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PROJECT NAME 42nd Avenue Upgrade

PROJECT LOCATION Anchorage, AK






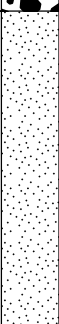


GROUND ELEVATION 154.155 ft

GROUND WATER LEVELS:

 AT TIME OF DRILLING 8.00 ft / Elev 146.16 ft

AT END OF DRILLING ---

▽ AFTER DRILLING 6.10 ft / Elev 148.06 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	TESTS	ICE BOND	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0										
	G 1	100		MC = 2%		AC		0.2 ASPHALT CONCRETE, (AC) black	154.0	PID = 0.9
						GW		2.5 WELL GRADED GRAVEL WITH SAND, (GW) brown, moist, [FILL]	151.7	PID = 0.7
	HD 2	75	12-16-15-14 (31)	MC = 4%		GW		5.0 WELL GRADED GRAVEL WITH SAND, (GW) brown, moist	149.2	PID = 0.9
5	HD 3	75	8-8-7-7 (15)	MC = 8%		GW		7.5 WELL GRADED GRAVEL WITH SAND, (GW) brown, wet	146.7	PID = 0.4
	HD 4	25	6-3-3-3 (6)	MC = 11%		GW		10.0 POORLY GRADED SAND WITH GRAVEL, (SP) brown, wet	144.2	PID = 0.5
10	HD 5	75	5-4-4-7 (8)	MC = 18%		SP		15.0 POORLY GRADED SAND WITH GRAVEL, (SP) brown, wet	139.2	PID = 0
	HD 6A	100	34-24-21 (45)	MC = 14%		SP		16.0 SILTY SAND, (SM) 39% fines, gray, wet	138.2	PID = 0
15	HD 6B	100		MC = 10% Fines = 39% P200		SM		16.5	137.7	PID = 0

CRW LOG - CRW DATATEMPLATE.GDT - 1/22/20 07:25 - 10142.00 42ND AVE.GPJ



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CLIENT Municipality of Anchorage

PROJECT NAME 42nd Avenue Upgrade

PROJECT NUMBER MOA PM&E Project No. 18-06

PROJECT LOCATION Anchorage, AK

DATE STARTED 5/6/19

COMPLETED 5/6/19

GROUND ELEVATION 154.063 ft

DRILLING CONTRACTOR Discovery Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Hollow-Stem Auger

▽ AT TIME OF DRILLING 5.00 ft / Elev 149.06 ft

LOGGED BY DMB

CHECKED BY SMH

AT END OF DRILLING ---

NOTES

AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	TESTS	ICE BOND	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0									
	G 1	100		MC = 19% Fines = 39% MA		AC		0.2 ASPHALT CONCRETE, (AC) black 153.9 SILTY SAND WITH GRAVEL, (SM) 24% gravel, 37% sand, 39% fines, brown, moist, [FILL], Frost Class: MOA F4	PID = 0.1
						SM			
	HD 2	67	3-5-9-14 (14)	MC = 16% Fines = 48% P200		GM		2.5 SILTY GRAVEL, (GM) 48% fines, gray, moist 151.6	PID = 0
5									
	HD 3	100	8-15-12 (27)	MC = 16% Fines = 2% AL		GM		5.0 ▽ SILTY GRAVEL, (GM) gray, wet, non plastic 149.1	PID = 0.5
						GM			
	HD 4	75	6-9-8-9 (17)	MC = 5% P200		GW		7.5 WELL GRADED GRAVEL, (GW) 2% fines, brown, wet 146.6	PID = 0.6
10									
	HD 5	75	10-9-10-8 (19)	MC = 10%		GW-GM		10.0 WELL GRADED GRAVEL WITH SILT, (GW-GM) gray, wet 144.1	PID = 0.1
						GW-GM			
15									
	HD 6	100	36-18-22 (40)	MC = 11%		ML		15.0 SILT WITH GRAVEL, (ML) gray, wet 139.1	PID = 0.6
								16.5 137.6	



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CLIENT Municipality of Anchorage

PROJECT NAME 42nd Avenue Upgrade

PROJECT NUMBER MOA PM&E Project No. 18-06

PROJECT LOCATION Anchorage, AK

DATE STARTED 5/6/19

COMPLETED 5/6/19

GROUND ELEVATION 154.953 ft

DRILLING CONTRACTOR Discovery Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Hollow-Stem Auger

▽ AT TIME OF DRILLING 5.00 ft / Elev 149.95 ft

LOGGED BY DMB

CHECKED BY SMH

AT END OF DRILLING ---

NOTES

AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	TESTS	ICE BOND	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0									
	G 1	100		MC = 5% Fines = 15% MA		AC		0.2 ASPHALT CONCRETE, (AC) black 154.8 SILTY GRAVEL WITH SAND, (GM) 50% gravel, 35% sand, 15% fines, brown, moist, [FILL], Frost Class: MOA F1	PID = 2.6
						GM		2.5 152.5	
	HD 2	67	11-9-7-10 (16)	MC = 4%		GM		SILTY GRAVEL WITH SAND, (GM) brown, moist	PID = 3.2
5								5.0 ▽ 150.0	
	HD 3	75	8-15-16-14 (31)	MC = 5%		GM		SILTY GRAVEL WITH SAND, (GM) brown, wet	PID = 4.5
								7.5 147.5	
	HD 4	58	29-17-10-7 (27)	MC = 11%		GM		SILTY GRAVEL WITH SAND, (GM) gray, wet	PID = 1
10								10.0 145.0	
	HD 5	75	8-5-5-6 (10)	MC = 15% SA		GW-GM		WELL GRADED GRAVEL WITH SILT AND SAND, (GW-GM) 49% gravel, 45% sand, 6% fines, brown, wet	PID = 0.3
								15.0 140.0	
15								15.0 140.0	
	HD 6	100	25-28-34 (62)	MC = 10% AL		ML		GRAVELLY SILT, (ML) gray, wet, non plastic	PID = 0
								16.5 138.5	



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CLIENT Municipality of Anchorage

PROJECT NAME 42nd Avenue Upgrade

PROJECT NUMBER MOA PM&E Project No. 18-06

PROJECT LOCATION Anchorage, AK

DATE STARTED 5/7/19

COMPLETED 5/7/19

GROUND ELEVATION 155.323 ft

DRILLING CONTRACTOR Discovery Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Hollow-Stem Auger

▽ AT TIME OF DRILLING 7.50 ft / Elev 147.82 ft

LOGGED BY DMB

CHECKED BY SMH

AT END OF DRILLING ---

NOTES

▽ AFTER DRILLING 6.40 ft / Elev 148.92 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	TESTS	ICE BOND	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0										
	G 1	100		MC = 3%		AC		0.2 ASPHALT CONCRETE, (AC) black 155.2	PID = 0.5	
						GW		WELL GRADED GRAVEL WITH SAND, (GW) brown, moist, [FILL]		
								2.5 152.8	PID = 1.1	
	HD 2	50	35-16-24-29 (40)	MC = 4%		GW		WELL GRADED GRAVEL, (GW) brown, moist, [FILL]		Piezometer
5								5.0 150.3	PID = 0.6	
	HD 3	67	10-19-50 (69)	MC = 4%		SW-SM		WELL GRADED SAND WITH SILT AND GRAVEL, (SW-SM) gray, moist		1-in. sch. 40. PVC
								7.5 147.8	PID = 0.8	
	HD 4A	75	18-15-18-14 (33)	MC = 12%		GW		WELL GRADED GRAVEL WITH SAND, (GW) brown, moist		
	HD 4B	75		MC = 6% Fines = 21% P200		GM		SILTY GRAVEL, (GM) 21% fines, gray, wet	PID = 1	
10								10.0 145.3	PID = 1	
	HD 5	75	10-10-9-9 (19)	MC = 12%		GW		WELL GRADED GRAVEL WITH SAND, (GW) brown, wet		1-in. sch. 40. PVC slotted
								15.0 140.3	PID = 0.2	
15	HD 6	100	41-15-15 (30)	MC = 8% AL		ML		SILT WITH GRAVEL, (ML) gray, wet, non plastic		
								16.5 138.8		



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CLIENT Municipality of Anchorage

PROJECT NAME 42nd Avenue Upgrade

PROJECT NUMBER MOA PM&E Project No. 18-06

PROJECT LOCATION Anchorage, AK

DATE STARTED 5/7/19

COMPLETED 5/7/19

GROUND ELEVATION 156.081 ft

DRILLING CONTRACTOR Discovery Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Hollow-Stem Auger

▽ AT TIME OF DRILLING 7.50 ft / Elev 148.58 ft

LOGGED BY DMB

CHECKED BY SMH

AT END OF DRILLING ---

NOTES

AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	TESTS	ICE BOND	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0									
	G 1	100		MC = 4% Fines = 9% MA		AC		0.2 ASPHALT CONCRETE, (AC) black 155.9 POORLY GRADED SAND WITH SILT AND GRAVEL, (SP-SM) 45% gravel, 54% sand, 9% fines, brown, moist, [FILL], Frost Class: MOA F1	PID = 0.1
						SP- SM			
	HD 2	17	4-6-9-9 (15)	MC = 5%		GW		2.5 WELL GRADED GRAVEL WITH SAND, (GW) brown, moist 153.6	PID = 0.7
5									
	HD 3	50		MC = 6%		GW		5.0 WELL GRADED GRAVEL WITH SAND, (GW) brown, wet 151.1 Blowcounts not recorded	PID = 0.2
	HD 4	75	5-3-6-7 (9)	MC = 11% Fines = 3% SA		GW		7.5 ▽ WELL GRADED GRAVEL WITH SAND, (GW) 65% gravel, 32% sand, 3% fines, brown, wet 148.6	PID = 1.1
10									
	HD 5	75	20-15-19- 15 (34)	MC = 9%		GW		10.0 WELL GRADED GRAVEL WITH SAND, (GW) gray, wet 146.1	PID = 0
						GW			
15									
	HD 6	100	13-20-28 (48)	PP = 4.5 tsf MC = 10% PP		ML		15.0 SANDY SILT WITH GRAVEL, (ML) gray, wet 141.1	PID = 0.2
								16.5 139.6	



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CLIENT Municipality of Anchorage

PROJECT NAME 42nd Avenue Upgrade

PROJECT NUMBER MOA PM&E Project No. 18-06

PROJECT LOCATION Anchorage, AK

DATE STARTED 5/7/19

COMPLETED 5/7/19

GROUND ELEVATION 156.67 ft

DRILLING CONTRACTOR Discovery Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Hollow-Stem Auger

AT TIME OF DRILLING --- Not Observed

LOGGED BY DMB

CHECKED BY SMH

AT END OF DRILLING ---

NOTES

▼ AFTER DRILLING 6.20 ft / Elev 150.47 ft

CRW LOG - CRW_DATA\TEMPLATE.GDT - 1/22/20 07:25 - 10142.00 42ND AVE.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	TESTS	ICE BOND	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0										
	G 1	100		MC = 8%		AC		0.2 ASPHALT CONCRETE, (AC) black	156.5	PID = 0
						SW		WELL GRADED SAND WITH GRAVEL, (SW) brown, moist, [FILL]		
								2.5	154.2	PID = 0.7
	HD 2	50	9-4-6-4 (10)	MC = 7%		SW		WELL GRADED SAND WITH GRAVEL, (SW) brown, moist, [FILL]		
5								5.0	151.7	PID = 0
	HD 3	75	5-8-9-3 (17)	MC = 12%		GW		WELL GRADED GRAVEL WITH SAND, (GW) brown, wet		
								7.5	149.2	PID = 0
	HD 4	75	6-10-11-8 (21)	MC = 10%		GW		WELL GRADED GRAVEL WITH SAND, (GW) brown, wet		
10								10.0	146.7	PID = 0
	HD 5	75	17-11-11-4 (22)	MC = 9%		GW		WELL GRADED GRAVEL WITH SAND, (GW) gray, wet		
								15.0	141.7	PID = 0.2
15								17.0	139.7	
	HD 6	75	3-4-34-29 (38)	MC = 12% Fines = 15% P200		SM		SILTY SAND, (SM) 15% fines, gray, wet		

Piezometer

1-in. sch. 40.
PVC

1-in. sch. 40.
PVC slotted



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CLIENT Municipality of Anchorage

PROJECT NAME 42nd Avenue Upgrade

PROJECT NUMBER MOA PM&E Project No. 18-06

PROJECT LOCATION Anchorage, AK

DATE STARTED 5/7/19

COMPLETED 5/7/19

GROUND ELEVATION 157.709 ft

DRILLING CONTRACTOR Discovery Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Hollow-Stem Auger

AT TIME OF DRILLING --- Not Observed







LOGGED BY DMB

CHECKED BY SMH

AT END OF DRILLING ---

NOTES

AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	TESTS	ICE BOND	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0									
	G 1	100		MC = 3% Fines = 10% MA		AC		0.2 ASPHALT CONCRETE, (AC) black 157.5 POORLY GRADED SAND WITH SILT AND GRAVEL, (SP-SM) 45% gravel, 45% sand, 10% fines, brown, moist, [FILL], Frost Class: MOA F2	PID = 0.3
						SP- SM			
	HD 2	50	47-14-12- 15 (26)	MC = 4%		SM		2.5 SILTY SAND WITH GRAVEL, (SM) gray, moist 155.2	PID = 1.1
5									
	HD 3	75	15-13-13- 11 (26)	MC = 6% Fines = 5% SA		GP		5.0 POORLY GRADED GRAVEL WITH SAND, (GP) 55% 152.7 gravel, 40% sand, 5% fines, gray, wet	PID = 0.3
	HD 4	50	11-15-23- 19 (38)	MC = 14%		GP		7.5 POORLY GRADED GRAVEL WITH SAND, (GP) gray, 150.2 wet	PID = 0.1
10									
	HD 5	75	15-13-13- 14 (26)	MC = 11%		GP- GM		10.0 POORLY GRADED GRAVEL WITH SILT AND SAND, 147.7 (GP-GM) gray, wet	PID = 0.1
15									
	HD 6	100	46-14-21 (35)	MC = 11%		ML		15.0 SANDY SILT WITH GRAVEL, (ML) gray, wet 142.7	PID = 0
								16.5 141.2	



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CLIENT Municipality of Anchorage

PROJECT NAME 42nd Avenue Upgrade

PROJECT NUMBER MOA PM&E Project No. 18-06

PROJECT LOCATION Anchorage, AK

DATE STARTED 5/7/19

COMPLETED 5/7/19

GROUND ELEVATION 157.488 ft

DRILLING CONTRACTOR Discovery Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Hollow-Stem Auger

▽ AT TIME OF DRILLING 5.00 ft / Elev 152.49 ft

LOGGED BY DMB

CHECKED BY SMH

AT END OF DRILLING ---

NOTES

AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	TESTS	ICE BOND	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0									
	G 1	100		MC = 27% Fines = 20% SA		AC		0.2 ASPHALT CONCRETE, (AC) black 157.3 SILTY SAND WITH GRAVEL, (SM) 35% gravel, 45% sand, 20% fines, brown, moist, [FILL]	PID = 0
						SM			
	HD 2	50	6-7-9-8 (16)	MC = 8% Fines = 14% P200		SM		2.5 SILTY SAND WITH GRAVEL, (SM) 14% fines, gray, moist, [FILL] 155.0	PID = 0
5									
	HD 3	75	5-9-8-11 (17)	MC = 9% Fines = 32% P200		SM		5.0 ▽ SILTY SAND WITH GRAVEL, (SM) 32% fines, gray, moist, [FILL] 152.5	PID = 0
	HD 4	75	7-9-12-15 (21)	MC = 19%		SP		7.5 POORLY GRADED SAND WITH GRAVEL, (SP) gray, moist 150.0	PID = 0.2
10									
	HD 5	75	10-14-14-14 (28)	MC = 12%		GM		10.0 SILTY GRAVEL WITH SAND, (GM) gray, wet 147.5	PID = 0
15									
	HD 6	100	21-22-16 (38)	MC = 10%		GW		15.0 WELL GRADED GRAVEL, (GW) gray, wet 142.5	PID = 0
								16.5 141.0	



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CLIENT Municipality of Anchorage

PROJECT NAME 42nd Avenue Upgrade

PROJECT NUMBER MOA PM&E Project No. 18-06

PROJECT LOCATION Anchorage, AK

DATE STARTED 5/7/19

COMPLETED 5/7/19

GROUND ELEVATION 167.784 ft

DRILLING CONTRACTOR Discovery Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Hollow-Stem Auger

▽ AT TIME OF DRILLING 15.00 ft / Elev 152.78 ft

LOGGED BY DMB

CHECKED BY SMH

AT END OF DRILLING ---

NOTES

▽ AFTER DRILLING 29.30 ft / Elev 138.48 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	TESTS	ICE BOND	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0										
	G 1	100		MC = 11% OLI		GC		CLAYEY GRAVEL, (GC) gray, moist, low plasticity, 0.3% organics, 97.7% ash	PID = 0	
						GC				
	HD 2	67	0-0-1-2 (1)	MC = 15%		GC		CLAYEY GRAVEL, (GC) brown, moist	PID = 2.8	
5										
	HD 3	50	2-3-6-6 (9)	MC = 12%		GC		CLAYEY GRAVEL, (GC) brown, moist	PID = 0.7	
	HD 4	75	4-4-3-4 (7)	PP = 4.5 tsf MC = 15% PP		ML		SILT WITH GRAVEL, (ML) gray, moist	PID = 0.4	
10										
	HD 5	75	3-3-3-4 (6)	MC = 13%		ML		SILT WITH GRAVEL, (ML) gray, moist	PID = 0	
15										
	HD 6	75	3-4-2-4 (6)	MC = 20% Fines = 71% P200		ML		SILT WITH SAND, (ML) 71% fines, gray, wet	PID = 0	
20										

(Continued Next Page)



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CLIENT Municipality of Anchorage

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PROJECT NUMBER MOA PM&E Project No. 18-06

PROJECT LOCATION Anchorage, AK

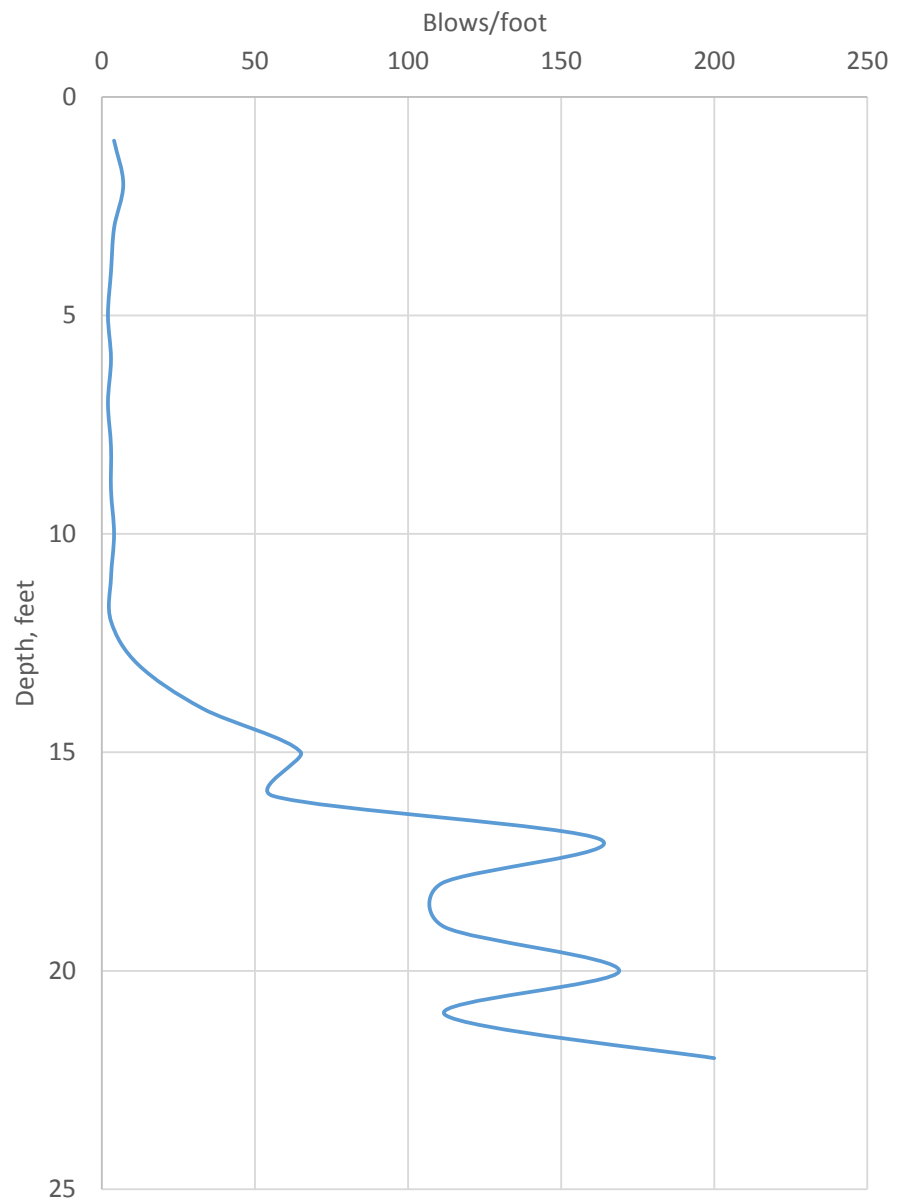
DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	TESTS	ICE BOND	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
20										
	HD 7	83	2-4-3-4 (7)	MC = 18%				GRAVELLY SILT WITH SAND, (ML) gray, wet	PID = 0	
					ML					
25										
	HD 8	75	8-14-15-17 (29)	MC = 7%				GRAVELLY SILT WITH SAND, (ML) gray, wet	PID = 0.7	
					ML					
30										
	HD 9	75	15-14-19- 27 (33)	MC = 10%				GRAVELLY SILT WITH SAND, (ML) gray, wet	PID = 2.7	
					ML					
35										
	HD 10	100	8-38-50 (88)	MC = 8%				SILTY SAND WITH GRAVEL, (SM) gray, wet	PID = 4	
					SM					
40										
	HD 11	83	19-52	MC = 6% Fines = 29% SA				SILTY SAND WITH GRAVEL, (SM) 32% gravel, 39% sand, 29% fines, gray, wet	PID = 0.6	
					SM					

1-in. sch. 40.
PVC

1-in. sch. 40.
PVC slotted

42nd Ave Upgrade Drive Penetrometer, P-01

Depth, feet	Blows/foot
1	4
2	7
3	4
4	3
5	2
6	3
7	2
8	3
9	3
10	4
11	3
12	3
13	12
14	33
15	65
16	56
17	163
18	111
19	112
20	169
21	112
22	200



Appendix B

Laboratory Results

Included in this section:

- 1) Laboratory Results from Alaska Testlab



Testing Report Summary

Date Sample Recv'd 5/28/2019

Client CRW Engineering
Project 42nd Ave Upgrade
Location BH-01 to BH-24

W.O. # 517
Lab # 470

All results will be posted to the website for your access and convenience. Samples will be kept for 30 days before being disposed. Please contact us if you would like the remaining material returned.

Test Performed

Moisture Content, ASTM D2216

Sample ID	Results (%)	Sample ID	Results (%)
BH-01 Sample 1	6	BH-13 Sample 1	5
BH-01 Sample 2	6	BH-13 Sample 2	5
BH-01 Sample 3	43	BH-13 Sample 3	5
BH-01 Sample 3B	51	BH-13 Sample 4	10
BH-01 Sample 4	17	BH-13 Sample 5	10
BH-01 Sample 5	12	BH-13 Sample 6	12
BH-01 Sample 6	16	BH-14 Sample 1	4
BH-01 Sample 6A	12	BH-14 Sample 2	3
BH-02 Sample 1	5	BH-14 Sample 3	3
BH-02 Sample 2	3	BH-14 Sample 4	11
BH-02 Sample 3	16	BH-14 Sample 5	12
BH-02 Sample 4	13	BH-14 Sample 6	10
BH-02 Sample 5	18	BH-15 Sample 1	2
BH-02 Sample 6	16	BH-15 Sample 2	4
BH-03 Sample 1	6	BH-15 Sample 3	8
BH-03 Sample 2	3	BH-15 Sample 4	11
BH-03 Sample 3	5	BH-15 Sample 5	18
BH-03 Sample 4	4	BH-15 Sample 6	14
BH-03 Sample 5	12	BH-15 Sample 6A	10
BH-03 Sample 6	10	BH-16 Sample 1	19
BH-04 Sample 1	10	BH-16 Sample 2	16
BH-04 Sample 2A	39	BH-16 Sample 3	16
BH-04 Sample 2B	17	BH-16 Sample 4	5
BH-04 Sample 3	17	BH-16 Sample 5	10
BH-04 Sample 4	8	BH-16 Sample 6	11
BH-04 Sample 5	12	BH-17 Sample 1	13
BH-04 Sample 6	14	BH-17 Sample 2A	5
BH-05 Sample 1	6	BH-17 Sample 2B	8
BH-05 Sample 2	5	BH-17 Sample 3	15
BH-05 Sample 3	6	BH-17 Sample 4A	10
BH-05 Sample 4	5	BH-17 Sample 4B	9
BH-05 Sample 5	2	BH-17 Sample 5	7
BH-05 Sample 6	7	BH-17 Sample 6	18
BH-06 Sample 1	3	BH-18 Sample 1	5
BH-06 Sample 2	4	BH-18 Sample 2	4
BH-06 Sample 3	2	BH-18 Sample 3	5
BH-06 Sample 4	3	BH-18 Sample 4	11
BH-06 Sample 5	6	BH-18 Sample 5	15
BH-06 Sample 6	6	BH-18 Sample 6	10

Client	CRW Engineering
Project	42nd Ave Upgrade
Location	BH-01 to BH-24

W.O. #	517
Lab #	470

BH-07 Sample 1	2	BH-19 Sample 1	3
BH-07 Sample 2	3	BH-19 Sample 2	4
BH-07 Sample 3	5	BH-19 Sample 3	4
BH-07 Sample 4	4	BH-19 Sample 4A	12
BH-07 Sample 5A	10	BH-19 Sample 4B	6
BH-07 Sample 5B	9	BH-19 Sample 5	12
BH-07 Sample 6	6	BH-19 Sample 6	8
BH-08 Sample 1	8	BH-20 Sample 1	4
BH-08 Sample 2A	2	BH-20 Sample 2	5
BH-08 Sample 2B	12	BH-20 Sample 3	6
BH-08 Sample 3	4	BH-20 Sample 4	11
BH-08 Sample 4	8	BH-20 Sample 5	9
BH-08 Sample 5	8	BH-20 Sample 6	10
BH-08 Sample 6	8	BH-21 Sample 1	8
BH-09 Sample 1	4	BH-21 Sample 2	7
BH-09 Sample 2	3	BH-21 Sample 3	12
BH-09 Sample 3	5	BH-21 Sample 4	10
BH-09 Sample 4	13	BH-21 Sample 5	9
BH-09 Sample 5	8	BH-21 Sample 6	12
BH-09 Sample 6	12	BH-22 Sample 1	3
BH-10 Sample 1	4	BH-22 Sample 2	4
BH-10 Sample 2	5	BH-22 Sample 3	6
BH-10 Sample 3	6	BH-22 Sample 4	14
BH-10 Sample 4	11	BH-22 Sample 5	11
BH-10 Sample 5	12	BH-22 Sample 6	11
BH-10 Sample 6	8	BH-23 Sample 1	27
BH-11 Sample 1	6	BH-23 Sample 2	8
BH-11 Sample 2	8	BH-23 Sample 3	9
BH-11 Sample 3	5	BH-23 Sample 4	19
BH-11 Sample 4	10	BH-23 Sample 5	12
BH-11 Sample 5	12	BH-23 Sample 6	10
BH-11 Sample 6A	11	BH-24 Sample 1	11
BH-11 Sample 6B	7	BH-24 Sample 2	15
BH-12 Sample 1	7	BH-24 Sample 3	12
BH-12 Sample 2	6	BH-24 Sample 4	15
BH-12 Sample 3	4	BH-24 Sample 5	13
BH-12 Sample 4	8	BH-24 Sample 6	20
BH-12 Sample 5	10	BH-24 Sample 7	18
BH-12 Sample 6	8	BH-24 Sample 8	7
		BH-24 Sample 9	10
		BH-24 Sample 10	8
		BH-24 Sample 11	6

If you have questions regarding this summary report or the test procedures, please contact us.

Oscar

Oscar Lage
Laboratory Supervisor



Testing Report Summary

		Date Sample Recv'd	5/28/2019
Client	CRW Engineering	W.O. #	517
Project	42nd Ave Upgrade	Lab #	See Below
Location	See Below		

All results will be posted to the website for your access and convenience. Samples will be kept for 30 days before being disposed. Please contact us if you would like the remaining material returned.

