPSTEIN
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.
FILE NAME PS3047013-SD3-8
JOB No. 214-3047-013
DATE FEBRUARY 2021

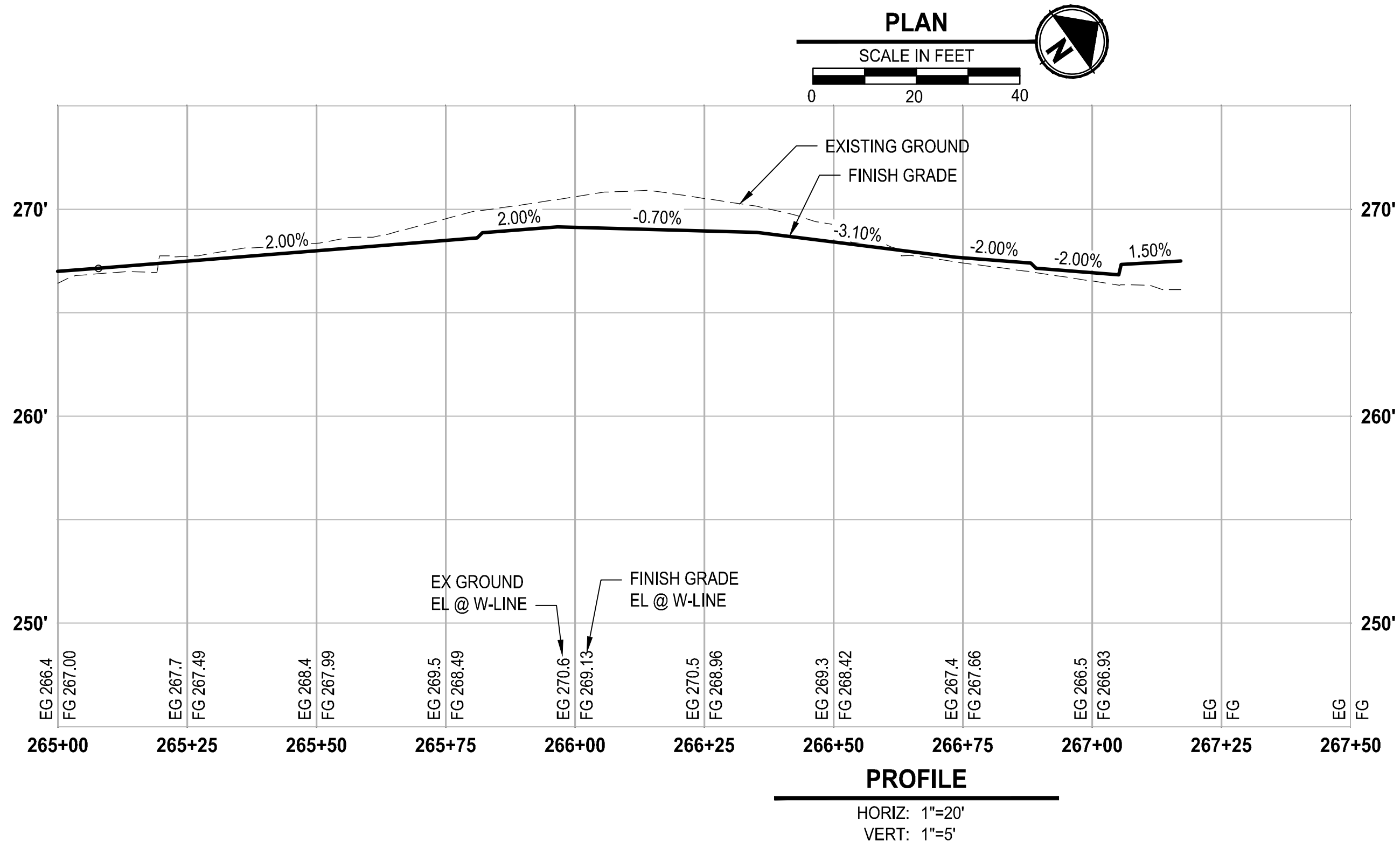
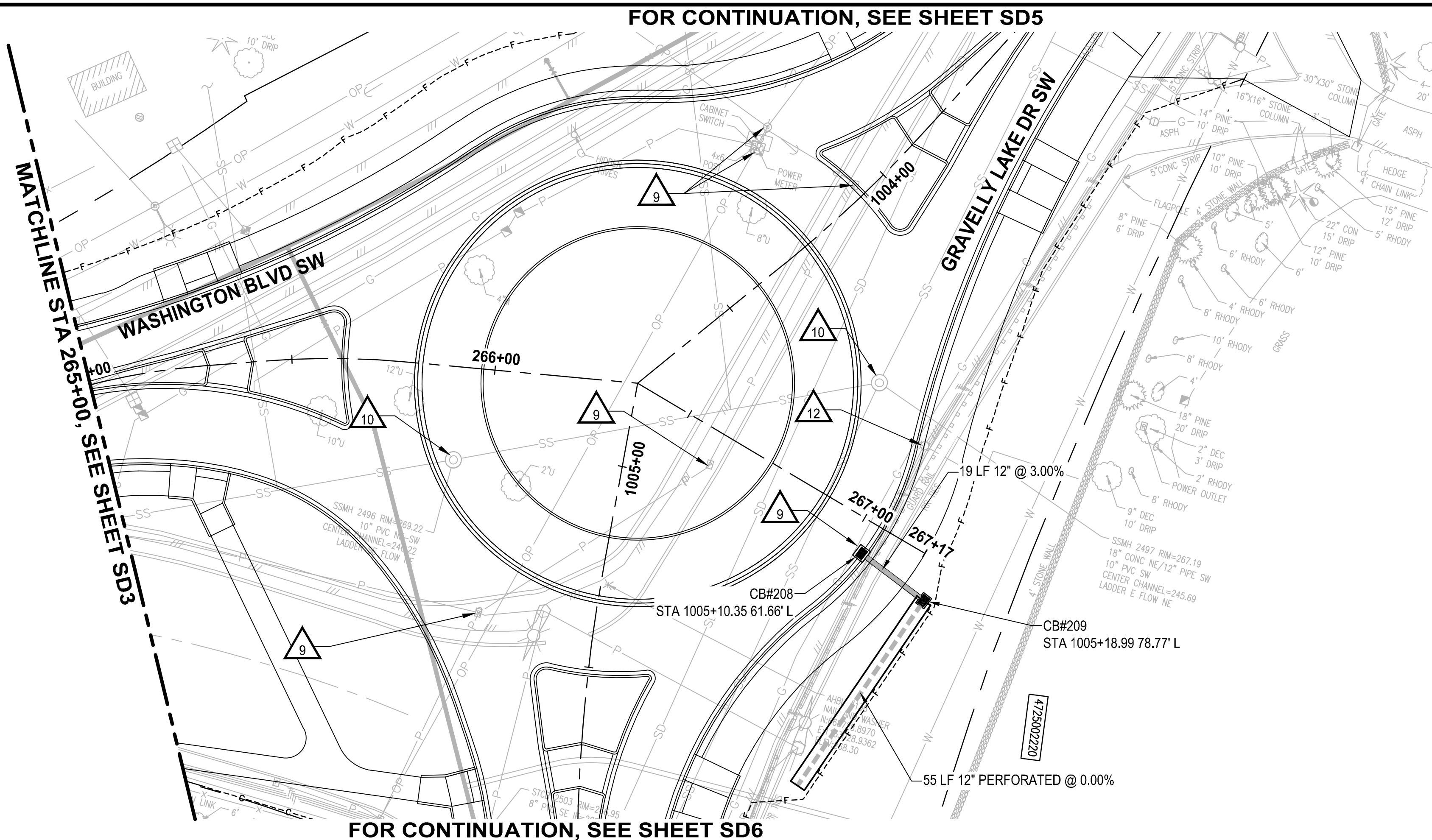


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO. 63 OF 153
SD3

LAYOUT: SD4 STORM DRAIN PLAN AND PROFILE PATH: \\Jupiter_projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG PLOTTED BY: lbeals DATE: Tuesday, February 2, 2021 4:16:26 PM



STORM DRAINAGE AND UTILITY NOTES

1. CONNECT TO EXISTING DRAINAGE STRUCTURE
2. CONNECT TO EXISTING STORM PIPE
3. PRESERVE AND PROTECT EXISTING CATCH BASIN
4. PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
5. WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
6. REMOVE EXISTING STORM PIPE
7. FLOW SPLITTER MANHOLE PER SPECIFICATIONS
8. ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
9. UTILITY TO BE RELOCATED BY OTHERS
10. SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
11. NOT USED
12. ADJUST EXISTING VALVE CASING TO FINISHED GRADE
13. ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - B. CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- ✕ REMOVE EXISTING DRAINAGE STRUCTURE
- 1 PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- INFILTRATION TRENCH PER DETAIL ²/_{DT4}
- BIOFILTRATION SWALE PER DETAIL ³/_{DT4}
- COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL ¹/_{DT4}

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			CHECKED
			A. EPSTEIN
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-SD3-8
JOB No. 214-3047-013
DATE FEBRUARY 2021



PROJECT NAME

**JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1**

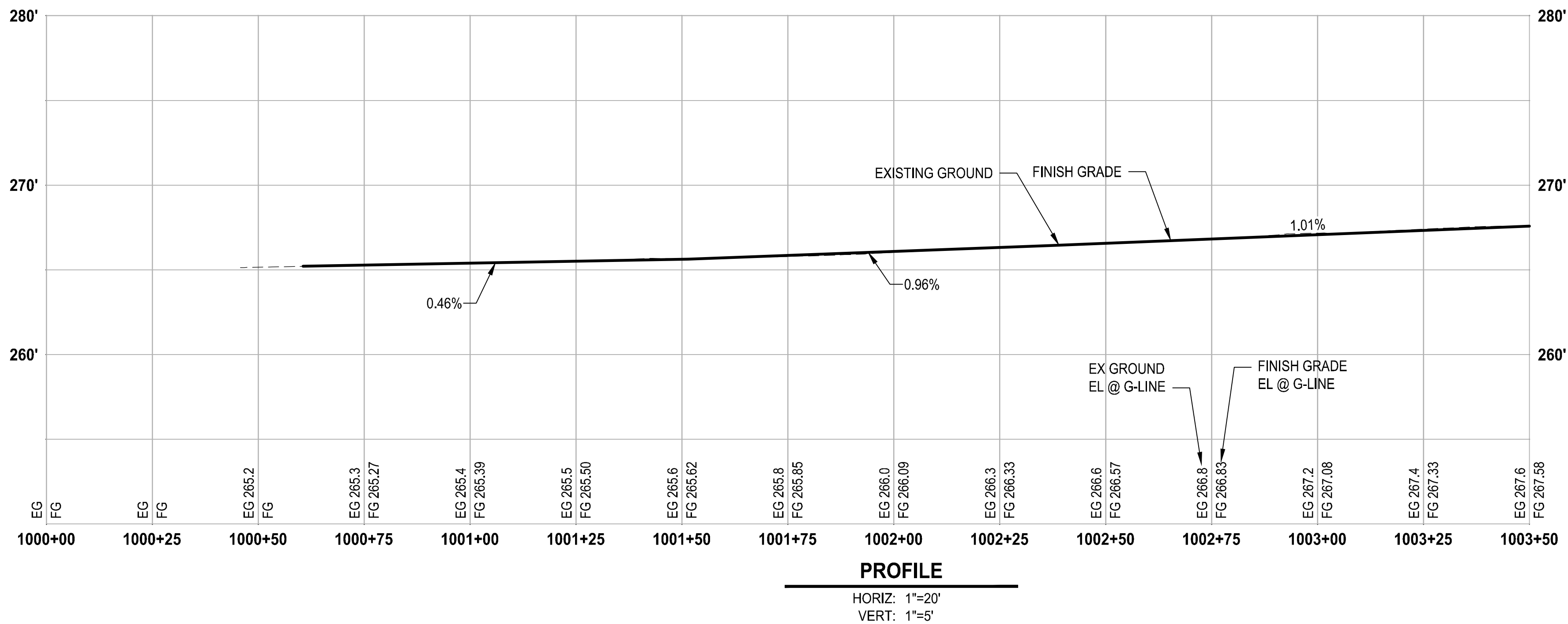
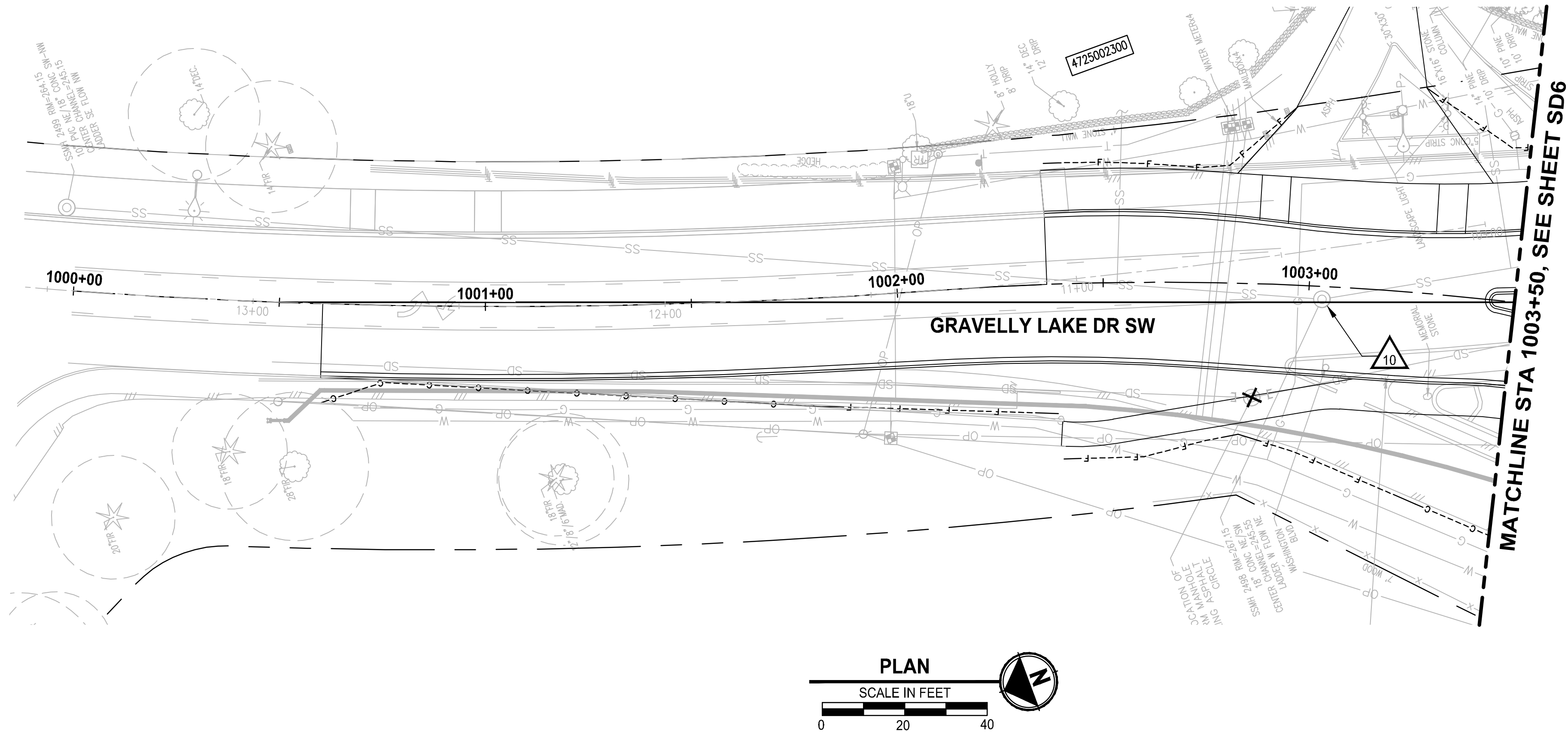
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO.
64 OF 153

SD4

LAYOUT: SD5 STORM DRAIN PLAN AND PROFILE PATH: \\Jupiter\projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG PLOTTED BY: lbeals DATE: Wednesday, February 3, 2021 9:02:20 AM



STORM DRAINAGE AND UTILITY NOTES

1. CONNECT TO EXISTING DRAINAGE STRUCTURE
2. CONNECT TO EXISTING STORM PIPE
3. PRESERVE AND PROTECT EXISTING CATCH BASIN
4. PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
5. WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
6. REMOVE EXISTING STORM PIPE
7. FLOW SPLITTER MANHOLE PER SPECIFICATIONS
8. ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
9. UTILITY TO BE RELOCATED BY OTHERS
10. SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
11. NOT USED
12. ADJUST EXISTING VALVE CASING TO FINISHED GRADE
13. ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

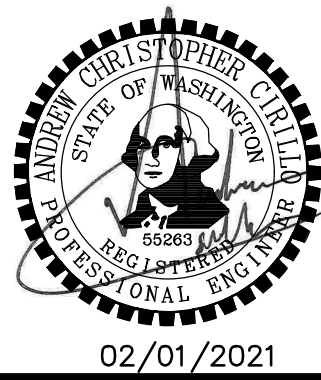
1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
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 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- ✕ REMOVE EXISTING DRAINAGE STRUCTURE
- ┆ PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- ⊙ CATCH BASIN TYPE 2
- ⊙ MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- ▨ INFILTRATION TRENCH PER DETAIL 2/DT4
- ▨ BIOFILTRATION SWALE PER DETAIL 3/DT4
- ▨ COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL 1/DT4

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			A. EPSTEIN
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-SD3-8
JOB No. 214-3047-013
DATE FEBRUARY 2021



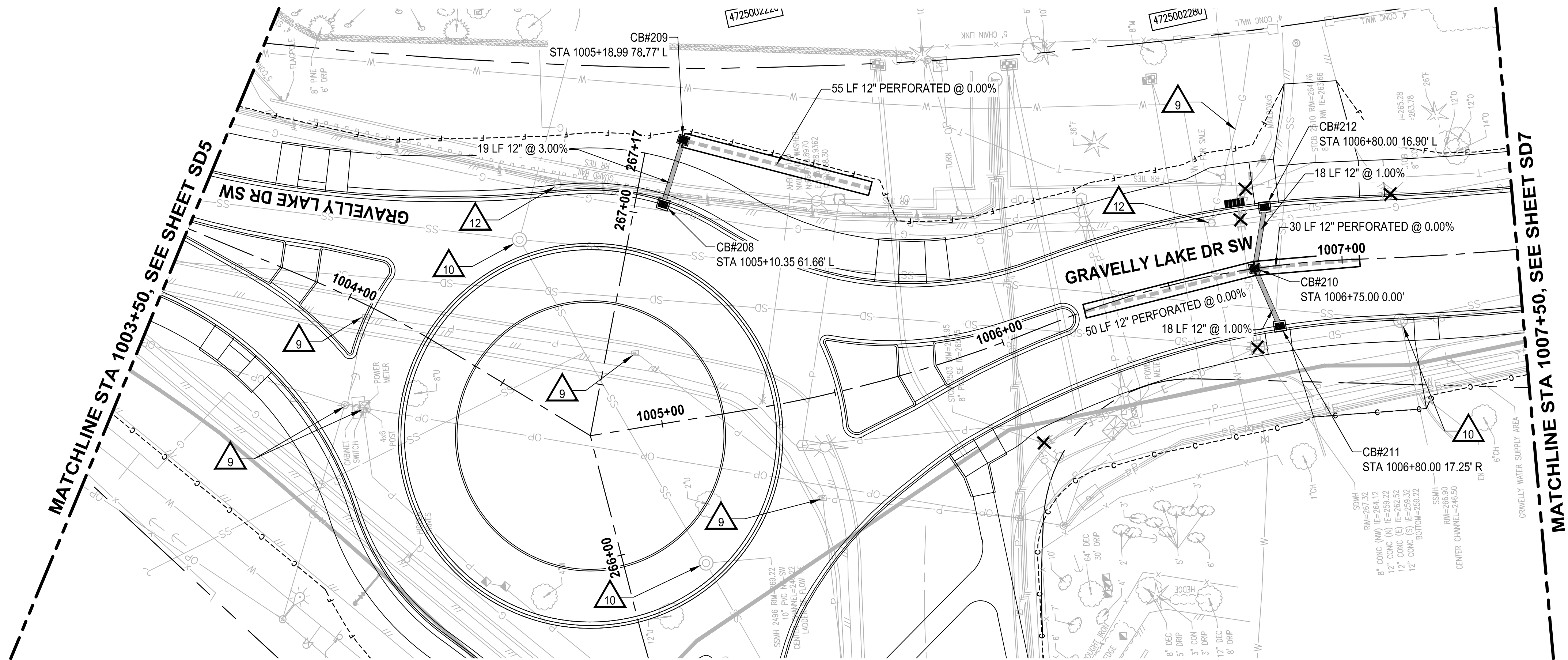
PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO.
65 OF 153

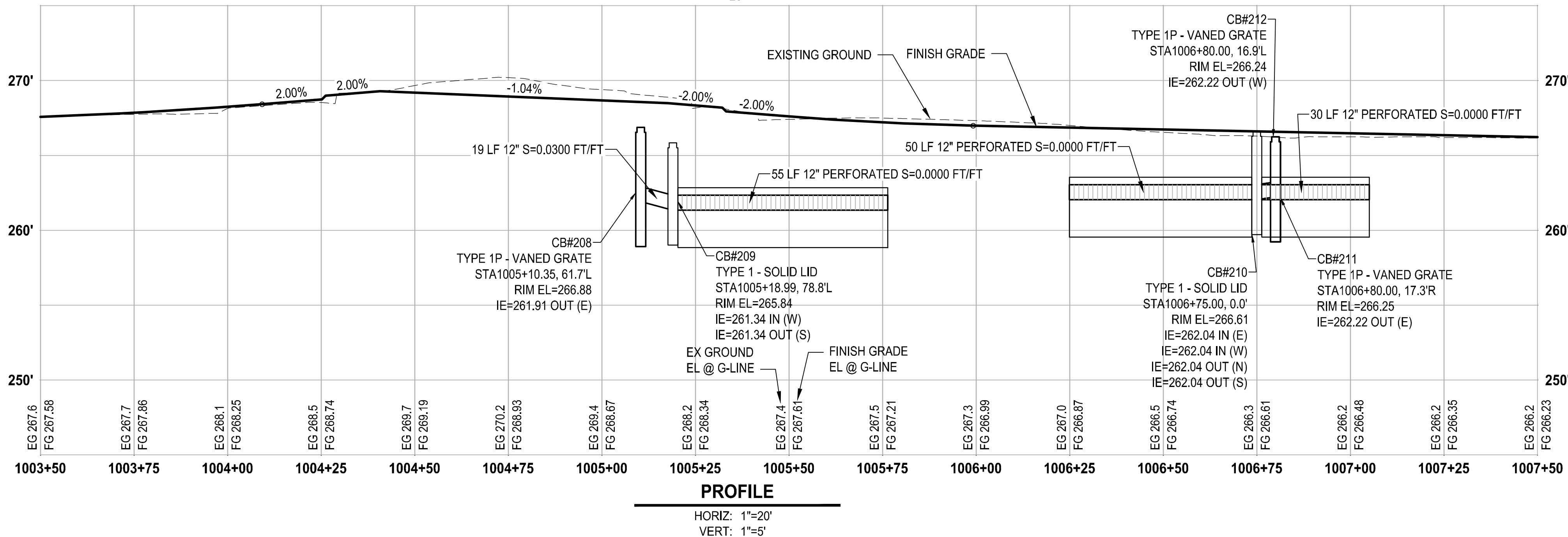
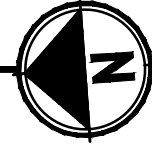
SD5

LAYOUT: SD6 STORM DRAIN PLAN AND PROFILE PATH: \\Jupiter\projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG PLOTTED BY: bbeals DATE: Tuesday, February 2, 2021 4:17:08 PM



FOR CONTINUATION, SEE SHEET SD4

PLAN



PROFILE

HORIZ: 1"=20'
VERT: 1"=5'

STORM DRAINAGE AND UTILITY NOTES

- CONNECT TO EXISTING DRAINAGE STRUCTURE
- CONNECT TO EXISTING STORM PIPE
- PRESERVE AND PROTECT EXISTING CATCH BASIN
- PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
- WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
- REMOVE EXISTING STORM PIPE
- FLOW SPLITTER MANHOLE PER SPECIFICATIONS
- ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
- UTILITY TO BE RELOCATED BY OTHERS
- SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
- NOT USED
- ADJUST EXISTING VALVE CASING TO FINISHED GRADE
- ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

- REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
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 - CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
- ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
- CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
- SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- REMOVE EXISTING DRAINAGE STRUCTURE
- PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- INFILTRATION TRENCH PER DETAIL ²DT4
- BIOFILTRATION SWALE PER DETAIL ³DT4
- COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL ¹DT4

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			CHECKED
			A. EPSTEIN
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-SD3-8
JOB No. 214-3047-013
DATE FEBRUARY 2021



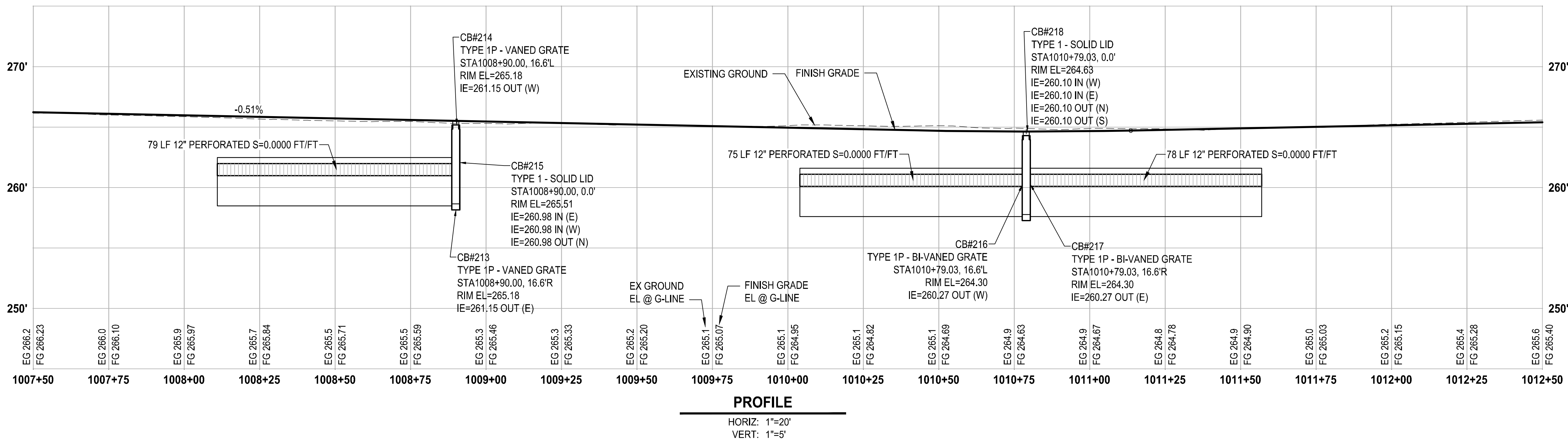
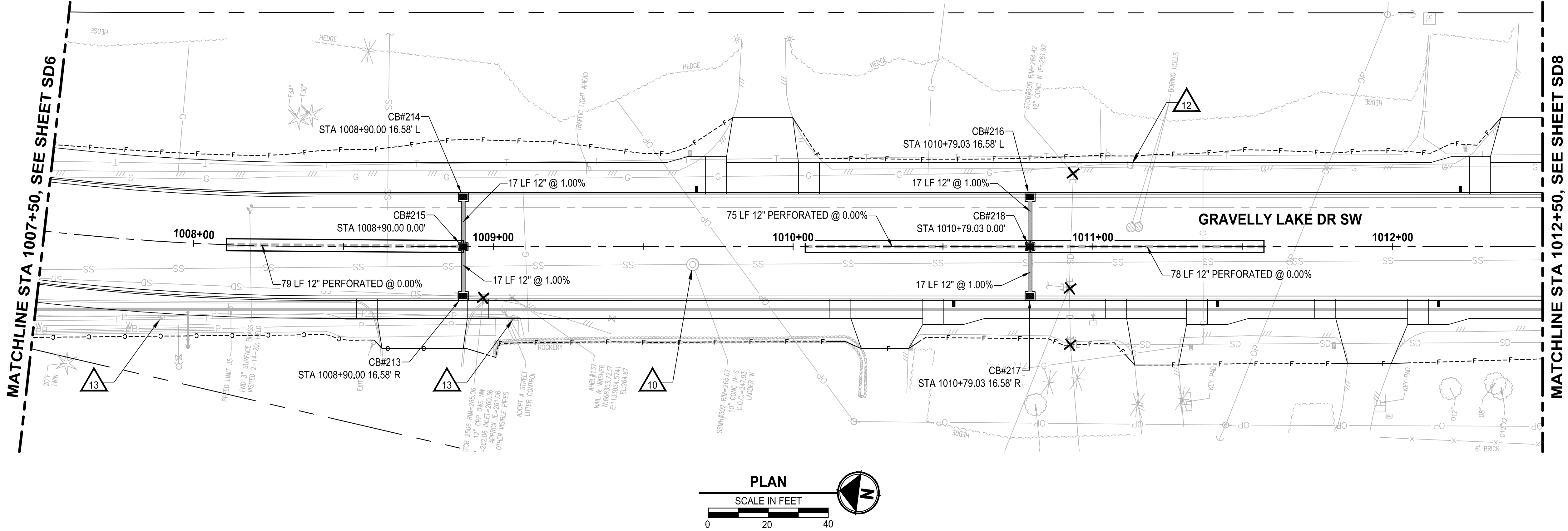
PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO.
66 OF 153

SD6

\\Jupiter\projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG - PLOTTED BY: bbeals DATE: Tuesday, February 2, 2021 4:17:29 PM
LAYOUT: SD7 STORM DRAIN PLAN AND PROFILE



REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			A. EPSTEIN
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-SD3-8
JOB No. 214-3047-013
DATE FEBRUARY 2021

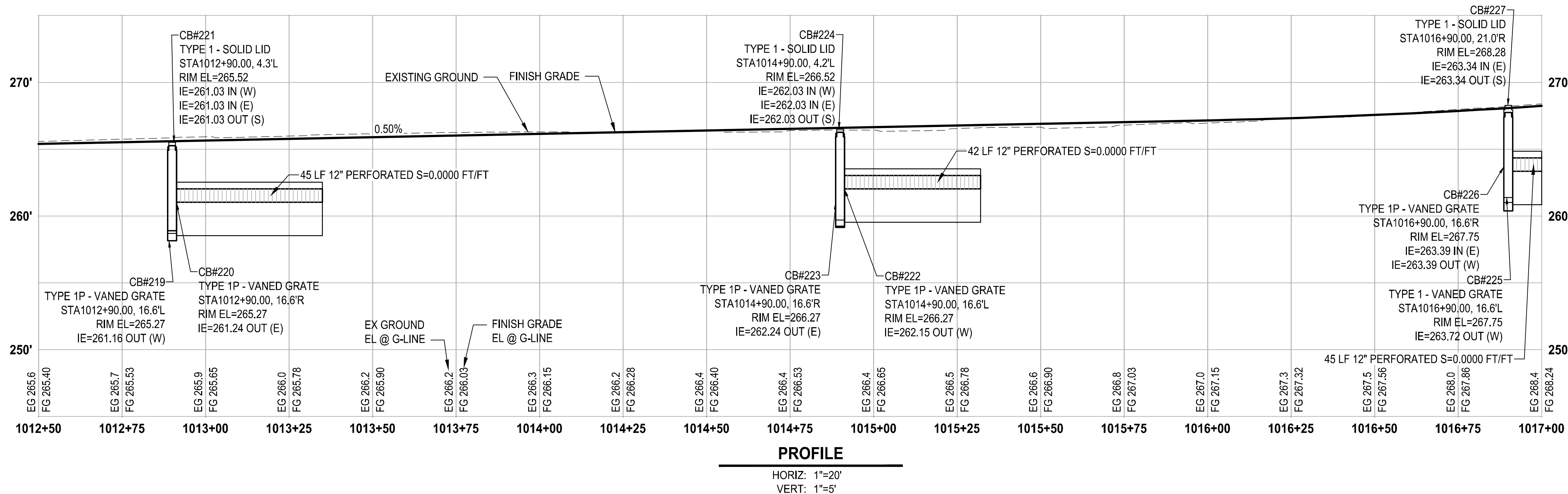
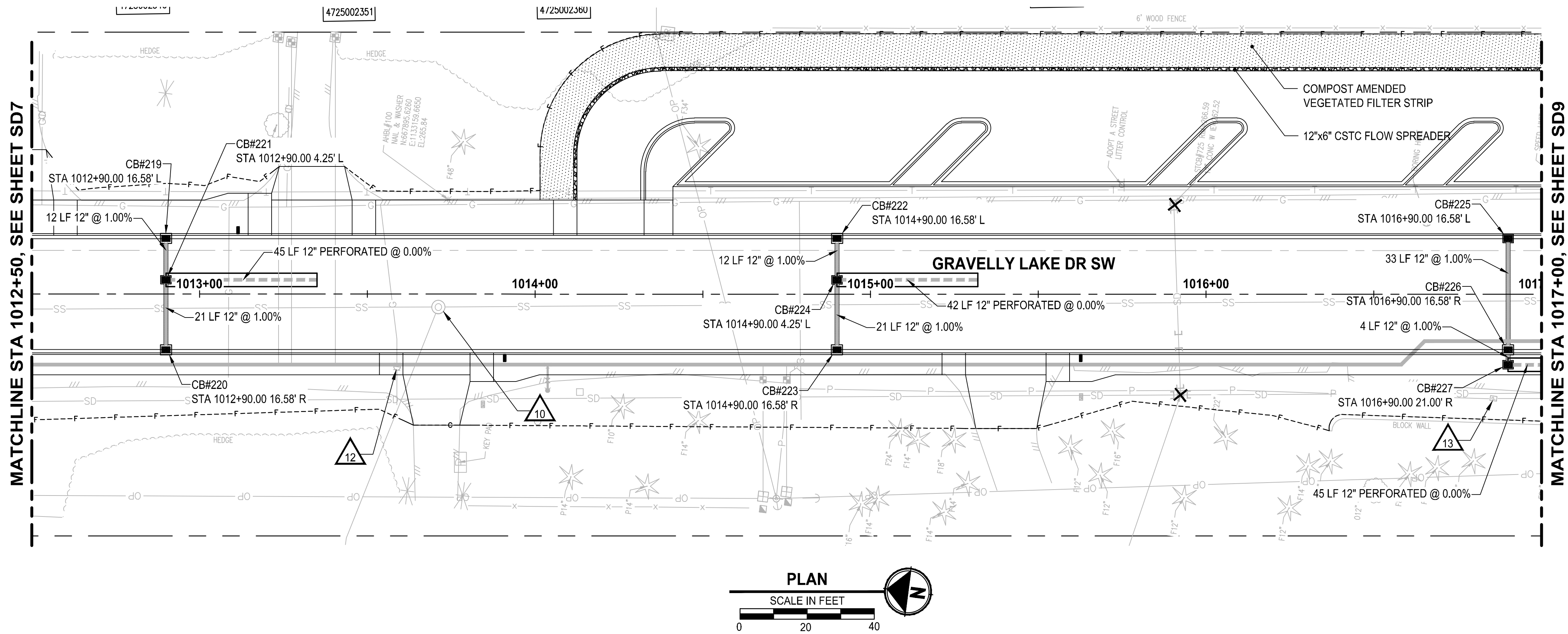


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO. 67 OF 153
SD7

LAYOUT: SD8 STORM DRAIN PLAN AND PROFILE PATH: \\Jupiter\projects\19000\19182.00.00 - JBLM North Access Improvements\Civil\07-CAD\DWG PLOTTED BY: tbeads DATE: Tuesday, February 2, 2021 4:17:49 PM



STORM DRAINAGE AND UTILITY NOTES

- CONNECT TO EXISTING DRAINAGE STRUCTURE
- CONNECT TO EXISTING STORM PIPE
- PRESERVE AND PROTECT EXISTING CATCH BASIN
- PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
- WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
- REMOVE EXISTING STORM PIPE
- FLOW SPLITTER MANHOLE PER SPECIFICATIONS
- ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
- UTILITY TO BE RELOCATED BY OTHERS
- SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
- NOT USED
- ADJUST EXISTING VALVE CASING TO FINISHED GRADE
- ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

- REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
- SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
- ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
- CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
- SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- REMOVE EXISTING DRAINAGE STRUCTURE
- PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- INFILTRATION TRENCH PER DETAIL
- BIOFILTRATION SWALE PER DETAIL
- COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			A. EPSTEIN
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.
FILE NAME PS3047013-SD3-8
JOB No. 214-3047-013
DATE FEBRUARY 2021

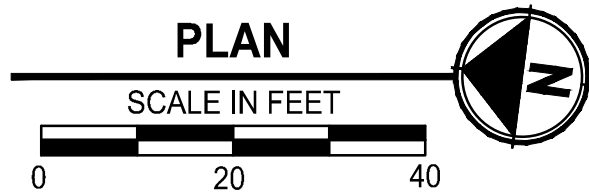
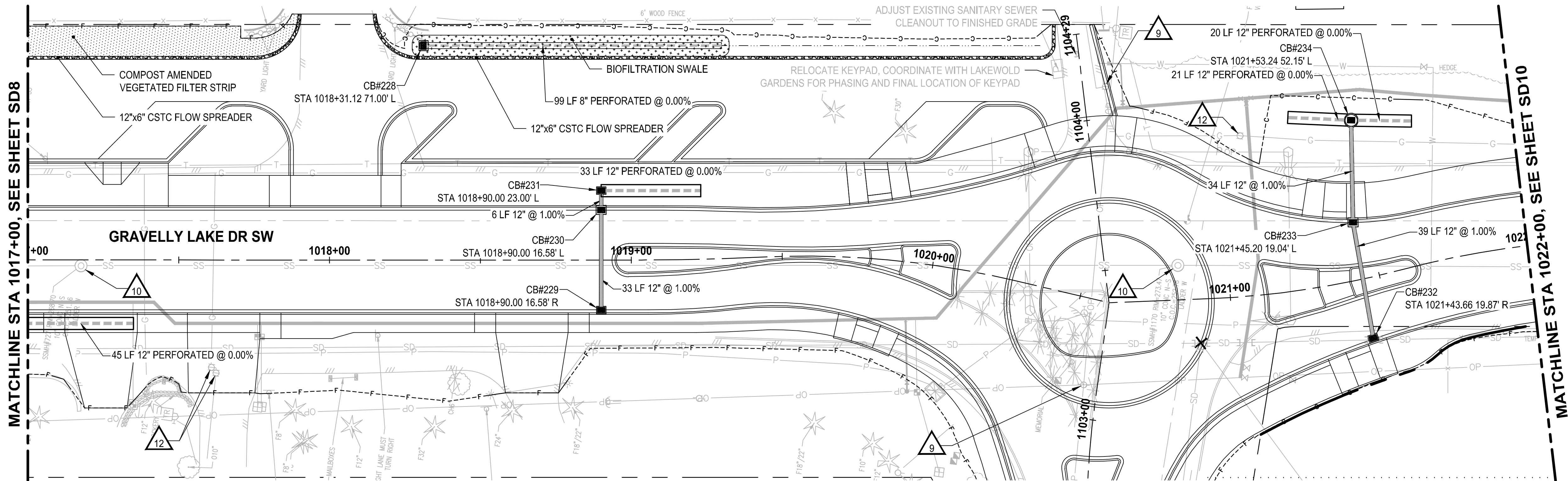


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

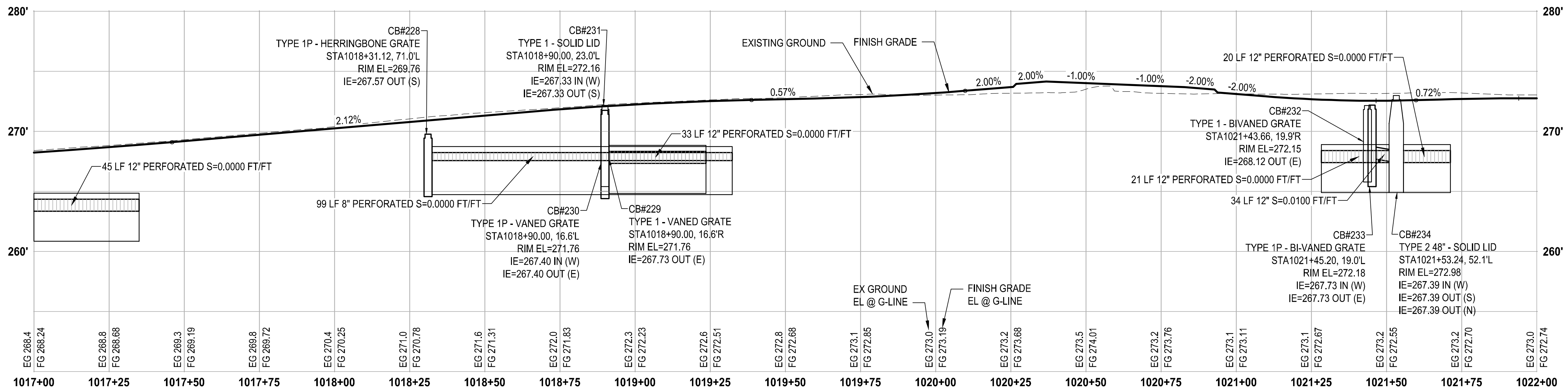
STORM DRAIN PLAN AND PROFILE

DRAWING NO. 68 OF 153
SD8

\\Jupiter\projects\19000\19182.00.00 - JBLM North Access Imp\Civil\07-CAD\DWG PLOTTED BY: bbeals DATE: Wednesday, February 3, 2021 9:17:10 AM
LAYOUT: SD9 STORM DRAIN PLAN AND PROFILE PATH: \\Jupiter\projects\19000\19182.00.00 - JBLM North Access Imp\Civil\07-CAD\DWG



FOR CONTINUATION, SEE SHEET SD21



PROFILE

HORIZ: 1"=20'
VERT: 1"=5'

STORM DRAINAGE AND UTILITY NOTES

1. CONNECT TO EXISTING DRAINAGE STRUCTURE
2. CONNECT TO EXISTING STORM PIPE
3. PRESERVE AND PROTECT EXISTING CATCH BASIN
4. PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
5. WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
6. REMOVE EXISTING STORM PIPE
7. FLOW SPLITTER MANHOLE PER SPECIFICATIONS
8. ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
9. UTILITY TO BE RELOCATED BY OTHERS
10. SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
11. NOT USED
12. ADJUST EXISTING VALVE CASING TO FINISHED GRADE
13. ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

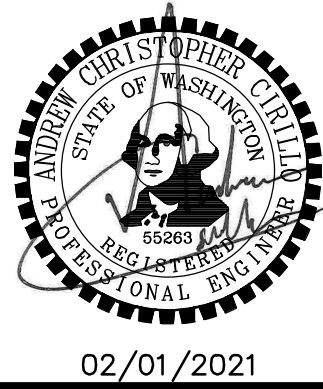
1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - B. CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- ✕ REMOVE EXISTING DRAINAGE STRUCTURE
- ┘ PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- INFILTRATION TRENCH PER DETAIL (2/DT4)
- BIOFILTRATION SWALE PER DETAIL (3/DT4)
- COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL (1/DT4)

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			CHECKED
			A. EPSTEIN
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-SD9-13
JOB No. 214-3047-013
DATE FEBRUARY 2021

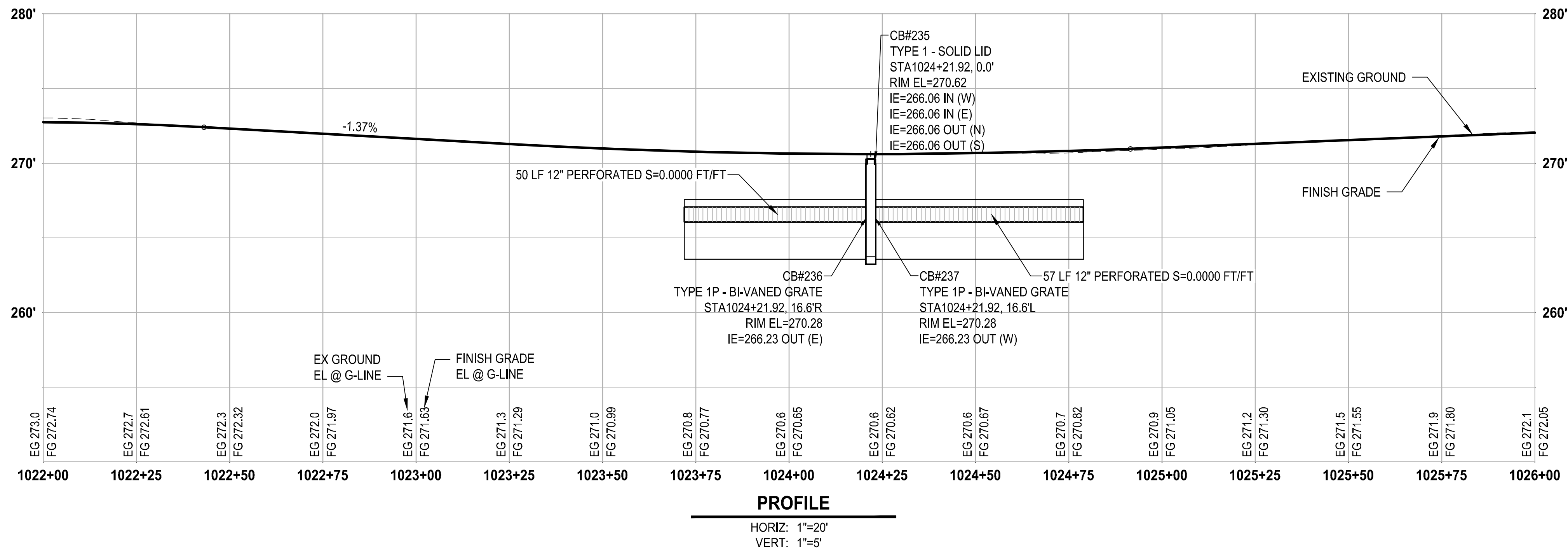
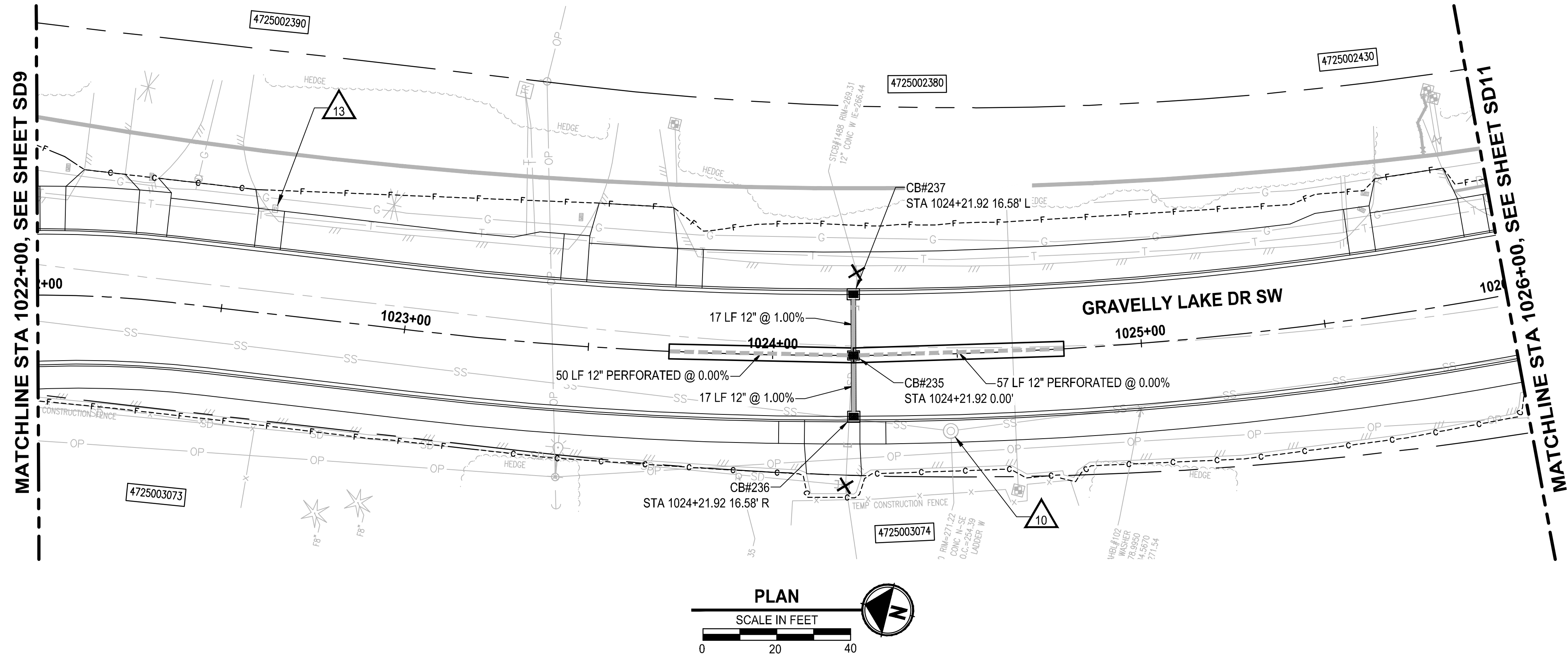