Sample ID	Test Performed	Test Method	% Passing #200
BH-01 Sample 6A	Standard Test Methods for Determining the Amount of Material Finer than 75- μ m (No. 200) Sieve in Soils by Washing	ASTM D1140	23
BH-04 Sample 3			26
BH-05 Sample 5			14
BH-06 Sample 6			12
BH-08 Sample 5			8
BH-09 Sample 2			5
BH-10 Sample 6			7
BH-11 Sample 5			29
BH-12 Sample 6			48
BH-14 Sample 6			51
BH-15 Sample 6B			39
BH-16 Sample 2			48
BH-16 Sample 4			2
BH-19 Sample 4B			21
BH-21 Sample 6			15
BH-23 Sample 2			14
BH-23 Sample 3			32
BH-24 Sample 6			71

Sample ID	Test Performed	Test Method	Results		
BH-05 S4 (ATL#478)	Plasticity Index	ASTM D4318	Liquid Limit	NP	ML
BH-08 S 2B (ATL#483)			Plastic Limit	NP	
			Plasticity Index	NP	
			Liquid Limit	NP	ML
Plastic Limit			NP		
Plasticity Index			NP		
BH-07 S6 (ATL#483)			Liquid Limit	NP	ML
			Plastic Limit	NP	
			Plasticity Index	NP	
BH-13 S5 (ATL#497)			Liquid Limit	17	ML
			Plastic Limit	15	
			Plasticity Index	2	

		Date Sample Recv'd	5/28/2019
Client	CRW Engineering	W.O. #	517
Project	42nd Ave Upgrade	Lab #	See Below
Location	See Below		

BH-14 S6 (ATL#500)	Plasticity Index	ASTM D4318	Liquid Limit	NP	ML
			Plastic Limit	NP	
			Plasticity Index	NP	
BH-14 S6 (ATL#500)			Liquid Limit	NP	ML
			Plastic Limit	NP	
			Plasticity Index	NP	
BH-16 S3 (ATL#504)			Liquid Limit	NP	ML
			Plastic Limit	NP	
			Plasticity Index	NP	
BH-17 S5 (ATL#507)			Liquid Limit	NP	ML
			Plastic Limit	NP	
			Plasticity Index	NP	
BH-18 S6 (ATL#510)			Liquid Limit	NP	ML
			Plastic Limit	NP	
			Plasticity Index	NP	
BH-19 S6 (ATL#512)			Liquid Limit	NP	ML
			Plastic Limit	NP	
			Plasticity Index	NP	

Sample ID	Test Performed	Test Method	Results	
BH-24 S2 (ATL#535)	Moisture, Ash & Organic Matter of Peat Materials	ASTM D2974	% Organics (by weight)	0.3
			% Ash	97.7

If you have questions regarding this summary report or the test procedures, please contact us.

oscar

Oscar Lage

Laboratory Supervisor



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-02 Sample 1

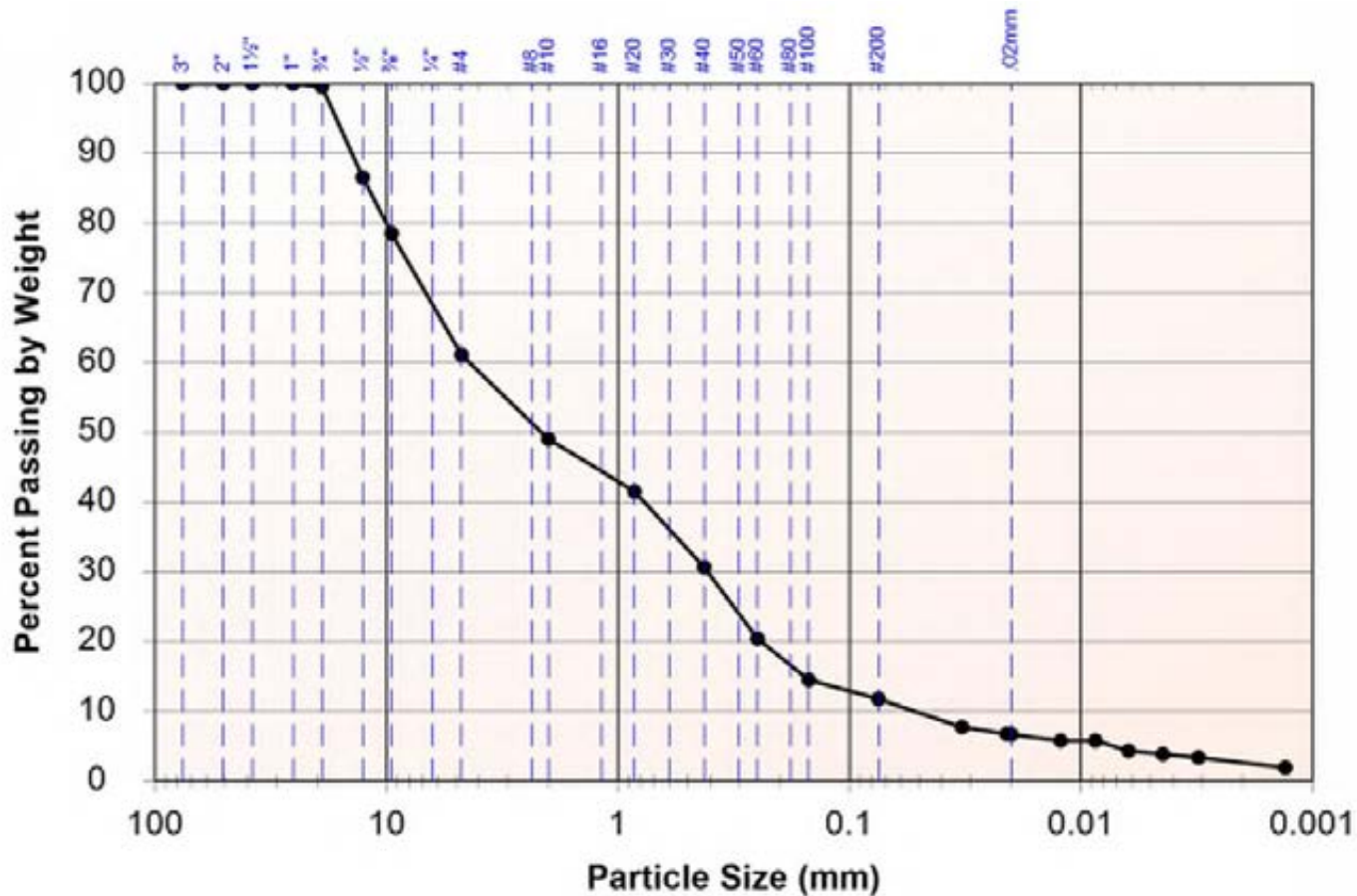
Lab Number 2019-472

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Poorly Graded Sand with Silt and Gravel, SP-SM

Frost Classification: F2



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	100%	
1"	100%	
3/4"	100%	
1/2"	87%	
3/8"	78%	
#4	61%	
#10	49%	
Total Weight of Sample 1431.2g		
#20	42%	
#40	31%	
#60	20%	
#100	14%	
#200	11.8%	
Total Weight of Fine Fraction 86.84g		
0.02 mm	6.7%	



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-02 Sample 6

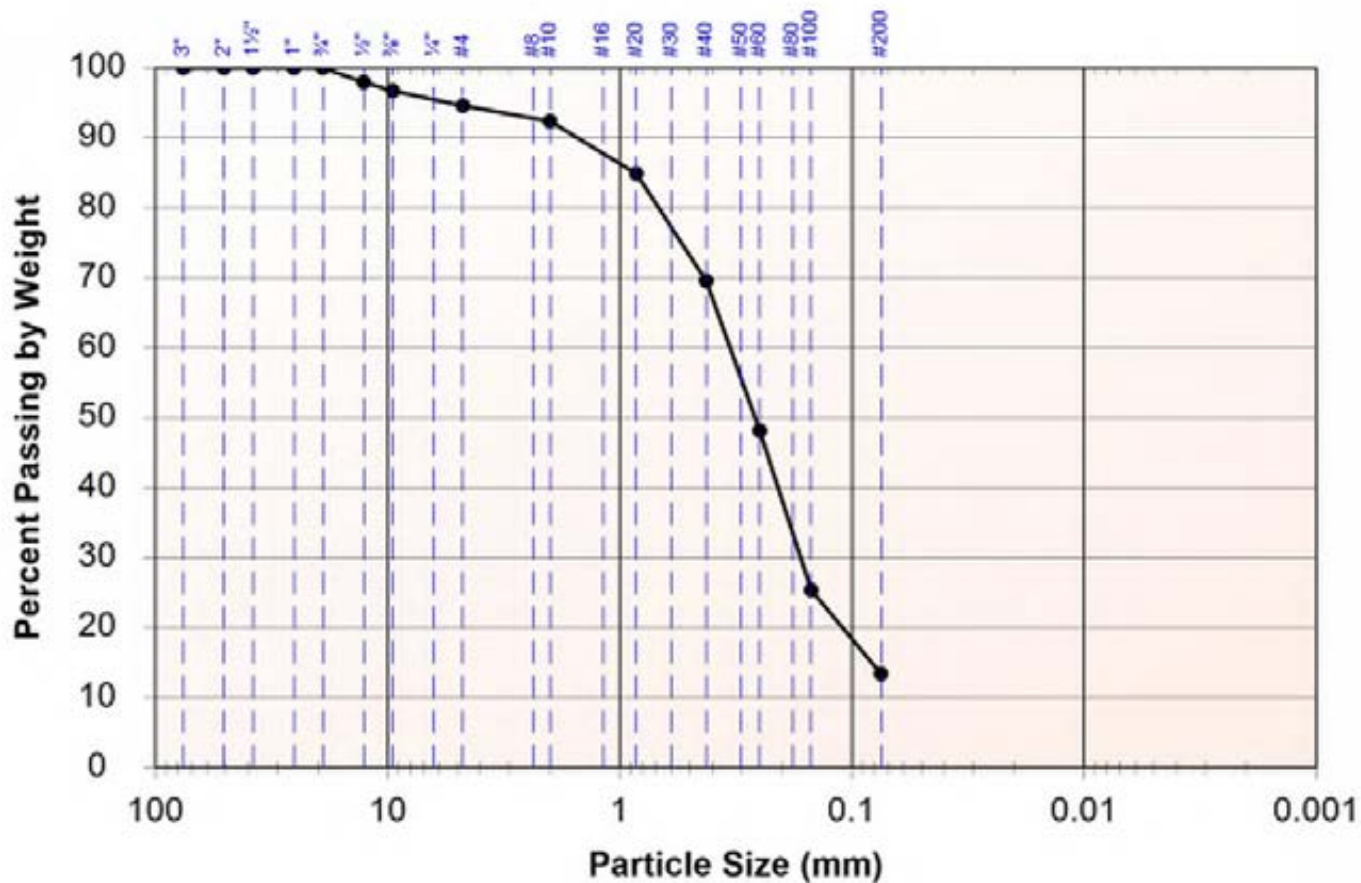
Lab Number 2019-473

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Silty Sand, SM

Frost Classification: Not Measured



Size	Passing	Specification
3"	100%	
2"	100%	
1½"	100%	
1"	100%	
¾"	100%	
½"	98%	
⅜"	97%	
#4	95%	
Total Weight of Sample 2614.6g		
#10	92%	
#20	85%	
#40	70%	
#60	48%	
#100	25%	
#200	13.4%	
Total Weight of Fine Fraction 639.0g		



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-4 Sample 4

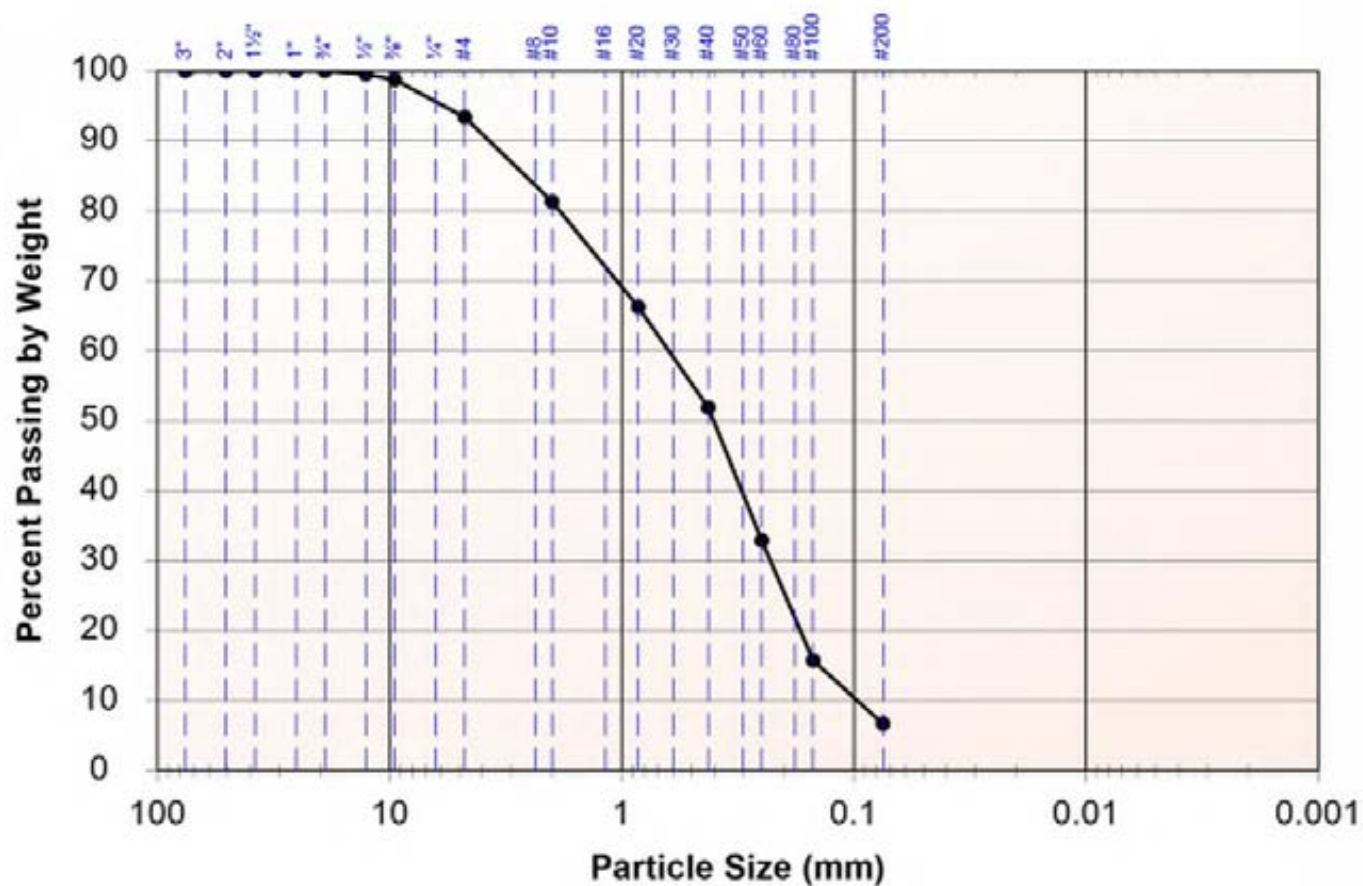
Lab Number 2019-475

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Poorly Graded Sand with Silt, SP-SM

Frost Classification: Not Measured



Size	Passing	Specification
------	---------	---------------

3"	100%	
----	------	--

2"	100%	
----	------	--

1 1/2"	100%	
--------	------	--

1"	100%	
----	------	--

3/4"	100%	
------	------	--

1/2"	100%	
------	------	--

3/8"	99%	
------	-----	--

#4	93%	
----	-----	--

Total Weight of Sample 1636.3g		
--------------------------------	--	--

#10	81%	
-----	-----	--

#20	66%	
-----	-----	--

#40	52%	
-----	-----	--

#60	33%	
-----	-----	--

#100	16%	
------	-----	--

#200	6.7%	
------	------	--

Total Weight of Fine Fraction 352.6g		
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Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-05 Sample 1

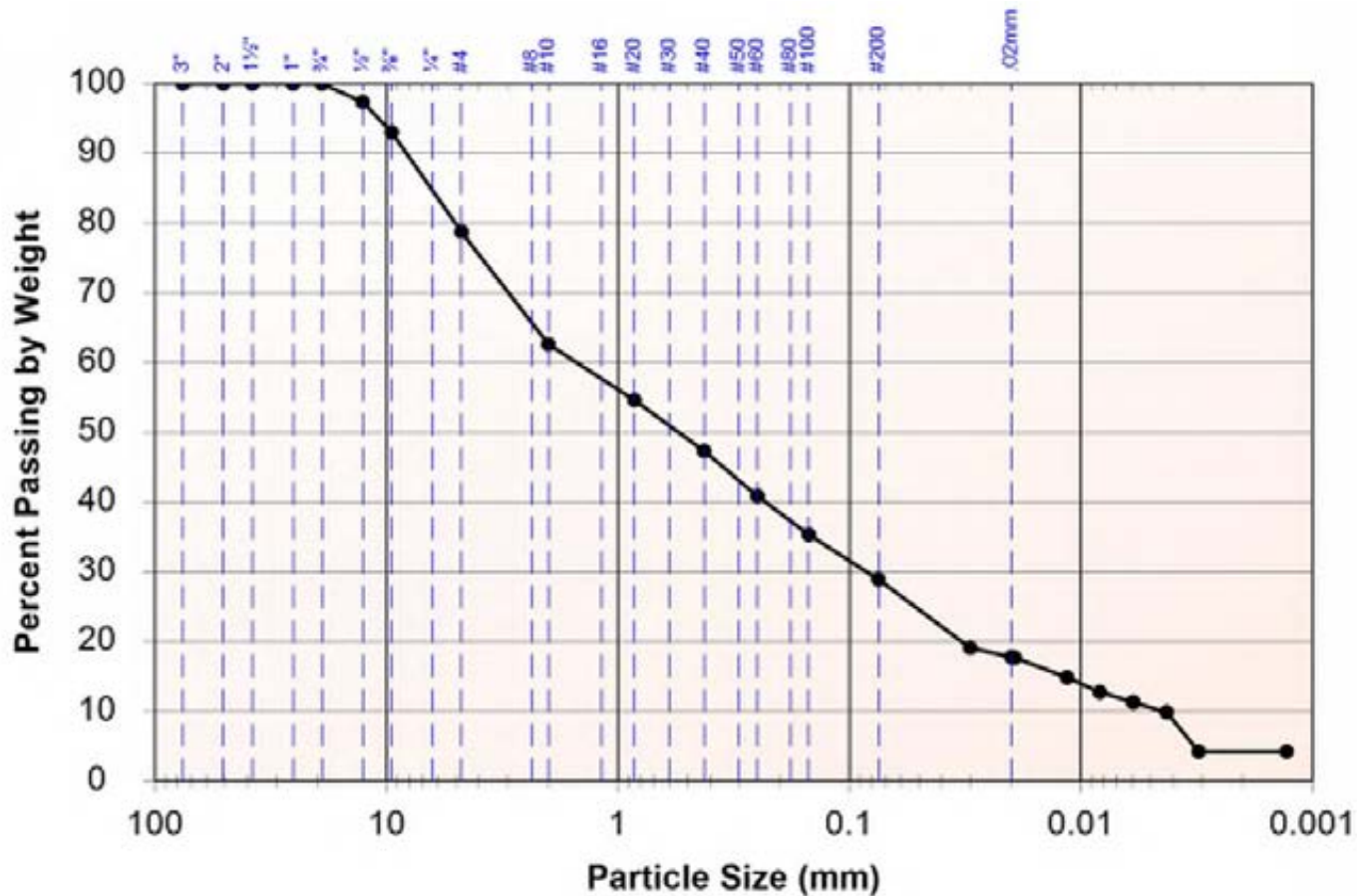
Lab Number 2019-476

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Silty Sand with Gravel, SM

Frost Classification: F3



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	100%	
1"	100%	
3/4"	100%	
1/2"	97%	
3/8"	93%	
#4	79%	
#10	63%	
Total Weight of Sample 2243.9g		
#20	55%	
#40	47%	
#60	41%	
#100	35%	
#200	28.9%	
Total Weight of Fine Fraction 78g		
0.02 mm	17.8%	



Client: CRW Engineering Group, LLC
 Project: 42nd Ave Upgrade
 Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-05 Sample 3

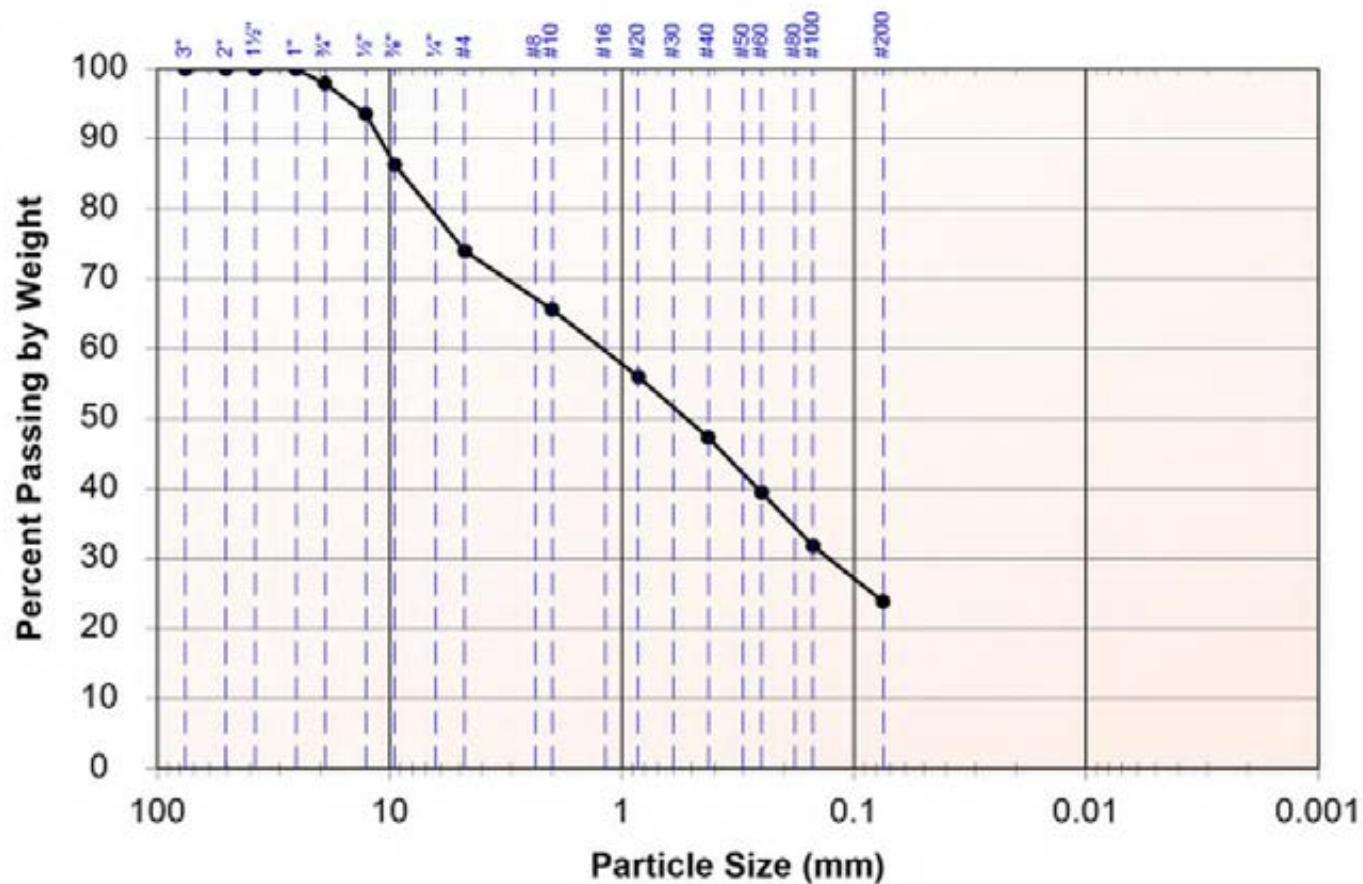
Lab Number 2019-477

Received 6/21/2019

Reported 6/21/2019

Engineering Classification: Silty Sand with Gravel, SM

Frost Classification: Not Measured



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	100%	
1"	100%	
3/4"	98%	
1/2"	94%	
3/8"	86%	
#4	74%	
Total Weight of Sample 830.4g		
#10	66%	
#20	56%	
#40	47%	
#60	39%	
#100	32%	
#200	23.9%	
Total Weight of Fine Fraction 614.5g		



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-06 Sample 2

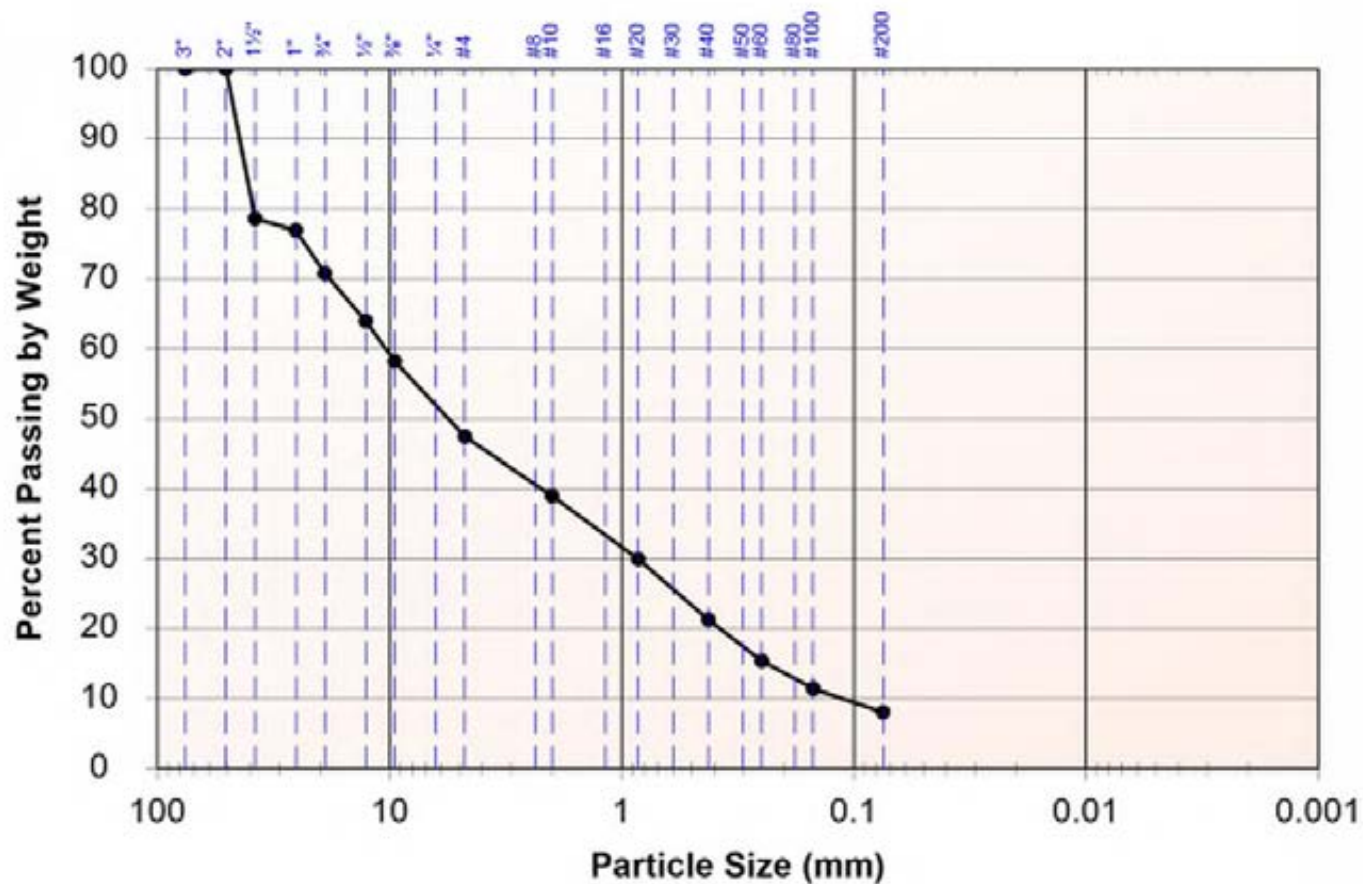
Lab Number 2019-480

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Poorly Graded Gravel with Silt and Sand, GP-GM

Frost Classification: Not Measured



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	79%	
1"	77%	
3/4"	71%	
1/2"	64%	
3/8"	58%	
#4	47%	
Total Weight of Sample 1936.8g		
#10	39%	
#20	30%	
#40	21%	
#60	15%	
#100	11%	
#200	8.1%	
Total Weight of Fine Fraction 410.2g		



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-07 Sample 1

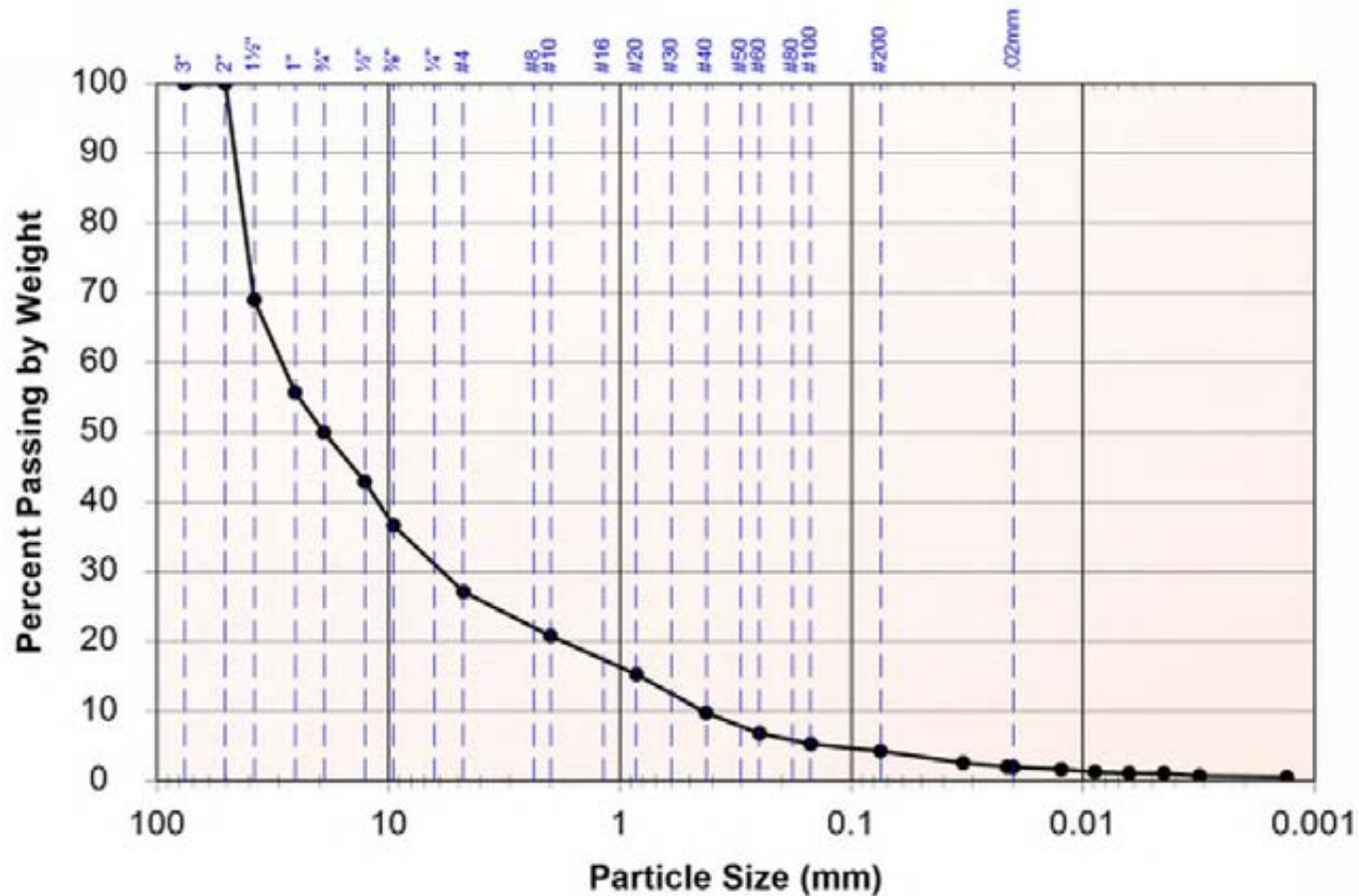
Lab Number 2019-482

Received 6/21/2019

Reported 6/21/2019

Engineering Classification: Well Graded Gravel with Sand, GW

Frost Classification: NFS



Size	Passing	Specification
3"	100%	
2"	100%	
1½"	69%	
1"	56%	
¾"	50%	
½"	43%	
⅜"	37%	
#4	27%	
#10	21%	
Total Weight of Sample 2510.9g		
#20	15%	
#40	10%	
#60	7%	
#100	5%	
#200	4.3%	
Total Weight of Fine Fraction 82.6g		
0.02 mm	2.0%	



Client: CRW Engineering Group, LLC
 Project: 42nd Ave Upgrade
 Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-08 Sample 6