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO.
69 OF 153
SD9

PATH: \\luniter\projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG PLOTTED BY: bbeals DATE: Wednesday, February 3, 2021 9:17:25 AM LAYOUT: SD10 STORM DRAIN PLAN AND PROFILE



STORM DRAINAGE AND UTILITY NOTES

- CONNECT TO EXISTING DRAINAGE STRUCTURE
- CONNECT TO EXISTING STORM PIPE
- PRESERVE AND PROTECT EXISTING CATCH BASIN
- PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
- WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
- REMOVE EXISTING STORM PIPE
- FLOW SPLITTER MANHOLE PER SPECIFICATIONS
- ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
- UTILITY TO BE RELOCATED BY OTHERS
- SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
- NOT USED
- ADJUST EXISTING VALVE CASING TO FINISHED GRADE
- ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

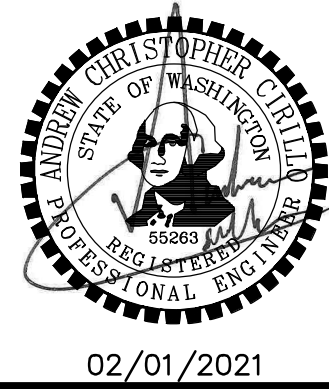
- REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
- SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
- ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
- CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
- SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- ✕ REMOVE EXISTING DRAINAGE STRUCTURE
- └ PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- INFILTRATION TRENCH PER DETAIL $\frac{2}{DT4}$
- BIOFILTRATION SWALE PER DETAIL $\frac{3}{DT4}$
- COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL $\frac{1}{DT4}$

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			A. EPSTEIN
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-SD9-13
JOB No. 214-3047-013
DATE FEBRUARY 2021

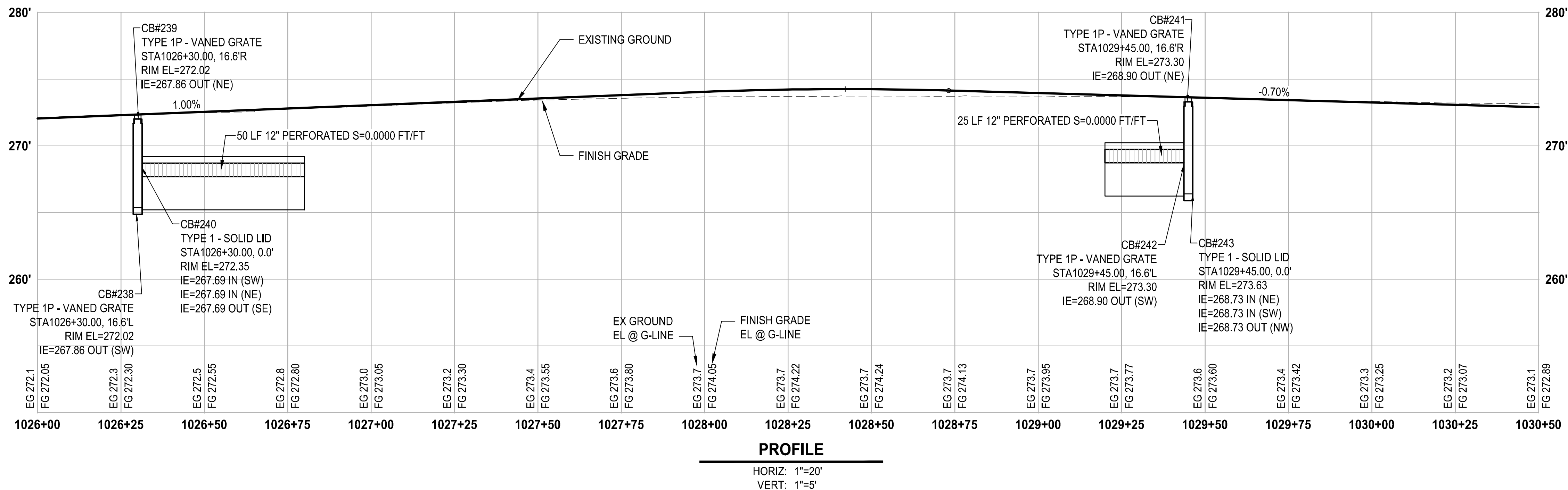
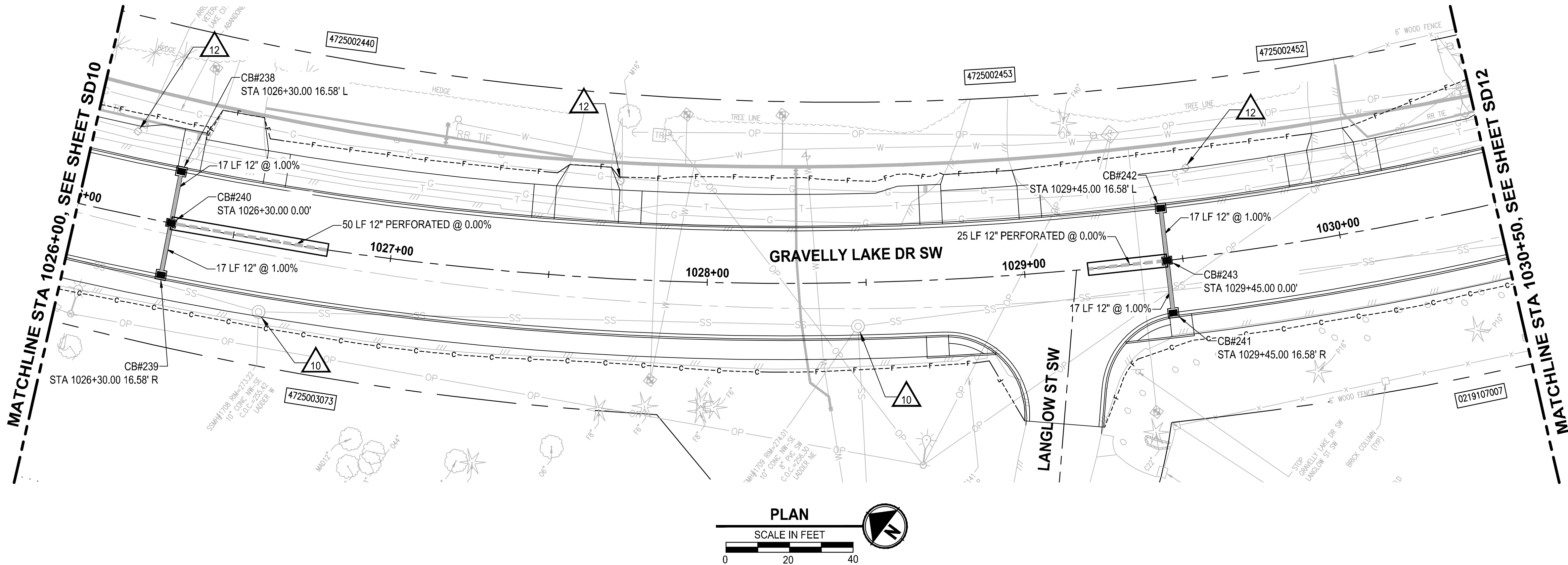


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO. 70 OF 153
SD10

\\juillet\projects\19000\19162.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG - JBLM North Access Impr\Civil\07-CAD\DWG PLOTTED BY: bbeals DATE: Wednesday, February 3, 2021 9:17:40 AM
LAYOUT: SD11 STORM DRAIN PLAN AND PROFILE



STORM DRAINAGE AND UTILITY NOTES

1. CONNECT TO EXISTING DRAINAGE STRUCTURE
2. CONNECT TO EXISTING STORM PIPE
3. PRESERVE AND PROTECT EXISTING CATCH BASIN
4. PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
5. WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
6. REMOVE EXISTING STORM PIPE
7. FLOW SPLITTER MANHOLE PER SPECIFICATIONS
8. ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
9. UTILITY TO BE RELOCATED BY OTHERS
10. SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
11. NOT USED
12. ADJUST EXISTING VALVE CASING TO FINISHED GRADE
13. ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - B. CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- ✕ REMOVE EXISTING DRAINAGE STRUCTURE
- └ PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- ⊙ CATCH BASIN TYPE 2
- ⊙ MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- ▨ INFILTRATION TRENCH PER DETAIL ²/_{DT4}
- ▨ BIOFILTRATION SWALE PER DETAIL ³/_{DT4}
- ▨ COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL ¹/_{DT4}

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			A. EPSTEIN
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.
FILE NAME PS3047013-SD9-13
JOB No. 214-3047-013
DATE FEBRUARY 2021



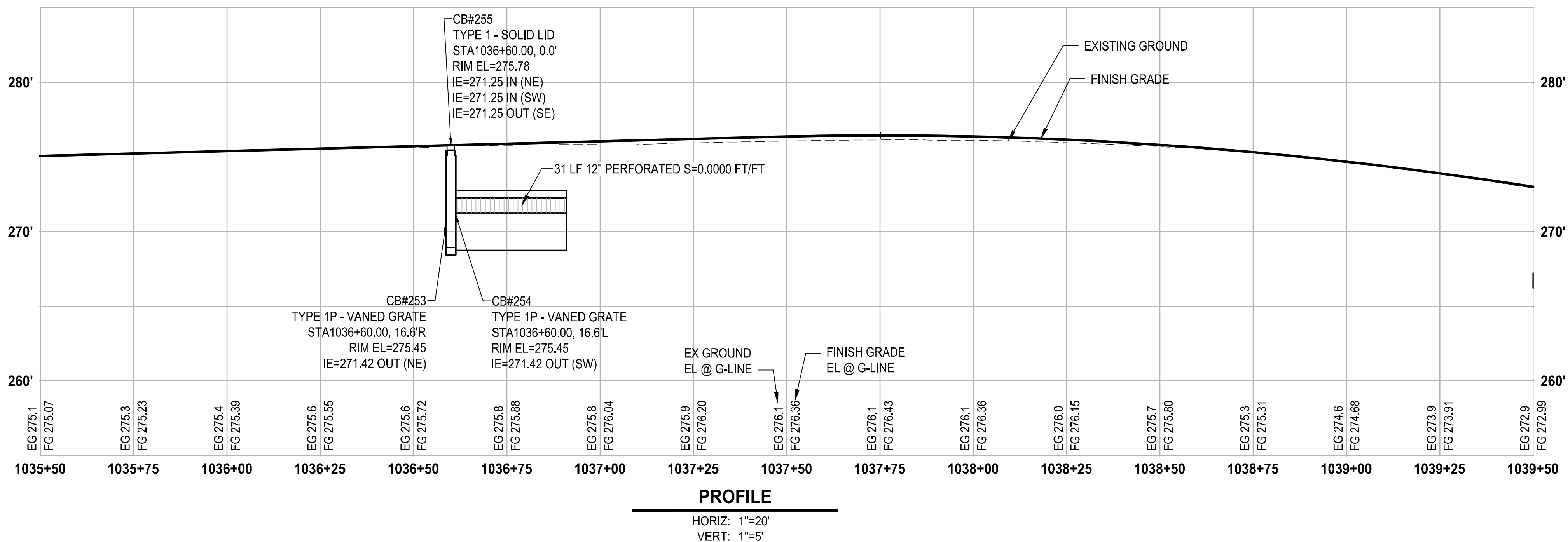
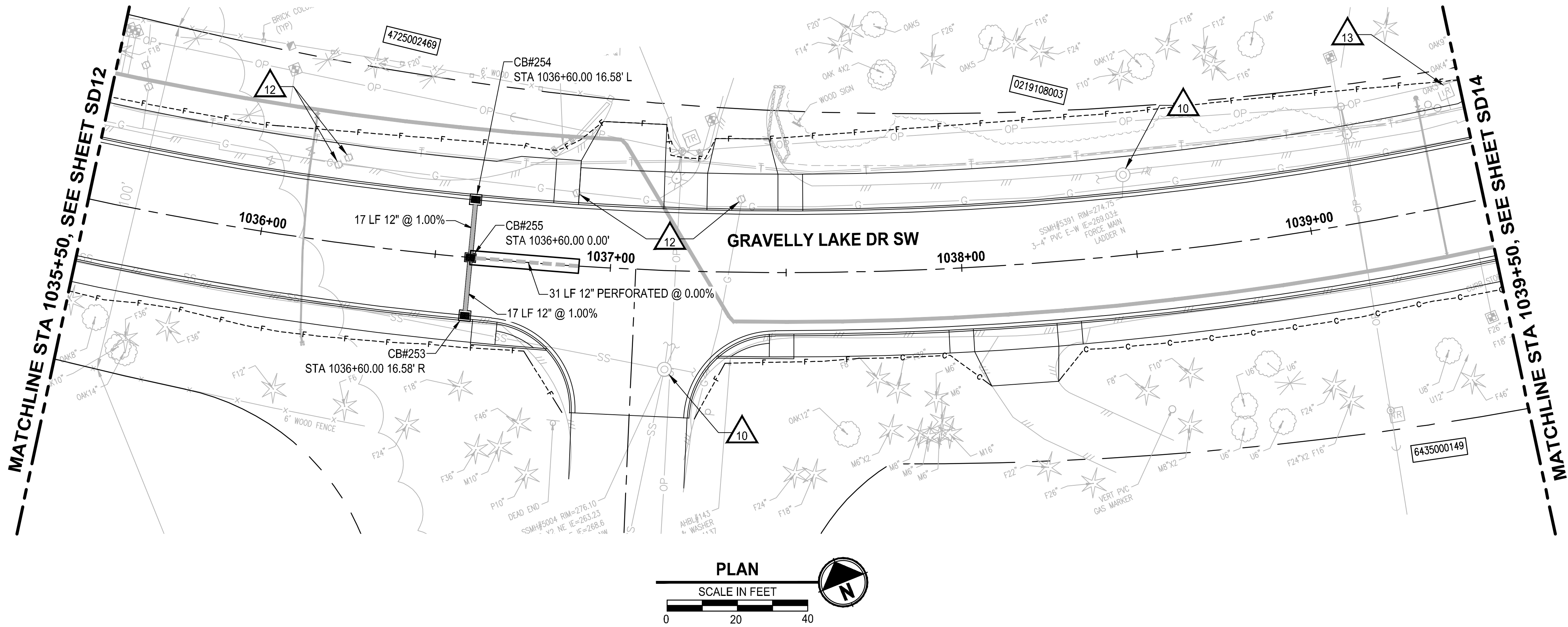
PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO.
71 OF 153

SD11

LAYOUT: SD13 STORM DRAIN PLAN AND PROFILE
PATH: \\jurite\projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG
PLOTED BY: bbeals DATE: Wednesday, February 3, 2021 9:18:18 AM



STORM DRAINAGE AND UTILITY NOTES

1. CONNECT TO EXISTING DRAINAGE STRUCTURE
2. CONNECT TO EXISTING STORM PIPE
3. PRESERVE AND PROTECT EXISTING CATCH BASIN
4. PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
5. WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
6. REMOVE EXISTING STORM PIPE
7. FLOW SPLITTER MANHOLE PER SPECIFICATIONS
8. ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
9. UTILITY TO BE RELOCATED BY OTHERS
10. SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
11. NOT USED
12. ADJUST EXISTING VALVE CASING TO FINISHED GRADE
13. ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

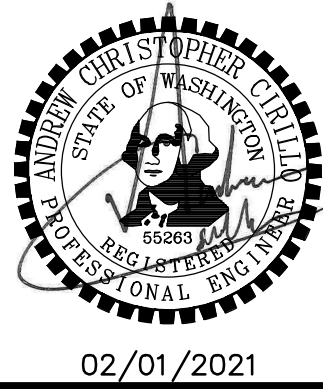
1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - B. CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- ✕ REMOVE EXISTING DRAINAGE STRUCTURE
- ┘ PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- ▨ INFILTRATION TRENCH PER DETAIL 2 DT4
- ▨ BIOFILTRATION SWALE PER DETAIL 3 DT4
- ▨ COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL 1 DT4

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			CHECKED
			A. EPSTEIN
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-SD9-13
JOB No. 214-3047-013
DATE FEBRUARY 2021

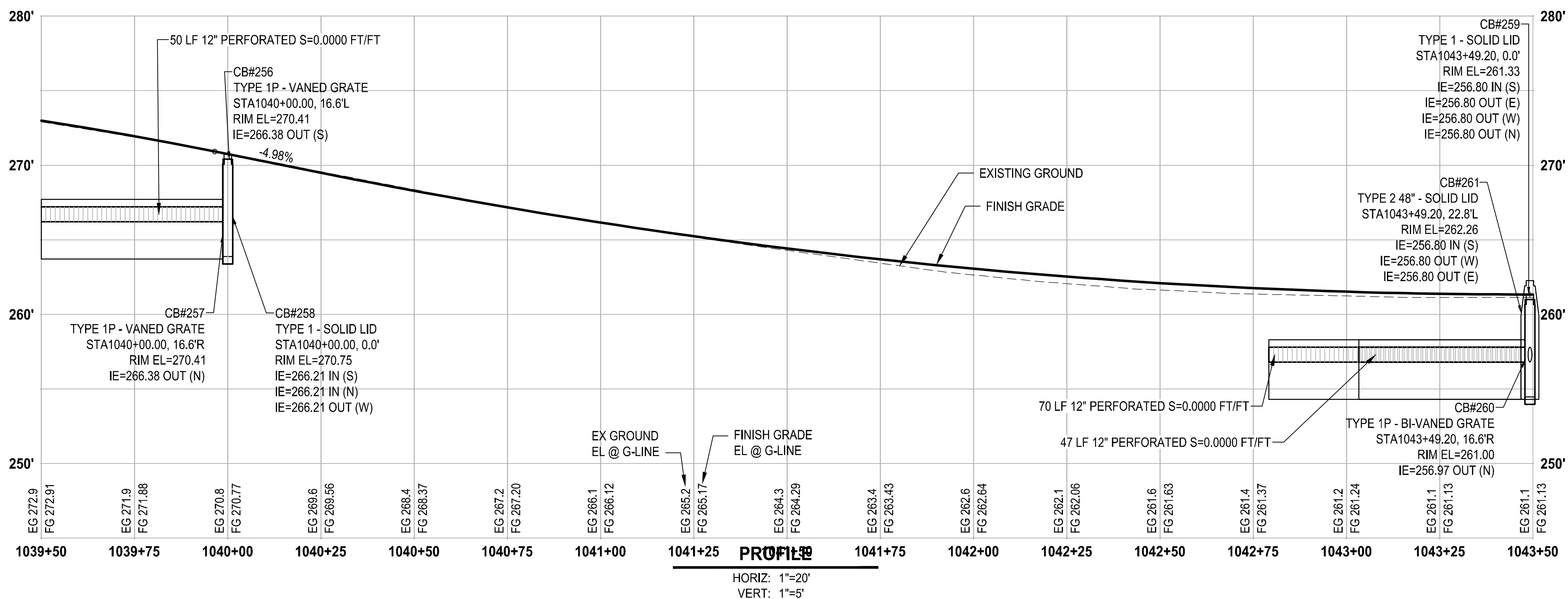
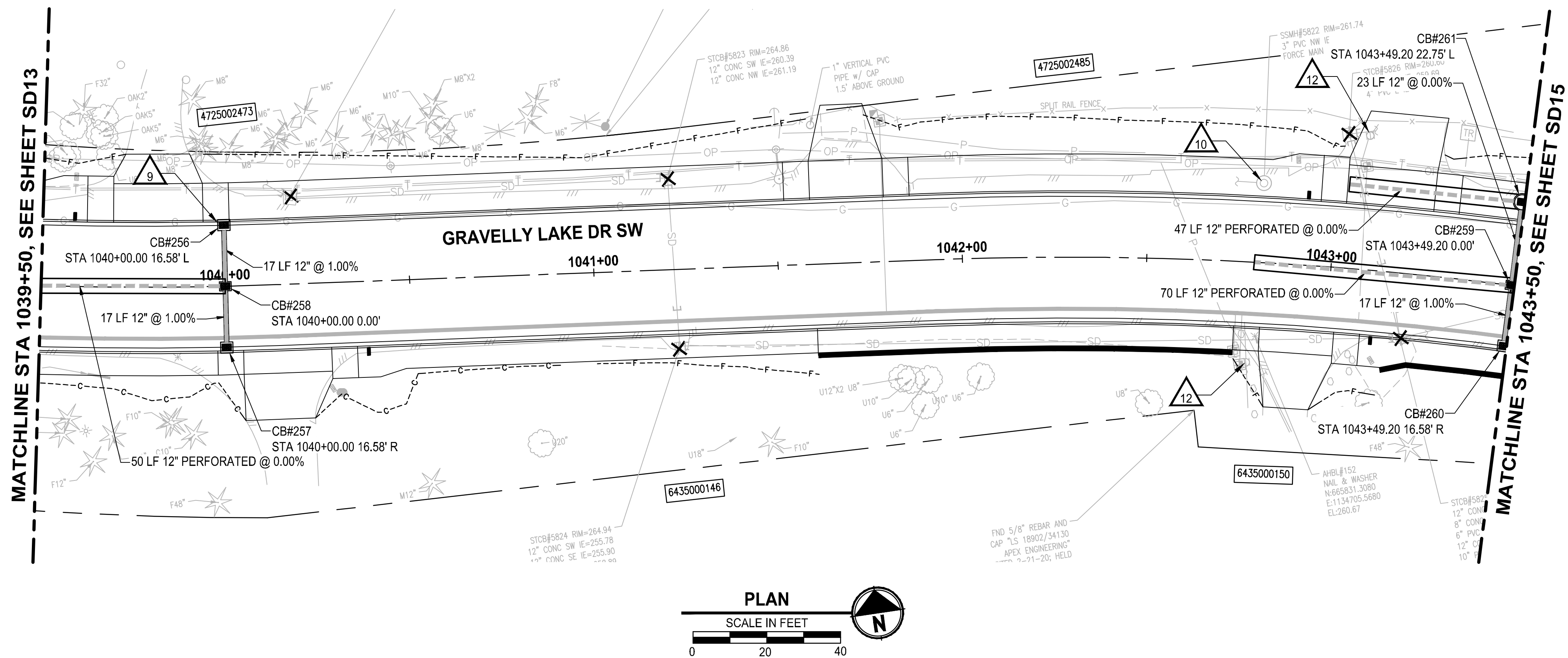


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO.
73 OF 153

SD13



△STORM DRAINAGE AND UTILITY NOTES

1. CONNECT TO EXISTING DRAINAGE STRUCTURE
2. CONNECT TO EXISTING STORM PIPE
3. PRESERVE AND PROTECT EXISTING CATCH BASIN
4. PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
5. WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
6. REMOVE EXISTING STORM PIPE
7. FLOW SPLITTER MANHOLE PER SPECIFICATIONS
8. ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
9. UTILITY TO BE RELOCATED BY OTHERS
10. SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
11. NOT USED
12. ADJUST EXISTING VALVE CASING TO FINISHED GRADE
13. ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - B. CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- | | |
|---|---|
|  | REMOVE EXISTING DRAINAGE STRUCTURE |
|  | PLUG EXISTING PIPE |
|  | CATCH BASIN TYPE 1 |
|  | CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW |
|  | CATCH BASIN TYPE 2 |
|  | MANHOLE TYPE 1 |
|  | STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED |
|  | INFILTRATION TRENCH PER DETAIL  |
|  | BIOFILTRATION SWALE PER DETAIL  |
|  | COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL  |

▷	REVISIONS	DATE	BY	DESIGNED A. CIRILLO
				DRAWN R. BEALS
				CHECKED A. EPSTEIN
				APPROVED A. FISHER

**ONE INCH AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY**

FILE NAME
PS3047013-SD14-19

JOB No.
214-3047-013

DATE
FEBRUARY 2021



PROJECT NAME

**JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1**

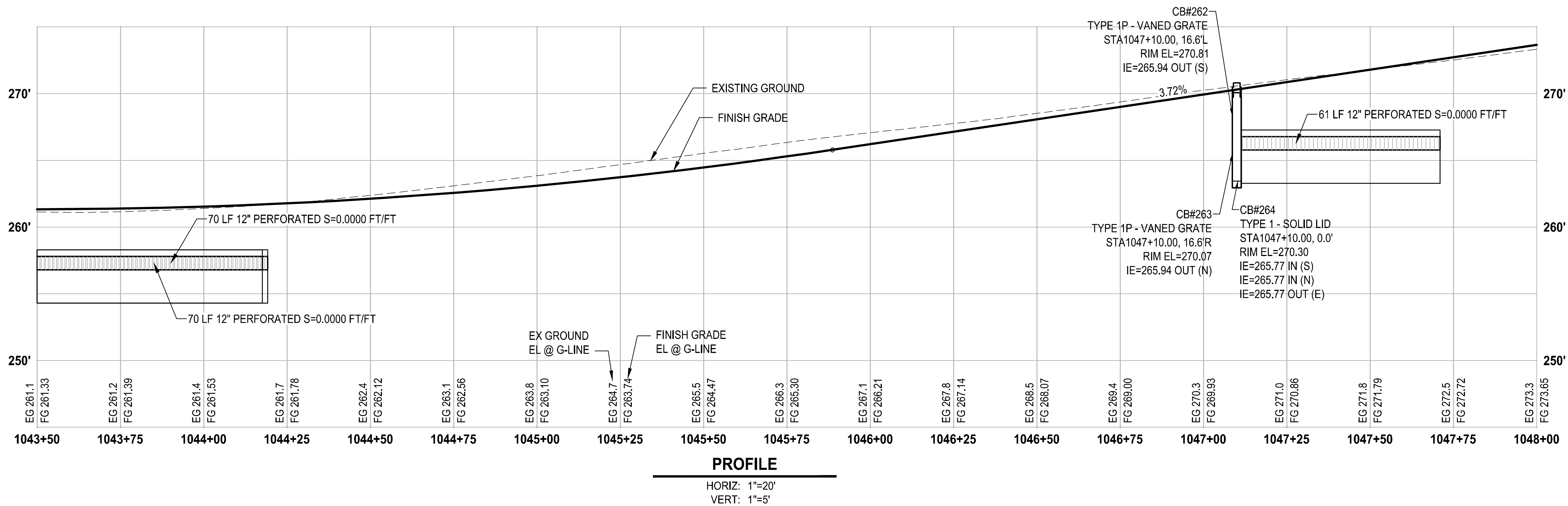
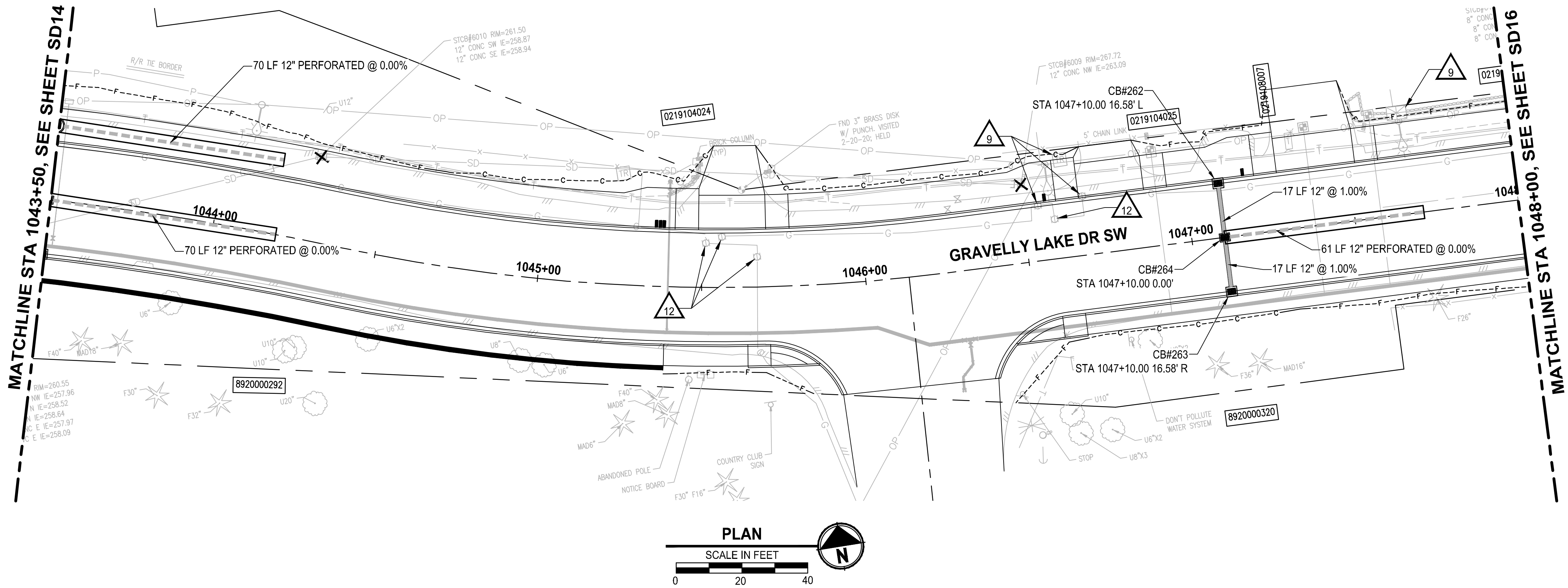
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO.
74 OF 153

SD14

LAYOUT: SD15 STORM DRAIN PLAN AND PROFILE
PATH: \\luniter\projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG
PLOTED BY: bbeals DATE: Tuesday, February 2, 2021 4:21:33 PM



STORM DRAINAGE AND UTILITY NOTES

- CONNECT TO EXISTING DRAINAGE STRUCTURE
- CONNECT TO EXISTING STORM PIPE
- PRESERVE AND PROTECT EXISTING CATCH BASIN
- PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
- WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
- REMOVE EXISTING STORM PIPE
- FLOW SPLITTER MANHOLE PER SPECIFICATIONS
- ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
- UTILITY TO BE RELOCATED BY OTHERS
- SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
- NOT USED
- ADJUST EXISTING VALVE CASING TO FINISHED GRADE
- ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

- REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
- SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
- ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
- CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
- SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- REMOVE EXISTING DRAINAGE STRUCTURE
- PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- INFILTRATION TRENCH PER DETAIL
- BIOFILTRATION SWALE PER DETAIL
- COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			CHECKED
			A. EPSTEIN
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-SD14-19
JOB No. 214-3047-013
DATE FEBRUARY 2021

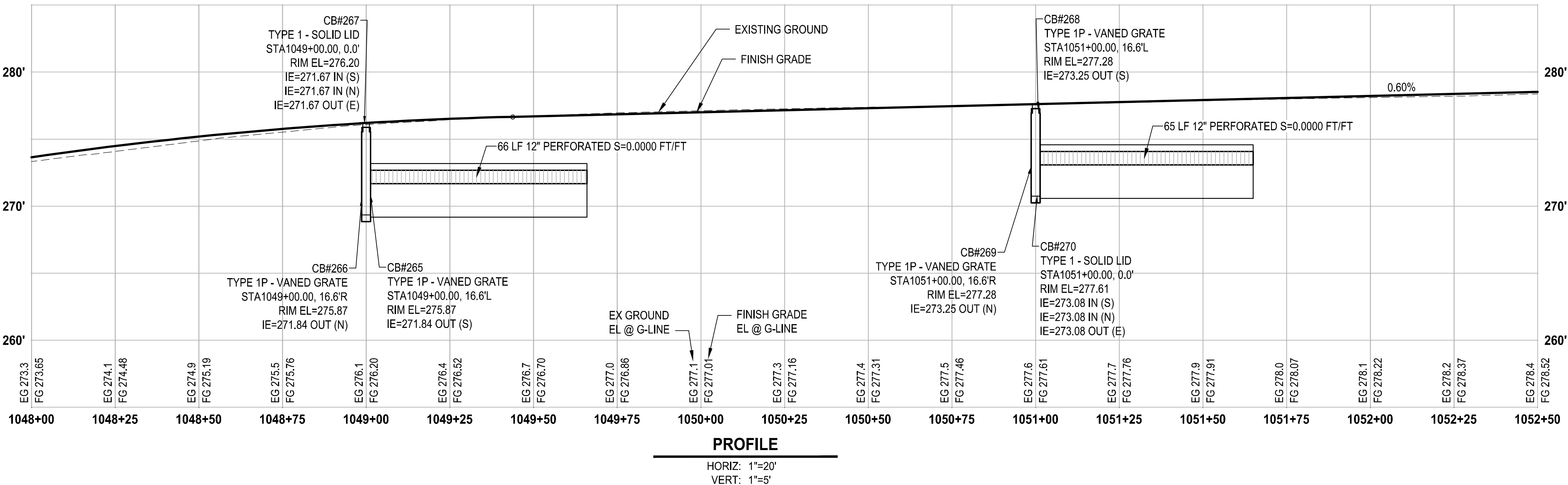
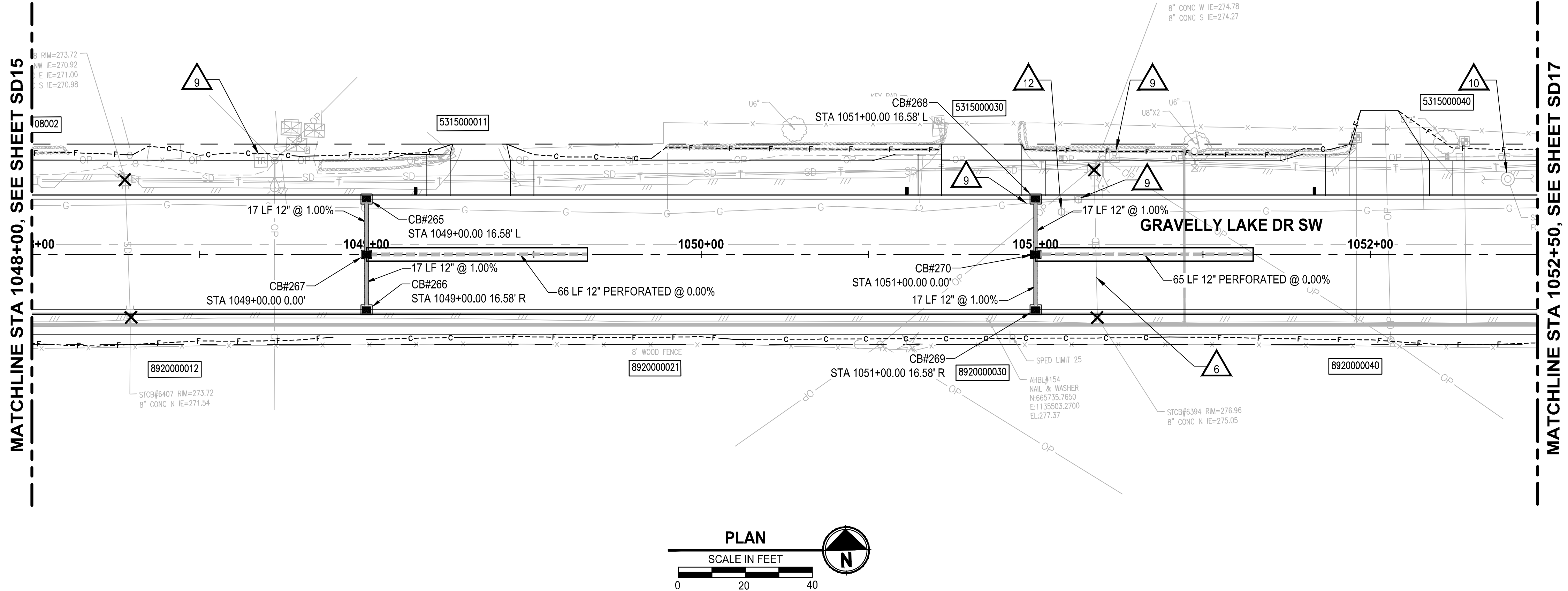


PROJECT NAME
**JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1**
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO.
75 OF 153
SD15

LAYOUT: SD16 STORM DRAIN PLAN AND PROFILE
PATH: \\luniter\projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG
PLOTED BY: bbeals DATE: Tuesday, February 2, 2021 4:22:05 PM



STORM DRAINAGE AND UTILITY NOTES

1. CONNECT TO EXISTING DRAINAGE STRUCTURE
2. CONNECT TO EXISTING STORM PIPE
3. PRESERVE AND PROTECT EXISTING CATCH BASIN
4. PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
5. WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
6. REMOVE EXISTING STORM PIPE
7. FLOW SPLITTER MANHOLE PER SPECIFICATIONS
8. ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
9. UTILITY TO BE RELOCATED BY OTHERS
10. SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
11. NOT USED
12. ADJUST EXISTING VALVE CASING TO FINISHED GRADE
13. ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - B. CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- ✕ REMOVE EXISTING DRAINAGE STRUCTURE
- ┘ PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- ▨ INFILTRATION TRENCH PER DETAIL 2 DT4
- ▨ BIOFILTRATION SWALE PER DETAIL 3 DT4
- ▨ COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL 1 DT4

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			CHECKED
			A. EPSTEIN
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-SD14-19
JOB No. 214-3047-013
DATE FEBRUARY 2021

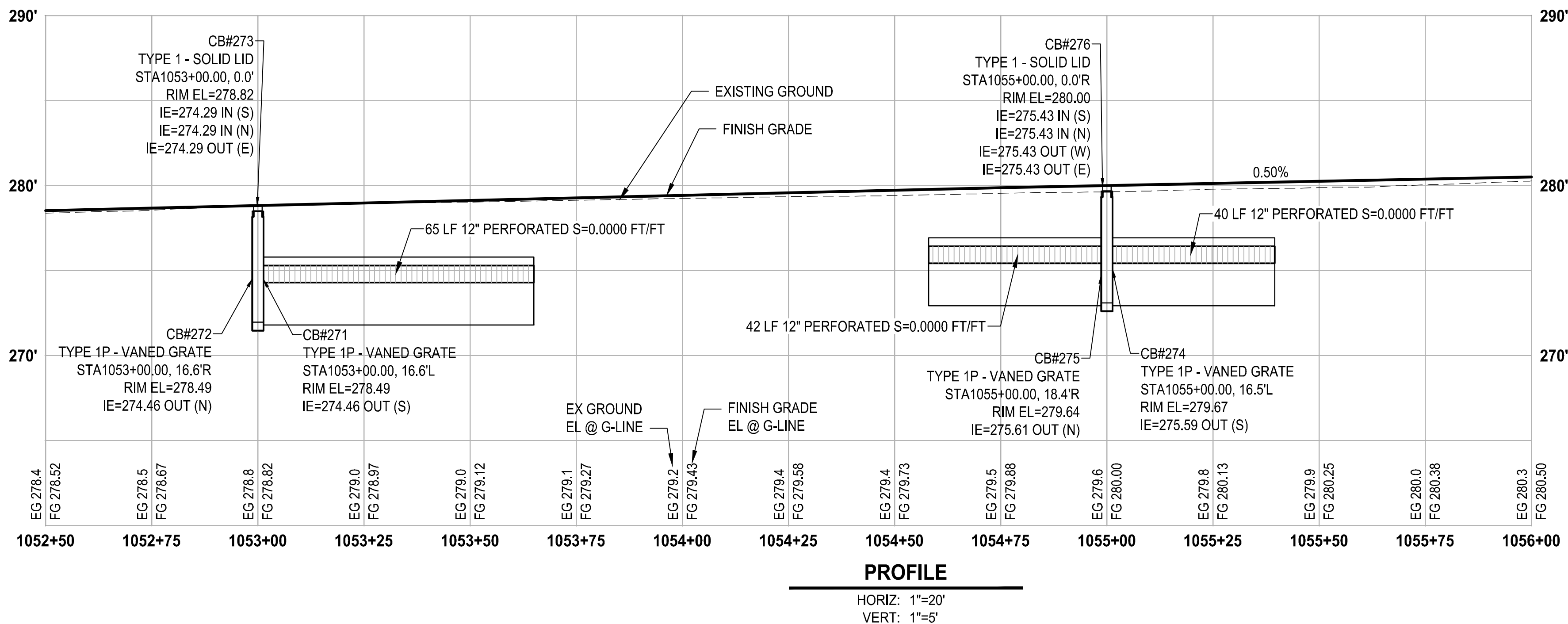
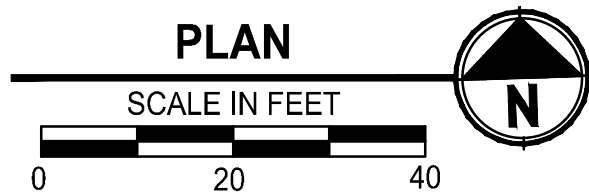
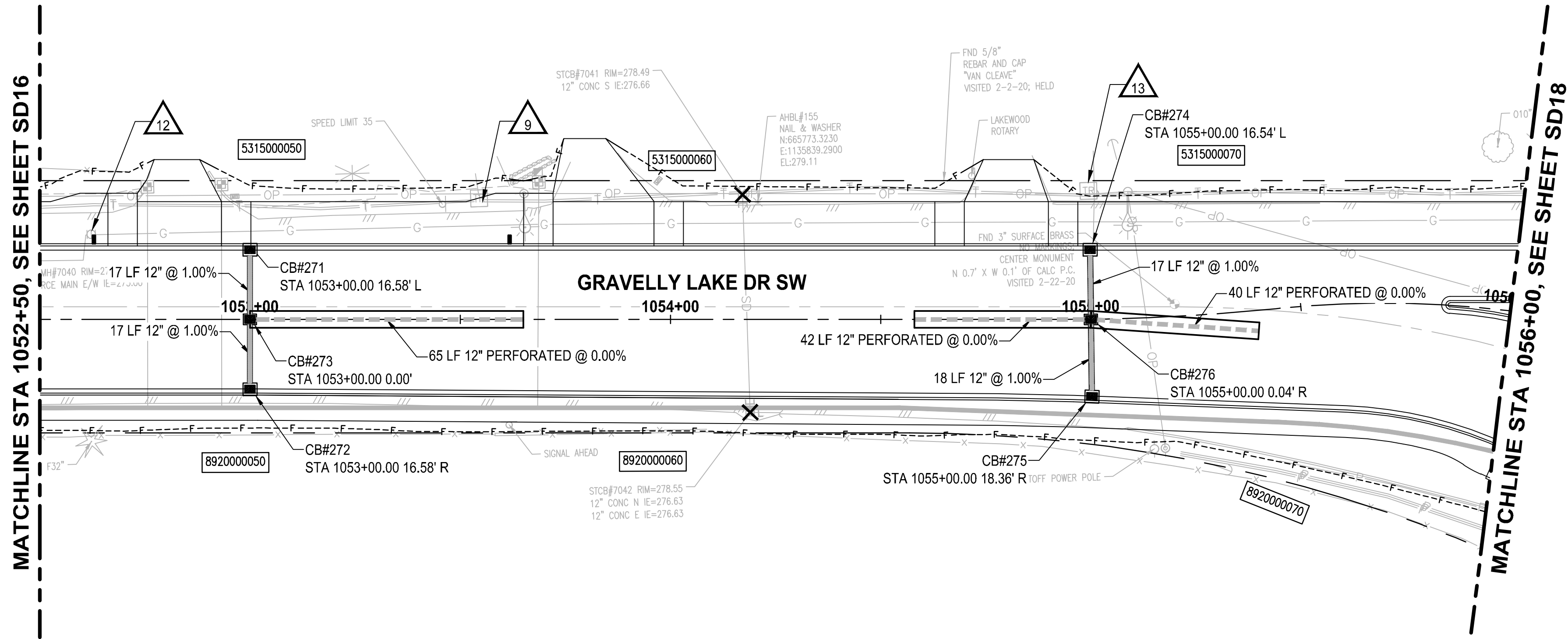


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO. 76 OF 153
SD16

LAYOUT: SD17 STORM DRAIN PLAN AND PROFILE
PATH: \\lucifer\projects\19000\19182\00.00 - JBLM North Access Impr\Civil\07-CAD\DWG
PLOTED BY: bbeals DATE: Tuesday, February 2, 2021 4:22:35 PM



STORM DRAINAGE AND UTILITY NOTES

1. CONNECT TO EXISTING DRAINAGE STRUCTURE
2. CONNECT TO EXISTING STORM PIPE
3. PRESERVE AND PROTECT EXISTING CATCH BASIN
4. PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
5. WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
6. REMOVE EXISTING STORM PIPE
7. FLOW SPLITTER MANHOLE PER SPECIFICATIONS
8. ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
9. UTILITY TO BE RELOCATED BY OTHERS
10. SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
11. NOT USED
12. ADJUST EXISTING VALVE CASING TO FINISHED GRADE
13. ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - B. CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- ✕ REMOVE EXISTING DRAINAGE STRUCTURE
- └ PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- INFILTRATION TRENCH PER DETAIL 2 DT4
- BIOFILTRATION SWALE PER DETAIL 3 DT4
- COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL 1 DT4

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			A. EPSTEIN
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.
FILE NAME PS3047013-SD14-19
JOB No. 214-3047-013
DATE FEBRUARY 2021



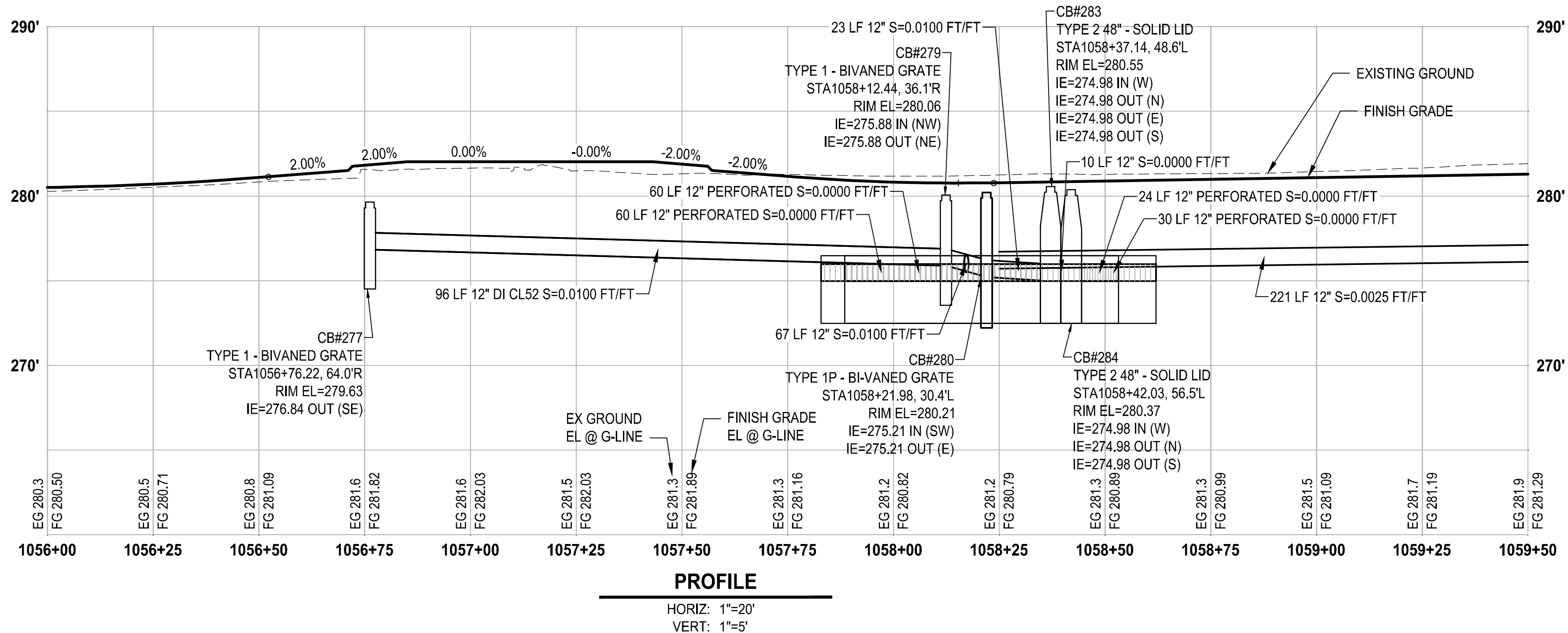
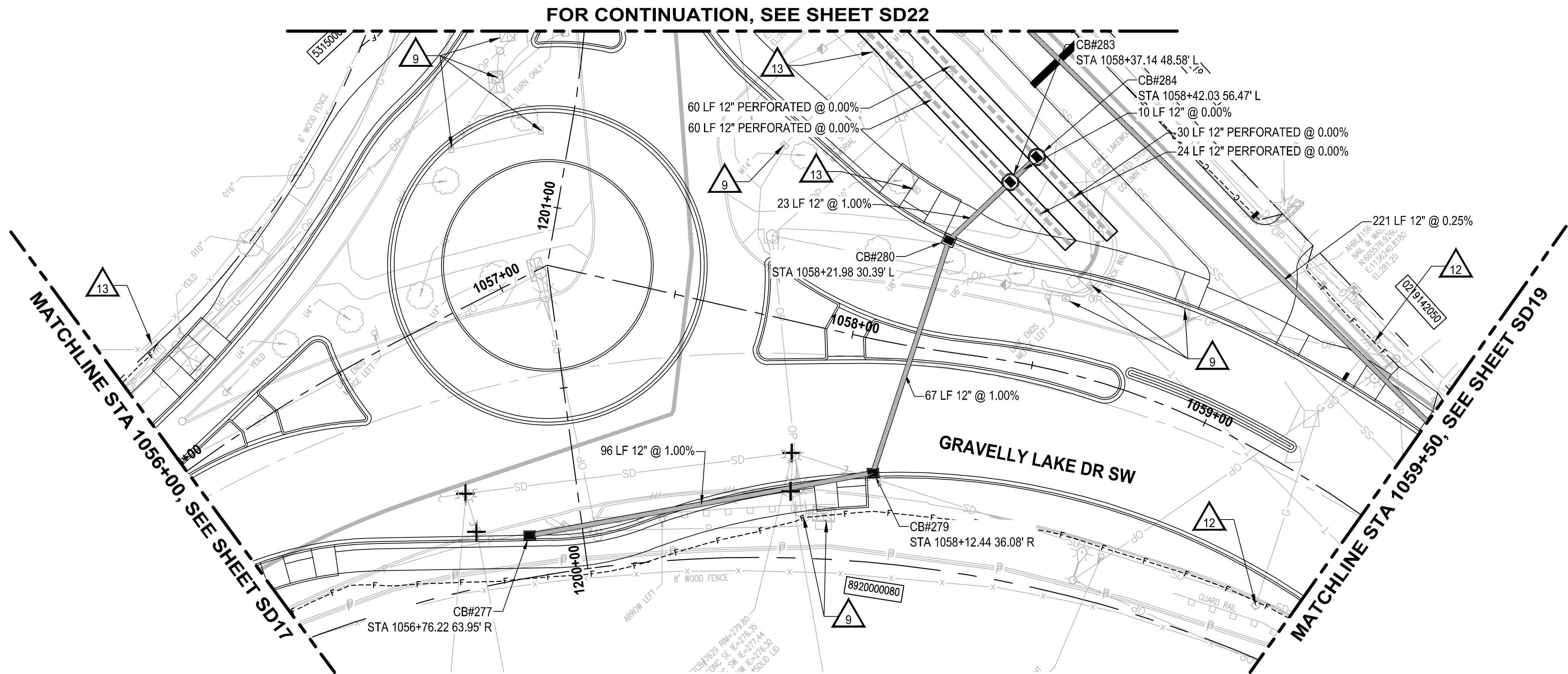
PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO.
77 OF 153