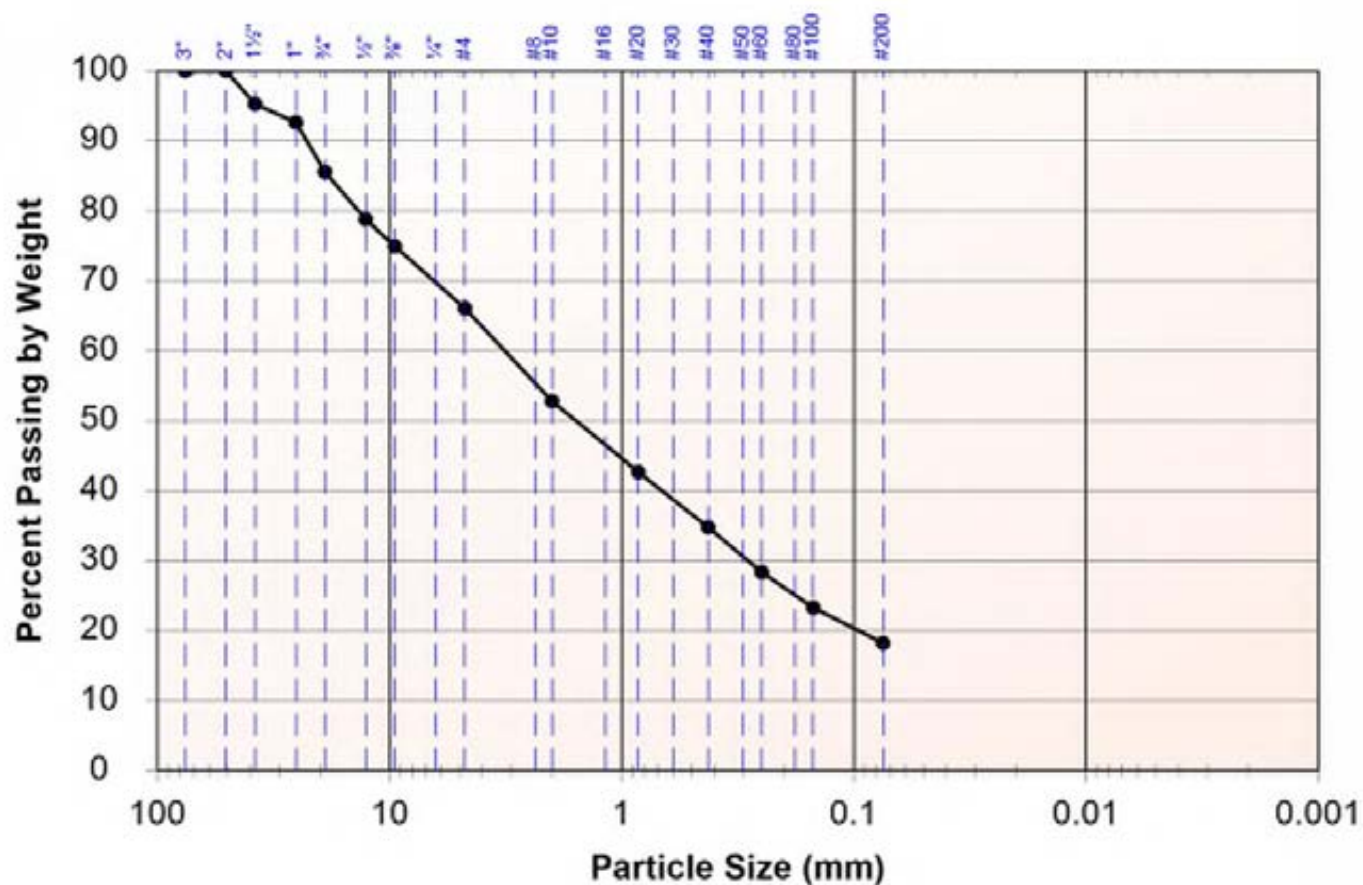
Lab Number 2019-486

Received 6/21/2019

Reported 6/21/2019

Engineering Classification: Silty Sand with Gravel, SM

Frost Classification: Not Measured



Size	Passing	Specification
------	---------	---------------

3"	100%	
----	------	--

2"	100%	
----	------	--

1½"	95%	
-----	-----	--

1"	93%	
----	-----	--

¾"	86%	
----	-----	--

½"	79%	
----	-----	--

⅜"	75%	
----	-----	--

#4	66%	
----	-----	--

Total Weight of Sample 2187.5g		
--------------------------------	--	--

#10	53%	
-----	-----	--

#20	43%	
-----	-----	--

#40	35%	
-----	-----	--

#60	28%	
-----	-----	--

#100	23%	
------	-----	--

#200	18.2%	
------	-------	--

Total Weight of Fine Fraction 380.3g		
--------------------------------------	--	--



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-09 Sample 1

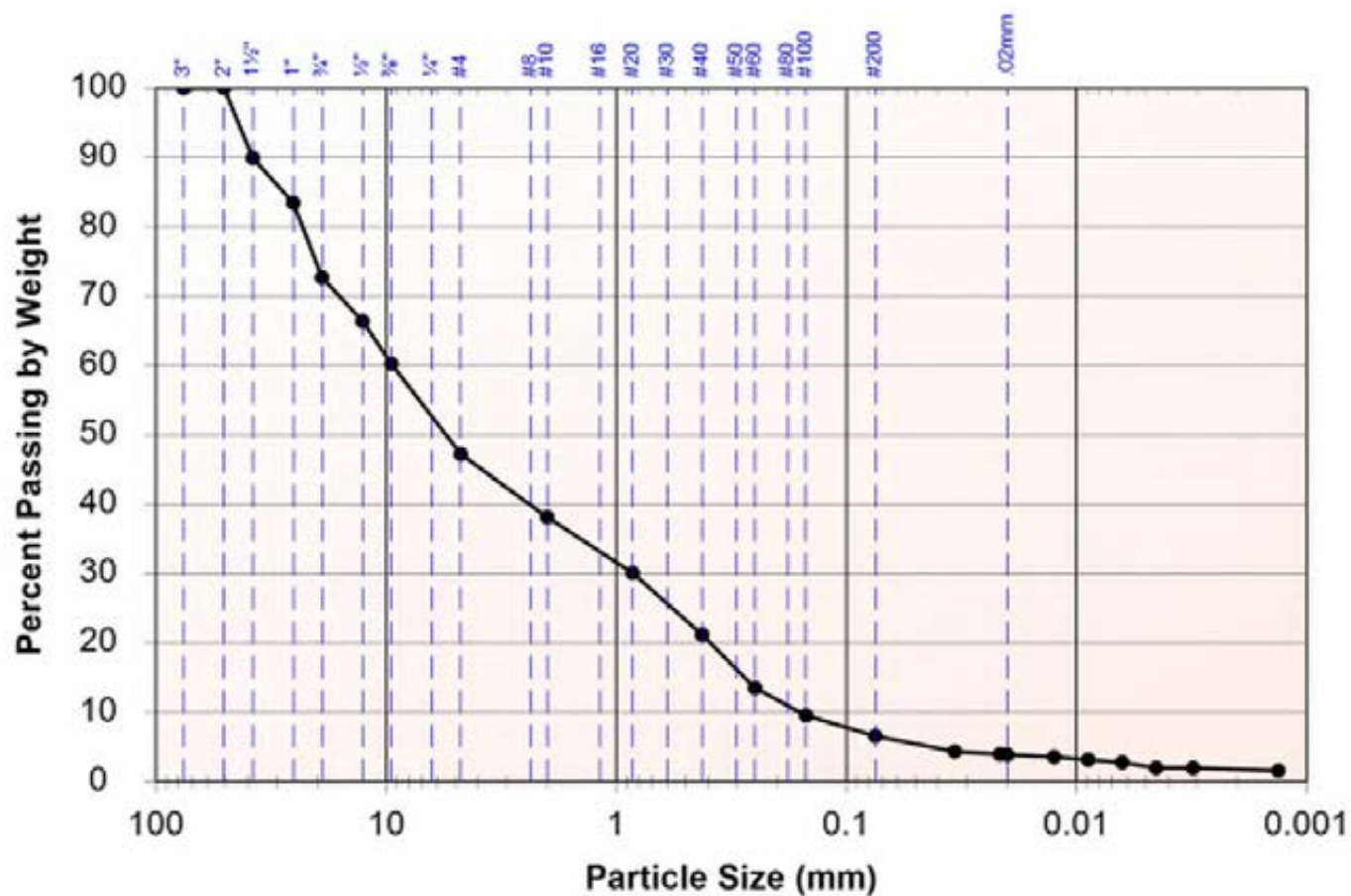
Lab Number 2019-487

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Poorly Graded Gravel with Silt and Sand, GP-GM

Frost Classification: S1



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	90%	
1"	83%	
3/4"	73%	
1/2"	66%	
3/8"	60%	
#4	47%	
#10	38%	
Total Weight of Sample 2078.1g		
#20	30%	
#40	21%	
#60	13%	
#100	10%	
#200	6.6%	
Total Weight of Fine Fraction 342.8g		
0.02 mm	3.9%	



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-9 Sample 4

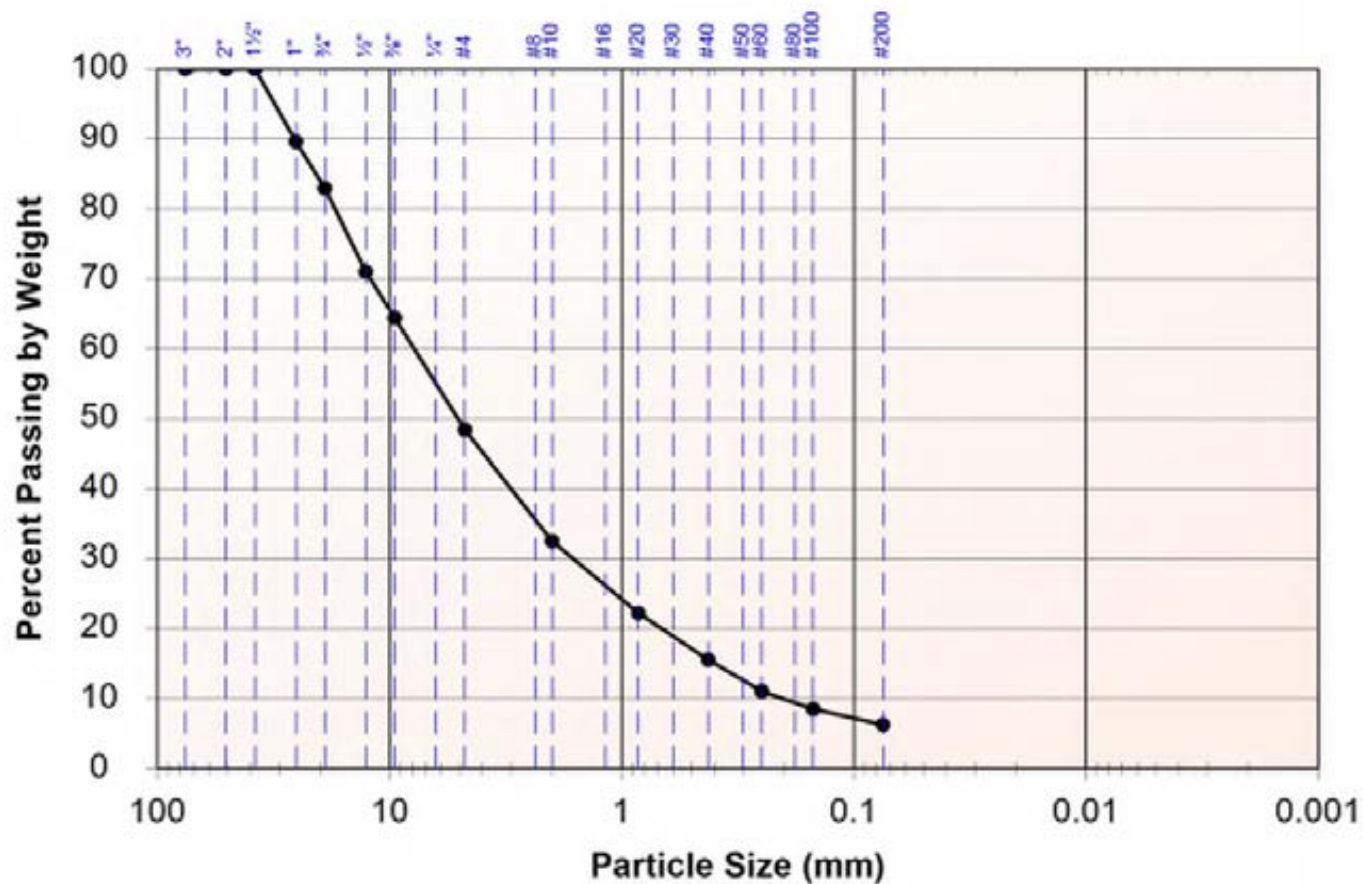
Lab Number 2019-489

Received 6/21/2019

Reported 6/21/2019

Engineering Classification: Well Graded Gravel with Silt and Sand, GW-GM

Frost Classification: Not Measured



Size	Passing	Specification
3"	100%	
2"	100%	
1½"	100%	
1"	90%	
¾"	83%	
½"	71%	
⅜"	64%	
#4	48%	
Total Weight of Sample 2247.8g		
#10	33%	
#20	22%	
#40	16%	
#60	11%	
#100	9%	
#200	6.3%	
Total Weight of Fine Fraction 310.1g		



Client: CRW Engineering Group, LLC
 Project: 42nd Ave Upgrade
 Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-10 Sample 2

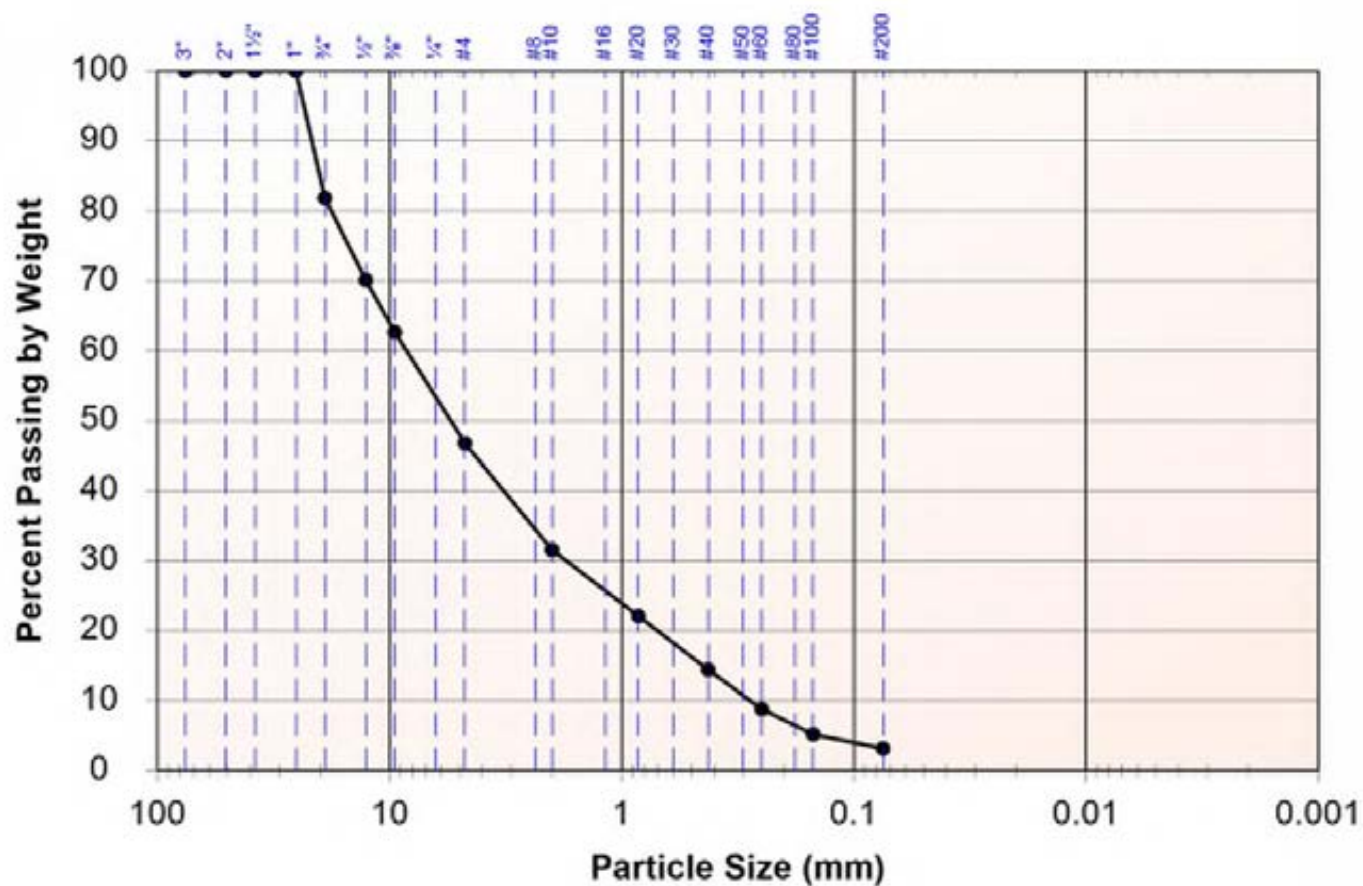
Lab Number 2019-490

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Well Graded Gravel with Sand, GW

Frost Classification: Not Measured



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	100%	
1"	100%	
3/4"	82%	
1/2"	70%	
3/8"	63%	
#4	47%	
Total Weight of Sample 1208g		
#10	32%	
#20	22%	
#40	14%	
#60	9%	
#100	5%	
#200	3.2%	
Total Weight of Fine Fraction 286.2g		



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-11 Sample 3

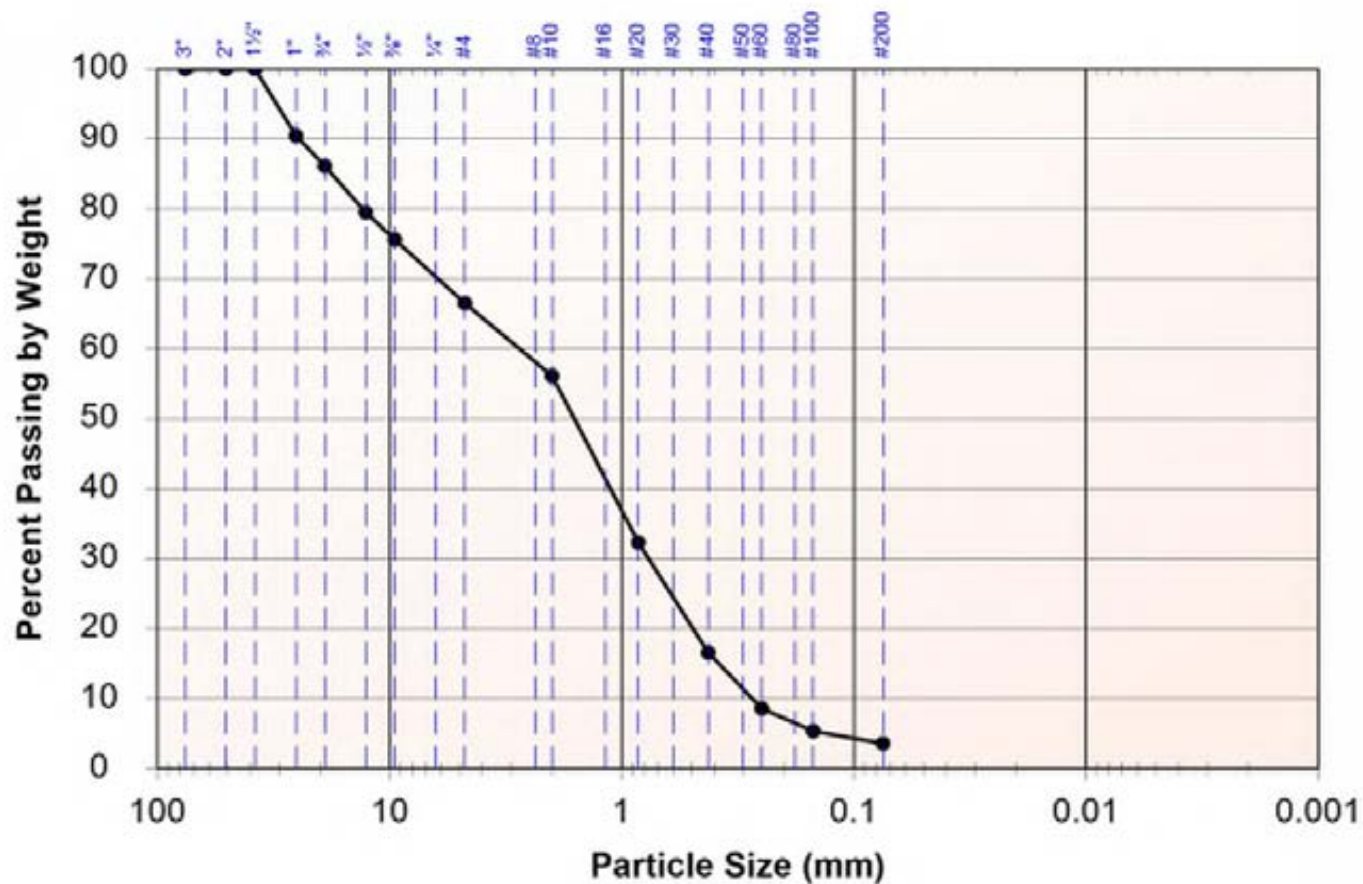
Lab Number 2019-492

Received 6/21/2019

Reported 6/21/2019

Engineering Classification: Poorly Graded Sand with Gravel, SP

Frost Classification: Not Measured



Size	Passing	Specification
3"	100%	
2"	100%	
1½"	100%	
1"	90%	
¾"	86%	
½"	79%	
⅜"	76%	
#4	67%	
Total Weight of Sample 2510.4g		
#10	56%	
#20	32%	
#40	17%	
#60	9%	
#100	5%	
#200	3.6%	
Total Weight of Fine Fraction 322.7g		



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: Bh-12 Sample 1

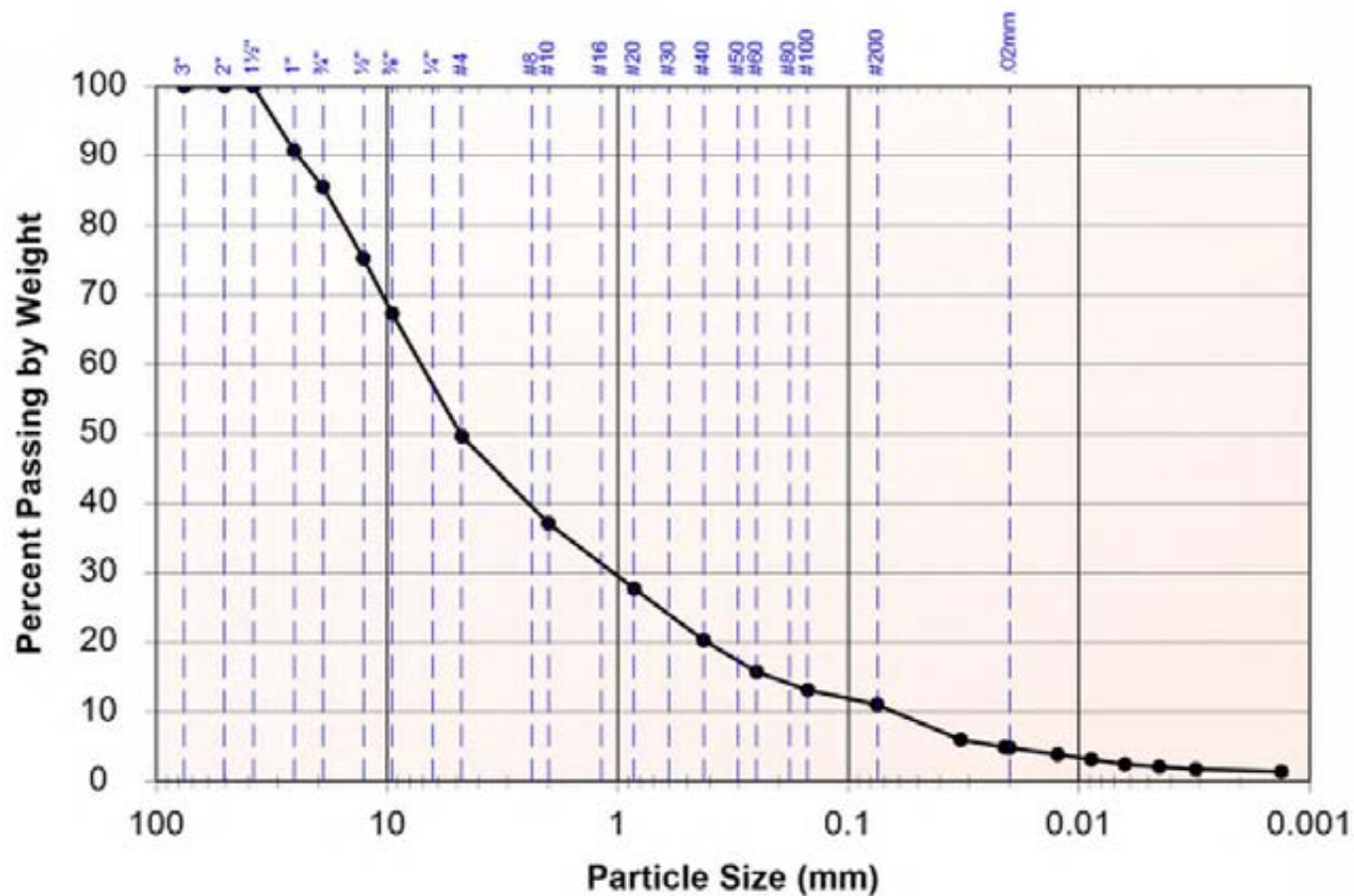
Lab Number 2019-494

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Well Graded Gravel with Silt and Sand, GW-GM

Frost Classification: S1



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	100%	
1"	91%	
3/4"	86%	
1/2"	75%	
3/8"	67%	
#4	50%	
#10	37%	
Total Weight of Sample 1098.2g		
#20	28%	
#40	20%	
#60	16%	
#100	13%	
#200	11.0%	
Total Weight of Fine Fraction 79.4g		
0.02 mm	4.8%	



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-13 Sample 3

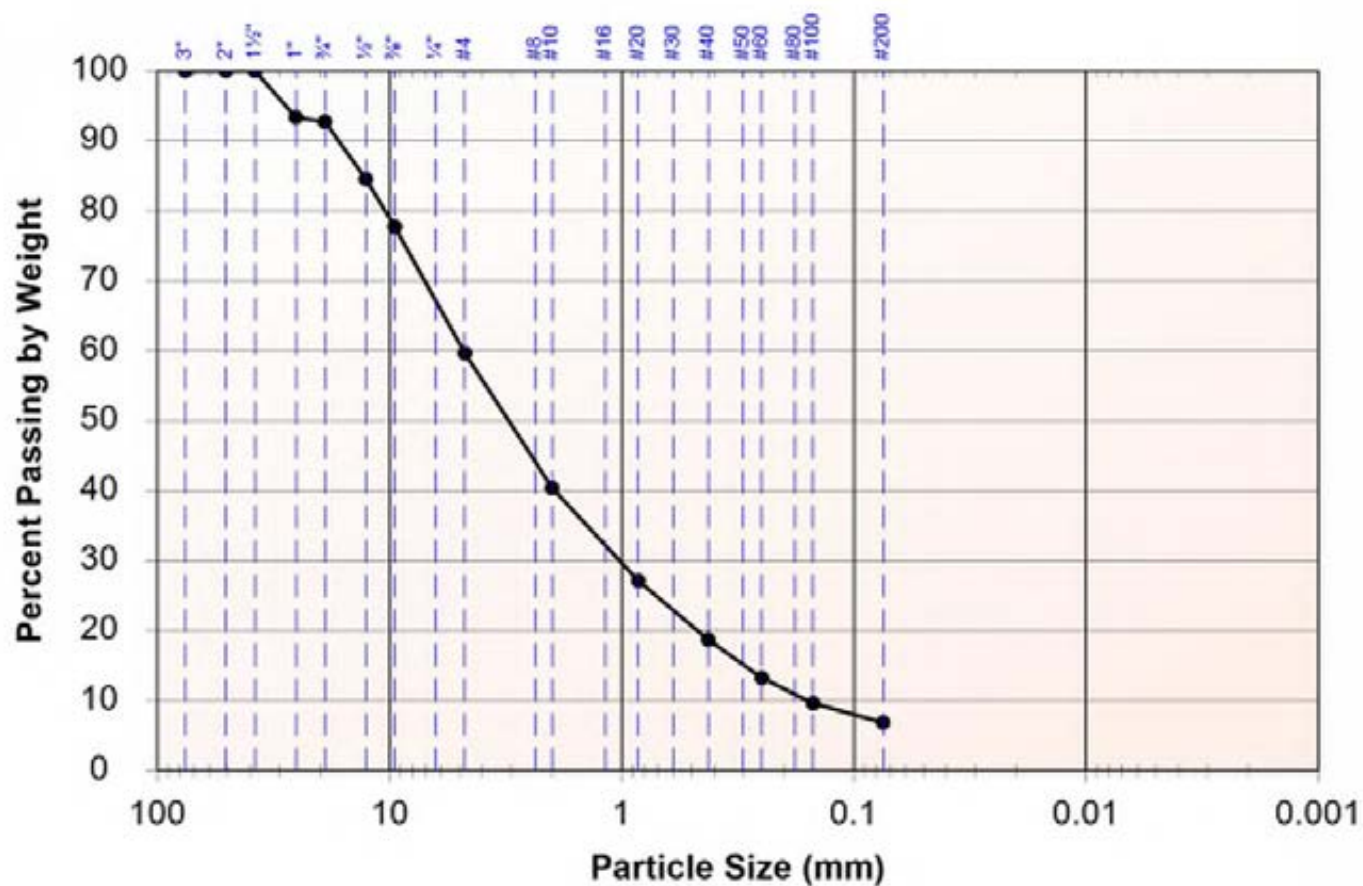
Lab Number 2019-496

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Well Graded Sand with Silt and Gravel, SW-SM

Frost Classification: Not Measured



Size	Passing	Specification
------	---------	---------------

3"	100%	
2"	100%	
1 1/2"	100%	
1"	93%	
3/4"	93%	
1/2"	85%	
3/8"	78%	
#4	60%	

Total Weight of Sample 1629.1g

#10	40%
#20	27%
#40	19%
#60	13%
#100	10%
#200	6.9%

Total Weight of Fine Fraction 374.4g



Client: CRW Engineering Group, LLC
 Project: 42nd Ave Upgrade
 Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-14 Sample 1