SD17

LAYOUT: SD18 STORM DRAIN PLAN AND PROFILE
PATH: \\jurister\projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG
PLOTED BY: bbeals DATE: Tuesday, February 2, 2021 4:23:19 PM



STORM DRAINAGE AND UTILITY NOTES

1. CONNECT TO EXISTING DRAINAGE STRUCTURE
2. CONNECT TO EXISTING STORM PIPE
3. PRESERVE AND PROTECT EXISTING CATCH BASIN
4. PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
5. WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
6. REMOVE EXISTING STORM PIPE
7. FLOW SPLITTER MANHOLE PER SPECIFICATIONS
8. ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
9. UTILITY TO BE RELOCATED BY OTHERS
10. SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
11. NOT USED
12. ADJUST EXISTING VALVE CASING TO FINISHED GRADE
13. ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

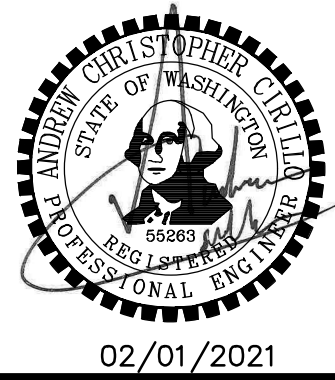
1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - B. CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- ✕ REMOVE EXISTING DRAINAGE STRUCTURE
- 1 PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- ⊙ CATCH BASIN TYPE 2
- ⊙ MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- INFILTRATION TRENCH PER DETAIL 2 DT4
- BIOFILTRATION SWALE PER DETAIL 3 DT4
- COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL 1 DT4

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			A. EPSTEIN
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-SD14-19
JOB No. 214-3047-013
DATE FEBRUARY 2021

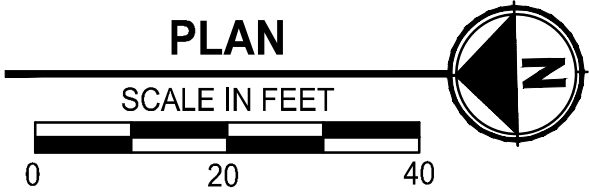


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO.
78 OF 153

SD18



HORIZ: 1"=20'
VERT: 1"=5'

	REVIEWS	DATE	BY	DESIGNED A. CIRILLO
				DRAWN R. BEALS
				CHECKED A. EPSTEIN
				APPROVED A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY	
FILE NAME	PS3047013-SD14-19
JOB No.	214-3047-013
DATE	FEBRUARY 2021



PROJECT NAME

**JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1**

LAKEWOOD, WASHINGTON

STORM DRAIN PLAN AND PROFILE

DRAWING NO.
9 OF 153

SD19

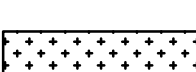
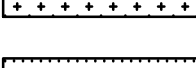
△STORM DRAINAGE AND UTILITY NOTES

1. CONNECT TO EXISTING DRAINAGE STRUCTURE
2. CONNECT TO EXISTING STORM PIPE
3. PRESERVE AND PROTECT EXISTING CATCH BASIN
4. PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
5. WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
6. REMOVE EXISTING STORM PIPE
7. FLOW SPLITTER MANHOLE PER SPECIFICATIONS
8. ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
9. UTILITY TO BE RELOCATED BY OTHERS
10. SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
11. NOT USED
12. ADJUST EXISTING VALVE CASING TO FINISHED GRADE
13. ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

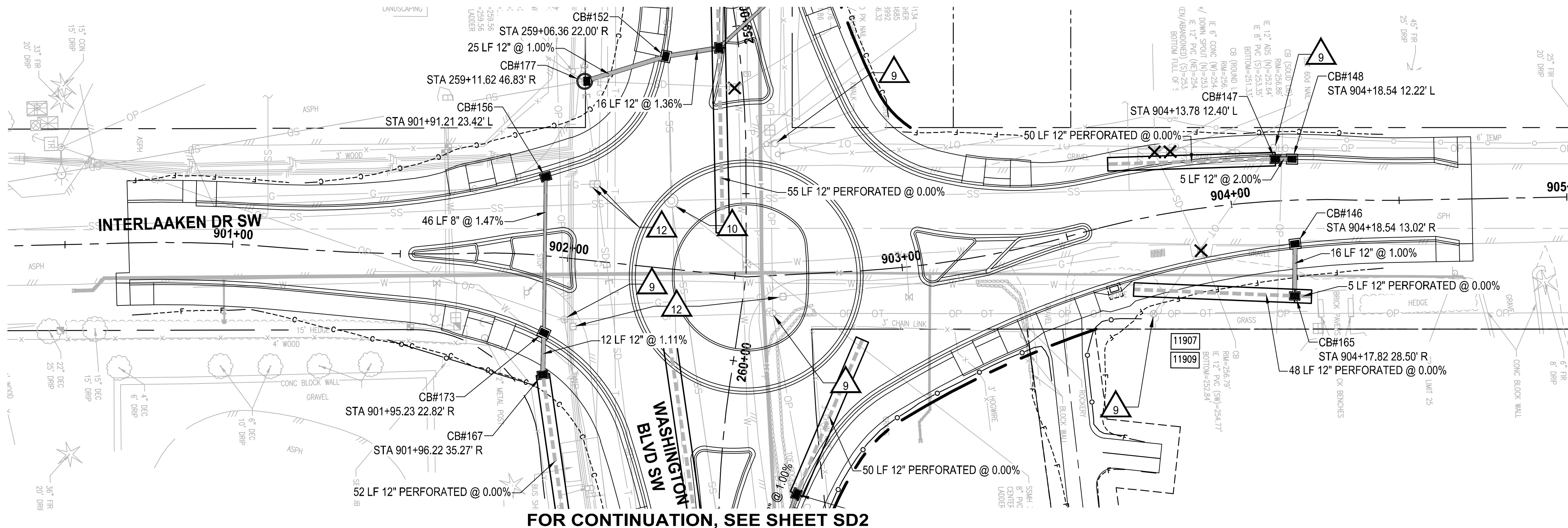
1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - B. CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

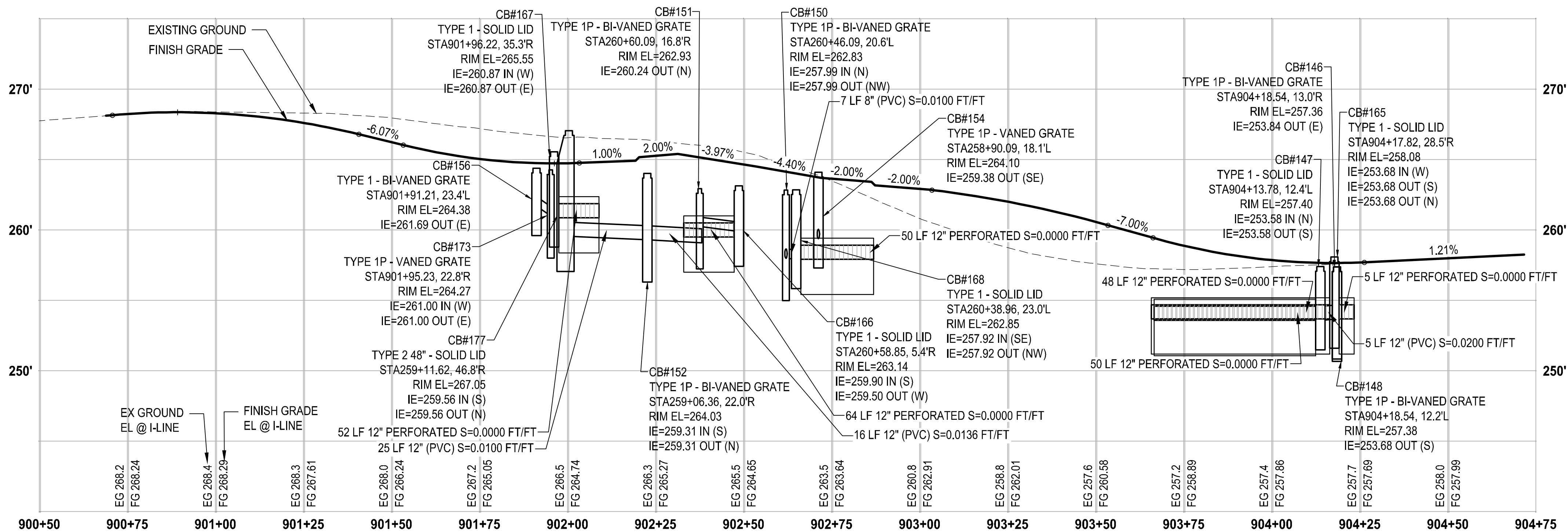
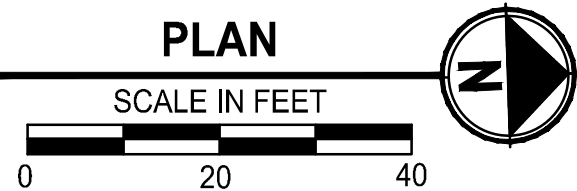
- | | |
|---|---|
|  | REMOVE EXISTING DRAINAGE STRUCTURE |
|  | PLUG EXISTING PIPE |
|  | CATCH BASIN TYPE 1 |
|  | CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW |
|  | CATCH BASIN TYPE 2 |
|  | MANHOLE TYPE 1 |
|  | STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED |
|  | INFILTRATION TRENCH PER DETAIL  |
|  | BIOFILTRATION SWALE PER DETAIL  |
|  | COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL  |

PATH: \\lapiter\projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG PLOTTED BY: bbeals DATE: Tuesday, February 2, 2021 4:24:28 PM LAYOUT: SD20 STORM DRAIN PLAN AND PROFILE

FOR CONTINUATION, SEE SHEET SD2



FOR CONTINUATION, SEE SHEET SD2



PROFILE

HORIZ: 1"=20'
VERT: 1"=5'

STORM DRAINAGE AND UTILITY NOTES

1. CONNECT TO EXISTING DRAINAGE STRUCTURE
2. CONNECT TO EXISTING STORM PIPE
3. PRESERVE AND PROTECT EXISTING CATCH BASIN
4. PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
5. WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
6. REMOVE EXISTING STORM PIPE
7. FLOW SPLITTER MANHOLE PER SPECIFICATIONS
8. ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
9. UTILITY TO BE RELOCATED BY OTHERS
10. SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
11. NOT USED
12. ADJUST EXISTING VALVE CASING TO FINISHED GRADE
13. ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

1. REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
2. PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
3. PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
4. SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - A. CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - B. CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - C. CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - D. MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - E. SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - F. VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - G. BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
5. ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
6. CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
7. SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- ✕ REMOVE EXISTING DRAINAGE STRUCTURE
- └ PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- INFILTRATION TRENCH PER DETAIL (2/DT4)
- BIOFILTRATION SWALE PER DETAIL (3/DT4)
- COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL (1/DT4)

REVISIONS	DATE	BY	DESIGNED
			S. PODGORSKI
			R. BEALS
			A. EPSTEIN
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.
FILE NAME PS3047013-SD20
JOB No. 214-3047-013
DATE FEBRUARY 2021



PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

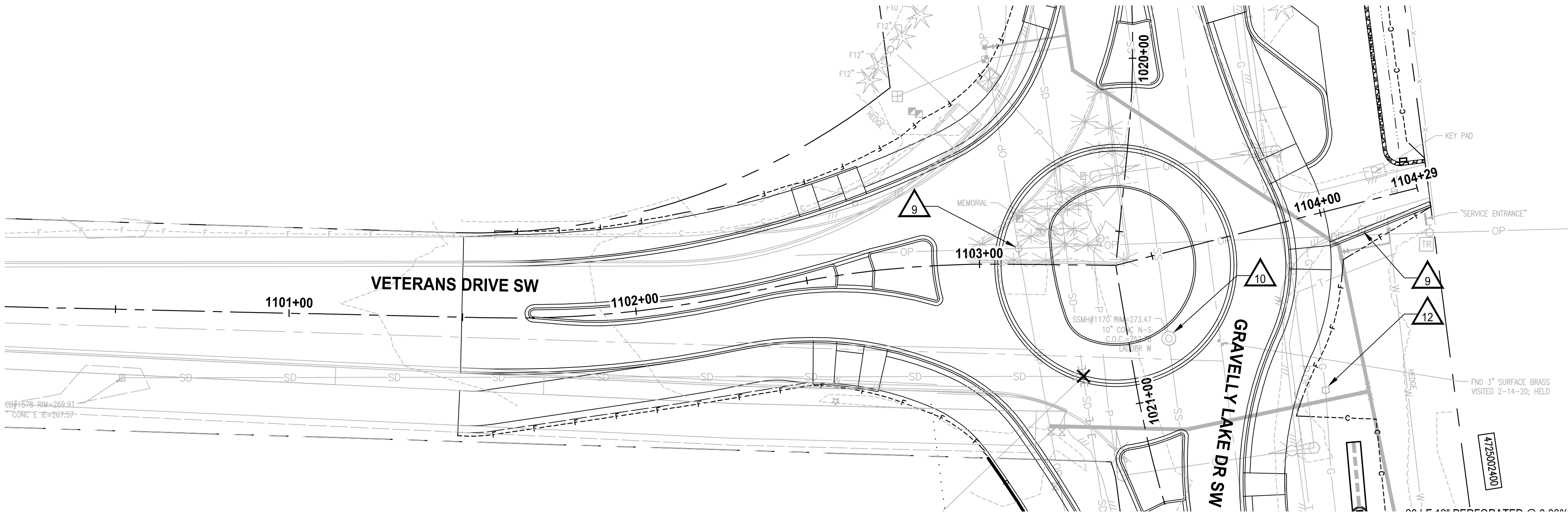
STORM DRAIN PLAN AND PROFILE

DRAWING NO.
80 OF 153

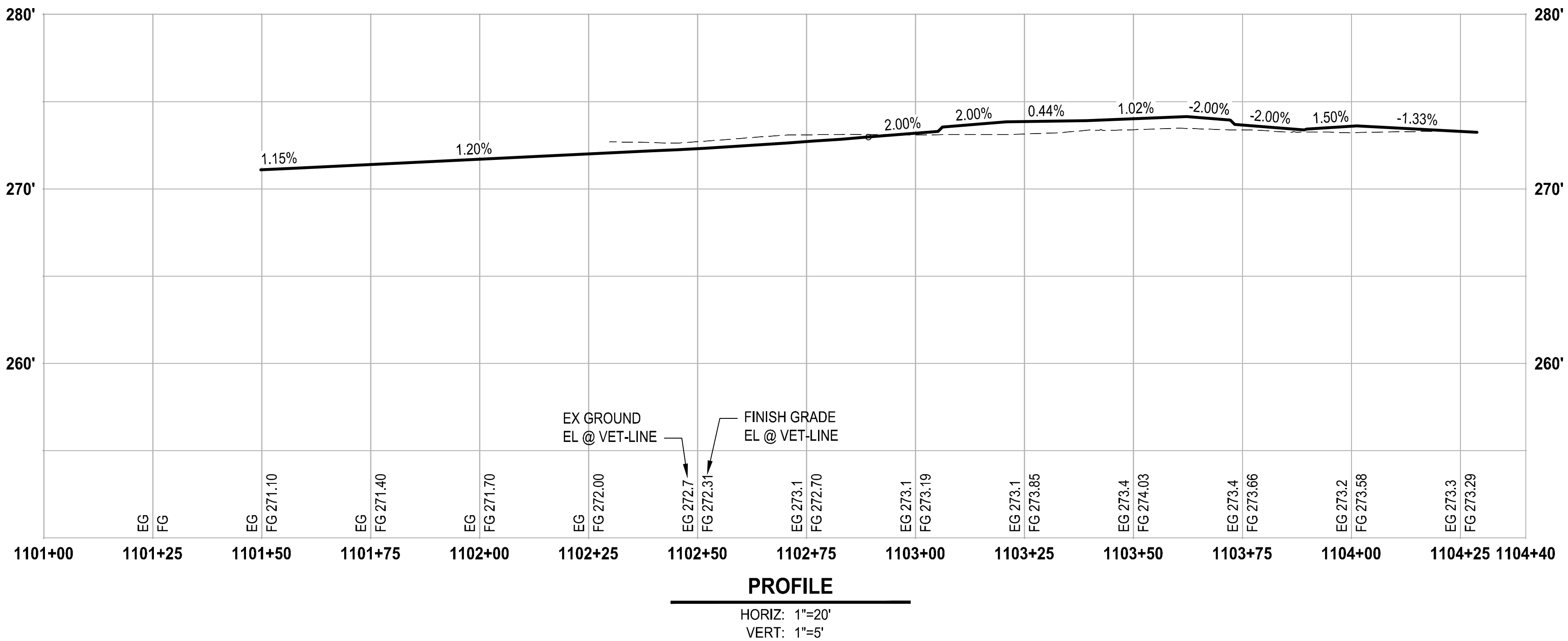
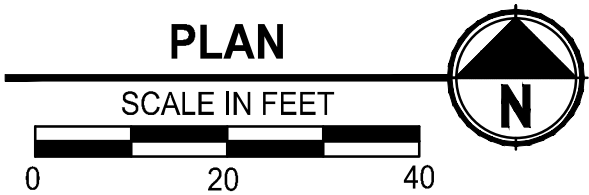
SD20

LAYOUT: SD21 STORM DRAIN PLAN AND PROFILE
PATH: \\jurite\projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG
PLOTED BY: bbeals DATE: Tuesday, February 2, 2021 4:25:50 PM

FOR CONTINUATION, SEE SHEET SD9



FOR CONTINUATION, SEE SHEET SD9



STORM DRAINAGE AND UTILITY NOTES

- CONNECT TO EXISTING DRAINAGE STRUCTURE
- CONNECT TO EXISTING STORM PIPE
- PRESERVE AND PROTECT EXISTING CATCH BASIN
- PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
- WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
- REMOVE EXISTING STORM PIPE
- FLOW SPLITTER MANHOLE PER SPECIFICATIONS
- ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
- UTILITY TO BE RELOCATED BY OTHERS
- SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
- NOT USED
- ADJUST EXISTING VALVE CASING TO FINISHED GRADE
- ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

- REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
- SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
- ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
- CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
- SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- REMOVE EXISTING DRAINAGE STRUCTURE
- PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- INFILTRATION TRENCH PER DETAIL 2 DT4
- BIOFILTRATION SWALE PER DETAIL 3 DT4
- COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL 1 DT4

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			CHECKED
			A. EPSTEIN
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-SD21-22
JOB No. 214-3047-013
DATE FEBRUARY 2021



PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

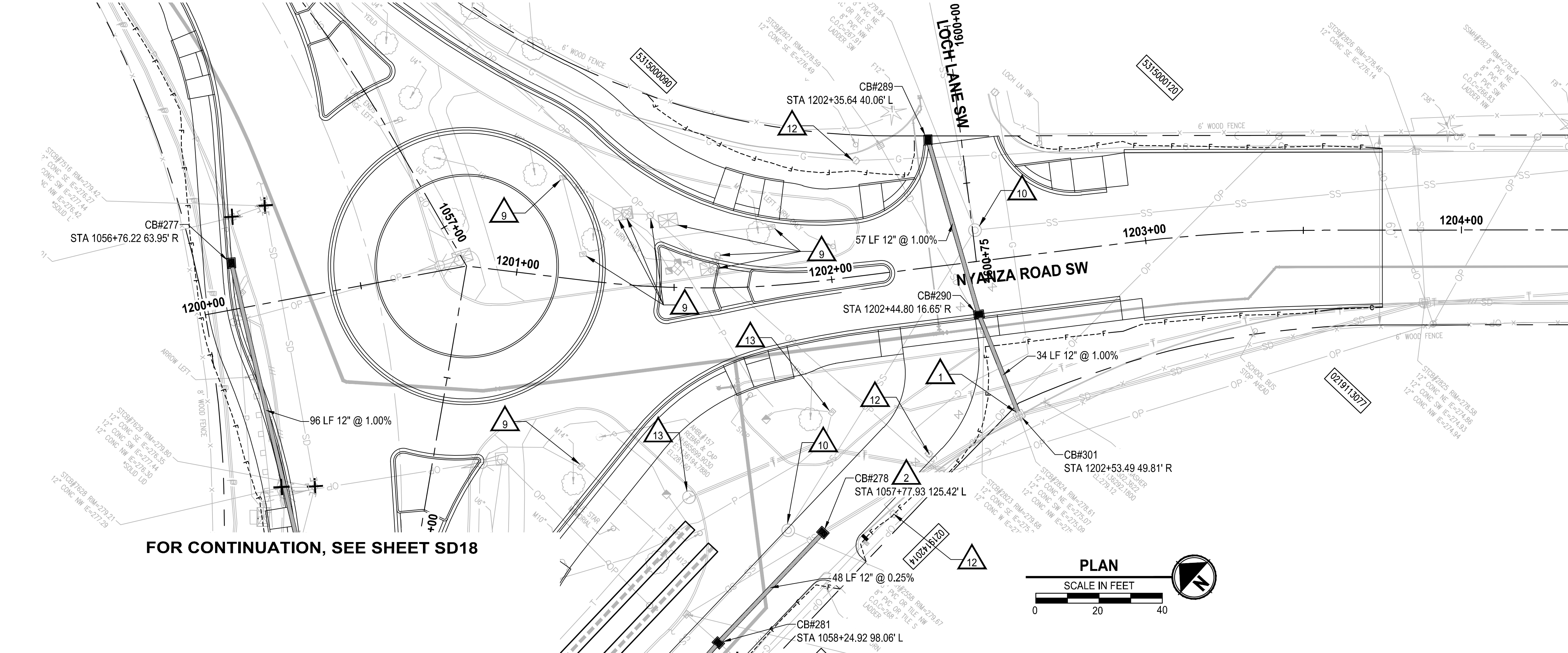
STORM DRAIN PLAN AND PROFILE

DRAWING NO.
81 OF 153

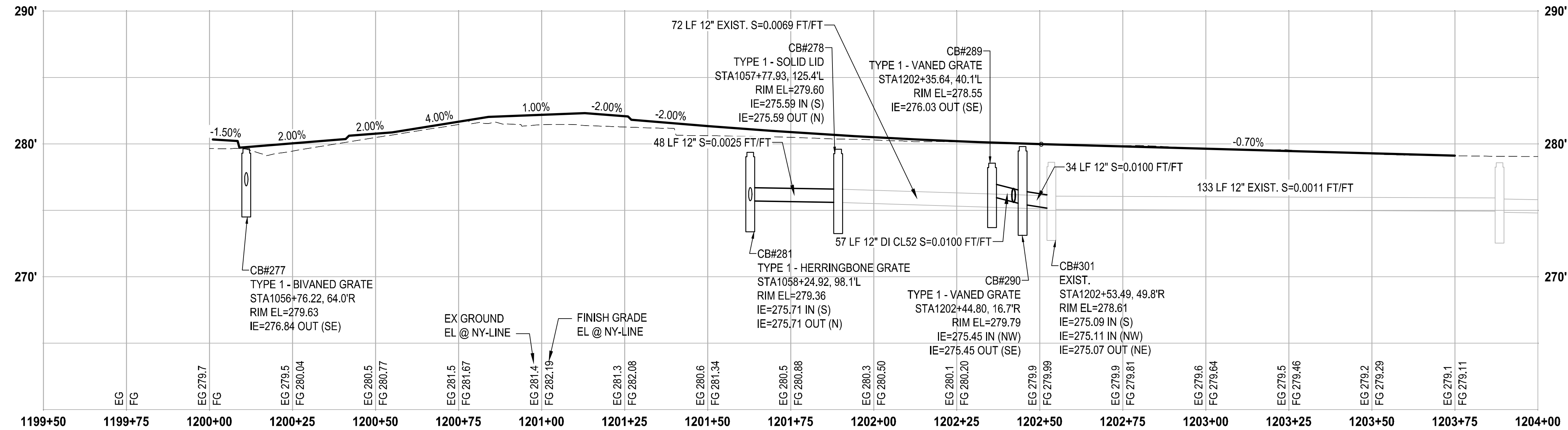
SD21

LAYOUT: SD22 STORM DRAIN PLAN AND PROFILE
PATH: \\lupiter\projects\19000\19182.00.00 - JBLM North Access Impr\Civil\07-CAD\DWG
PLOTED BY: bbeals DATE: Friday, February 5, 2021 12:00:34 PM

FOR CONTINUATION, SEE SHEET SD18



FOR CONTINUATION, SEE SHEET SD18



PROFILE

HORIZ: 1"=20'
VERT: 1"=5'

STORM DRAINAGE AND UTILITY NOTES

- CONNECT TO EXISTING DRAINAGE STRUCTURE
- CONNECT TO EXISTING STORM PIPE
- PRESERVE AND PROTECT EXISTING CATCH BASIN
- PRESERVE AND PROTECT EXISTING STORM DRAIN PIPE
- WATER QUALITY TREATMENT UNIT PER SPECIFICATIONS
- REMOVE EXISTING STORM PIPE
- FLOW SPLITTER MANHOLE PER SPECIFICATIONS
- ADJUST EXISTING CATCH BASIN TO FINISHED GRADE
- UTILITY TO BE RELOCATED BY OTHERS
- SANITARY SEWER MANHOLE, SEE SPECIFICATIONS FOR WORK REQUIRED
- NOT USED
- ADJUST EXISTING VALVE CASING TO FINISHED GRADE
- ADJUST EXISTING JUNCTION BOX TO FINISHED GRADE

GENERAL NOTES

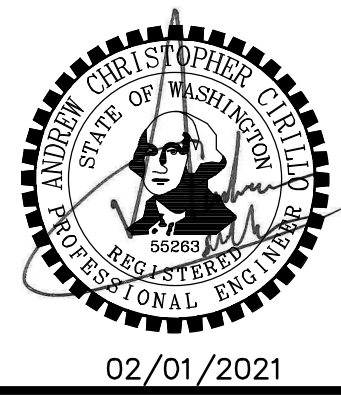
- REMOVE EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PLUG AND ABANDON EXISTING STORM DRAIN PIPES IN PLACE WITHIN THE PROJECT LIMITS UNLESS OTHERWISE NOTED
- PRESERVE AND PROTECT EXISTING UTILITIES UNLESS OTHERWISE NOTED
- SEE PROFILE CALLOUTS FOR STRUCTURE AND GRATE/ LID TYPE
 - CATCH BASIN TYPE 1 PER WSDOT STD PLAN B-5.20-02
 - CATCH BASIN TYPE 1P PER WSDOT STD PLAN B-5.60-02
 - CATCH BASIN TYPE 2 PER WSDOT STD PLAN B-10.20-02
 - MANHOLE TYPE 1 PER WSDOT STD PLAN B-15.20-02
 - SOLID LOCKING LID PER WSDOT STD PLAN B-20.30-04
 - VANED GRATES PER WSDOT STD PLAN B-30.30-03
 - BI-VANED GRATES PER WSDOT STD PLAN B-30.40-03
- ALL TYPE 1P CATCH BASINS SHALL HAVE A DOWNTURNED ELBOW PER LAKEWOOD STD PLAN SW-03
- CIRCULAR RING AND COVER PER WSDOT STD PLAN B-30.70-04
- SEE WS SHEETS FOR WATER SYSTEM DESIGN

LEGEND

- REMOVE EXISTING DRAINAGE STRUCTURE
- PLUG EXISTING PIPE
- CATCH BASIN TYPE 1
- CATCH BASIN TYPE 1P WITH DOWNTURNED ELBOW
- CATCH BASIN TYPE 2
- MANHOLE TYPE 1
- STORM SEWER PIPE, SCHEDULE A UNLESS OTHERWISE NOTED
- INFILTRATION TRENCH PER DETAIL 2 DT4
- BIOFILTRATION SWALE PER DETAIL 3 DT4
- COMPOST AMENDED VEGETATED FILTER STRIP PER DETAIL 1 DT4

REVISIONS	DATE	BY	DESIGNED
			A. CIRILLO
			R. BEALS
			CHECKED
			A. EPSTEIN
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-SD21-22
JOB No. 214-3047-013
DATE FEBRUARY 2021



PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

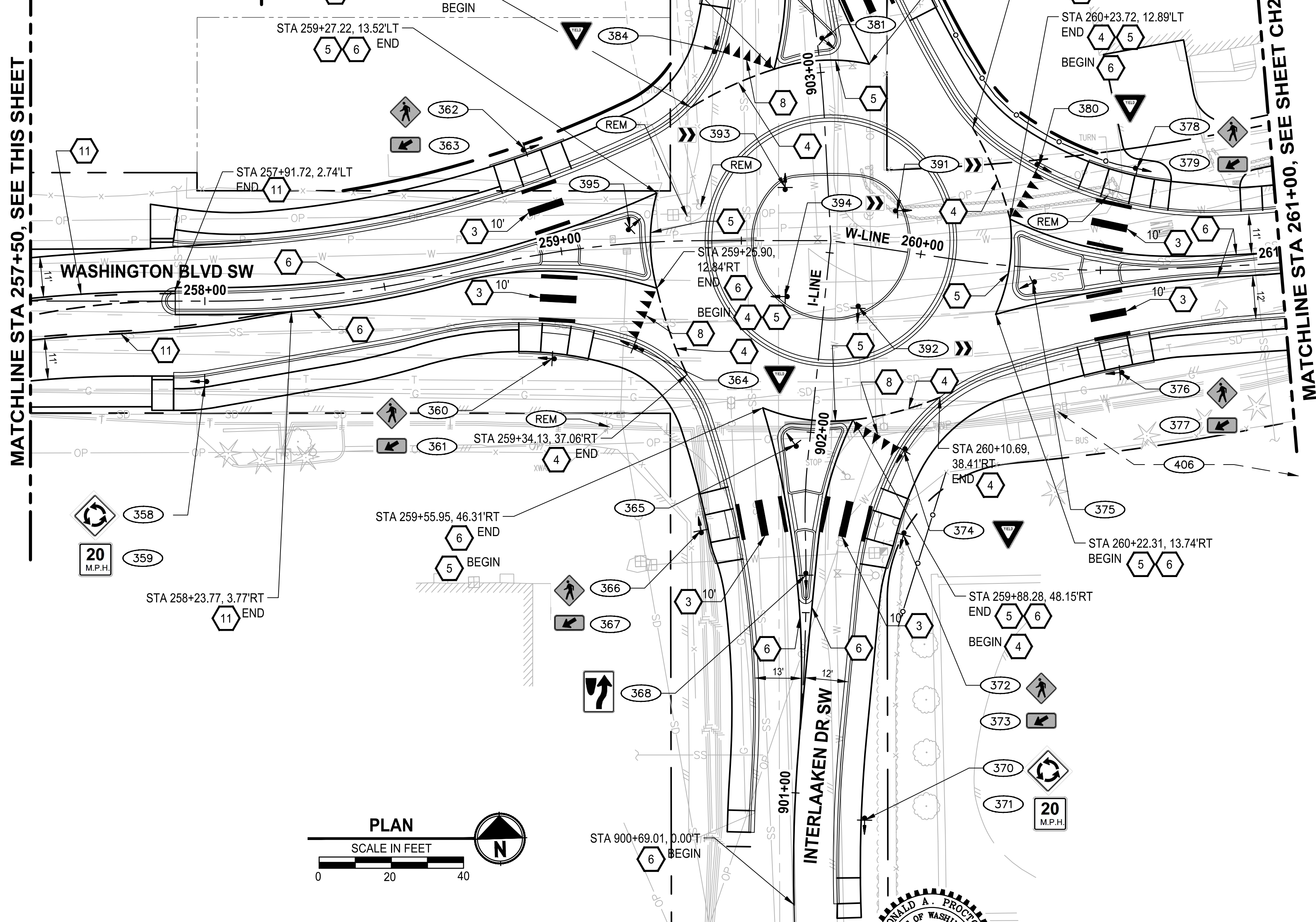
STORM DRAIN PLAN AND PROFILE

DRAWING NO. 82 OF 153
SD22

U:\PSO\Projects\Clients\3047-City of Lakewood\214-3047-013 JBLM North Access\995\cadd\DWG PLOTTED BY: toyekot DATE: Tuesday, February 2, 2021 2:24:43 PM
LAYOUT: CH1

MATCHLINE STA 257+50, SEE THIS SHEET

MATCHLINE STA 257+50, SEE THIS SHEET



SIGN SCHEDULE						
SIGN #	ALIGNMENT	STATION & OFFSET	MUTCD	SIZE (IN) W X H	DESCRIPTION	COMMENTS
354	NOT USED					
355	NOT USED					
356	NOT USED					
357	NOT USED					
358	W-LINE	258+00 22.2' RT	W2-6	30" X 30"	ROUNDBOUT CIRCULATION PLAQUE	INSTALL NEW SIGN ON NEW POST
359	W-LINE	258+00 22.2' RT	W13-1P	18" x 18"	ADVISORY SPEED PLAQUE	INSTALL NEW SIGN UNDER SIGN 358, ON SAME POST
360	W-LINE	258+92 28.9' RT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
361	W-LINE	258+92 28.9' RT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 360, ON SAME POST
362	W-LINE	258+95 29.4' LT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
363	W-LINE	258+95 29.4' LT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 362, ON SAME POST
364	W-LINE	259+17 28.4' RT	R1-2	30" X 30" X 30"	"YIELD"	INSTALL NEW SIGN ON NEW POST
365	I-LINE	901+96 3.9' LT	D3-1	38" X 12"	"INTERLAAKEN DR SW"	INSTALL NEW SIGN ON NEW POST, SEE COL STD PLAN PS-01 FOR SIGN DETAILS
366	I-LINE	901+73 28.5' LT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST

CHANNELIZATION NOTES:

1. INSTALL PLASTIC DOUBLE CENTERLINE (YELLOW) PER PIERCE COUNTY STD PLAN PC. H2.9
2. INSTALL PLASTIC STOP BAR PER COL STD PLAN PS-05
3. INSTALL PLASTIC CROSSWALK LINE PER COL STD PLAN PS-05
4. INSTALL PLASTIC WHITE DOTTED ENTRY LINE PER WSDOT STD PLAN M-12.10-01
5. INSTALL PLASTIC WIDE LANE LINE PER PIERCE COUNTY STD PLAN PC. H2.9
6. INSTALL PLASTIC EDGE LINE (YELLOW) PER PIERCE COUNTY STD PLAN PC. H2.9
7. INSTALL PLASTIC EDGE LINE (WHITE) PER PIERCE COUNTY STD PLAN PC. H2.9
8. INSTALL YIELD LINE SYMBOL PER WSDOT STD PLAN M-24.60-04
9. INSTALL PLASTIC TRAFFIC ARROW PER PIERCE COUNTY STD PLAN PC. H2.8 AND WSDOT STD PLAN M-12.10-01
10. INSTALL BIKE LANE SYMBOL PER COL STD PLAN PS-04
11. INSTALL PLASTIC WIDE DOTTED LANE LINE PER PIERCE COUNTY STD PLAN PC. H2.9
12. INSTALL PLASTIC TWO-WAY LEFT-TURN CENTER LINE PER PIERCE COUNTY STD PLAN PC. H2.9
13. INSTALL PLASTIC ACCESS PARKING SYMBOL
14. INSTALL PLASTIC LINE (4 INCH)

LEGEND:

- ↓ NEW SIGN, SINGLE POST PER CITY OF LAKEWOOD STD DETAIL PS-03
- (REM) REMOVE SIGN
- (XX) RELOCATE / REPLACED SIGN

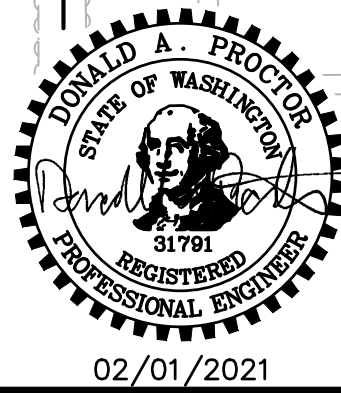
GENERAL NOTES:

1. SALVAGE ALL EXISTING SIGNS AND METAL POSTS TO O&M SHOP.

SIGN SCHEDULE						
SIGN #	ALIGNMENT	STATION & OFFSET	MUTCD	SIZE (IN) W X H	DESCRIPTION	COMMENTS
367	I-LINE	901+73 28.5' LT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 366, ON SAME POST
368	I-LINE	901+60 0.0' LT	R4-7	24" X 30"	KEEP RIGHT	INSTALL NEW SIGN ON NEW POST
369	NOT USED					
370	I-LINE	900+93 19.4' RT	W2-6	30" X 30"	ROUNDBOUT CIRCULATION PLAQUE	INSTALL NEW SIGN ON NEW POST
371	I-LINE	900+93 19.4' RT	W13-1P	18" x 18"	ADVISORY SPEED PLAQUE	INSTALL NEW SIGN UNDER SIGN 370, ON SAME POST
372	I-LINE	901+71 27.0' RT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
373	I-LINE	901+71 27.0' RT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 372, ON SAME POST
374	I-LINE	901+98 26.2' RT	R1-2	30" X 30" X 30"	"YIELD"	INSTALL NEW SIGN ON NEW POST
375	W-LINE	260+31 4.2' RT	D3-1	36" X 12"	"WASHINGTON BLVD SW"	INSTALL NEW SIGN ON NEW POST, SEE COL STD PLAN PS-01 FOR SIGN DETAILS
376	W-LINE	260+55 28.4' RT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
377	W-LINE	260+55 28.4' RT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 376, ON SAME POST
378	W-LINE	260+61 28.0' LT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
379	W-LINE	260+61 28.0' LT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 379, ON SAME POST
380	W-LINE	260+31 28.3' LT	R1-2	30" X 30" X 30"	"YIELD"	INSTALL NEW SIGN ON NEW POST
381	I-LINE	903+09 2.0' RT	D3-1	38" X 12"	"INTERLAAKEN DR SW"	INSTALL NEW SIGN ON NEW POST, SEE COL STD PLAN PS-01 FOR SIGN DETAILS
382	I-LINE	903+23 30.0' RT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
383	I-LINE	903+23 30.0' RT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 382, ON SAME POST
384	I-LINE	903+10 28.4' LT	R1-2	30" X 30" X 30"	"YIELD"	INSTALL NEW SIGN ON NEW POST
385	NOT USED					
386	NOT USED					
387	I-LINE	904+03 21.3' LT	W2-6	30" X 30"	ROUNDBOUT CIRCULATION PLAQUE	INSTALL NEW SIGN ON NEW POST
388	I-LINE	904+03 21.3' LT	W13-1P	18" x 18"	ADVISORY SPEED PLAQUE	INSTALL NEW SIGN UNDER SIGN 387, ON SAME POST
389	I-LINE	903+36 28.5' LT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
390	I-LINE	903+36 28.5' LT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 389, ON SAME POST
391	W-LINE	259+91 10.9' LT	R6-4	30" X 24"	ROUNDBOUT DIRECTIONAL	INSTALL NEW SIGN ON NEW POST
392	W-LINE	259+85 17.4' RT	R6-4	30" X 24"	ROUNDBOUT DIRECTIONAL	INSTALL NEW SIGN ON NEW POST
393	W-LINE	259+62 14.7' LT	R6-4	30" X 24"	ROUNDBOUT DIRECTIONAL	INSTALL NEW SIGN ON NEW POST
394	W-LINE	259+62 15.5' RT	R6-4	30" X 24"	ROUNDBOUT DIRECTIONAL	INSTALL NEW SIGN ON NEW POST
395	W-LINE	259+19 4.2' LT	D3-1	36" X 12"	"WASHINGTON BLVD SW"	INSTALL NEW SIGN ON NEW POST, SEE COL STD PLAN PS-01 FOR SIGN DETAILS

REVISIONS	DATE	BY	DESIGNED
			M. TSUN
			DRAWN
			B. MAY
			CHECKED
			J. JOHNSON
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE, IF NOT, SCALE ACCORDINGLY	
FILE NAME	PS3047013-CH13-15
JOB No.	214-3047-013
DATE	FEBRUARY 2021

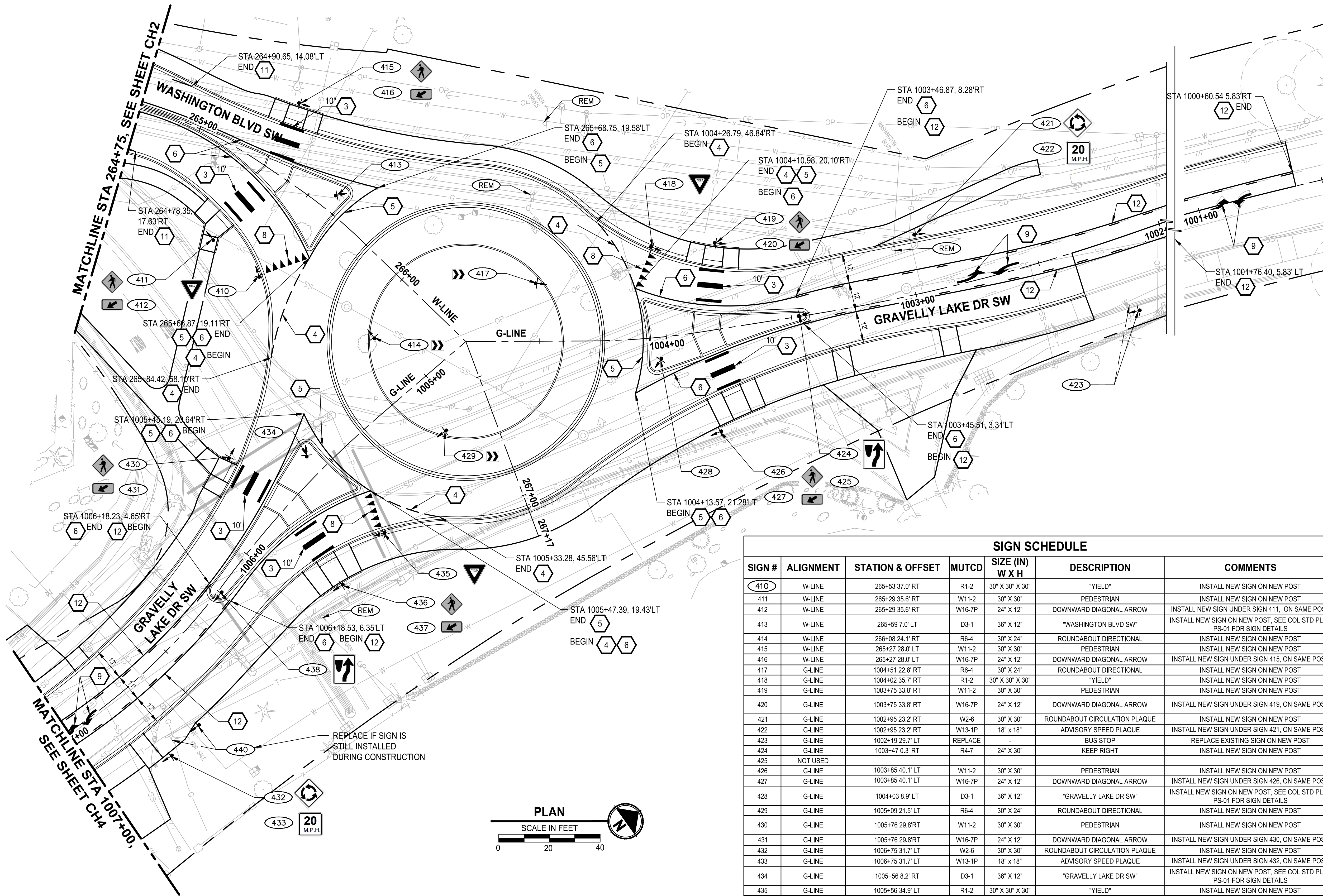


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

CHANNELIZATION AND SIGNING PLAN
WASHINGTON BLVD SW

DRAWING NO.
83 OF 153
CH1

PATH: U:\PSO\Projects\Clients\3047-City of Lakewood\214-3047-013_JBLM North Access Road\DWG PLOTTED BY: toyokot DATE: Tuesday, February 2, 2021 2:26:36 PM LAYOUT: CH3



CHANNELIZATION NOTES:

1. INSTALL PLASTIC DOUBLE CENTERLINE (YELLOW)
PER PIERCE COUNTY STD PLAN PC. H2.9
2. INSTALL PLASTIC STOP BAR
PER COL STD PLAN PS-05
3. INSTALL PLASTIC CROSSWALK LINE
PER COL STD PLAN PS-05
4. INSTALL PLASTIC WHITE DOTTED ENTRY LINE
PER WSDOT STD PLAN M-12.10-01
5. INSTALL PLASTIC WIDE LANE LINE
PER PIERCE COUNTY STD PLAN PC. H2.9
6. INSTALL PLASTIC EDGE LINE (YELLOW)
PER PIERCE COUNTY STD PLAN PC. H2.9
7. INSTALL PLASTIC EDGE LINE (WHITE)
PER PIERCE COUNTY STD PLAN PC. H2.9
8. INSTALL YIELD LINE SYMBOL
PER WSDOT STD PLAN M-24.60-04
9. INSTALL PLASTIC TRAFFIC ARROW
PER PIERCE COUNTY STD PLAN PC. H2.8
AND WSDOT STD PLAN M-12.10-01
10. INSTALL BIKE LANE SYMBOL
PER COL STD PLAN PS-04
11. INSTALL PLASTIC WIDE DOTTED LANE LINE
PER PIERCE COUNTY STD PLAN PC. H2.9
12. INSTALL PLASTIC TWO-WAY LEFT-TURN CENTER LINE
PER PIERCE COUNTY STD PLAN PC. H2.9
13. INSTALL PLASTIC ACCESS PARKING SYMBOL
14. INSTALL PLASTIC LINE (4 INCH)

LEGEND:

- ↓ NEW SIGN, SINGLE POST PER CITY OF
LAKEWOOD STD DETAIL PS-03
- (REM) REMOVE SIGN
- (XX) RELOCATE / REPLACED SIGN

GENERAL NOTES:

1. SALVAGE ALL EXISTING SIGNS AND METAL POSTS TO
O&M SHOP.

SIGN SCHEDULE

SIGN #	ALIGNMENT	STATION & OFFSET	MUTCD	SIZE (IN) W X H	DESCRIPTION	COMMENTS
410	W-LINE	265+53 37.0' RT	R1-2	30" X 30" X 30"	"YIELD"	INSTALL NEW SIGN ON NEW POST
411	W-LINE	265+29 35.6' RT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
412	W-LINE	265+29 35.6' RT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 411, ON SAME POST
413	W-LINE	265+59 7.0' LT	D3-1	36" X 12"	"WASHINGTON BLVD SW"	INSTALL NEW SIGN ON NEW POST, SEE COL STD PLAN PS-01 FOR SIGN DETAILS
414	W-LINE	266+08 24.1' RT	R6-4	30" X 24"	ROUNDABOUT DIRECTIONAL	INSTALL NEW SIGN ON NEW POST
415	W-LINE	265+27 28.0' LT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
416	W-LINE	265+27 28.0' LT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 415, ON SAME POST
417	G-LINE	1004+51 22.8' RT	R6-4	30" X 24"	ROUNDABOUT DIRECTIONAL	INSTALL NEW SIGN ON NEW POST
418	G-LINE	1004+02 35.7' RT	R1-2	30" X 30" X 30"	"YIELD"	INSTALL NEW SIGN ON NEW POST
419	G-LINE	1003+75 33.8' RT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
420	G-LINE	1003+75 33.8' RT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 419, ON SAME POST
421	G-LINE	1002+95 23.2' RT	W2-6	30" X 30"	ROUNDABOUT CIRCULATION PLAQUE	INSTALL NEW SIGN ON NEW POST
422	G-LINE	1002+95 23.2' RT	W13-1P	18" x 18"	ADVISORY SPEED PLAQUE	INSTALL NEW SIGN UNDER SIGN 421, ON SAME POST
423	G-LINE	1002+19 29.7' LT	REPLACE	-	BUS STOP	REPLACE EXISTING SIGN ON NEW POST
424	G-LINE	1003+47 0.3' RT	R4-7	24" X 30"	KEEP RIGHT	INSTALL NEW SIGN ON NEW POST
425	NOT USED					
426	G-LINE	1003+85 40.1' LT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
427	G-LINE	1003+85 40.1' LT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 426, ON SAME POST
428	G-LINE	1004+03 8.9' LT	D3-1	36" X 12"	"GRAVELLY LAKE DR SW"	INSTALL NEW SIGN ON NEW POST, SEE COL STD PLAN PS-01 FOR SIGN DETAILS
429	G-LINE	1005+09 21.5' LT	R6-4	30" X 24"	ROUNDABOUT DIRECTIONAL	INSTALL NEW SIGN ON NEW POST
430	G-LINE	1005+76 29.8' RT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
431	G-LINE	1005+76 29.8' RT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 430, ON SAME POST
432	G-LINE	1006+75 31.7' LT	W2-6	30" X 30"	ROUNDABOUT CIRCULATION PLAQUE	INSTALL NEW SIGN ON NEW POST
433	G-LINE	1006+75 31.7' LT	W13-1P	18" x 18"	ADVISORY SPEED PLAQUE	INSTALL NEW SIGN UNDER SIGN 432, ON SAME POST
434	G-LINE	1005+56 8.2' RT	D3-1	36" X 12"	"GRAVELLY LAKE DR SW"	INSTALL NEW SIGN ON NEW POST, SEE COL STD PLAN PS-01 FOR SIGN DETAILS
435	G-LINE	1005+56 34.9' LT	R1-2	30" X 30" X 30"	"YIELD"	INSTALL NEW SIGN ON NEW POST
436	G-LINE	1005+85 37.0' LT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
437	G-LINE	1005+85 37.0' LT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 436, ON SAME POST
438	G-LINE	1006+18 1.3' LT	R4-7	24" X 30"	KEEP RIGHT	INSTALL NEW SIGN ON NEW POST
439	NOT USED					
440	G-LINE	1006+61 29.8' LT	REPLACE	-	"FOR SALE"	REPLACE EXISTING SIGN ON NEW POST
441-442	NOT USED					

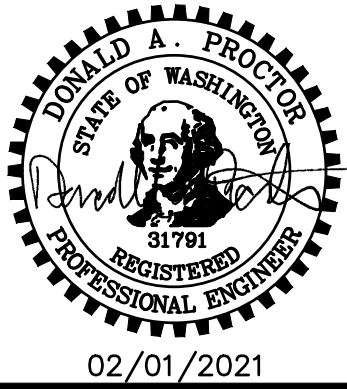
REVISIONS	DATE	BY	DESIGNED
			M. TSUN
			DRAWN
			B. MAY
			CHECKED
			J. JOHNSON
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY.

FILE NAME
PS3047013-CH13-15

JOB No.
214-3047-013

DATE
FEBRUARY 2021



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TACOMA, WA 98402
P 253.627.4367
WWW.BCRADDESIGN.COM

PROJECT NAME

**JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1**

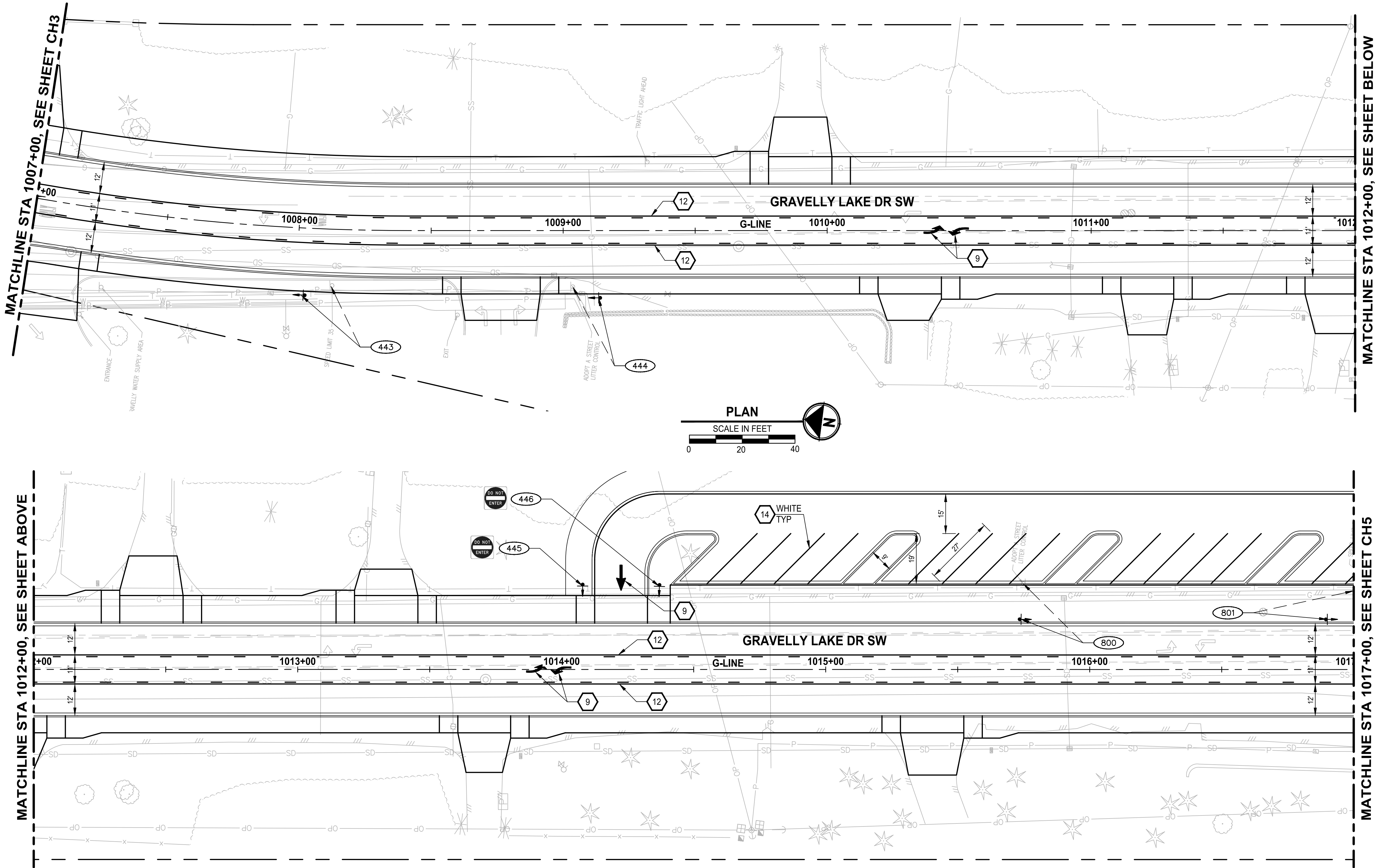
LAKEWOOD, WASHINGTON

**CHANNELIZATION AND
SIGNING PLAN
WASHINGTON BLVD SW**

DRAWING NO.
85 OF 153

CH3

PATH: U:\PSO\Projects\Clients\3047-City of Lakewood\214-3047-013_JBLM North Access Road\Access\995\cadd\DWG PLOTTED BY: toyokot DATE: Tuesday, February 2, 2021 2:31:18 PM LAYOUT: CH4



CHANNELIZATION NOTES:

1. INSTALL PLASTIC DOUBLE CENTERLINE (YELLOW) PER PIERCE COUNTY STD PLAN PC. H2.9
2. INSTALL PLASTIC STOP BAR PER COL STD PLAN PS-05
3. INSTALL PLASTIC CROSSWALK LINE PER COL STD PLAN PS-05
4. INSTALL PLASTIC WHITE DOTTED ENTRY LINE PER WSDOT STD PLAN M-12.10-01
5. INSTALL PLASTIC WIDE LANE LINE PER PIERCE COUNTY STD PLAN PC. H2.9
6. INSTALL PLASTIC EDGE LINE (YELLOW) PER PIERCE COUNTY STD PLAN PC. H2.9
7. INSTALL PLASTIC EDGE LINE (WHITE) PER PIERCE COUNTY STD PLAN PC. H2.9
8. INSTALL YIELD LINE SYMBOL PER WSDOT STD PLAN M-24.60-04
9. INSTALL PLASTIC TRAFFIC ARROW PER PIERCE COUNTY STD PLAN PC. H2.8 AND WSDOT STD PLAN M-12.10-01
10. INSTALL BIKE LANE SYMBOL PER COL STD PLAN PS-04
11. INSTALL PLASTIC WIDE DOTTED LANE LINE PER PIERCE COUNTY STD PLAN PC. H2.9
12. INSTALL PLASTIC TWO-WAY LEFT-TURN CENTER LINE PER PIERCE COUNTY STD PLAN PC. H2.9
13. INSTALL PLASTIC ACCESS PARKING SYMBOL
14. INSTALL PLASTIC LINE (4 INCH)

LEGEND:

- ↓ NEW SIGN, SINGLE POST PER CITY OF LAKEWOOD STD DETAIL PS-03
- REM REMOVE SIGN
- XX RELOCATE / REPLACED SIGN

GENERAL NOTES:

1. SALVAGE ALL EXISTING SIGNS AND METAL POSTS TO O&M SHOP.

SIGN SCHEDULE

SIGN #	ALIGNMENT	STATION & OFFSET	TYPE	SIZE (IN) W X H	DESCRIPTION	COMMENTS
443	G-LINE	1008+02 25.4' RT	REPLACE	-	SPEED LIMIT 35	REPLACE EXISTING SIGN ON NEW POST
444	G-LINE	1009+13 25.5' RT	REPLACE	-	"ADOPT A STREET" "LITTER CONTROL"	REPLACE EXISTING SIGN ON NEW POST
445	G-LINE	1014+08 31.6' LT	R5-1	30" X 30"	"DO NOT ENTER"	INSTALL NEW SIGN ON NEW POST
446	G-LINE	1014+37 31.5' LT	R5-1	30" X 30"	"DO NOT ENTER"	INSTALL NEW SIGN ON NEW POST

PLAN



SIGN SCHEDULE

SIGN #	ALIGNMENT	STATION & OFFSET	TYPE	SIZE (IN) W X H	DESCRIPTION	COMMENTS
800	G-LINE	1015+74 19.0' LT	REPLACE	-	"ADOPT A STREET" "LITTER CONTROL"	REPLACE EXISTING SIGN ON NEW POST
801	G-LINE	1016+90 19.0' LT	REPLACE	-	SPEED LIMIT 35	REPLACE EXISTING SIGN ON NEW POST

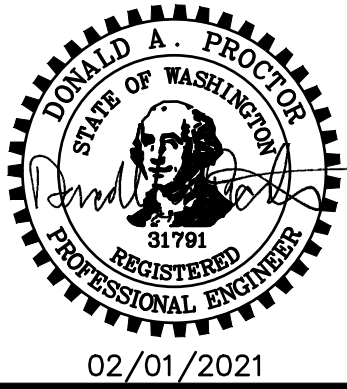
REVISIONS	DATE	BY	DESIGNED
			M. TSUN
			DRAWN
			B. MAY
			CHECKED
			J. JOHNSON
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY

FILE NAME
PS3047013-CH16-20

JOB No.
214-3047-013

DATE
FEBRUARY 2021



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PROJECT NAME

**JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1**

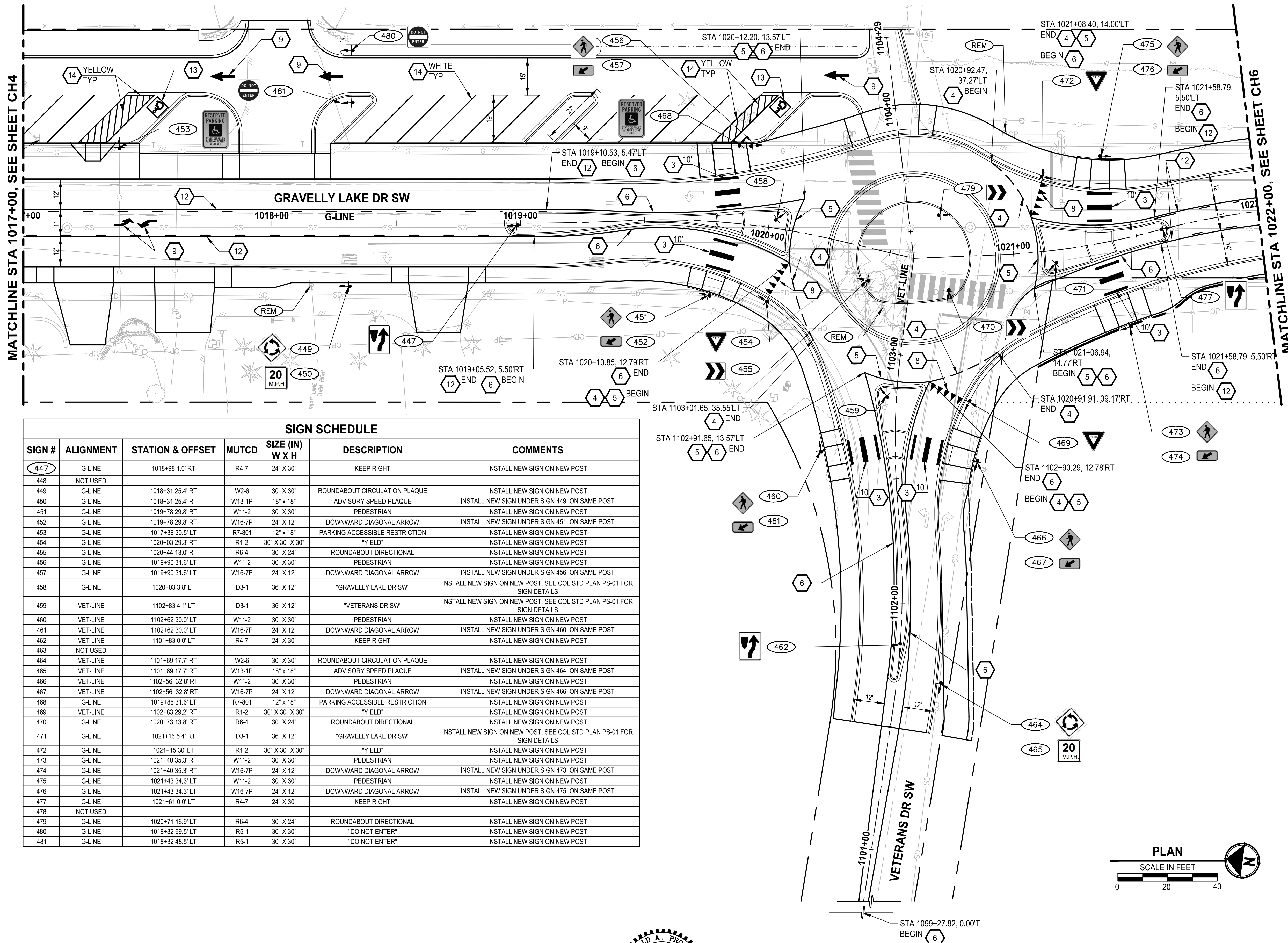
LAKEWOOD, WASHINGTON

**CHANNELIZATION AND
SIGNING PLAN GRAVELLY
LAKE DR SW**

DRAWING NO.
86 OF 153

CH4

PATH: U:\PSO\Projects\Clients\3047-City of Lakewood\214-3047-013 JBLM North Access Road\995504 CADD\DWG PLOTTED BY: toyokot DATE: Tuesday, February 2, 2021 2:32:01 PM LAYOUT: CH5



SIGN SCHEDULE

SIGN #	ALIGNMENT	STATION & OFFSET	MUTCD	SIZE (IN) W X H	DESCRIPTION	COMMENTS
447	G-LINE	1018+98 1.0' RT	R4-7	24" X 30"	KEEP RIGHT	INSTALL NEW SIGN ON NEW POST
448	NOT USED					
449	G-LINE	1018+31 25.4' RT	W2-6	30" X 30"	ROUNDABOUT CIRCULATION PLAQUE	INSTALL NEW SIGN ON NEW POST
450	G-LINE	1018+31 25.4' RT	W13-1P	18" x 18"	ADVISORY SPEED PLAQUE	INSTALL NEW SIGN UNDER SIGN 449, ON SAME POST
451	G-LINE	1019+78 29.8' RT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
452	G-LINE	1019+78 29.8' RT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 451, ON SAME POST
453	G-LINE	1017+38 30.5' LT	R7-801	12" x 18"	PARKING ACCESSIBLE RESTRICTION	INSTALL NEW SIGN ON NEW POST
454	G-LINE	1020+03 29.3' RT	R1-2	30" X 30" X 30"	"YIELD"	INSTALL NEW SIGN ON NEW POST
455	G-LINE	1020+44 13.0' RT	R6-4	30" X 24"	ROUNDABOUT DIRECTIONAL	INSTALL NEW SIGN ON NEW POST
456	G-LINE	1019+90 31.6' LT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
457	G-LINE	1019+90 31.6' LT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 456, ON SAME POST
458	G-LINE	1020+03 3.8' LT	D3-1	36" X 12"	"GRAVELLY LAKE DR SW"	INSTALL NEW SIGN ON NEW POST. SEE COL STD PLAN PS-01 FOR SIGN DETAILS
459	VET-LINE	1102+83 4.1' LT	D3-1	36" X 12"	"VETERANS DR SW"	INSTALL NEW SIGN ON NEW POST. SEE COL STD PLAN PS-01 FOR SIGN DETAILS
460	VET-LINE	1102+62 30.0' LT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
461	VET-LINE	1102+62 30.0' LT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 460, ON SAME POST
462	VET-LINE	1101+83 0.0' LT	R4-7	24" X 30"	KEEP RIGHT	INSTALL NEW SIGN ON NEW POST
463	NOT USED					
464	VET-LINE	1101+69 17.7' RT	W2-6	30" X 30"	ROUNDABOUT CIRCULATION PLAQUE	INSTALL NEW SIGN ON NEW POST
465	VET-LINE	1101+69 17.7' RT	W13-1P	18" x 18"	ADVISORY SPEED PLAQUE	INSTALL NEW SIGN UNDER SIGN 464, ON SAME POST
466	VET-LINE	1102+56 32.8' RT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
467	VET-LINE	1102+56 32.8' RT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 466, ON SAME POST
468	G-LINE	1019+86 31.6' LT	R7-801	12" x 18"	PARKING ACCESSIBLE RESTRICTION	INSTALL NEW SIGN ON NEW POST
469	VET-LINE	1102+83 29.2' RT	R1-2	30" X 30" X 30"	"YIELD"	INSTALL NEW SIGN ON NEW POST
470	G-LINE	1020+73 13.8' RT	R6-4	30" X 24"	ROUNDABOUT DIRECTIONAL	INSTALL NEW SIGN ON NEW POST
471	G-LINE	1021+16 5.4' RT	D3-1	36" X 12"	"GRAVELLY LAKE DR SW"	INSTALL NEW SIGN ON NEW POST. SEE COL STD PLAN PS-01 FOR SIGN DETAILS
472	G-LINE	1021+15 30' LT	R1-2	30" X 30" X 30"	"YIELD"	INSTALL NEW SIGN ON NEW POST
473	G-LINE	1021+40 35.3' RT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
474	G-LINE	1021+40 35.3' RT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 473, ON SAME POST
475	G-LINE	1021+43 34.3' LT	W11-2	30" X 30"	PEDESTRIAN	INSTALL NEW SIGN ON NEW POST
476	G-LINE	1021+43 34.3' LT	W16-7P	24" X 12"	DOWNWARD DIAGONAL ARROW	INSTALL NEW SIGN UNDER SIGN 475, ON SAME POST
477	G-LINE	1021+61 0.0' LT	R4-7	24" X 30"	KEEP RIGHT	INSTALL NEW SIGN ON NEW POST
478	NOT USED					
479	G-LINE	1020+71 16.9' LT	R6-4	30" X 24"	ROUNDABOUT DIRECTIONAL	INSTALL NEW SIGN ON NEW POST
480	G-LINE	1018+32 69.5' LT	R5-1	30" X 30"	"DO NOT ENTER"	INSTALL NEW SIGN ON NEW POST
481	G-LINE	1018+32 48.5' LT	R5-1	30" X 30"	"DO NOT ENTER"	INSTALL NEW SIGN ON NEW POST

CHANNELIZATION NOTES:

1. INSTALL PLASTIC DOUBLE CENTERLINE (YELLOW) PER PIERCE COUNTY STD PLAN PC. H2.9
2. INSTALL PLASTIC STOP BAR PER COL STD PLAN PS-05
3. INSTALL PLASTIC CROSSWALK LINE PER COL STD PLAN PS-05
4. INSTALL PLASTIC WHITE DOTTED ENTRY LINE PER WSDOT STD PLAN M-12.10-01
5. INSTALL PLASTIC WIDE LANE LINE PER PIERCE COUNTY STD PLAN PC. H2.9
6. INSTALL PLASTIC EDGE LINE (YELLOW) PER PIERCE COUNTY STD PLAN PC. H2.9
7. INSTALL PLASTIC EDGE LINE (WHITE) PER PIERCE COUNTY STD PLAN PC. H2.9
8. INSTALL YIELD LINE SYMBOL PER WSDOT STD PLAN M-24.60-04
9. INSTALL PLASTIC TRAFFIC ARROW PER PIERCE COUNTY STD PLAN PC. H2.8 AND WSDOT STD PLAN M-12.10-01
10. INSTALL BIKE LANE SYMBOL PER COL STD PLAN PS-04
11. INSTALL PLASTIC WIDE DOTTED LANE LINE PER PIERCE COUNTY STD PLAN PC. H2.9
12. INSTALL PLASTIC TWO-WAY LEFT-TURN CENTER LINE PER PIERCE COUNTY STD PLAN PC. H2.9
13. INSTALL PLASTIC ACCESS PARKING SYMBOL
14. INSTALL PLASTIC LINE (4 INCH)

LEGEND:

- ↓ NEW SIGN, SINGLE POST PER CITY OF LAKEWOOD STD DETAIL PS-03
- (REM) REMOVE SIGN
- (XX) RELOCATE / REPLACED SIGN

GENERAL NOTES:

1. SALVAGE ALL EXISTING SIGNS AND METAL POSTS TO O&M SHOP.

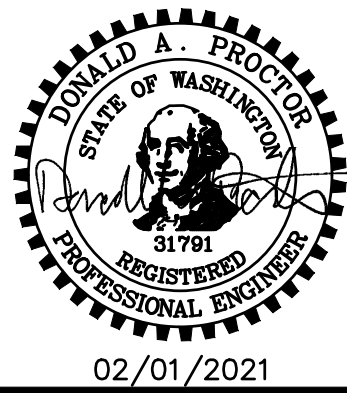
REVISIONS	DATE	BY	DESIGNED
			M. TSUN
			DRAWN
			B. MAY
			CHECKED
			J. JOHNSON
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE.
IF NOT, SCALE ACCORDINGLY.