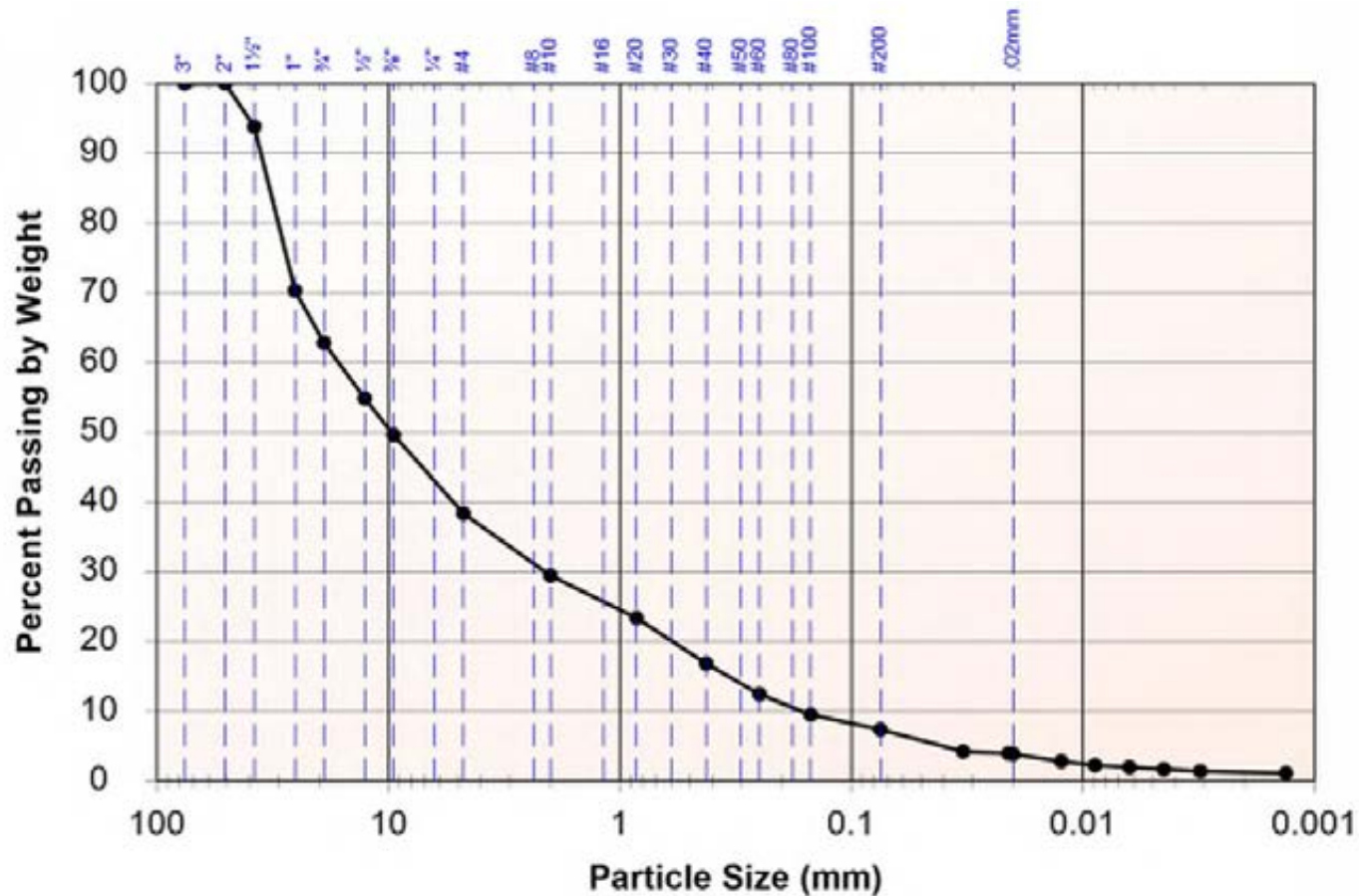
Lab Number 2019-498

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Well Graded Gravel with Silt and Sand, GW-GM

Frost Classification: S1



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	94%	
1"	70%	
3/4"	63%	
1/2"	55%	
3/8"	50%	
#4	38%	
#10	29%	
Total Weight of Sample 2070.8g		
#20	23%	
#40	17%	
#60	12%	
#100	10%	
#200	7.4%	
Total Weight of Fine Fraction 83.2g		
0.02 mm	3.9%	



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-14 Sample 4

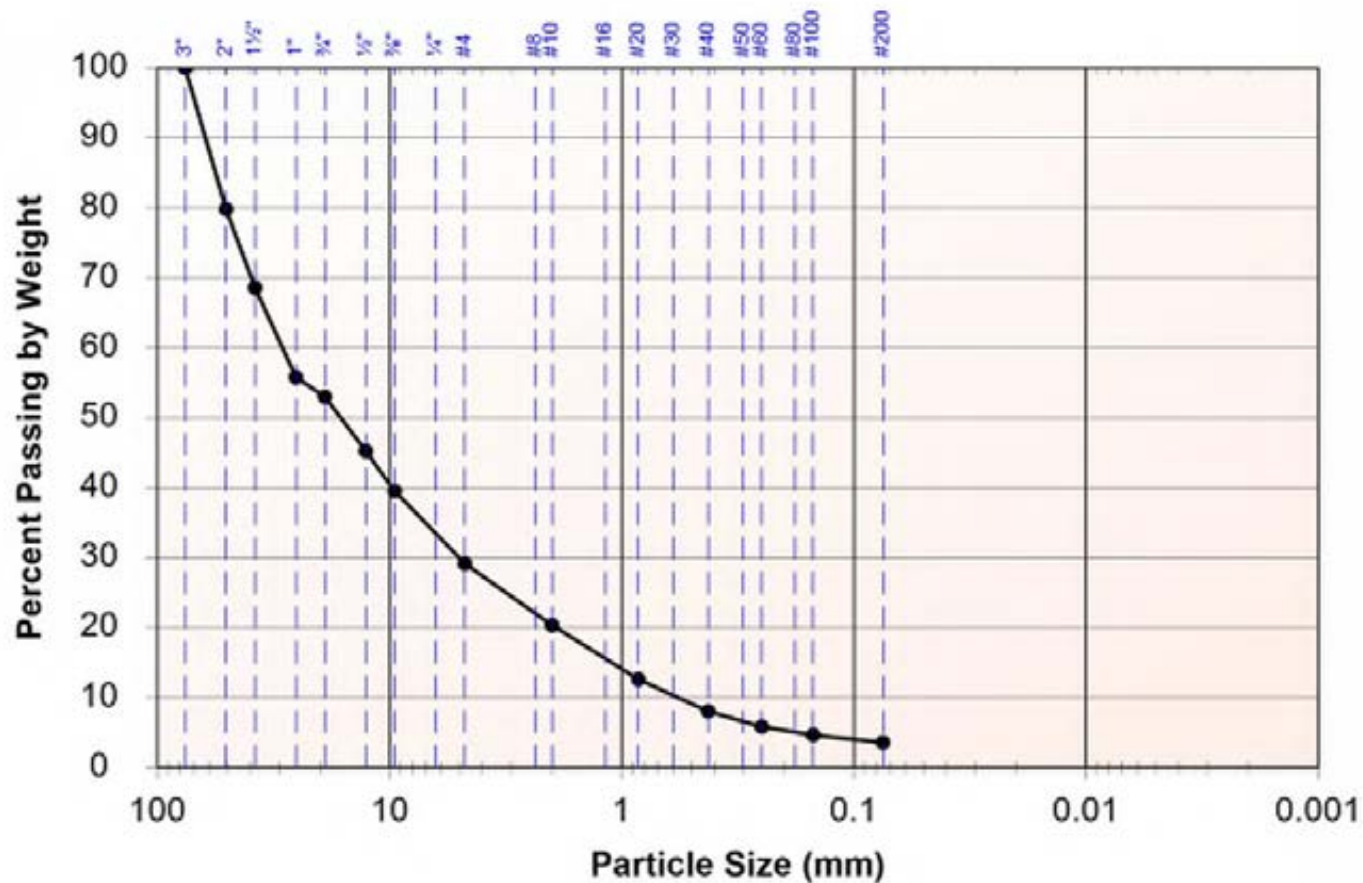
Lab Number 2019-499

Received 6/21/2019

Reported 6/21/2019

Engineering Classification: Well Graded Gravel with Sand, GW

Frost Classification: Not Measured



Size	Passing	Specification
3"	100%	
2"	80%	
1½"	69%	
1"	56%	
¾"	53%	
½"	45%	
⅜"	40%	
#4	29%	
Total Weight of Sample 1108g		
#10	20%	
#20	13%	
#40	8%	
#60	6%	
#100	5%	
#200	3.6%	
Total Weight of Fine Fraction 323.6g		



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-16 Sample 1

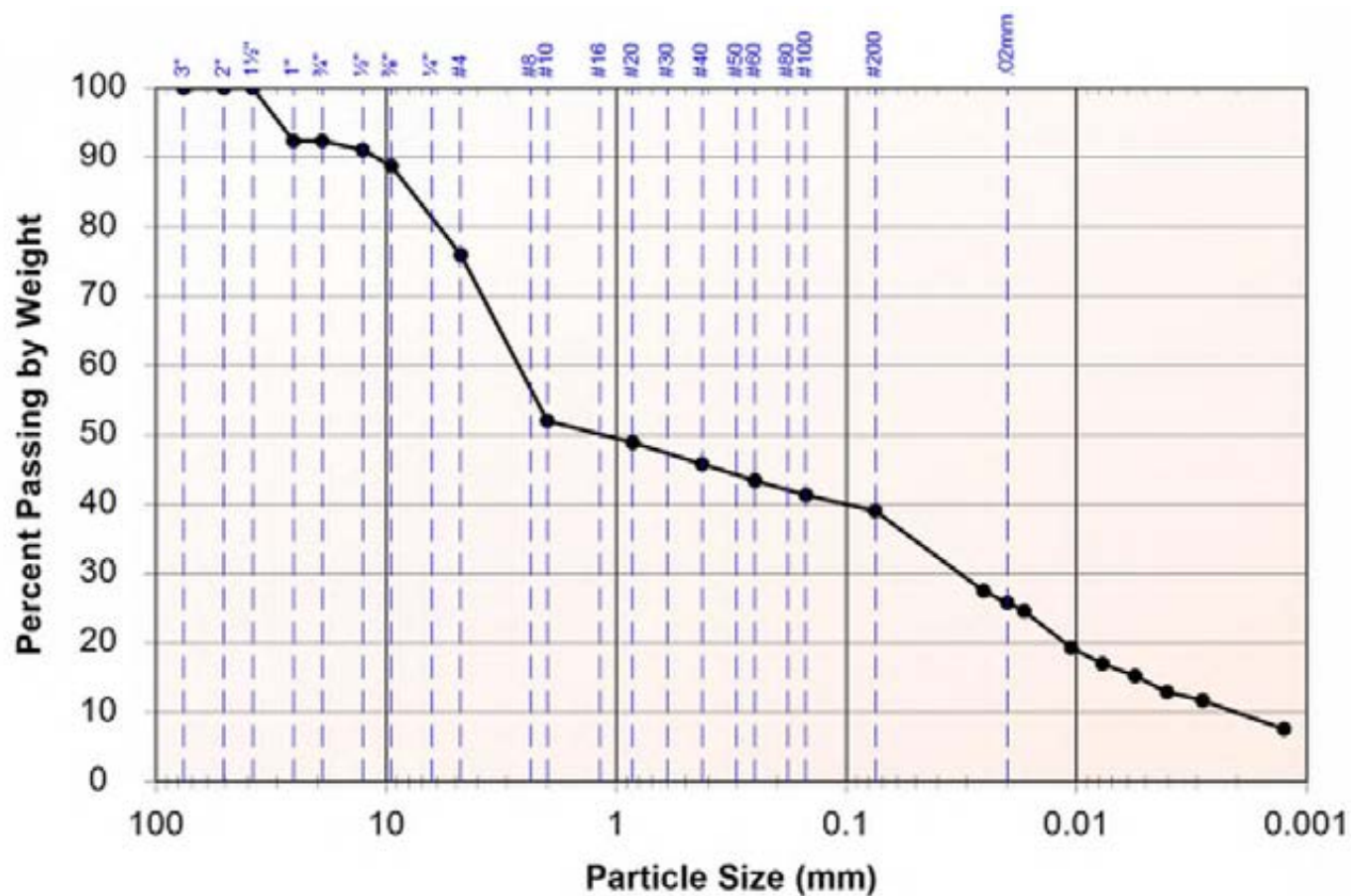
Lab Number 2019-502

Received 6/21/2019

Reported 6/21/2019

Engineering Classification: Silty Sand with Gravel, SM

Frost Classification: F4



Size	Passing	Specification
3"	100%	
2"	100%	
1½"	100%	
1"	92%	
¾"	92%	
½"	91%	
⅜"	89%	
#4	76%	
#10	52%	
Total Weight of Sample 1881.4g		
#20	49%	
#40	46%	
#60	43%	
#100	41%	
#200	39.0%	
Total Weight of Fine Fraction 85.8g		
0.02 mm	25.8%	



Client: CRW Engineering Group, LLC
 Project: 42nd Ave Upgrade
 Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-17 Sample 3

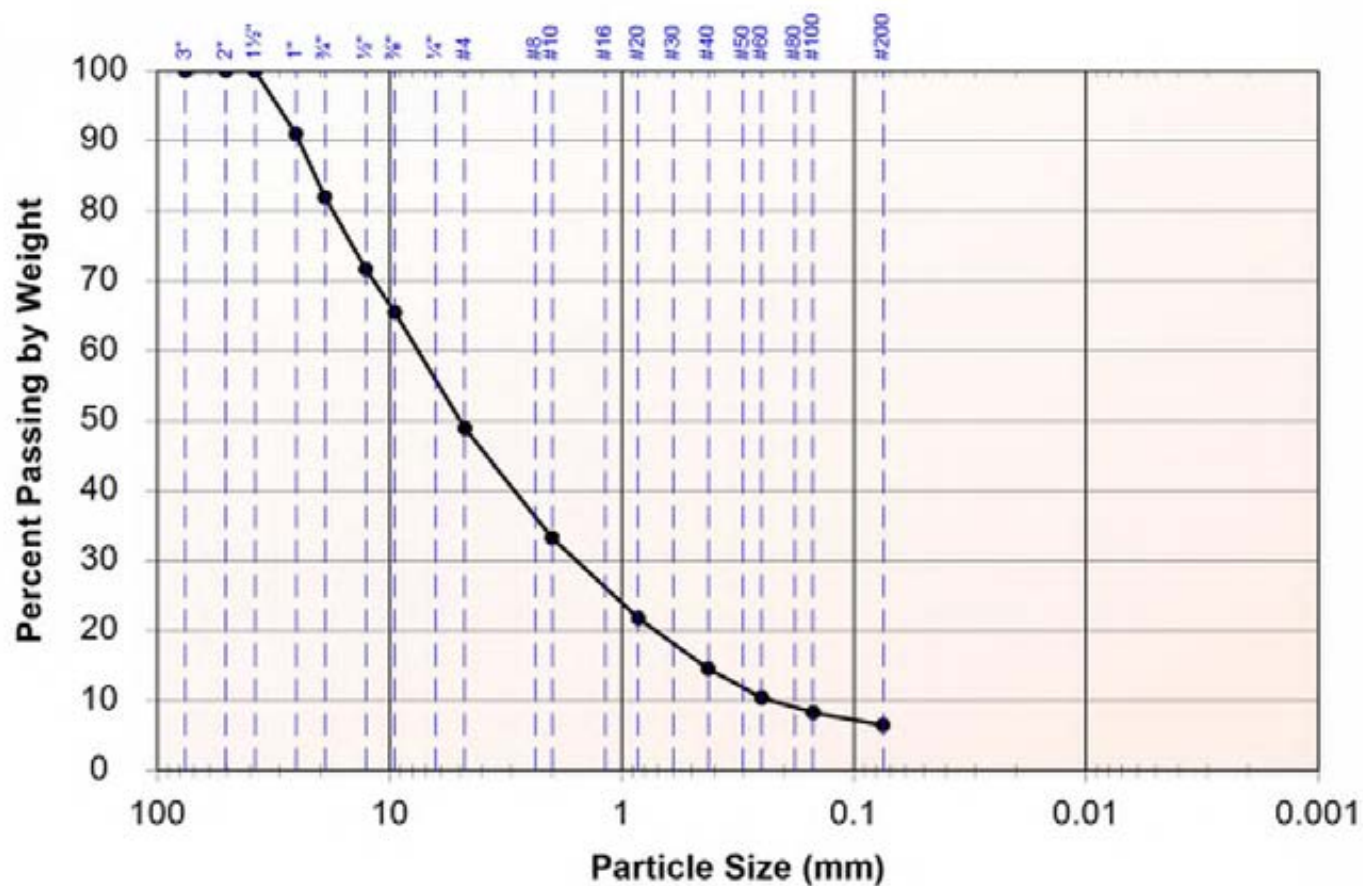
Lab Number 2019-506

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Well Graded Gravel with Silt and Sand, GW-GM

Frost Classification: Not Measured



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	100%	
1"	91%	
3/4"	82%	
1/2"	72%	
3/8"	66%	
#4	49%	
Total Weight of Sample 2250.9g		
#10	33%	
#20	22%	
#40	15%	
#60	10%	
#100	8%	
#200	6.5%	
Total Weight of Fine Fraction 519.5g		



Client: CRW Engineering Group, LLC
 Project: 42nd Ave Upgrade
 Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-18 Sample 1

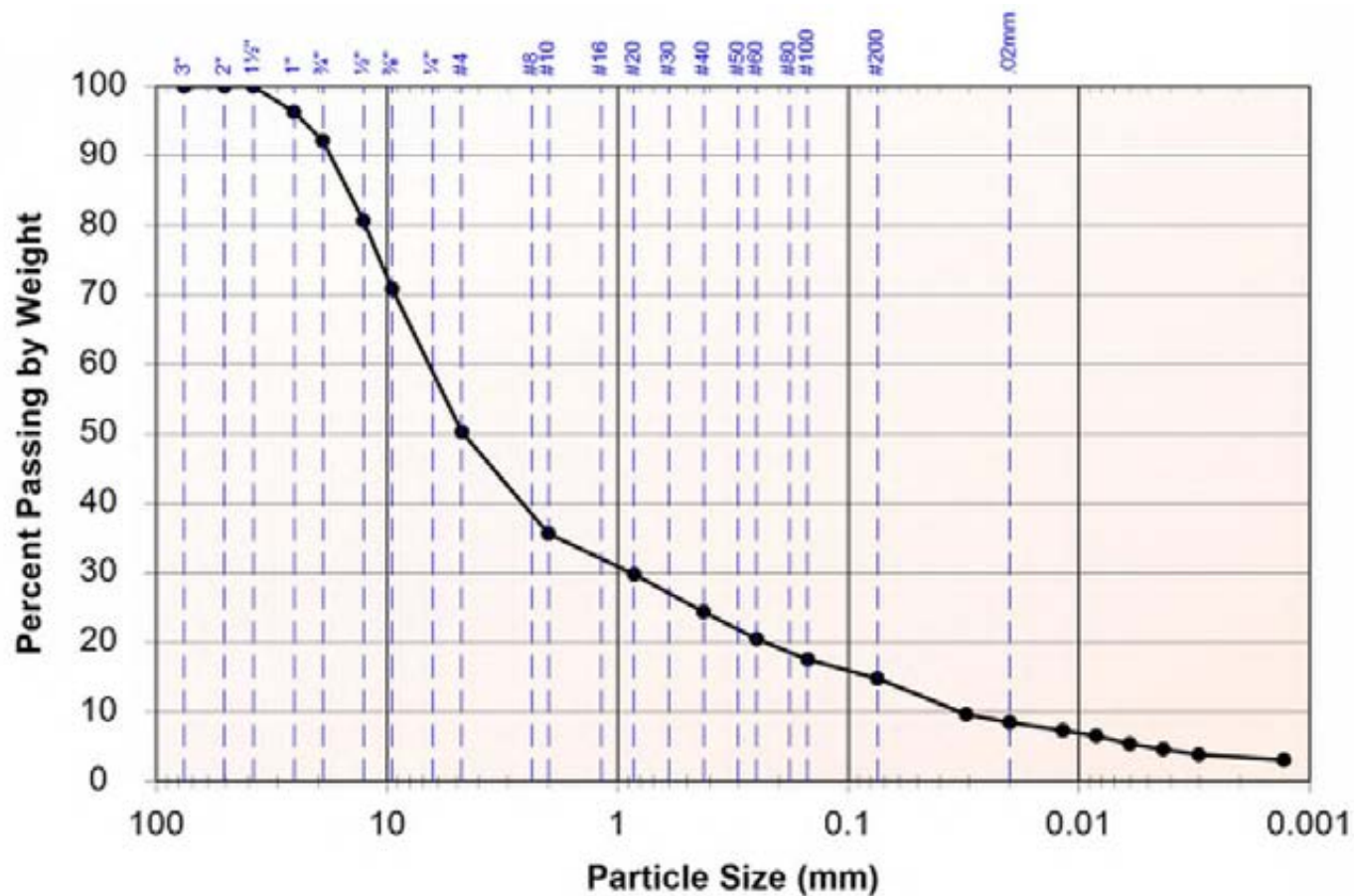
Lab Number 2019-508

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Silty Gravel with Sand, GM

Frost Classification: F1



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	100%	
1"	96%	
3/4"	92%	
1/2"	81%	
3/8"	71%	
#4	50%	
#10	36%	
Total Weight of Sample 2696.4g		
#20	30%	
#40	24%	
#60	20%	
#100	18%	
#200	14.8%	
Total Weight of Fine Fraction 78.4g		
0.02 mm	8.5%	



Client: CRW Engineering Group, LLC
 Project: 42nd Ave Upgrade
 Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-18 Sample 5

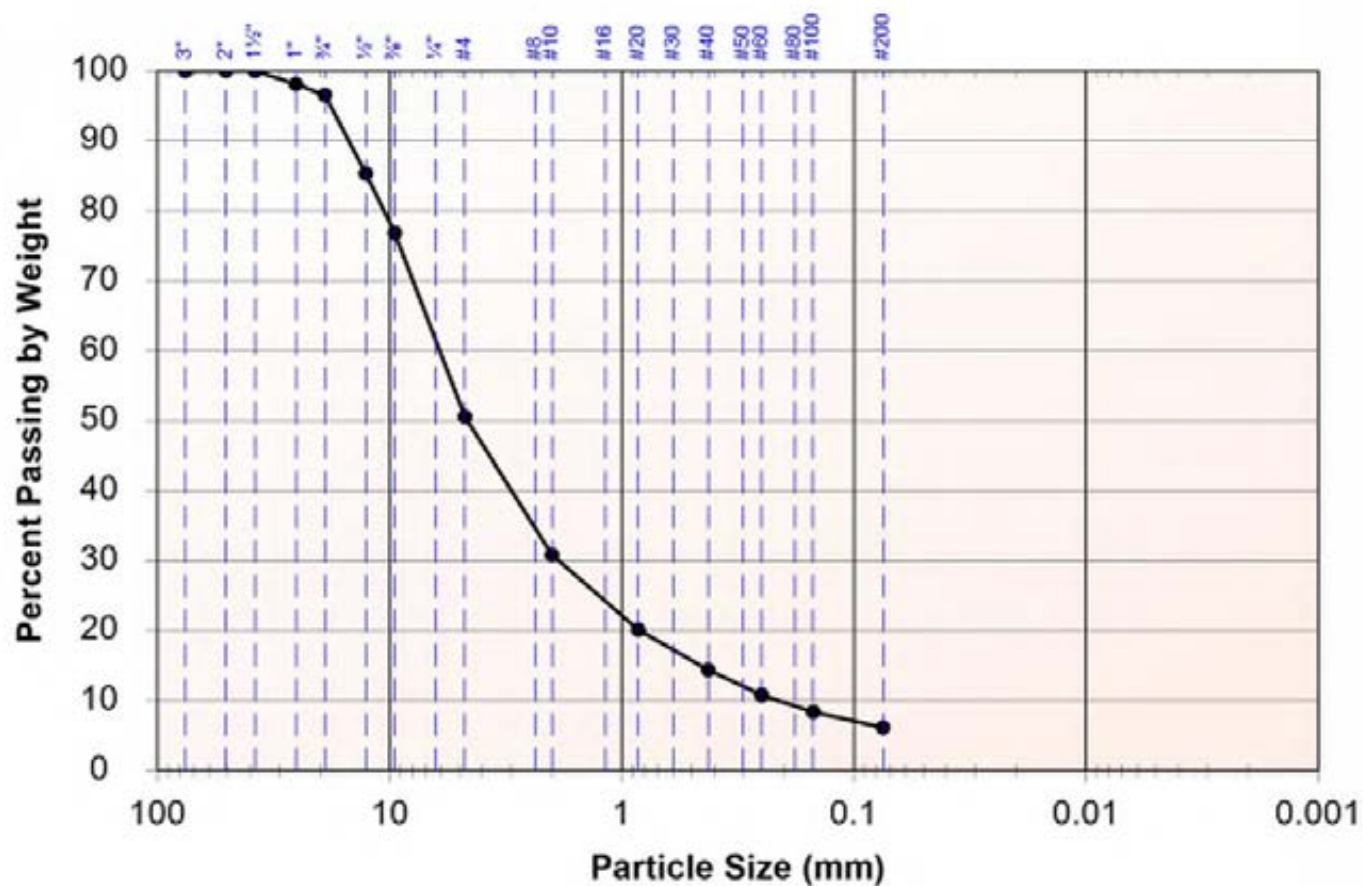
Lab Number 2019-509

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Well Graded Gravel with Silt and Sand, GW-GM

Frost Classification: Not Measured



Size	Passing	Specification
------	---------	---------------

3"	100%	
2"	100%	
1 1/2"	100%	
1"	98%	
3/4"	97%	
1/2"	85%	
3/8"	77%	
#4	51%	

Total Weight of Sample 1731.8g

#10	31%	
#20	20%	
#40	14%	
#60	11%	
#100	8%	
#200	6.2%	

Total Weight of Fine Fraction 432.2g



Client: CRW Engineering Group, LLC
 Project: 42nd Ave Upgrade
 Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-20 Sample 1

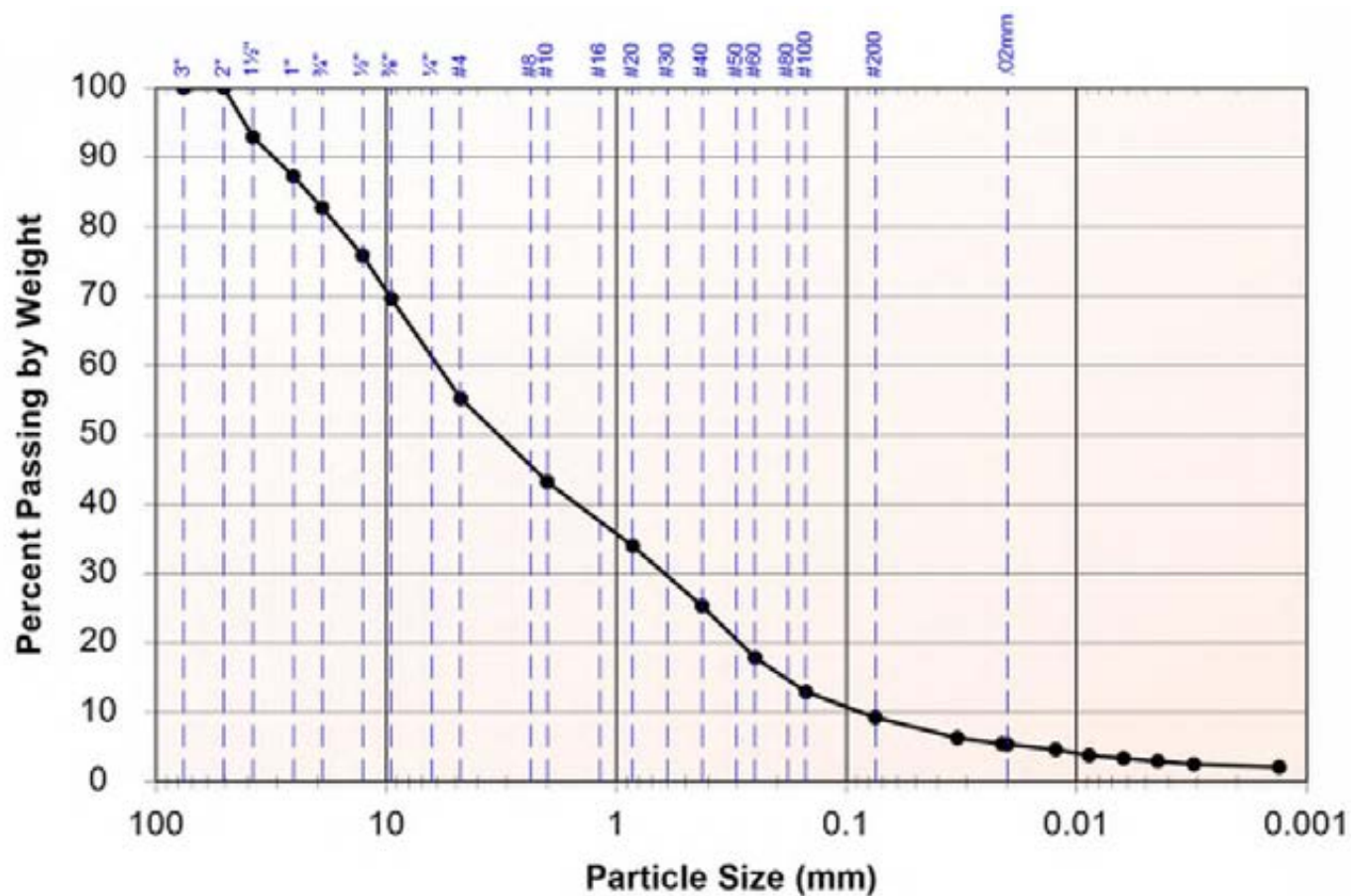
Lab Number 2019-513

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Poorly Graded Sand with Silt and Gravel, SP-SM

Frost Classification: S2



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	93%	
1"	87%	
3/4"	83%	
1/2"	76%	
3/8"	70%	
#4	55%	
#10	43%	
Total Weight of Sample 1983.9g		
#20	34%	
#40	25%	
#60	18%	
#100	13%	
#200	9.3%	
Total Weight of Fine Fraction 464.4g		
0.02 mm	5.4%	



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-20 Sample 4

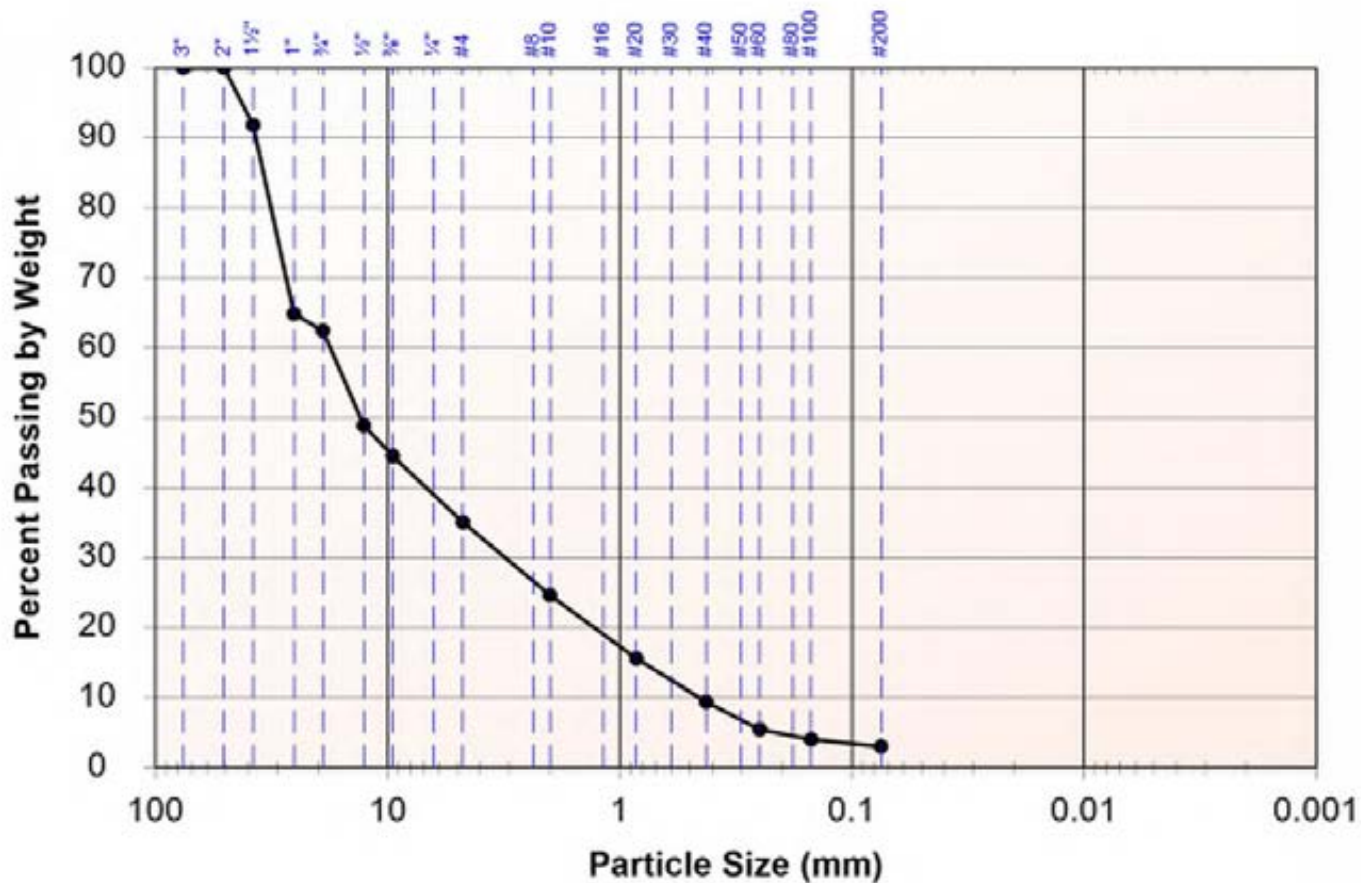
Lab Number 2019-514

Received 6/21/2019

Reported 6/21/2019

Engineering Classification: Well Graded Gravel with Sand, GW

Frost Classification: Not Measured



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	92%	
1"	65%	
3/4"	62%	
1/2"	49%	
3/8"	45%	
#4	35%	
Total Weight of Sample 1397.4g		
#10	25%	
#20	16%	
#40	9%	
#60	5%	
#100	4%	
#200	3.0%	
Total Weight of Fine Fraction 490.5g		