FILE NAME
PS3047013-CH16-20

JOB No.
214-3047-013

DATE
FEBRUARY 2021



Parametrix
ENGINEERING · PLANNING · ENVIRONMENTAL SCIENCES

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PROJECT NAME

**JBLM NORTH ACCESS ROAD
IMPROVEMENTS - PHASE 1**

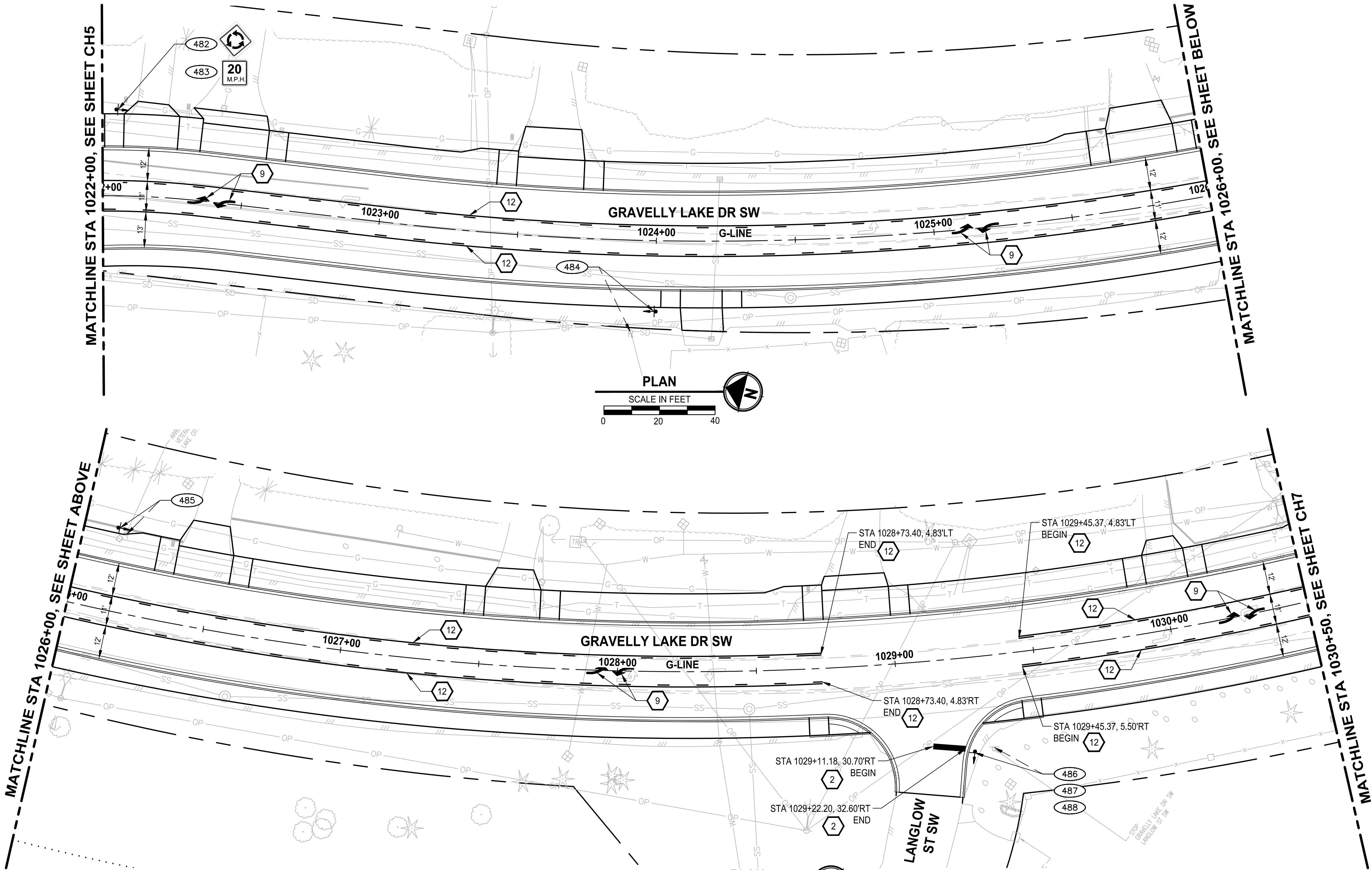
LAKEWOOD, WASHINGTON

**CHANNELIZATION AND
SIGNING PLAN GRAVELLY
LAKE DR SW**

DRAWING NO.
87 OF 153

CH5

PATH: U:\PSO\Projects\Clients\3047-City of Lakewood\214-3047-013_JBLM North Access Road\DWG PLOTTED BY: toyokot DATE: Wednesday, February 3, 2021 11:08:16 AM LAYOUT: CH6



CHANNELIZATION NOTES:

1. INSTALL PLASTIC DOUBLE CENTERLINE (YELLOW)
PER PIERCE COUNTY STD PLAN PC. H2.9
2. INSTALL PLASTIC STOP BAR
PER COL STD PLAN PS-05
3. INSTALL PLASTIC CROSSWALK LINE
PER COL STD PLAN PS-05
4. INSTALL PLASTIC WHITE DOTTED ENTRY LINE
PER WSDOT STD PLAN M-12.10-01
5. INSTALL PLASTIC WIDE LANE LINE
PER PIERCE COUNTY STD PLAN PC. H2.9
6. INSTALL PLASTIC EDGE LINE (YELLOW)
PER PIERCE COUNTY STD PLAN PC. H2.9
7. INSTALL PLASTIC EDGE LINE (WHITE)
PER PIERCE COUNTY STD PLAN PC. H2.9
8. INSTALL YIELD LINE SYMBOL
PER WSDOT STD PLAN M-24.60-04
9. INSTALL PLASTIC TRAFFIC ARROW
PER PIERCE COUNTY STD PLAN PC. H2.8
AND WSDOT STD PLAN M-12.10-01
10. INSTALL BIKE LANE SYMBOL
PER COL STD PLAN PS-04
11. INSTALL PLASTIC WIDE DOTTED LANE LINE
PER PIERCE COUNTY STD PLAN PC. H2.9
12. INSTALL PLASTIC TWO-WAY LEFT-TURN CENTER LINE
PER PIERCE COUNTY STD PLAN PC. H2.9
13. INSTALL PLASTIC ACCESS PARKING SYMBOL
14. INSTALL PLASTIC LINE (4 INCH)

LEGEND:

- ↓ NEW SIGN, SINGLE POST PER CITY OF LAKEWOOD STD DETAIL PS-03
- (REM) REMOVE SIGN
- (XX) RELOCATE / REPLACED SIGN

GENERAL NOTES:

1. SALVAGE ALL EXISTING SIGNS AND METAL POSTS TO O&M SHOP.

SIGN SCHEDULE

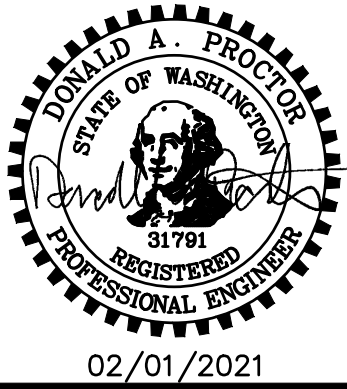
SIGN #	ALIGNMENT	STATION & OFFSET	MUTCD	SIZE (IN) W X H	DESCRIPTION	COMMENTS
482	G-LINE	1022+05 31.0' LT	W2-6	30" X 24"	ROUNDAABOUT DIRECTIONAL	INSTALL NEW SIGN ON NEW POST
483	G-LINE	1022+05 31.0' LT	W13-1P	18" X 18"	ADVISORY SPEED PLAQUE	INSTALL NEW SIGN UNDER SIGN 482, ON SAME POST
484	G-LINE	1023+99 25.5' RT	REPLACE	-	SPEED LIMIT 35	REPLACE EXISTING SIGN ON NEW POST
485	G-LINE	1026+13 30.0' LT	REPLACE	-	ARROW LEFT "VETERANS HOSPITAL", ARROW LEFT "LAKE CITY"	REPLACE EXISTING SIGN ON NEW POST

SIGN SCHEDULE

SIGN #	ALIGNMENT	STATION & OFFSET	MUTCD	SIZE (IN) W X H	DESCRIPTION	COMMENTS
486	G-LINE	1029+25 34.5' RT	REPLACE	-	STOP	REPLACE EXISTING SIGN ON NEW POST
487	G-LINE	1029+25 34.5' RT	REPLACE	-	"GRAVELLY LAKE DR SW"	REPLACE EXISTING SIGN ABOVE SIGN 486, ON SAME POST
488	G-LINE	1029+25 34.5' RT	REPLACE	-	"LANGLOW ST SW"	REPLACE EXISTING SIGN ABOVE SIGN 486, ON SAME POST

REVISIONS	DATE	BY	DESIGNED
			M. TSUN
			DRAWN
			B. MAY
			CHECKED
			J. JOHNSON
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-CH16-20
JOB No. 214-3047-013
DATE FEBRUARY 2021



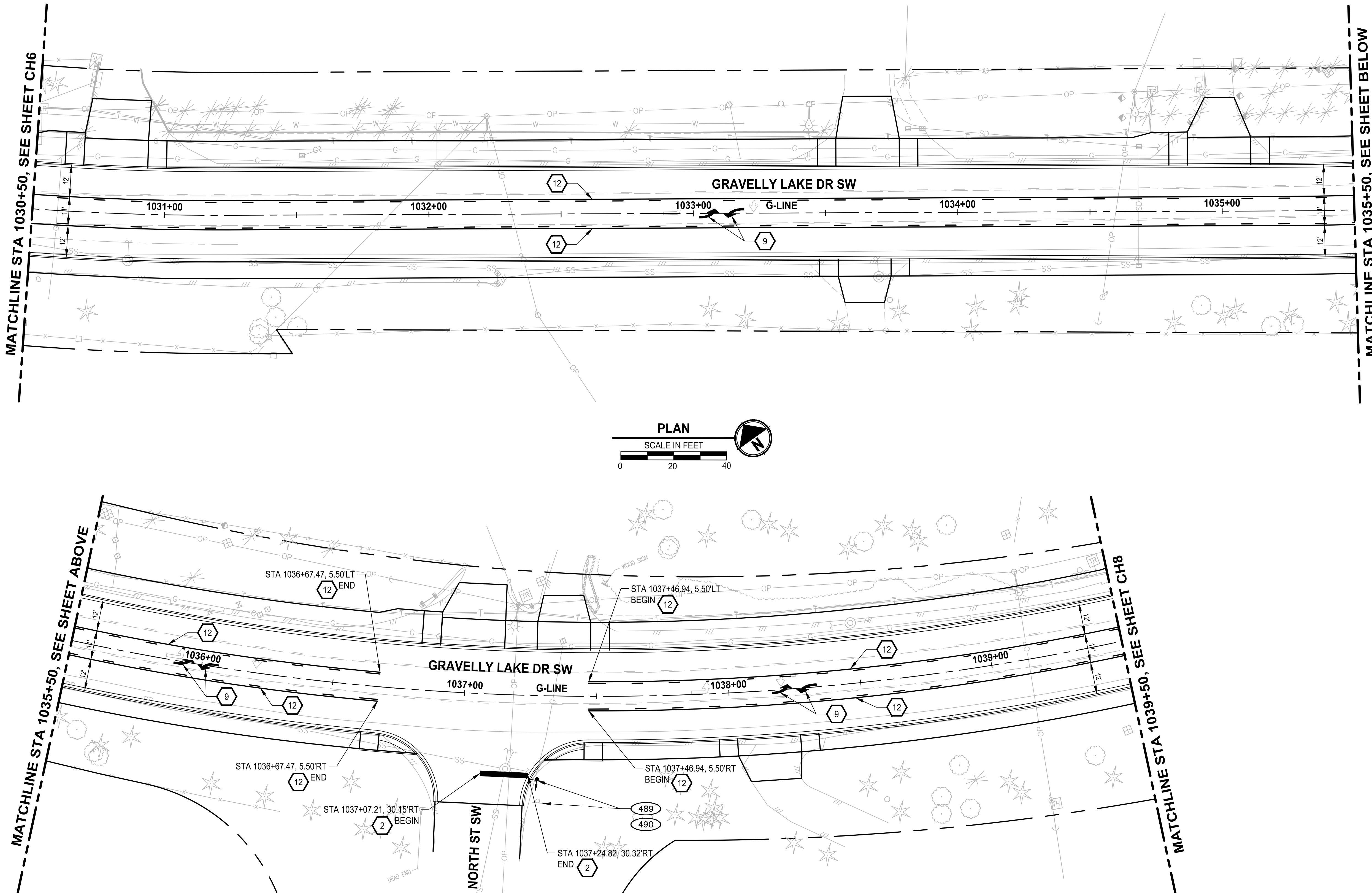
PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

CHANNELIZATION AND
SIGNING PLAN GRAVELLY
LAKE DR SW

DRAWING NO.
88 OF 153

CH6

PATH: U:\PSO\Projects\Clients\3047-City of Lakewood\214-3047-013 JBLM North Access\99Svcs\CAAD\DWG PLOTTED BY: layekot DATE: Monday, February 1, 2021 3:54:56 PM LAYOUT: CH7



CHANNELIZATION NOTES:

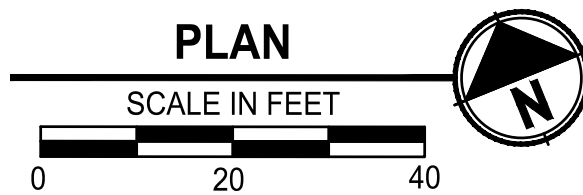
1. INSTALL PLASTIC DOUBLE CENTERLINE (YELLOW)
PER PIERCE COUNTY STD PLAN PC. H2.9
2. INSTALL PLASTIC STOP BAR
PER COL STD PLAN PS-05
3. INSTALL PLASTIC CROSSWALK LINE
PER COL STD PLAN PS-05
4. INSTALL PLASTIC WHITE DOTTED ENTRY LINE
PER WSDOT STD PLAN M-12.10-01
5. INSTALL PLASTIC WIDE LANE LINE
PER PIERCE COUNTY STD PLAN PC. H2.9
6. INSTALL PLASTIC EDGE LINE (YELLOW)
PER PIERCE COUNTY STD PLAN PC. H2.9
7. INSTALL PLASTIC EDGE LINE (WHITE)
PER PIERCE COUNTY STD PLAN PC. H2.9
8. INSTALL YIELD LINE SYMBOL
PER WSDOT STD PLAN M-24.60-04
9. INSTALL PLASTIC TRAFFIC ARROW
PER PIERCE COUNTY STD PLAN PC. H2.8
AND WSDOT STD PLAN M-12.10-01
10. INSTALL BIKE LANE SYMBOL
PER COL STD PLAN PS-04
11. INSTALL PLASTIC WIDE DOTTED LANE LINE
PER PIERCE COUNTY STD PLAN PC. H2.9
12. INSTALL PLASTIC TWO-WAY LEFT-TURN CENTER LINE
PER PIERCE COUNTY STD PLAN PC. H2.9
13. INSTALL PLASTIC ACCESS PARKING SYMBOL
14. INSTALL PLASTIC LINE (4 INCH)

LEGEND:

- ↓ NEW SIGN, SINGLE POST PER CITY OF LAKEWOOD STD DETAIL PS-03
- REM REMOVE SIGN
- XX RELOCATE / REPLACED SIGN

GENERAL NOTES:

1. SALVAGE ALL EXISTING SIGNS AND METAL POSTS TO O&M SHOP.

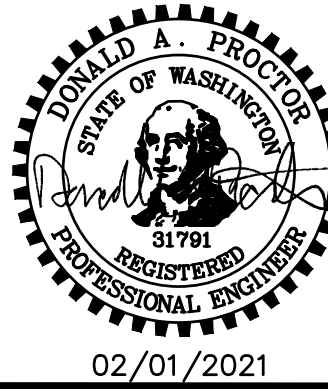


SIGN SCHEDULE

SIGN #	ALIGNMENT	STATION & OFFSET	MUTCD	SIZE (IN) W X H	DESCRIPTION	COMMENTS
489	G-LINE	1037+28 32.0' RT	REPLACE	-	STOP	REPLACE EXISTING SIGN ON NEW POST
490	G-LINE	1037+28 32.0' RT	REPLACE	-	"NORTH ST SW"	REPLACE EXISTING SIGN ABOVE SIGN 489, ON SAME POST

REVISIONS	DATE	BY	DESIGNED
			M. TSUN
			DRAWN
			B. MAY
			CHECKED
			J. JOHNSON
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME PS3047013-CH16-20
JOB No. 214-3047-013
DATE FEBRUARY 2021

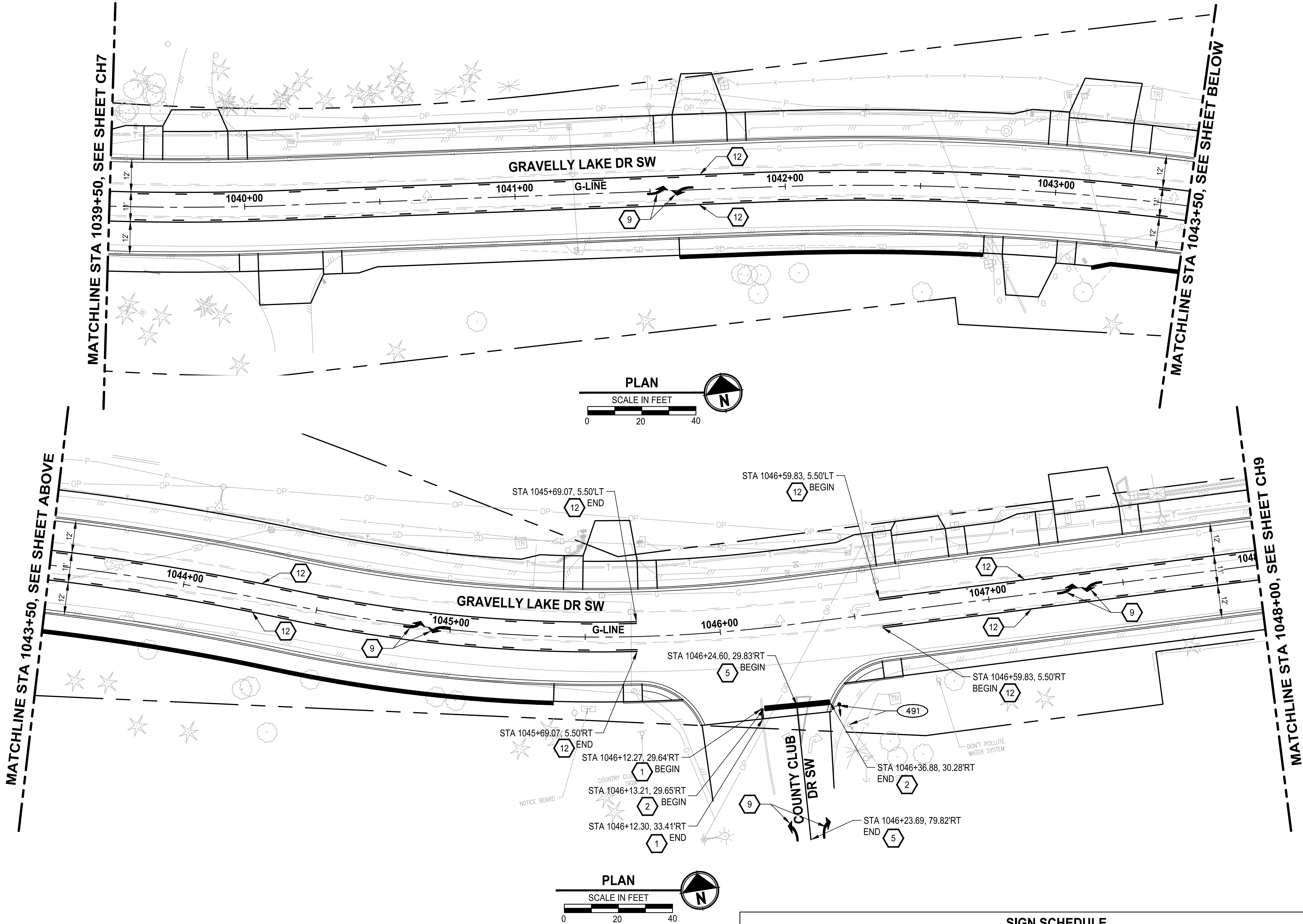


PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

CHANNELIZATION AND SIGNING PLAN GRAVELLY LAKE DR SW

DRAWING NO. 89 OF 153
CH7

PATH: U:\PSO\Projects\Clients\3047-City of Lakewood\214-3047-013_JBLM North Access Road\Access\995\cadd\DWG PLOTTED BY: toyokot DATE: Tuesday, February 2, 2021 2:35:16 PM LAYOUT: CH8



CHANNELIZATION NOTES:

- 1 INSTALL PLASTIC DOUBLE CENTERLINE (YELLOW)
PER PIERCE COUNTY STD PLAN PC. H2.9
- 2 INSTALL PLASTIC STOP BAR
PER COL STD PLAN PS-05
- 3 INSTALL PLASTIC CROSSWALK LINE
PER COL STD PLAN PS-05
- 4 INSTALL PLASTIC WHITE DOTTED ENTRY LINE
PER WSDOT STD PLAN M-12.10-01
- 5 INSTALL PLASTIC WIDE LANE LINE
PER PIERCE COUNTY STD PLAN PC. H2.9
- 6 INSTALL PLASTIC EDGE LINE (YELLOW)
PER PIERCE COUNTY STD PLAN PC. H2.9
- 7 INSTALL PLASTIC EDGE LINE (WHITE)
PER PIERCE COUNTY STD PLAN PC. H2.9
- 8 INSTALL YIELD LINE SYMBOL
PER WSDOT STD PLAN M-24.60-04
- 9 INSTALL PLASTIC TRAFFIC ARROW
PER PIERCE COUNTY STD PLAN PC. H2.8
AND WSDOT STD PLAN M-12.10-01
- 10 INSTALL BIKE LANE SYMBOL
PER COL STD PLAN PS-04
- 11 INSTALL PLASTIC WIDE DOTTED LANE LINE
PER PIERCE COUNTY STD PLAN PC. H2.9
- 12 INSTALL PLASTIC TWO-WAY LEFT-TURN CENTER LINE
PER PIERCE COUNTY STD PLAN PC. H2.9
- 13 INSTALL PLASTIC ACCESS PARKING SYMBOL
- 14 INSTALL PLASTIC LINE (4 INCH)

LEGEND:

- ↓ NEW SIGN, SINGLE POST PER CITY OF
LAKEWOOD STD DETAIL PS-03
- (REM) REMOVE SIGN
- (XX) RELOCATE / REPLACED SIGN

GENERAL NOTES:

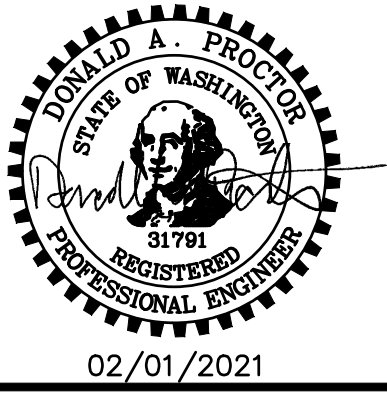
1. SALVAGE ALL EXISTING SIGNS AND METAL POSTS TO
O&M SHOP.

SIGN SCHEDULE

SIGN #	ALIGNMENT	STATION & OFFSET	MUTCD	SIZE (IN) W X H	DESCRIPTION	COMMENTS
491	G-LINE	1046+40 32.0' RT	REPLACE	30" X 30"	STOP	REPLACE EXISTING SIGN ON NEW POST

REVISIONS	DATE	BY	DESIGNED
			M. TSUN
			DRAWN
			B. MAY
			CHECKED
			J. JOHNSON
			APPROVED
			A. FISHER

ONE INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY
FILE NAME
PS3047013-CH16-20
JOB No.
214-3047-013
DATE
FEBRUARY 2021



PROJECT NAME
JBLM NORTH ACCESS ROAD IMPROVEMENTS - PHASE 1
LAKEWOOD, WASHINGTON

CHANNELIZATION AND
SIGNING PLAN GRAVELLY
LAKE DR SW

DRAWING NO.
90 OF 153

CH8