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-22 Sample 1

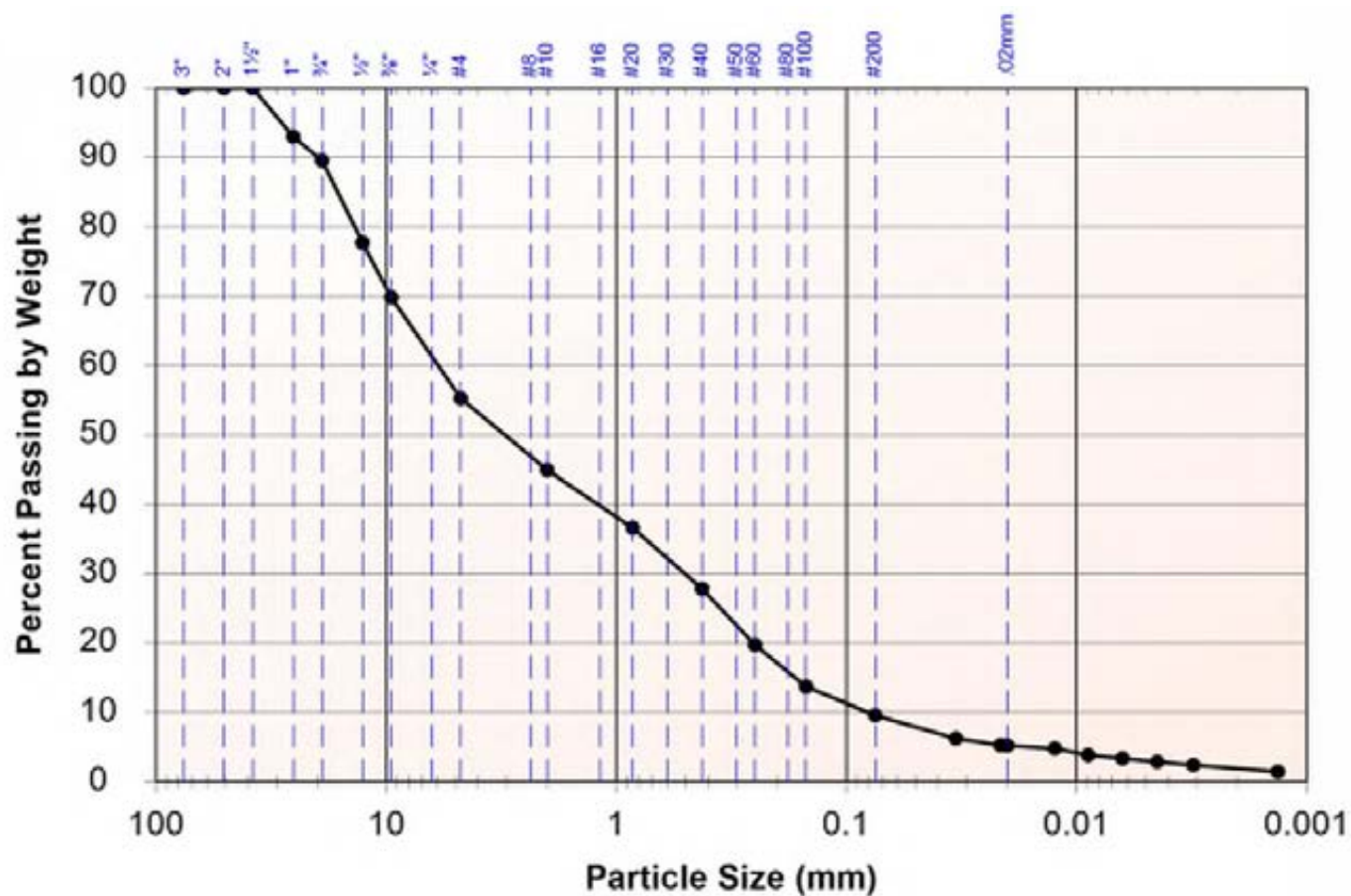
Lab Number 2019-516

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Poorly Graded Sand with Silt and Gravel, SP-SM

Frost Classification: S2



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	100%	
1"	93%	
3/4"	90%	
1/2"	78%	
3/8"	70%	
#4	55%	
#10	45%	
Total Weight of Sample 3060.3g		
#20	37%	
#40	28%	
#60	20%	
#100	14%	
#200	9.6%	
Total Weight of Fine Fraction 370.6g		
0.02 mm	5.2%	



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-22 Sample 3

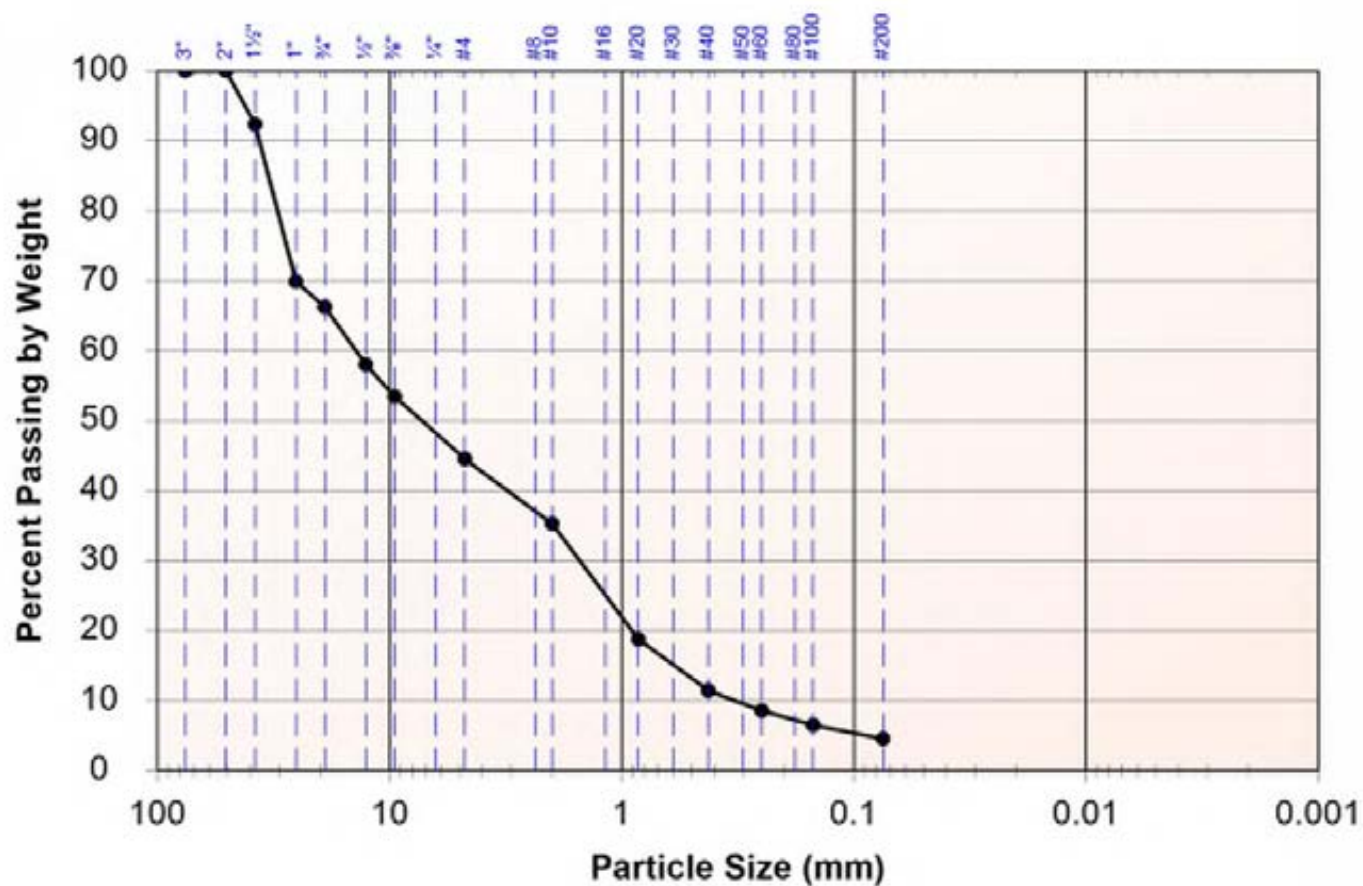
Lab Number 2019-517

Received 6/21/2019

Reported 6/21/2019

Engineering Classification: Poorly Graded Gravel with Sand, GP

Frost Classification: Not Measured



Size	Passing	Specification
------	---------	---------------

3"	100%	
----	------	--

2"	100%	
----	------	--

1 1/2"	92%	
--------	-----	--

1"	70%	
----	-----	--

3/4"	66%	
------	-----	--

1/2"	58%	
------	-----	--

3/8"	53%	
------	-----	--

#4	45%	
----	-----	--

Total Weight of Sample 1515.6g		
--------------------------------	--	--

#10	35%	
-----	-----	--

#20	19%	
-----	-----	--

#40	11%	
-----	-----	--

#60	9%	
-----	----	--

#100	7%	
------	----	--

#200	4.6%	
------	------	--

Total Weight of Fine Fraction 674.7g		
--------------------------------------	--	--



Client: CRW Engineering Group, LLC
Project: 42nd Ave Upgrade
Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-23 Sample 1

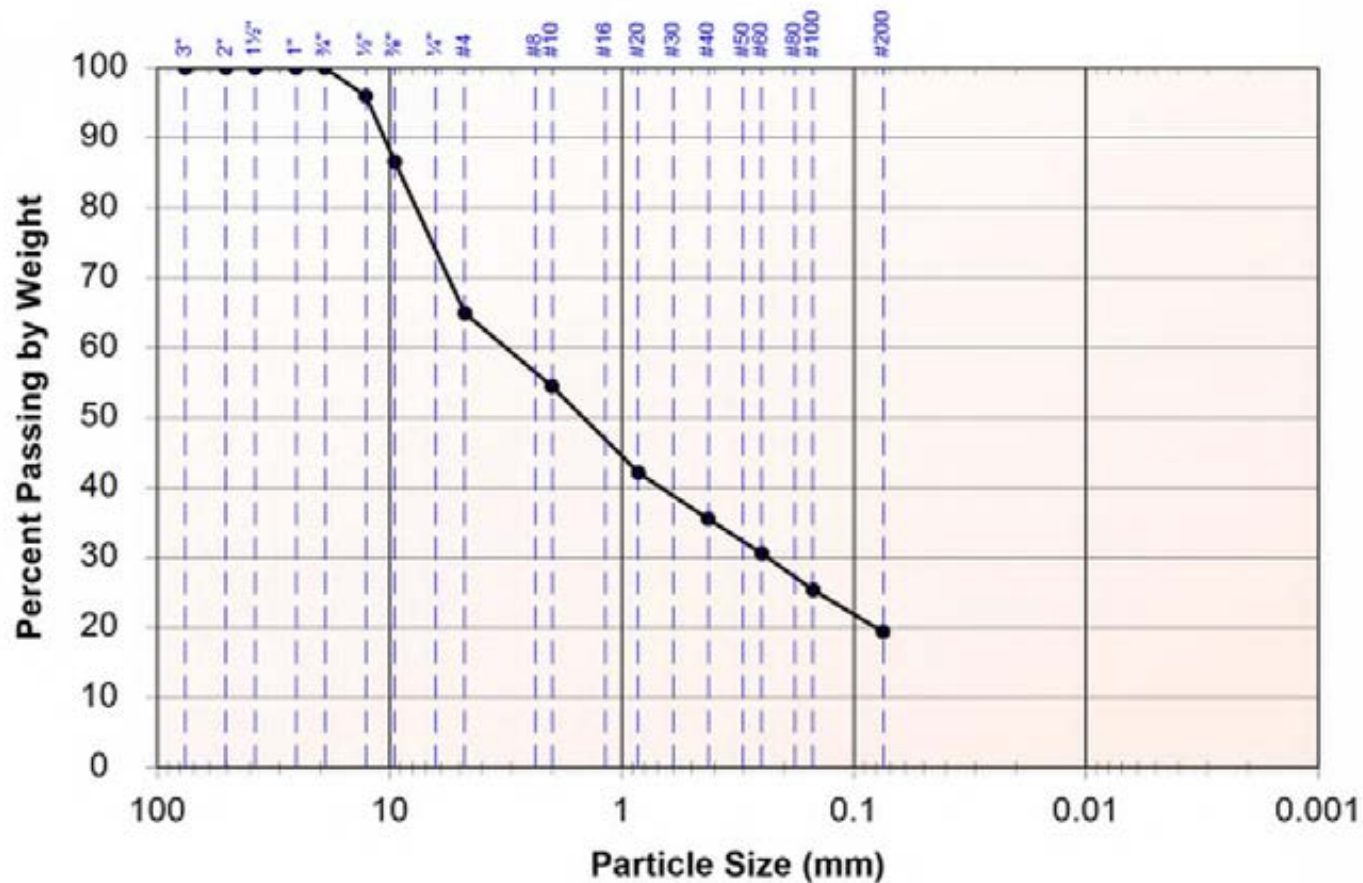
Lab Number 2019-518

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Silty Sand with Gravel, SM

Frost Classification: Not Measured



Size	Passing	Specification
3"	100%	
2"	100%	
1 1/2"	100%	
1"	100%	
3/4"	100%	
1/2"	96%	
3/8"	87%	
#4	65%	
Total Weight of Sample 1924.8g		
#10	54%	
#20	42%	
#40	36%	
#60	31%	
#100	25%	
#200	19.4%	
Total Weight of Fine Fraction 447.6g		



Client: CRW Engineering Group, LLC
 Project: 42nd Ave Upgrade
 Work Order: 517

Particle Size Distribution

ASTM D422

Location: BH-24 Sample 11

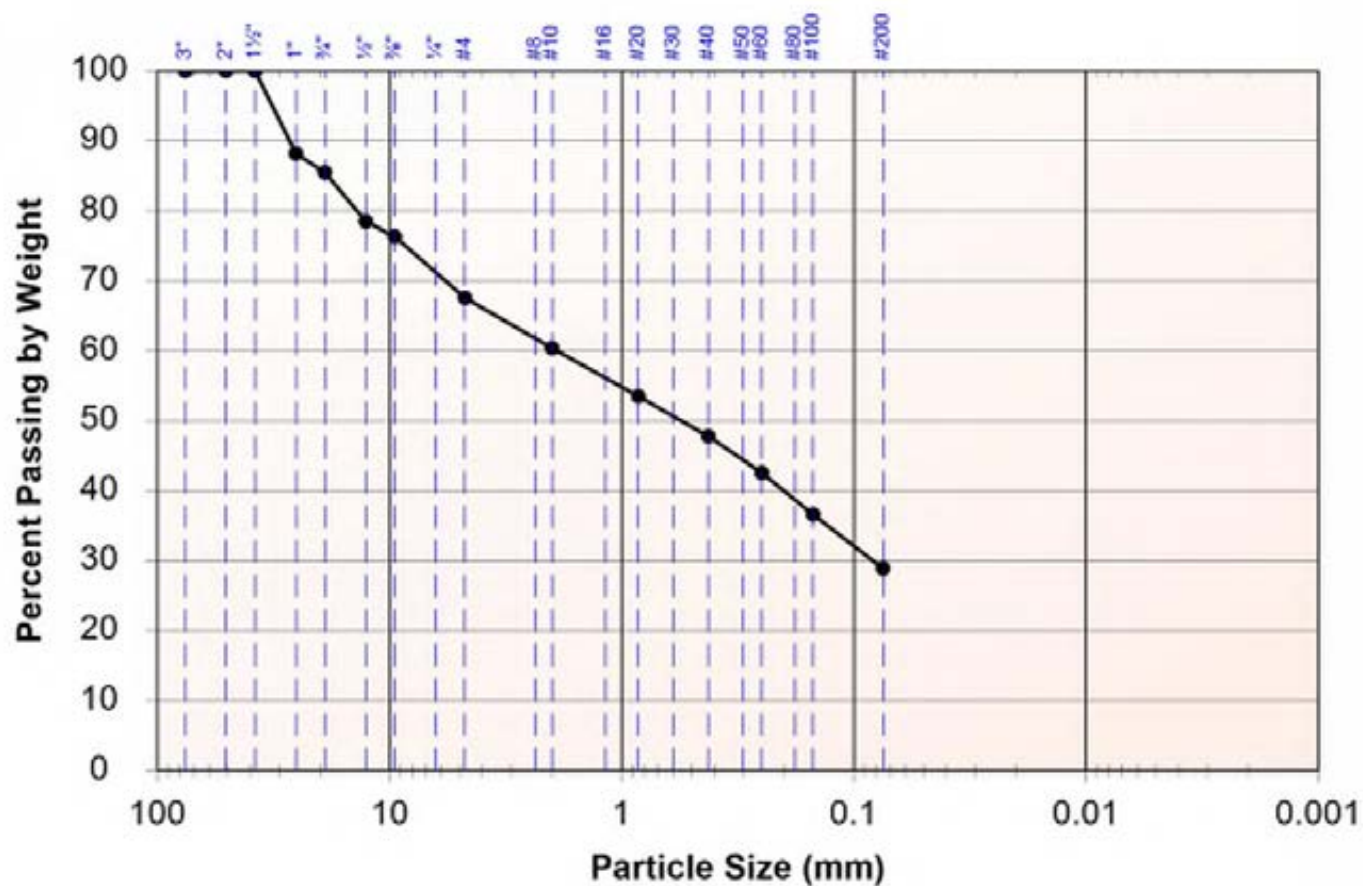
Lab Number 2019-523

Received 5/28/2019

Reported 6/21/2019

Engineering Classification: Silty Sand with Gravel, SM

Frost Classification: Not Measured



Size	Passing	Specification
------	---------	---------------

3"	100%	
----	------	--

2"	100%	
----	------	--

1 1/2"	100%	
--------	------	--

1"	88%	
----	-----	--

3/4"	85%	
------	-----	--

1/2"	78%	
------	-----	--

3/8"	76%	
------	-----	--

#4	68%	
----	-----	--

Total Weight of Sample 1290g		
------------------------------	--	--

#10	60%	
-----	-----	--

#20	53%	
-----	-----	--

#40	48%	
-----	-----	--

#60	43%	
-----	-----	--

#100	37%	
------	-----	--

#200	28.9%	
------	-------	--

Total Weight of Fine Fraction 455.0g		
--------------------------------------	--	--

Appendix C

Site Investigation Photos

Included in this section:

- 1) Select Site Investigation Photos

<div>42nd Avenue Upgrade, Anchorage, AK Site Investigation Photos</div>	
Photo	Description
	Drilling BH-04.
	Setting up on BH-11.

<div>42nd Avenue Upgrade, Anchorage, AK Site Investigation Photos</div>	
Photo	Description
	Drilling BH-17.
	Completed BH-01.

<div>42nd Avenue Upgrade, Anchorage, AK Site Investigation Photos</div>	
Photo	Description
	Completed BH-16.
	May 2019 water level measurements on 42 nd Avenue.

Appendix D

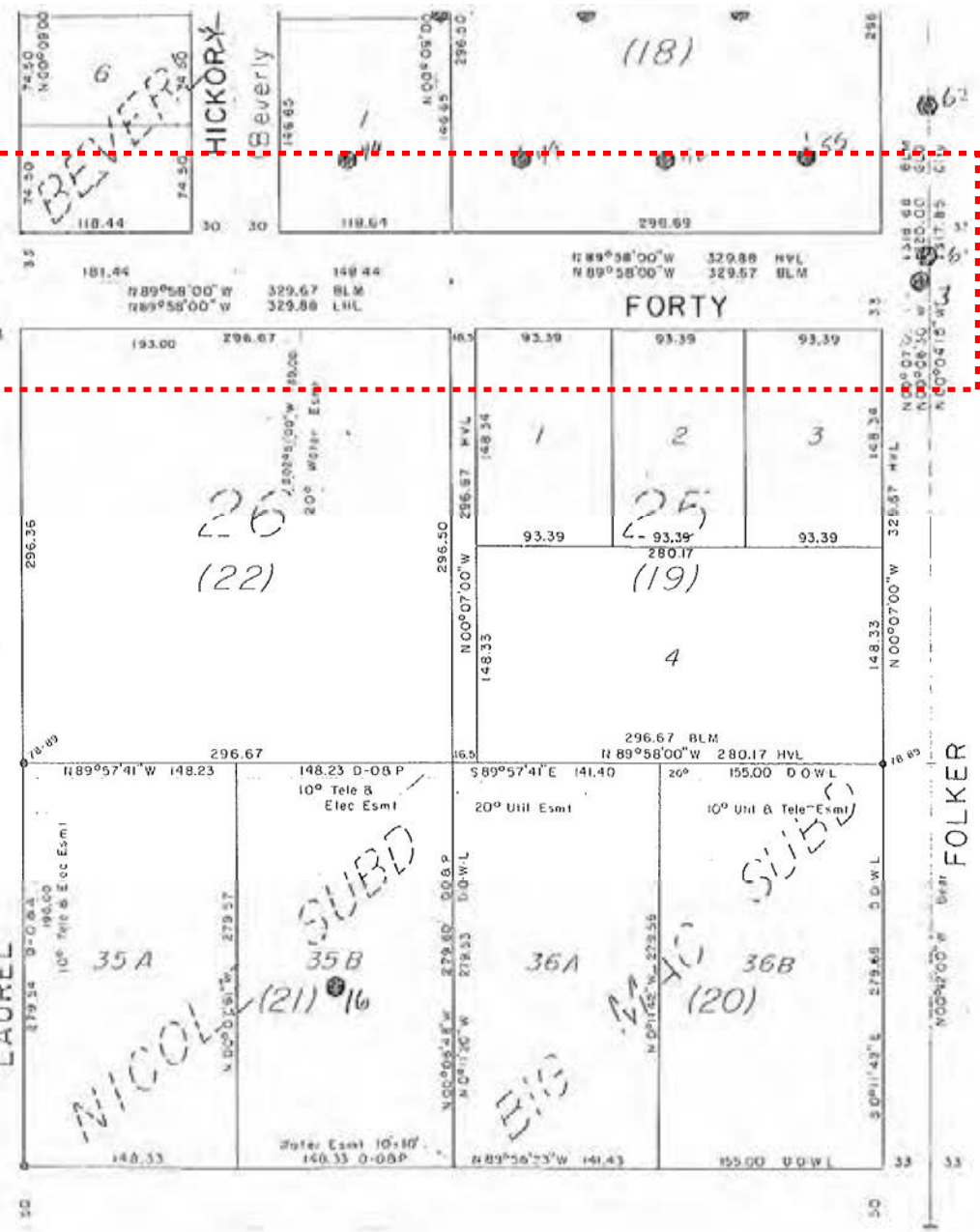
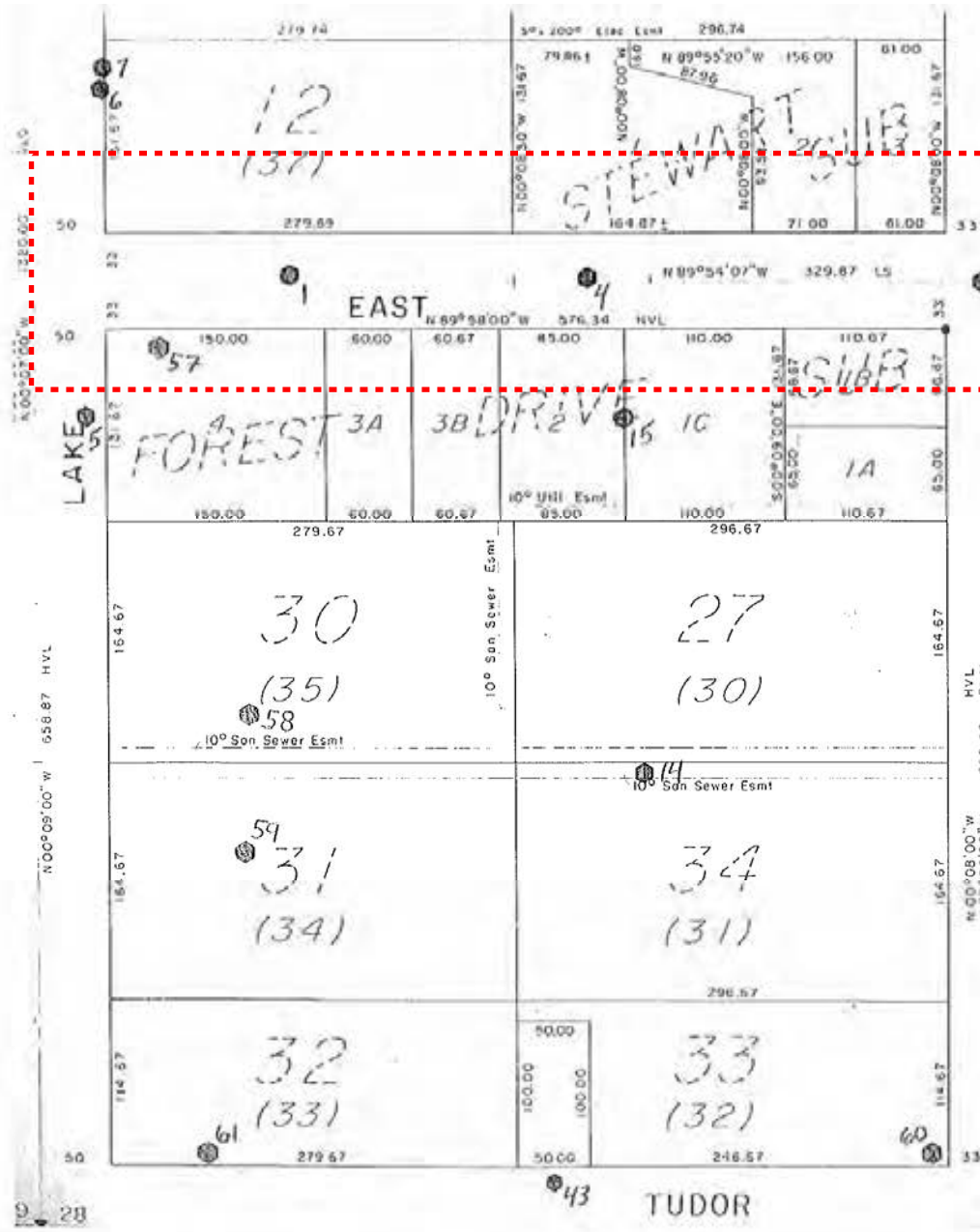
Historic Geotechnical Data

Included in this section:

- 1) Historic Borehole Logs for 42nd Ave

42nd Avenue

Lake Otis Parkway to Folker Street



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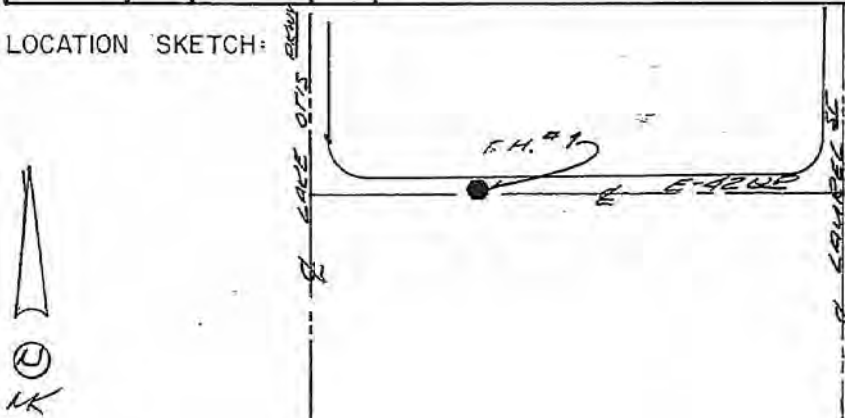
SOILS LOG

LOCATION 450' NORTH OF THE 2 OF E 42ND AVE / 175' E
EAST OF THE 2 OF LAKE OTIS
COMMENTS ALL TEST CLASSIFICATION BASE ON 0.075MM
% = 50% OF THE - # 200%

HOLE NO. #1
DATE 6/9/76
BY M.E. PRINCE
DEPTH 9.5' FT.
WATER TABLE 7.5'

DEPTH	UNIFIED CLASS	DESCRIPTION
0		EXIST. GROUND / ROAD SURFACE
1		
2	SW-SM 1-A	(46%) (48%) (6%) GR. GULY-SAND w/ SM. SILT / - # 200 = 6% MOIST = 9.9% / MED. DENSE / NP / LIES TO F-2
3		
4	ML 1-B	(35%) (60%) (5%) GR. SANDY-SILT w/ GRADE OF GRAVEL / - # 200 = 60 MOIST = 25% / FROZEN / NP / F-4
5		
6	GM 1-C	(31%) (32%) (37%) GR. SILTY-SANDY- GRAVEL / - # 200 = 31% MOIST = 19% / MED. DENSE / NP / F-4
7		
8		
9	SW-SM 1-D	(93%) (7%) BEN. WELL GRADED SAND w/ SM. SILT / - # 200 = 7.0 / MOIST = 15% / NP / LIES TO F-2
10		

LOCATION SKETCH:



GRID
1734-C

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CONSTRUCTION DIVISION

SOILS LOG

②

LOCATION 2 OF E. 46TH AVE. 14TH WEST OF CORNER OF
LAURELST

HOLE NO. #2

DATE 6/9/76

BY M. E. KUEGA

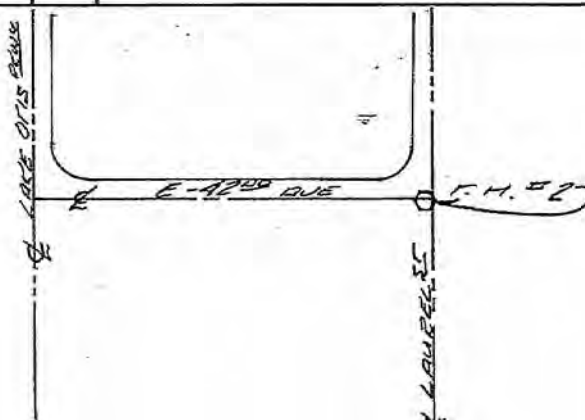
COMMENTS ACCEPTED REFUSAL AT -6^{FT} DUE
TO LOOSE MATERIAL / ALL FROST CLASSIFICATION
BASED ON DEN₁₀₀ = 30% OF -⁵200⁺

DEPTH 6^{FT}

WATER TABLE None

DEPTH	UNIFIED CLASS	DESCRIPTION
0		EXIST. GROUND / ROAD SURFACE
1		
2		
3		
4	GP 2-A	(37%) (60%) REL. SANDY - GRAVEL W/ OCU. CORBLE / - ⁵ 200 = 3% / MOIST = 4% / N.P. / N.E.S. / DENSE
5		
6		
7		
8		
9		
10		

LOCATION SKETCH:



Grid
1734-C

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DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION DIVISION

SOILS LOG

LOCATION S. OF E. 42ND AVE. / 4TH WEST OF FOLKERS ST

HOLE NO. 53

DATE 6/19/76

BY M.F. KRUEGER

COMMENTS EXTRACTED REFUSE AT -8 FEET DUE

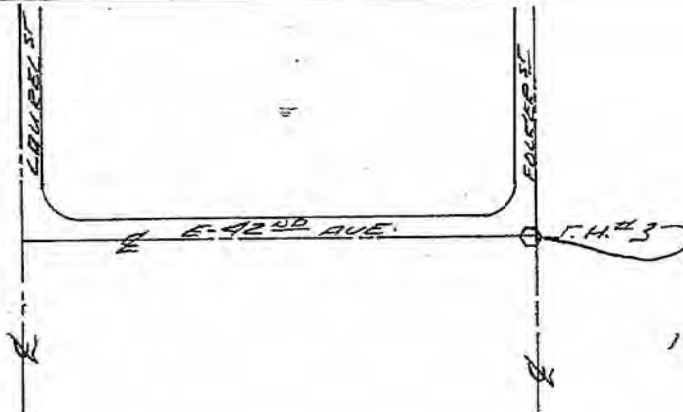
DEPTH 8 FEET

TO COARSE MATERIAL / ALL FROST CLASSIFICATION
BASE ON .02MM % = 50% OF - #200

WATER TABLE N/A

DEPTH	UNIFIED CLASS	DESCRIPTION
0		EXIST. GROUND / ROAD SURFACE
1		
2		
3		
4		
5		
6	GP 3-A	REL. (40%) (59%) SANDY-GRAVEL w/ OIL CORBLE / - #200 = 1.0% / MOIST = 3.0% / NP / NES. DENSE
7		
8		
9		
10		

LOCATION SKETCH:



1734-C

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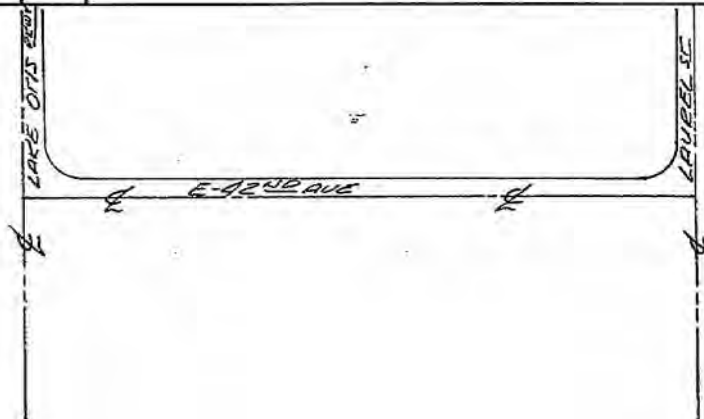
SOILS LOG

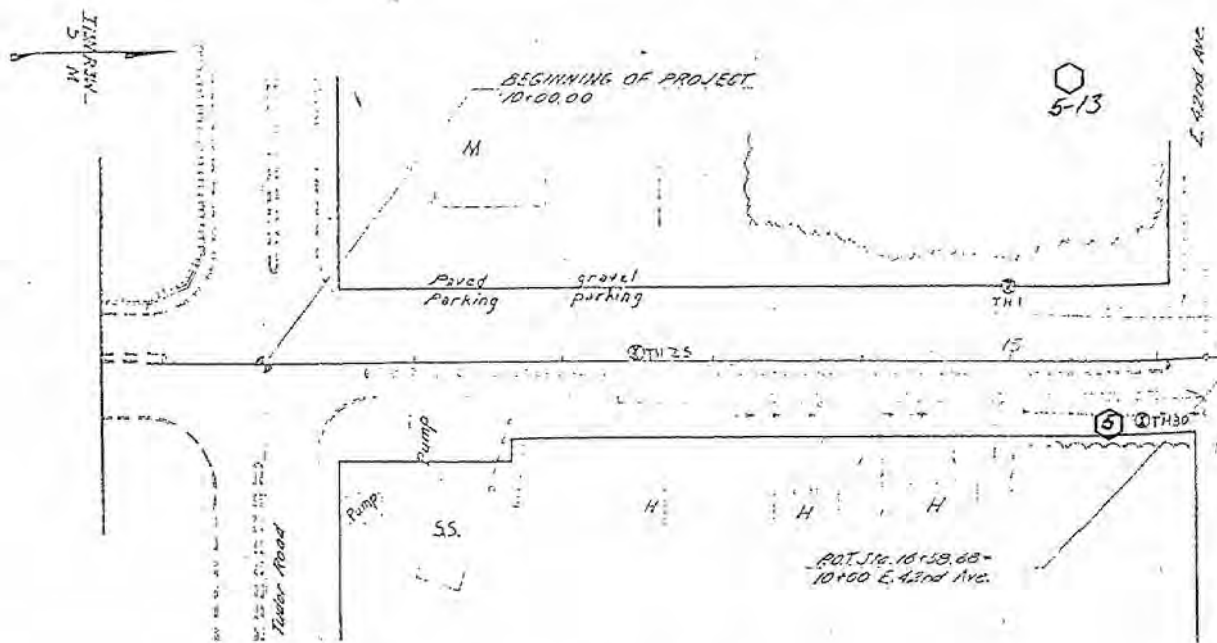
LOCATION 2 OF E-42ND / 275' WEST OF THE 2 OF
LAUREL ST / 420' EAST OF THE 2 OF LAUREL ST
COMMENTS ALL FROST CLASSIFICATION BASED ON
0.02 MIN. = 50% OF THE - #200

HOLE NO. 7
DATE 6/9/76
BY M. E. KRUEGER
DEPTH 9.5 FT
WATER TABLE 3 FT

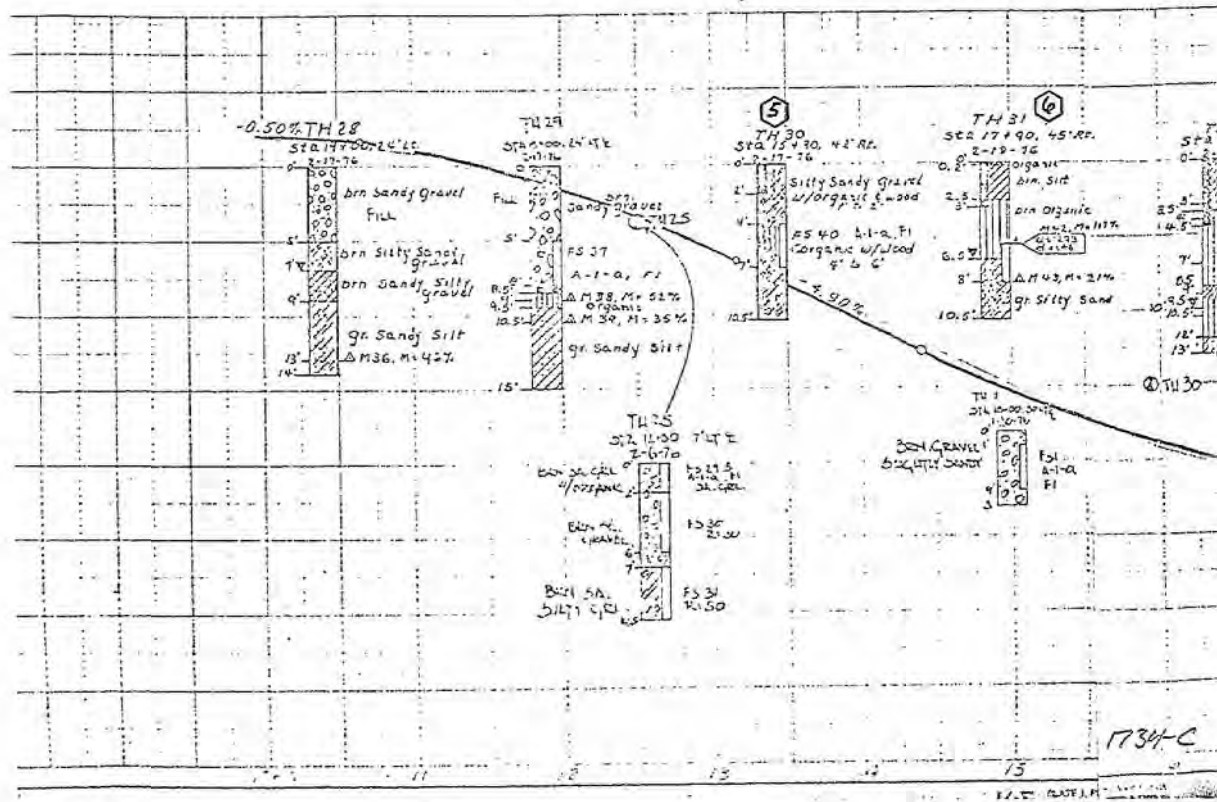
DEPTH	UNIFIED CLASS	DESCRIPTION
0		EXIST. GROUND / ROAD SURFACE
1	GM	7-A BRN. SILTY - SANDY - GRAVEL w/ A TRACE OF ORGANIC (25%) (30%) (47%) - #200 = 23% / MOIST. = 14.1% / NP / F-2 / MED. DENSE
2		
3		
4	SM	7-B BRN. GULV - SILTY - SAND / (15%) (47%) (40%) - #200 = 47% / MOIST. = 14.1% NP / F-4 / MED. DENSE
5		
6		
7		
8		
9	SM	7-C BRN. SILTY - GULV - SAND / (15%) (14%) (25%) - #200 = 13% / MOIST. 16 NP / F-2 / LOW DENSITY
10		

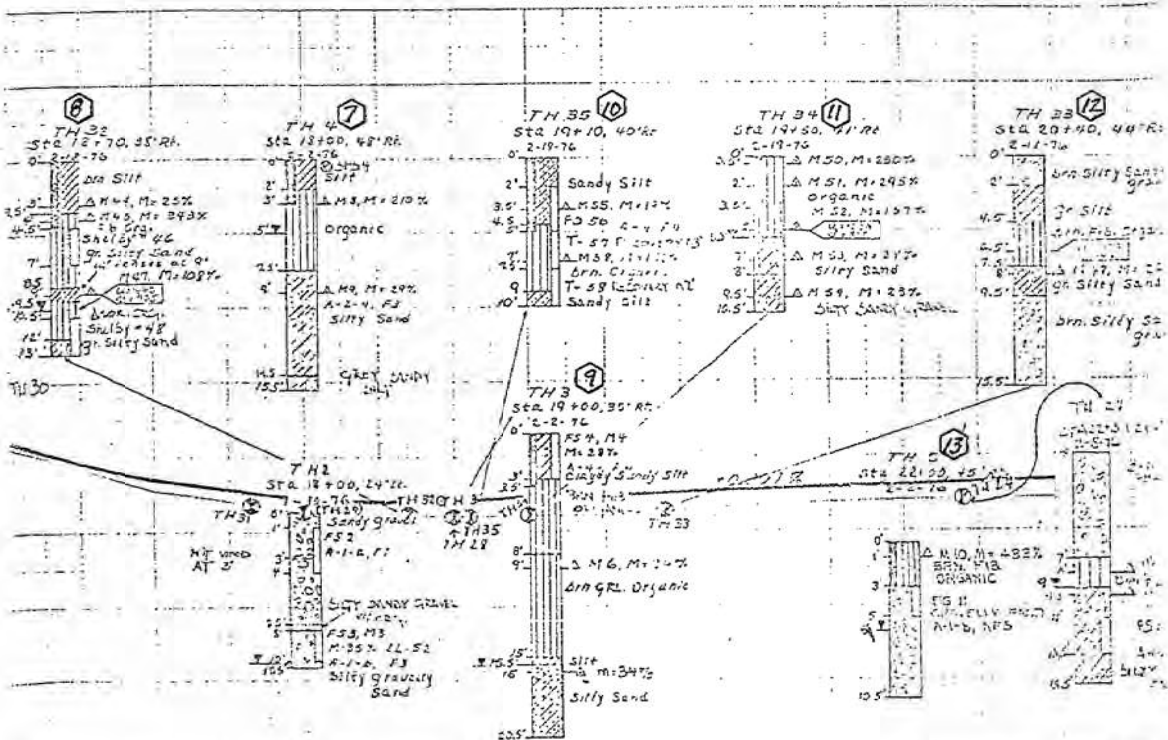
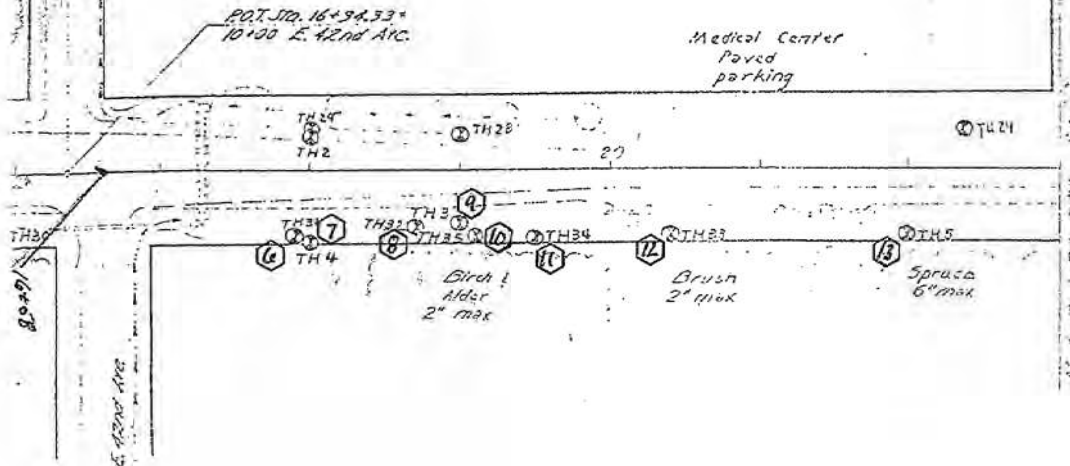
LOCATION SKETCH:





State of Alaska DOT
Lokoris Parkway





Performed For S. G. Hestlin Date Performed 19 January 1970
Legal Description: Lot Block Subdivision FOREST DRIVE SUBDIVISION
This Form Reports a: Soils Log X Percolation Test

Depth Feet	Soil Characteristics	Location Sketch
1	Silt topsoil - ML	
2		
3	Glacial Till, consisting of	
4	Silty gravel GM	
5		
6		
7		
8		
9		
10		
11		
12		

Was Ground Water Encountered? N/O

If Yes, At What Depth

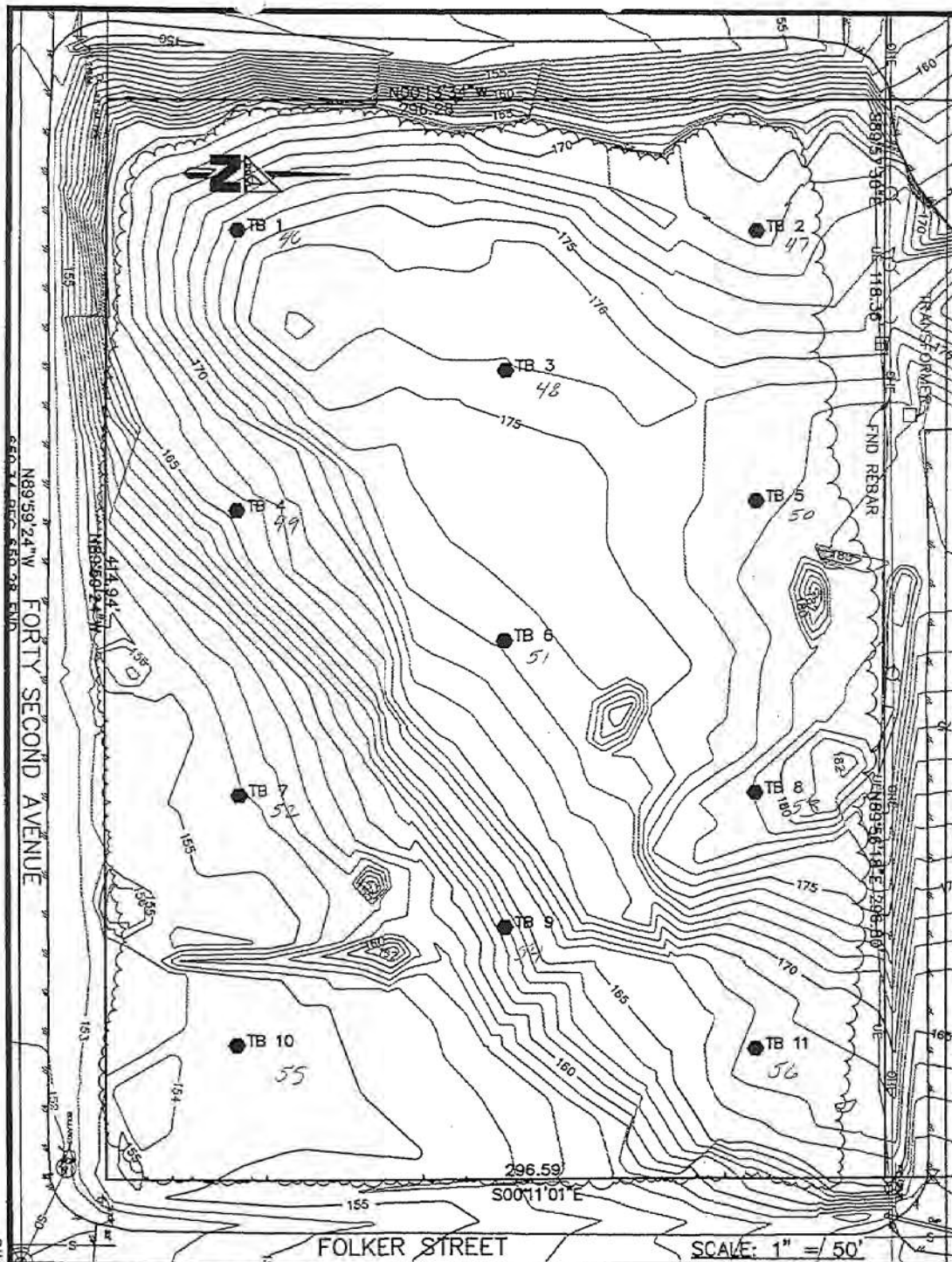
Reading	Date	Gross Time	Net Time	Depth To H ₂ O	Net Drop

Percolation Rate 1" Minute
Proposed Installation: Seepage Pit Drain Field
Depth Of Inlet Depth To Bottom Of Pit Or Trench
COMMENTS: Seepage area required: 225 square feet
per hour - same soil conditions to apply to
each lot listed above

Test Performed By: Alaska Geological Consultants

Data Certified By: A. P. M. Jensen
Date: 1-19-70

RECEIVED
JAN 28 1970
1734c

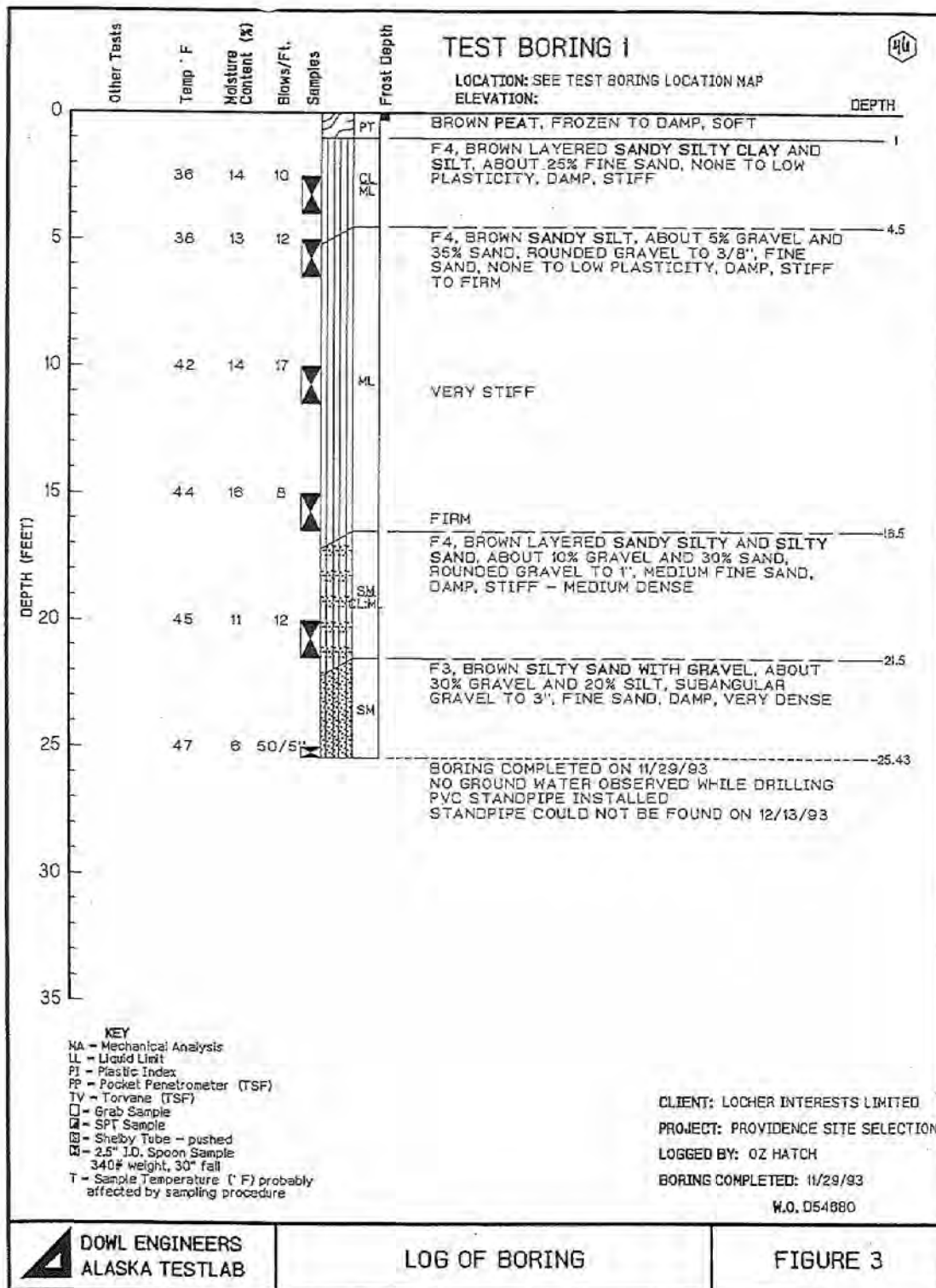


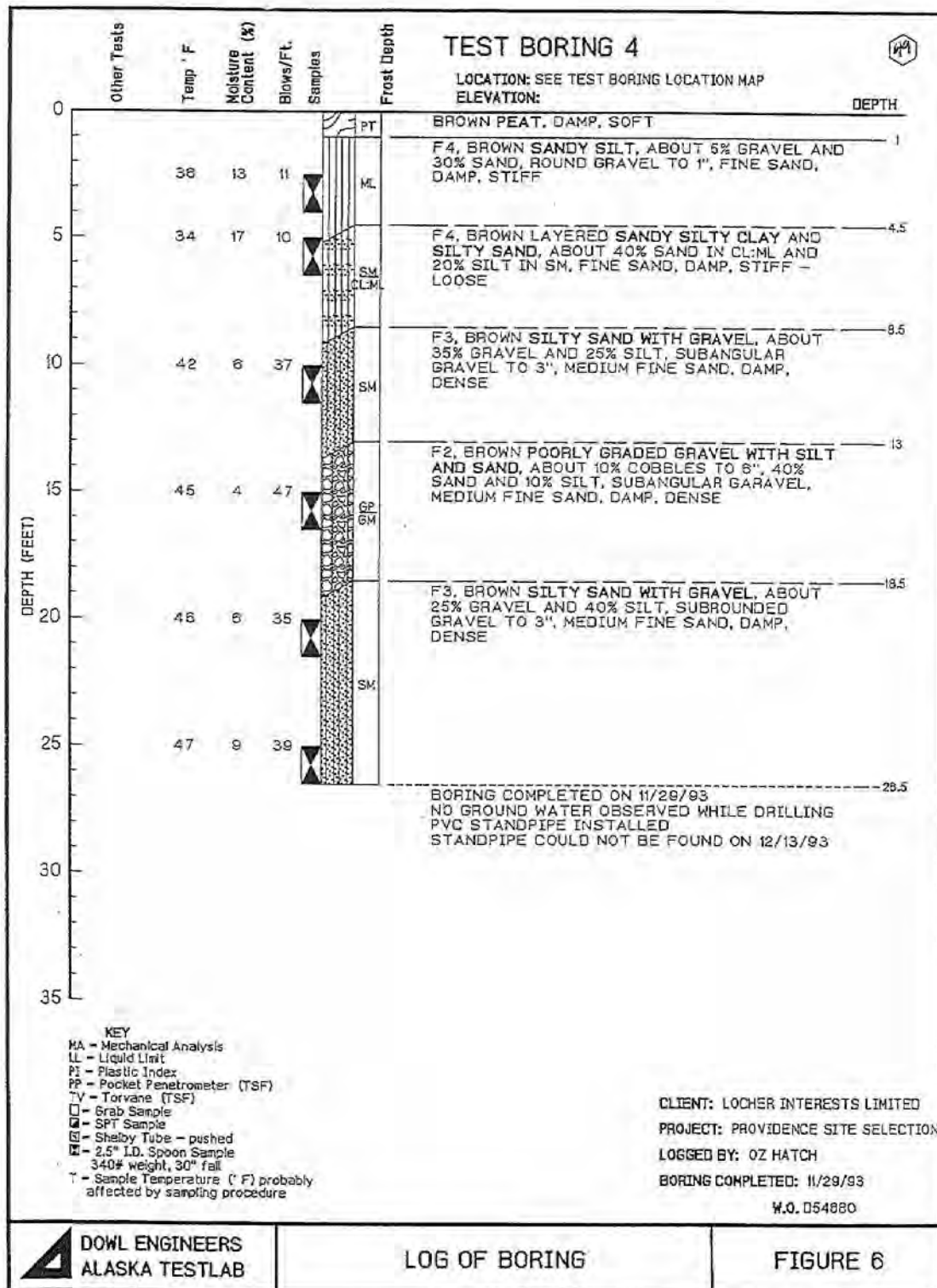
D54680
GRID 1734
ETBLADY.DWG

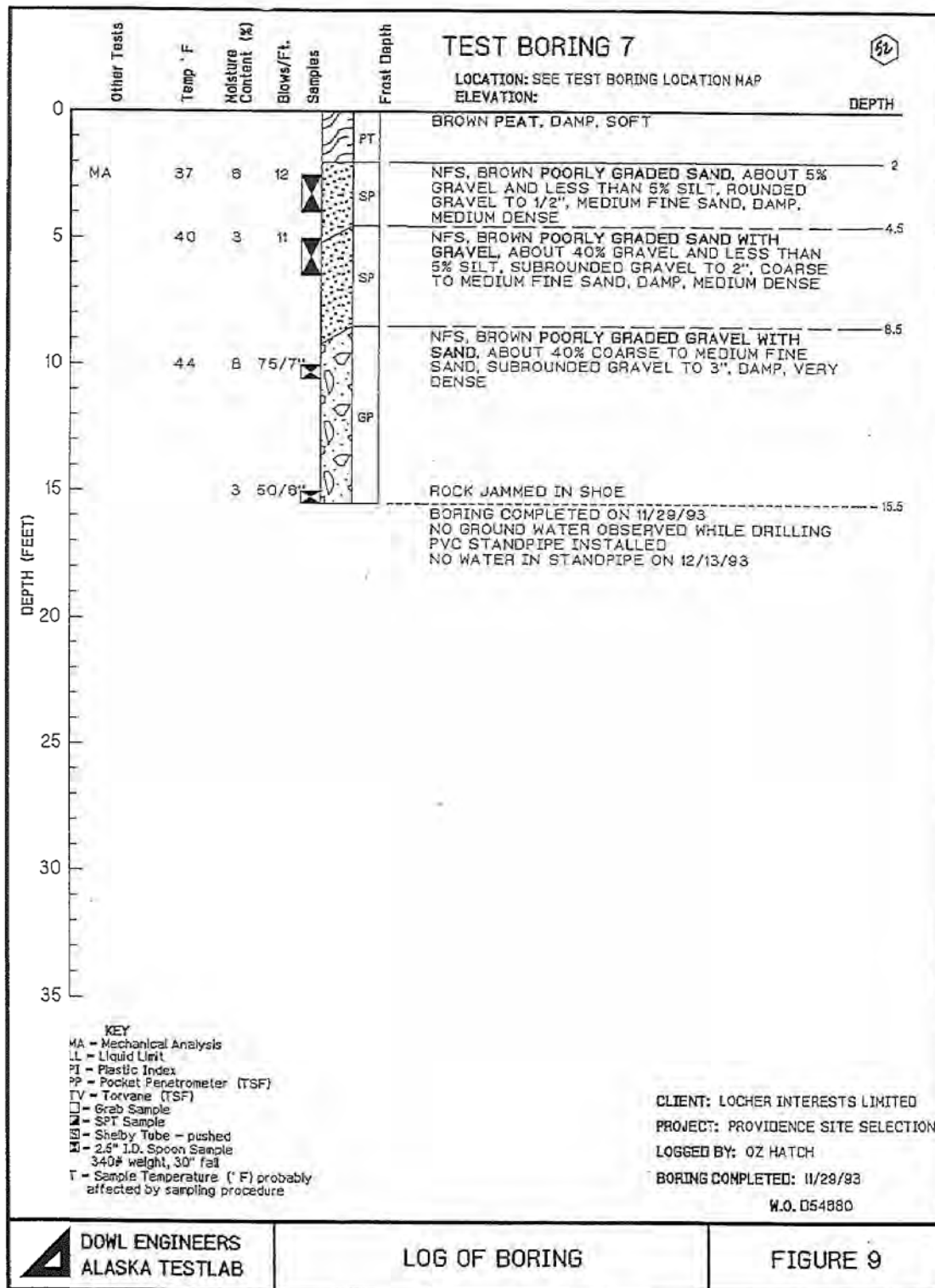


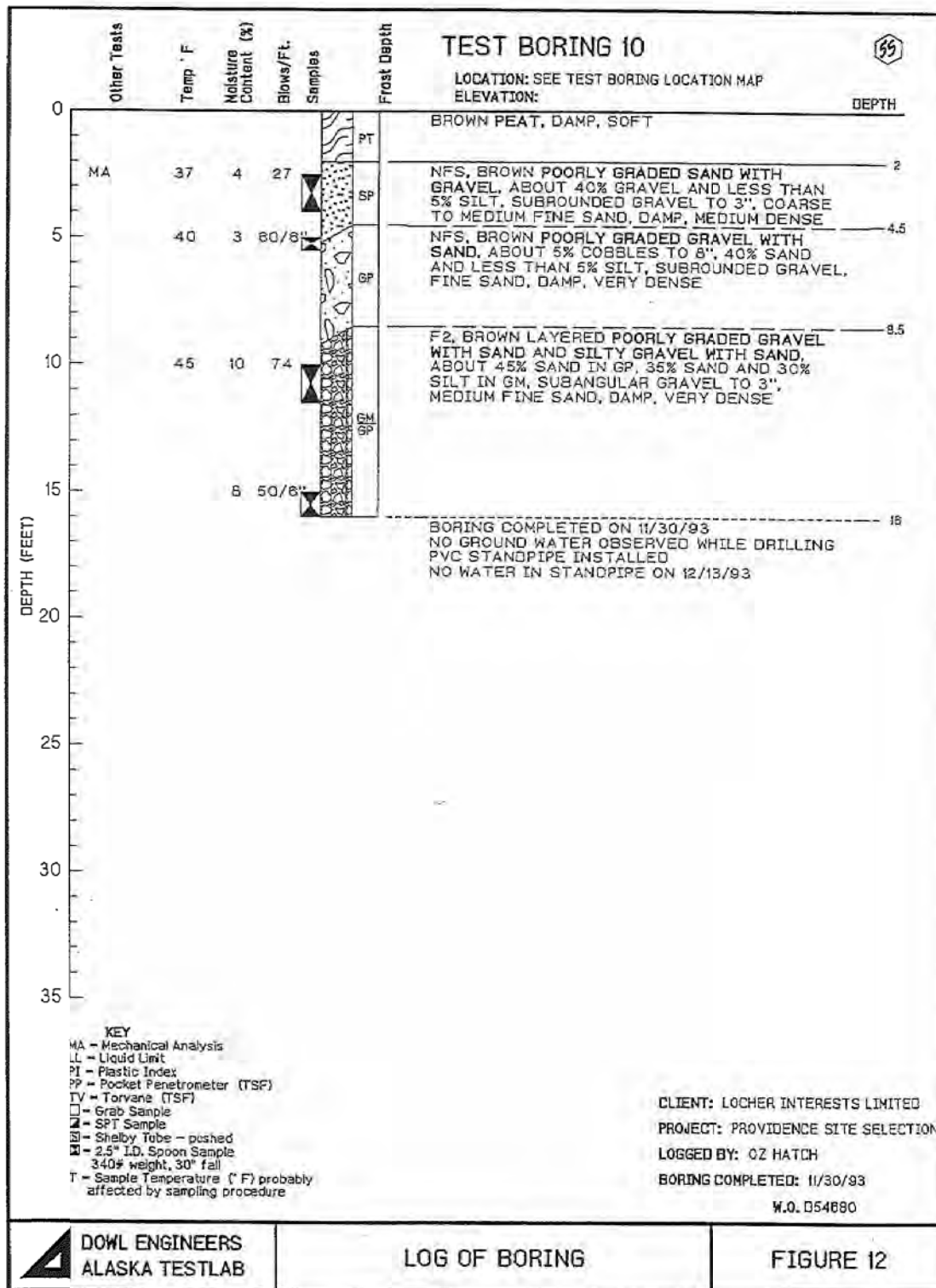
TEST BORING LOCATION MAP

FIGURE 2

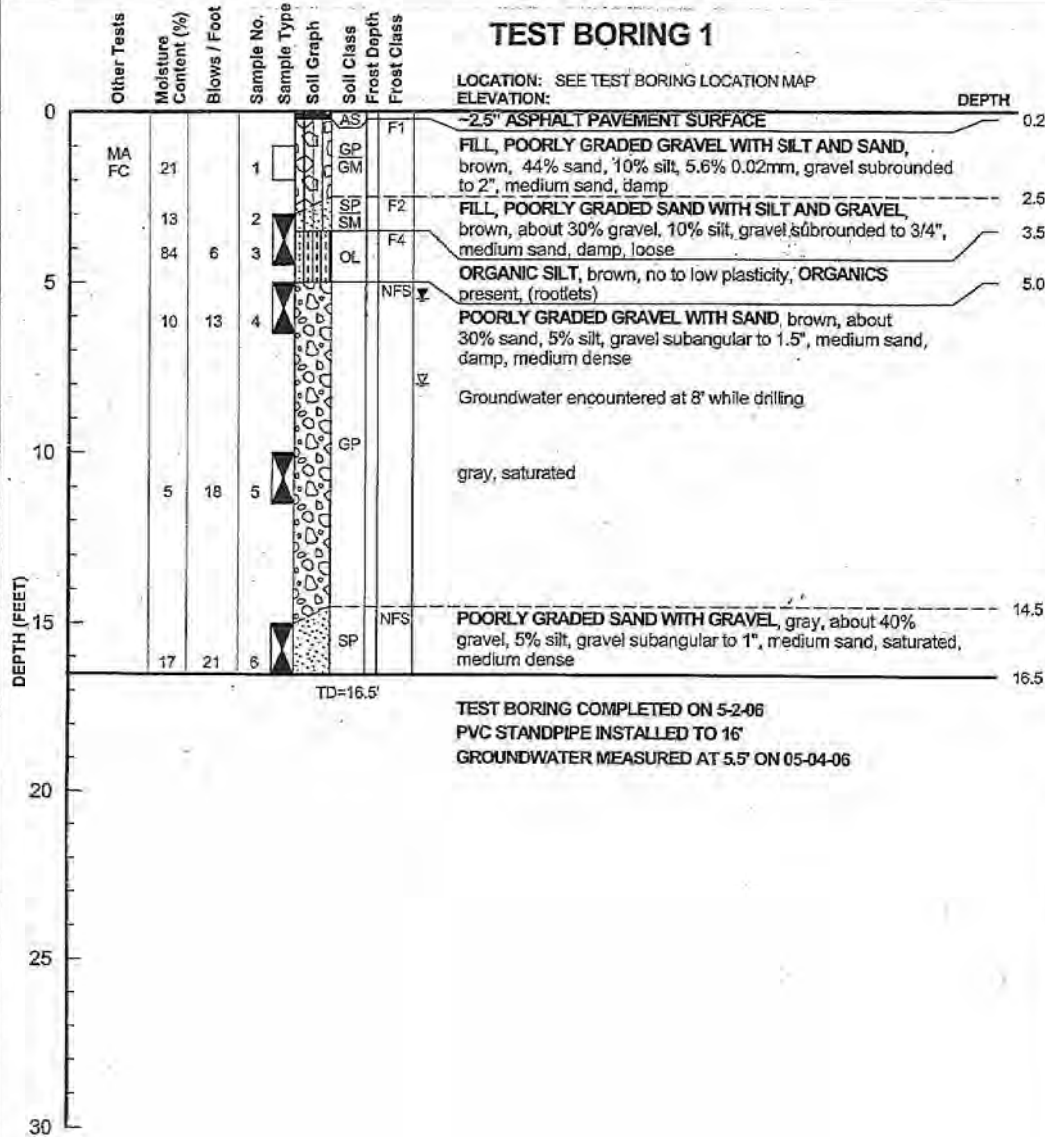








TEST BORING 1



TEST BORING COMPLETED ON 5-2-06
PVC STANDPIPE INSTALLED TO 16'
GROUNDWATER MEASURED AT 5.5' ON 05-04-06

KEY
MA = Mechanical Analysis
FC = Frost Classification
TD = Total Depth
* = Groundwater After Drilling
□ = Grab Sample
□ = SPT Sample
□ = Shelby Tube - pushed
□ = 2.5" I.D. Spoon Sample
340# weight, 30" fall

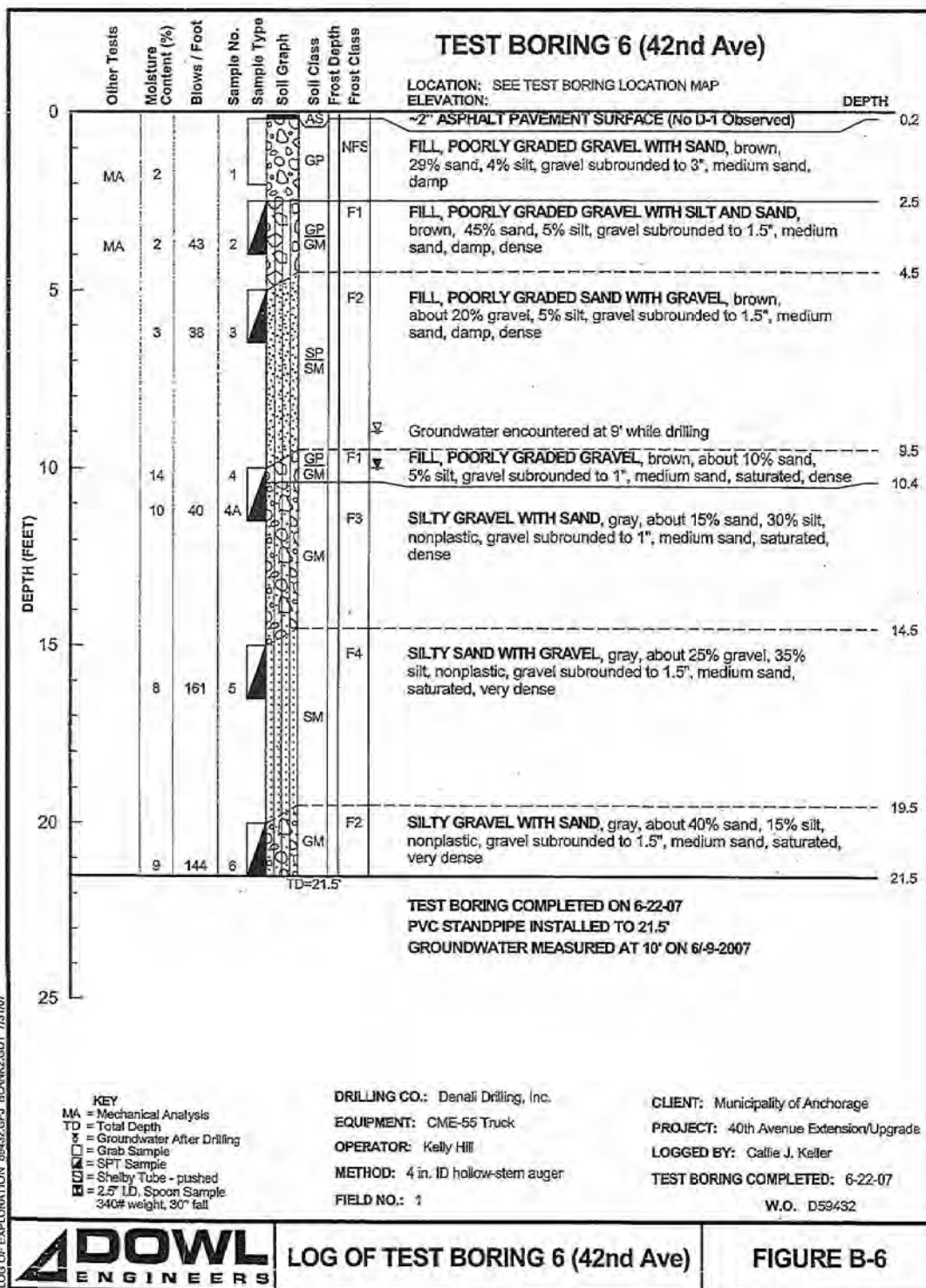
DRILLING CO.: Denali Drilling, Inc.
EQUIPMENT: CME-55
OPERATOR: Aaron Shaw
METHOD: 8 in. hollow-stem auger

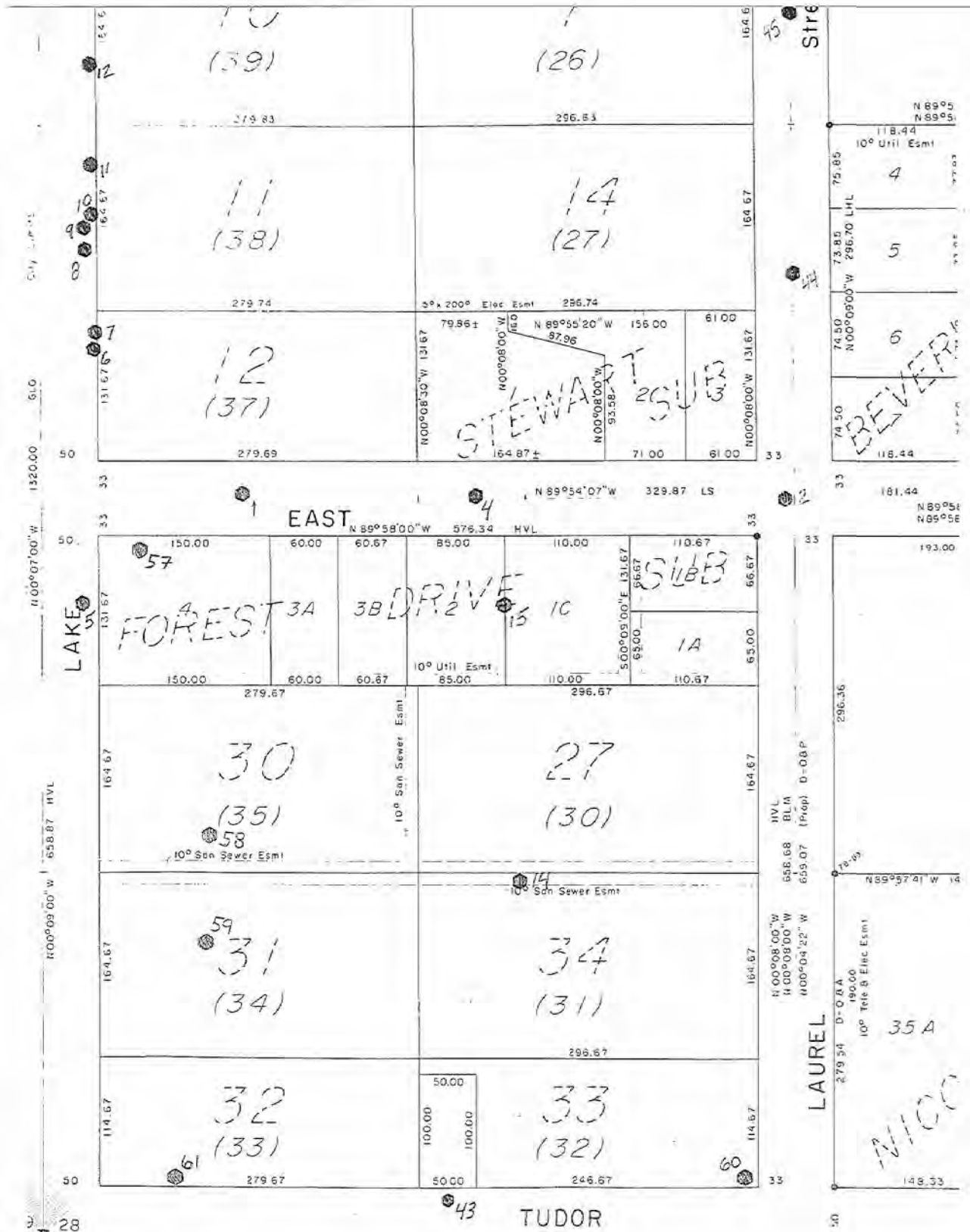
CLIENT: MOA
PROJECT: Tudor / Lake Otis Upgrade
LOGGED BY: Matt T. Stevie
BORING COMPLETED: 5-2-06
W.O. D59117A



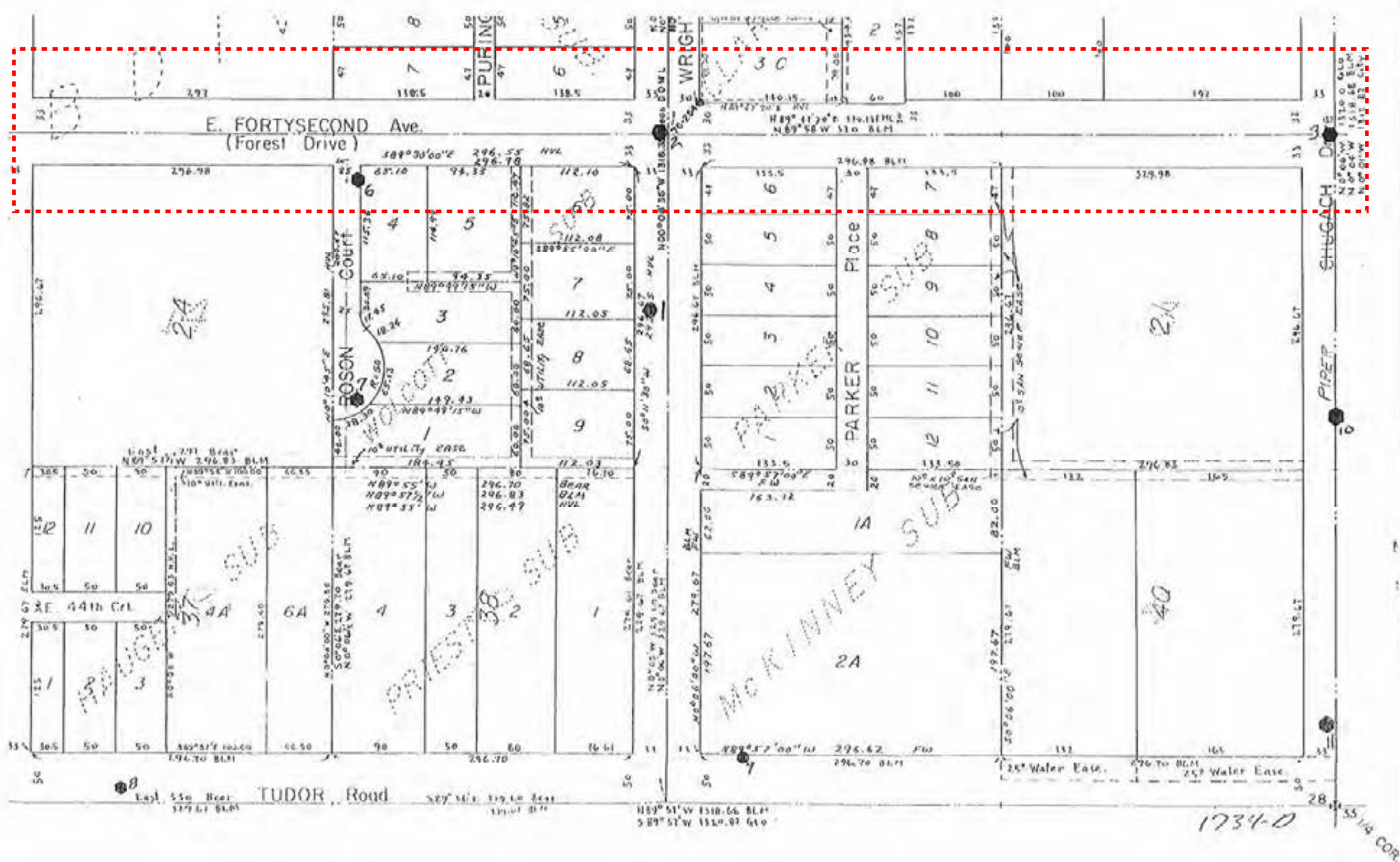
LOG OF TEST BORING 1

FIGURE B-1





42nd Avenue
Folker Street to Piper Street



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2

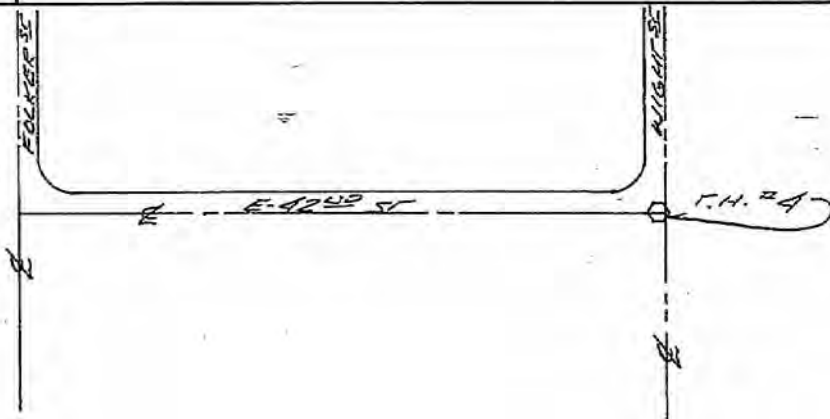
SOILS LOG

LOCATION 8 OF E-42ND AVE. / 4 FEET WEST OF THE 2
DE WRIGHT ST
COMMENTS ALL FROST CLASSIFICATION BASE ON
OR MIN % = 50% OF - # 200%

HOLE NO. #4
DATE 6/9/76
BY M.E. KUEHL
DEPTH 95 FT
WATER TABLE 100

DEPTH	UNIFIED CLASS	DESCRIPTION
0		EXIST GROUND / ROAD SURFACE
1		
2		
3		
4		
5	GWGM 4-A	(56%) SANDY - GRAVEL W/ (56%) SILT FOLL COBBLE + ISOLATED BOULDER / - # 200 = 8% / MOIST = 7% HP / MES. TO F-1
6		
7		
8		
9		
10		

LOCATION SKETCH:



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DEPARTMENT OF PUBLIC WORKS
CONSTRUCTION DIVISION

③

SOILS LOG

LOCATION E OF E-42 / E OF PIPER ST

HOLE NO. #5

DATE 6/9/76

BY M.E. KRUEGER

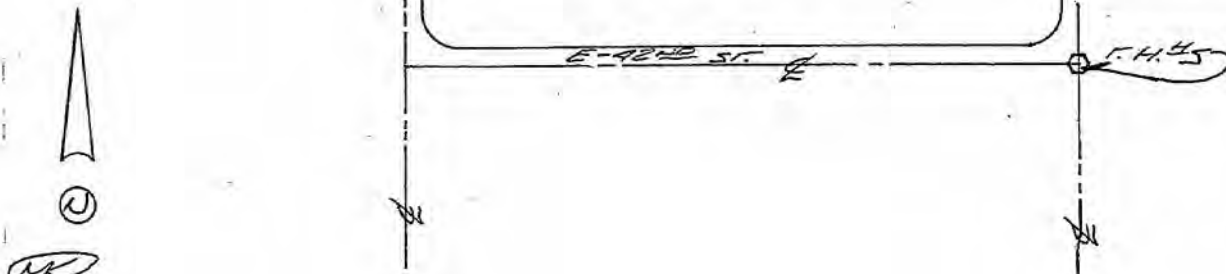
COMMENTS ALL BEST CLASSIFICATION BASED ON 100% =
50% OF - #200 %

DEPTH 9 FT

WATER TABLE None

DEPTH	UNIFIED CLASS	DESCRIPTION
0		EXIST. GROUND / ROAD SURFACE
1	GW S-A	(32%) (65%) (5%) BRN. SANDY-GRAVEL w/ SM. SILT & ALL. CORBLE - #200 = 5% / MOIST = 5% / NP / N.E.S. / DENSE
2		
3		
4	GW S-B	(41%) (57%) BRN. SANDY-GRAVEL w/ ALL. CORBLE / WELL-GRADED / - #200 = 2% / MOIST = 7% NP / N.E.S. / DENSE
5		
6		
7	GW S-C	(47%) (51%) BRN. SANDY-GRAVEL w/ ALL. CORBLE / - #200 = 2% / MOIST = 8% / NP / N.E.S. DENSE
8		
9		
10		

LOCATION SKETCH:



MUNICIPALITY OF ANCHORAGE

DEPARTMENT OF PUBLIC WORKS CONSTRUCTION DIVISION

SOILS LOG

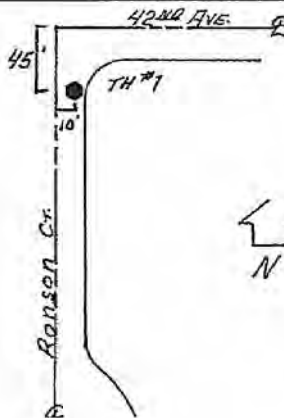
LOCATION Ranson Cr. / 10' East of E Ranson Cr.
45' South of E 42nd Ave.

COMMENTS _____

HOLE NO. 1
DATE 8/31/84
BY D.N. Rolles
DEPTH 9.2'
WATER TABLE 7.2'

	DEPTH	UNIFIED CLASS	FROST GROUP	DESCRIPTION
1-A EX-106	0			Existing Grade
	1	GW/GM	F-1	Brown - Sandy (28%) Gravel (6.2%) w/silt (10%)
	2			& Cobbles (>20%) / Moist. = 7% / Medium Density
	3			
1-B EX-107	4	GW/GM	NFS TO F-1	Red + Brown - Sandy (31%) Gravel (6.3%) w/silt (6%)
	5			& Cobbles (≈ 20%) / Moist. = 5% / Moderately Low Dens.
	6			Sloughing From - 3.2'
	7			
	8			
	9			
	10			
	11			
	12			
	13			
	14			

LOCATION SKETCH:



LEGEND

SYMBOL

TEST HOLE

WATER TABLE

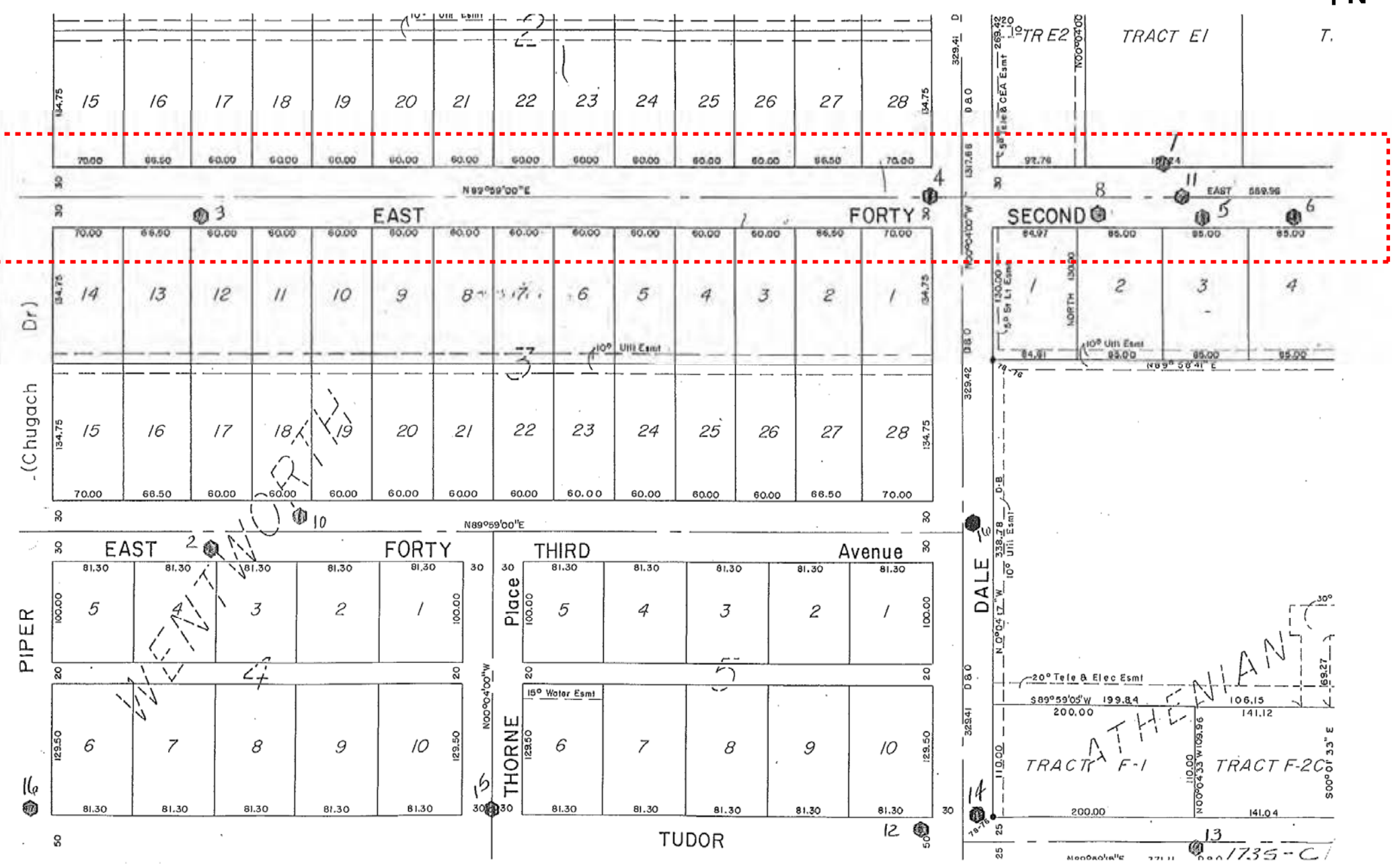
FROZEN MATERIAL

ALL FROST CLASSIFICATION
BASED ON THE .02mm = 50%
OF THE #200 UNLESS
OTHERWISE NOTED

GRID NO. 1734

42nd Avenue

Piper Street to Florina Street



MUNICIPALITY OF ANCHORAGE

DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION DIVISION

SOILS LOG

LOCATION 42ND AVE / 200' E. 4TH AVE PIPERS
20' N. 4TH E-42ND AVE

COMMENTS _____

HOLE NO. 3

DATE 7/12/96

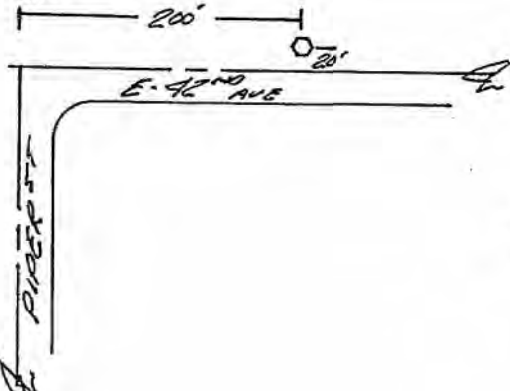
BY J. JACOBSEN

DEPTH 10.2'

WATER TABLE 7.2'

DEPTH	UNIFIED CLASS	FROST GROUP	DESCRIPTION
0	SM	F-2	BRN SILTY-GULY-SAND / MED MOIST
1			DENSE
2			
3			
4			
5	SW	NF	BRN GULY-SAND / COBBLES (12") / MED MOIST
6			DENSE
7			
8			
9			
10			
11			
12			
13			
14			

LOCATION SKETCH:



LEGEND

SYMBOL



TEST HOLE



WATER TABLE



FROZEN MATERIAL

ALL FROST CLASSIFICATION
 BASED ON THE .02mm = 50%
 OF THE #200 UNLESS
 OTHERWISE NOTED

GRID NO. 1735

MUNICIPALITY OF ANCHORAGE
DEPARTMENT OF PUBLIC WORKS
CONSTRUCTION DIVISION

④

SOILS LOG

LOCATION E OF E-42ND AVE. / 15 FT WEST OF F.H.#6
OF DATE 6/9/76

HOLE NO. #6

DATE 6/9/76

BY M.E. KRUH

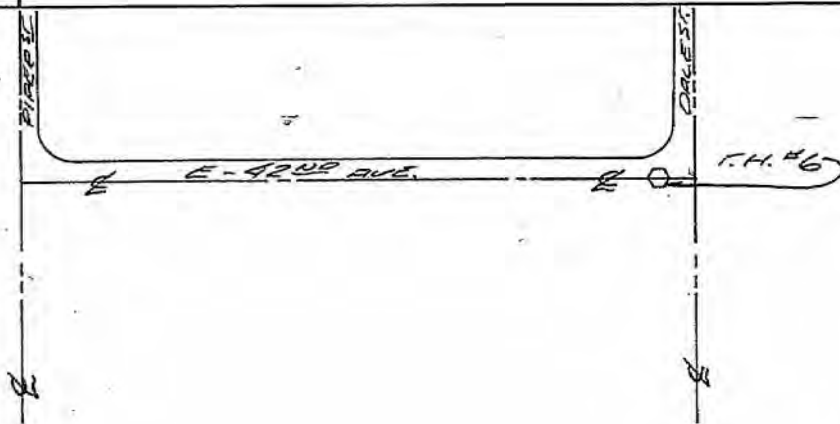
COMMENTS ACCEPTED REFUSEL AT - 7' DUE TO
COARSE MATERIAL / ALL FROST CLASSIFICATION
BASE ON .02 MM % = 50% OF - #200 %

DEPTH 7' F

WATER TABLE N/A

DEPTH	UNIFIED CLASS	DESCRIPTION
0		EXIST. GROUND / ROAD SURFACE
1		
2		
3		
4	GW 6-A	(39%) (57%) RED SANDY-GRAVEL W/ ALL COBBLE # ISOLATED BOULDER / - #200 = 4% MOIST = 5.8% / WP / NPS / DENSE
5		
6		
7		
8		
9		
10		

LOCATION SKETCH:



MUNICIPALITY OF ANCHORAGE

DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION DIVISION

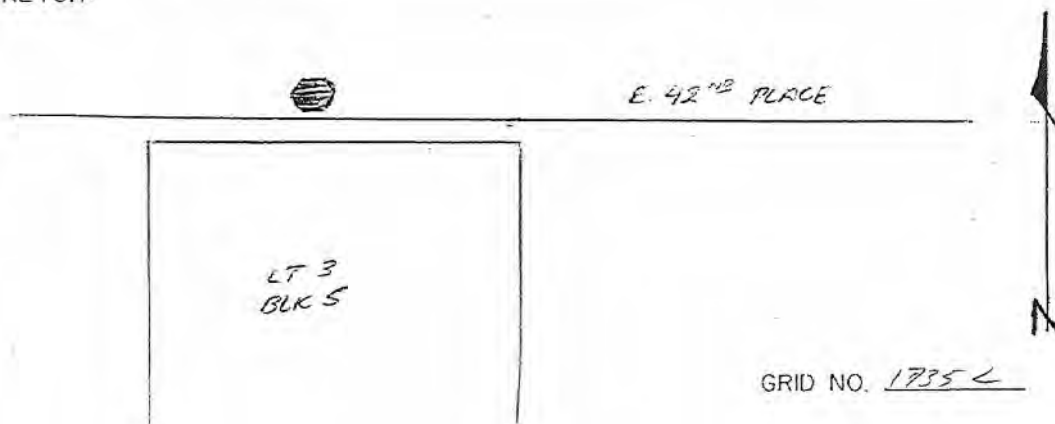
SOILS LOG

LOCATION ATHENIAN VILLAGE — LT 3, BLK 5 — E. 42ND PLACE
SEWER MAIN TAP — PERMIT # 10154 — NORTH SIDE LT 3
 COMMENTS VISUAL CLASSIFICATION ONLY

HOLE NO. 5
 DATE 5/5/77
 BY W.G.S.
 DEPTH 9'
 WATER TABLE 9'

DEPTH:	UNIFIED CLASS	DESCRIPTION
0		ROAD SURFACE
1		
2		
3		
4		
5	SP	BROWN GRAVELLY SAND
6		
7		
8		
9		WATER TABLE — 8" SEWER MAIN
0		

LOCATION SKETCH:



MUNICIPALITY OF ANCHORAGE
DEPARTMENT OF PUBLIC WORKS
CONSTRUCTION DIVISION

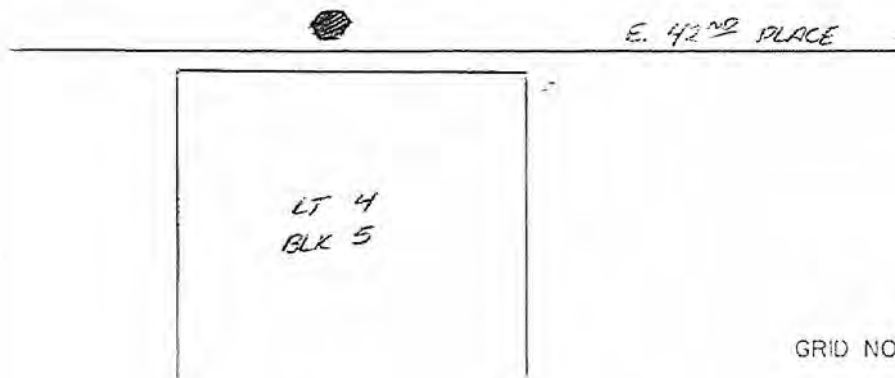
SOILS LOG

LOCATION ATHENIAN VILLAGE - LT. 4, BLK. 5 - E. 42ND PLACE
SEWER MAIN TAP - PERMIT # 10161 - NORTH SIDE LT. 4
COMMENTS VISUAL CLASSIFICATION ONLY

HOLE NO. 6
DATE 5/4/77
BY W.G.S.
DEPTH 9'
WATER TABLE 9'

DEPTH	UNIFIED CLASS	DESCRIPTION
0		ROAD SURFACE
1		
2		
3		
4	SP	
5		BROWN GRAVELLY SAND
6		
7		
8		
9		WATER TABLE - 8" SEWER MAIN
0		

LOCATION SKETCH:



GRID NO. 1735 L

MUNICIPALITY OF ANCHORAGE

DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION DIVISION

SOILS LOG

LOCATION ATHENIAN VILLAGE - TRACT E-1, B 8 - 42ND AVE
SEWER MAIN TAP - PERMIT # 10153 - SOUTH SIDE TRACT E-1
 COMMENTS VISUAL ONLY

HOLE NO. 7
 DATE _____
 BY W. G. SMITH
 DEPTH 10'
 WATER TABLE 9'

DEPTH	UNIFIED CLASS	FROST GROUP	DESCRIPTION
0			SURFACE
1			
2			
3			
4			
5			
6	SP		BROWN GRAVELLY SAND
7			
8			
9			WATER TABLE
10			8" SEWER MAIN
11			
12			
13			
14			

LOCATION SKETCH:

TRACT E-1
B 8

E. 42ND PLCE

LEGEND

SYMBOL



TEST HOLE



WATER TABLE

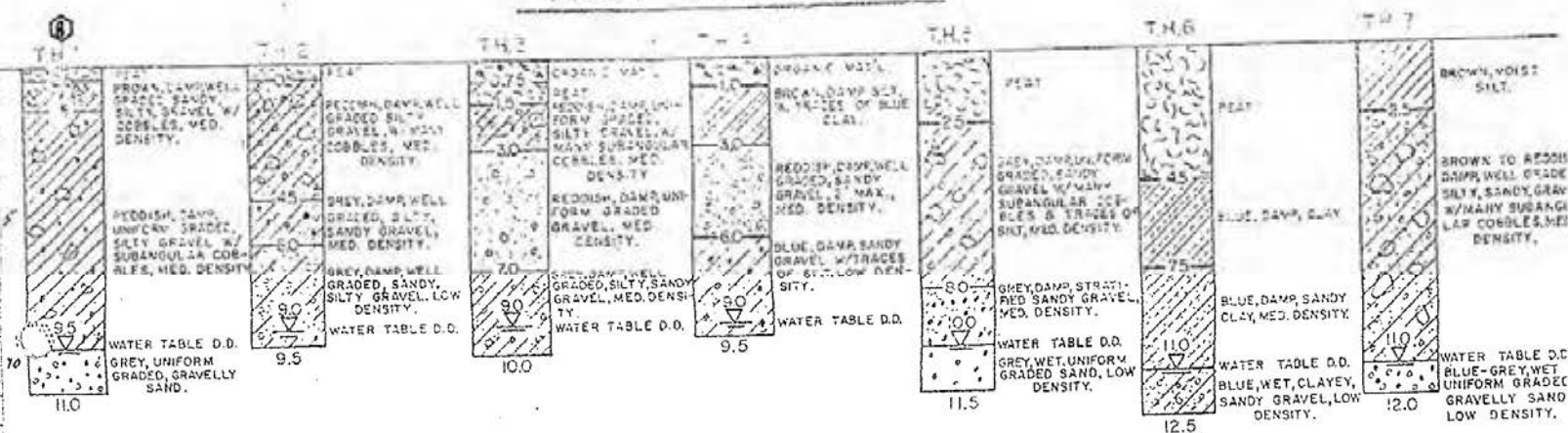


FROZEN MATERIAL

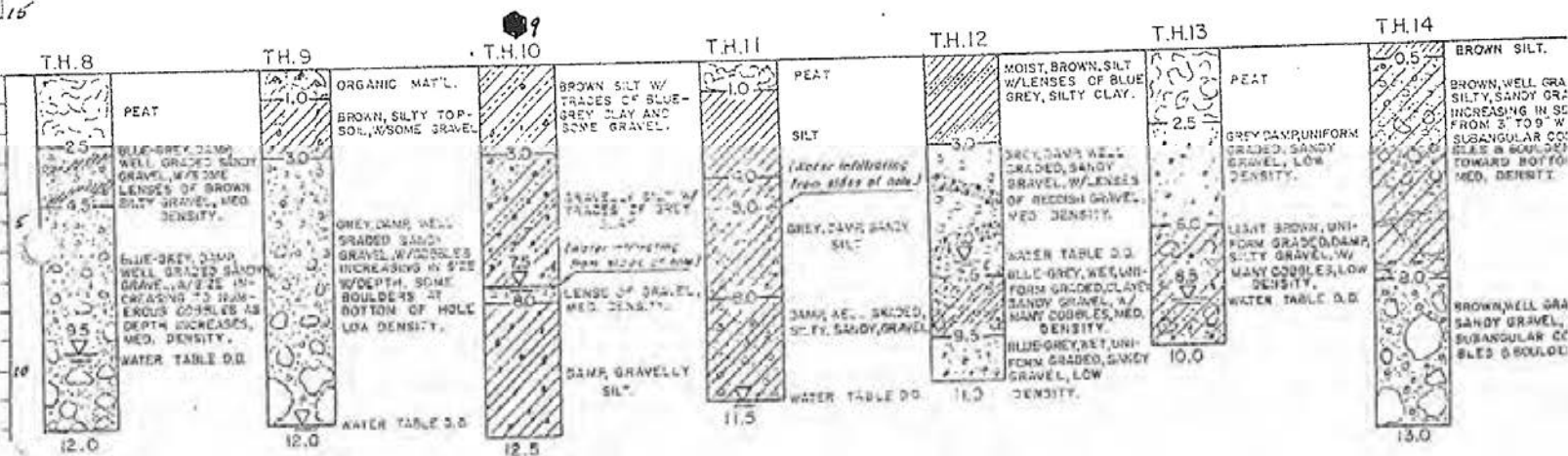
ALL FROST CLASSIFICATION
 BASED ON THE .02mm = 50%
 OF THE #200 UNLESS
 OTHERWISE NOTED

GRID NO. 1735 C

TEST HOLE LOG

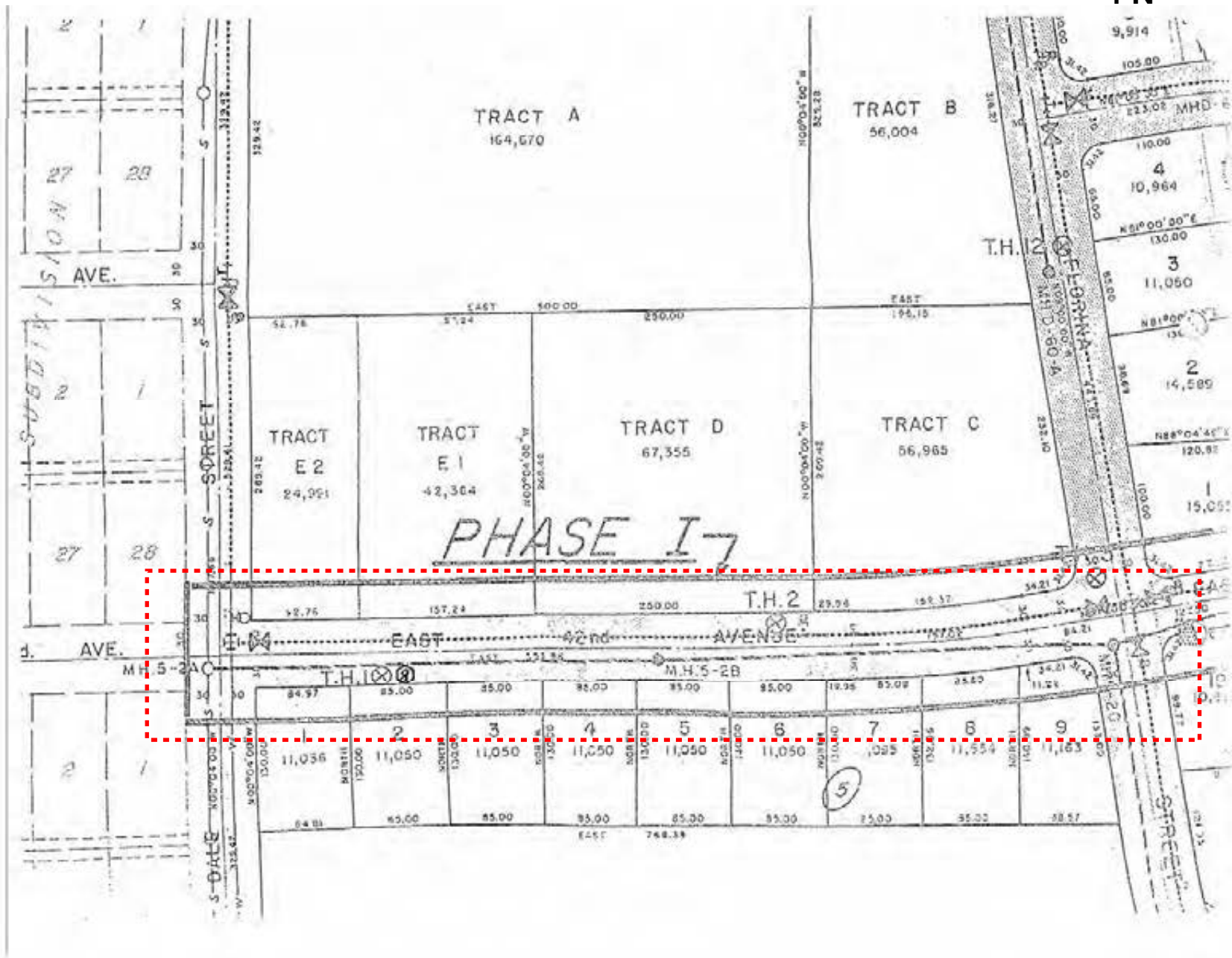


WATER TABLE D.D. = WATER TABLE DURING DIGGING



7-30-71 Added Phase 1 Limits
 Revision Date Description
 G.D.U.
 By

KEY MAP C-111007 3-1-1071



MUNICIPALITY OF ANCHORAGE

DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION DIVISION

SOILS LOG

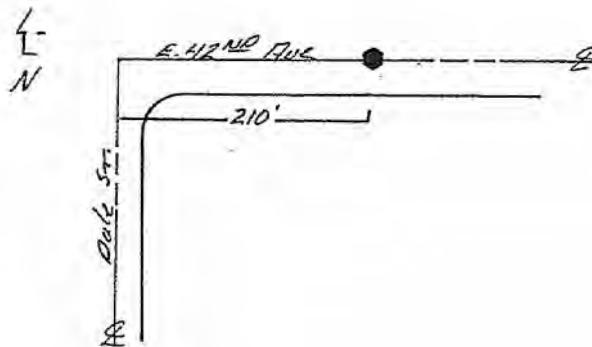
LOCATION E. 42ND Ave. / E of E. 42ND Ave. / 210' East of E
Dale St.

COMMENTS _____

HOLE NO. 3
 DATE 8/13/82
 BY D. Ballew
 DEPTH 3²'
 WATER TABLE None

	DEPTH	UNIFIED CLASS	FROST GROUP	DESCRIPTION
3-A Ex-406	0	GW	NFS	Existing Grade
				(31%) (6.6%)
	1			Brown - Sandy Gravel / Moisture = 20% / Silt = 3%
				Cobbles = 19% / N.P. / Dense
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	11			
	12			
	13			
	14			

LOCATION SKETCH:



LEGEND

SYMBOL

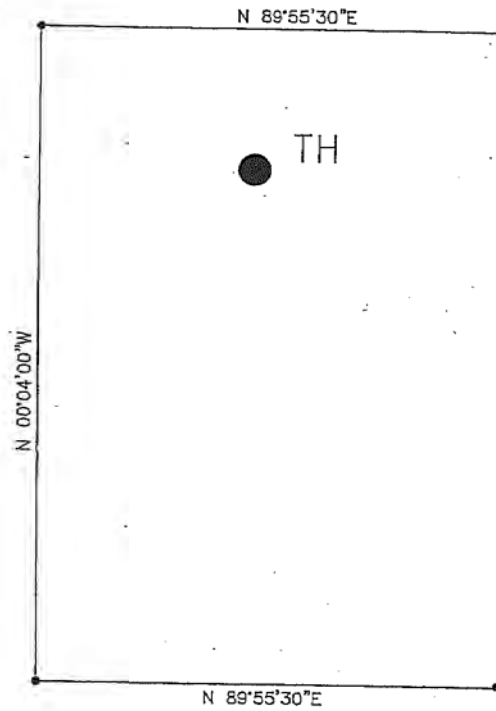
- TEST HOLE
- WATER TABLE
- FROZEN MATERIAL

ALL FROST CLASSIFICATION
 BASED ON THE .02mm = 50%
 OF THE #200 UNLESS
 OTHERWISE NOTED

LOT 14, BLOCK 3
WENTWORTH SUBDIVISION

EAST 42ND AVENUE

PIPER STREET



TEST HOLE LOCATION PLAN

SCALE 1" = 30'

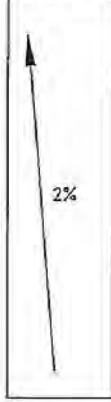
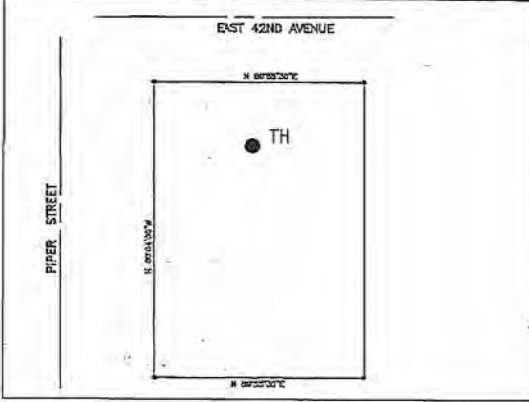
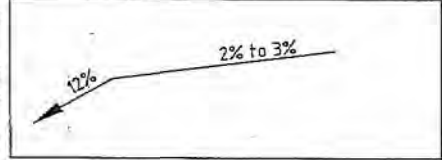
TEST HOLE LOG SOILS REPORT

PROJECT #: 06-233

PERFORMED FOR: RPM Construction

DATE PERFORMED: 8/21/2006

LEGAL DESCRIPTION: Lot 14, Block 3, Wentworth Subdivision

TEST HOLE # <u>1</u>		SLOPE	SITE PLAN
1	Organic Material OG/OL		
2			
3	Gap Graded Gravel with Sand		
4	GP <5% Silt		
5	NFS (Visually Rated)		
6	Rust Brown		
7			
8	Cobbles to 4"		
9			
10	BOH		
11			
12			
13			
14			
15			
16			
17			
18			

WAS GROUNDWATER ENCOUNTERED? Yes

IF YES, WHAT DEPTH? 7'

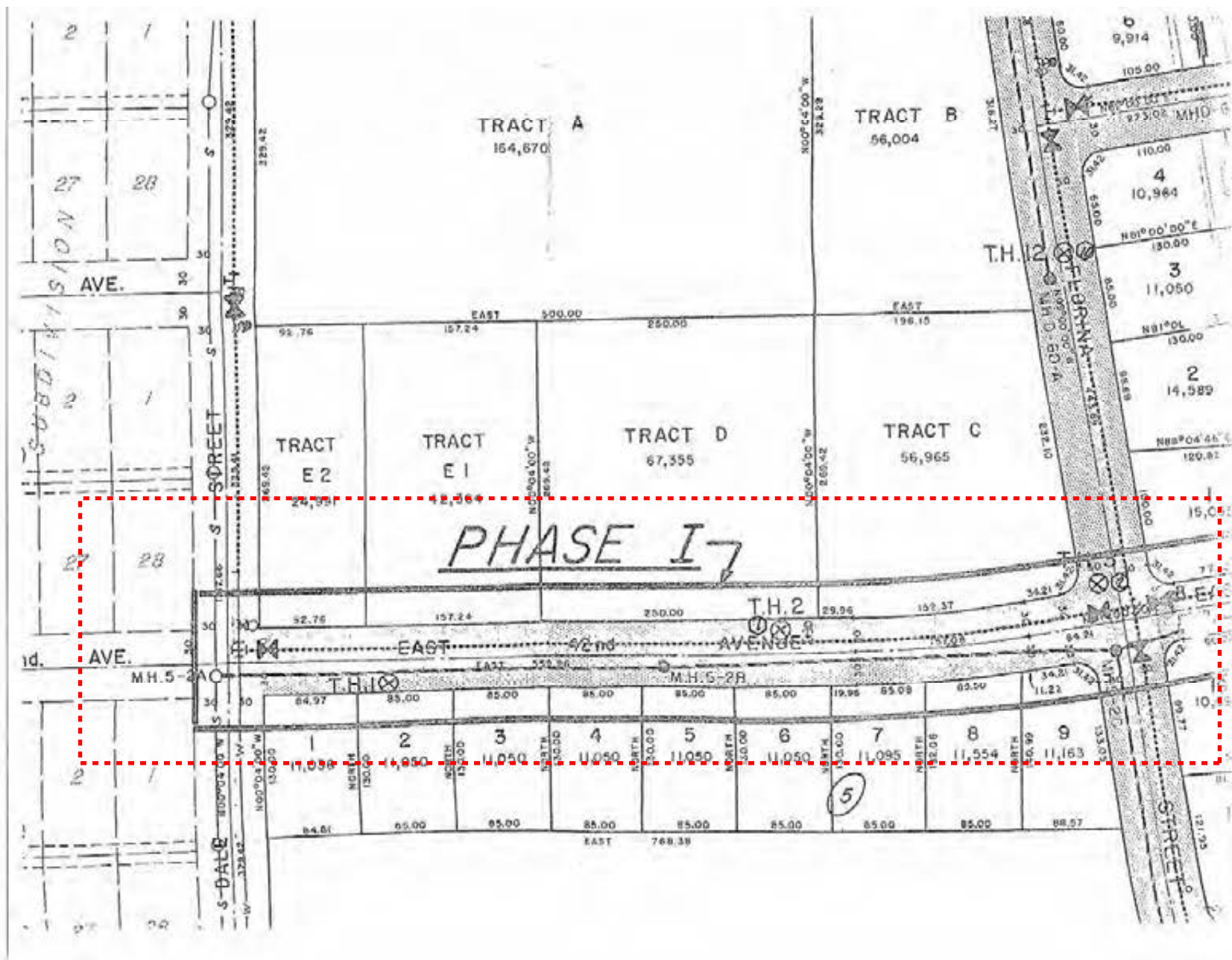
DEPTH OF WATER AFTER MONITORING: _____

DATE: _____

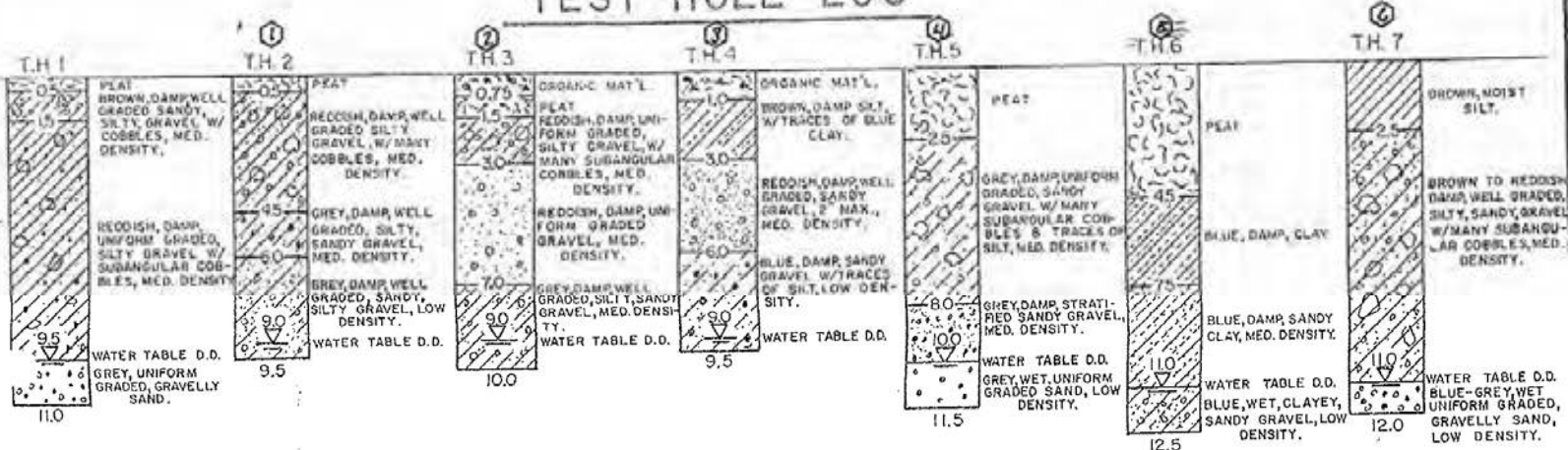
COMMENTS: ORGANIC MAT ENCOUNTERED TO 1.0' TO 1.5' UNDERLAIN BY RUST BROWN GAP GRADED GRAVEL WITH A MINOR
AMOUNT OF SAND AND SILT (<5%). MATERIAL IS MODERATELY DENSE AND DRY. VISUALLY RATED AS NFS.
BEARING CAPACITY CONSERVATIVELY ESTIMATED AT 2,500 PSF. GROUNDWATER ENCOUNTERED AT 7'.
PERCOLATION RATE <<< 1 MINUTE PER INCH. WATER WILL NOT STAND IN HOLE.

TEST PERFORMED BY: A. HARALA

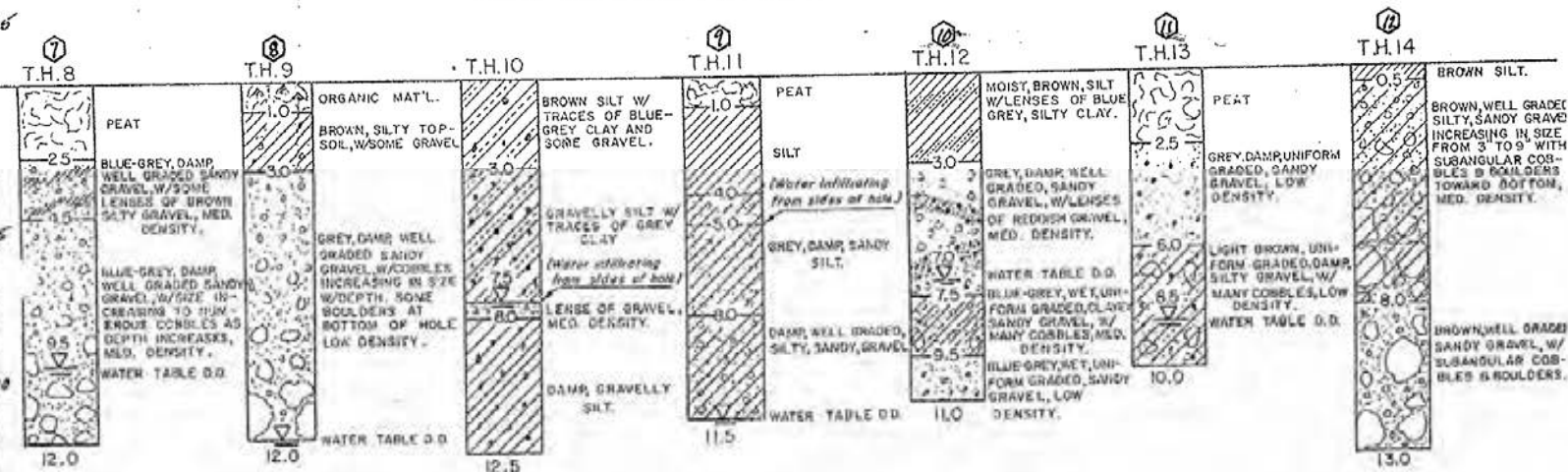




TEST HOLE LOG



WATER TABLE D.D. = WATER TABLE DURING DIGGING



7-30-71
Revision Date

Added Phase I Limits

Description

G.O.U.

By

KEY MAP

C-11407 T.M. 1 1971

MUNICIPALITY OF ANCHORAGE
DEPARTMENT OF PUBLIC WORKS
CONSTRUCTION DIVISION

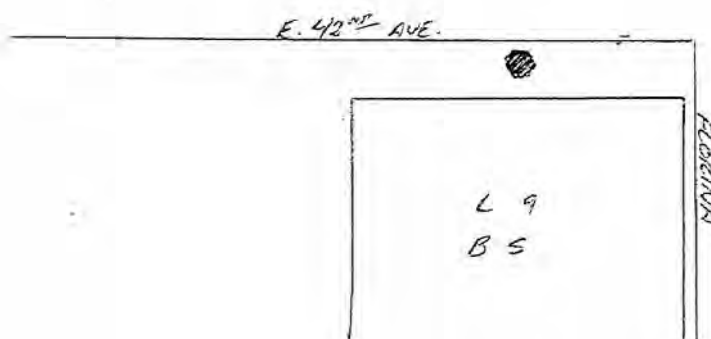
SOILS LOG

LOCATION ATHENIAN VILLAGE - L9, B.S. - E. 42ND / FLORINA
SEWER MAIN TAP - PERMIT # 11339 - NORTH SIDE L9
COMMENTS WISUDG ONLY

BOLE NO. 78
DATE 9/11/78
BY W.G.S.
DEPTH 9'
WATER TABLE 7'

DEPTH	UNIFIED CLASS	DESCRIPTION
0		SURFACE
1		
2		
3		
4	SP	BROWN GRAVELLY SAND
5		
6		
7		WATER TABLE
8		
9		8" SEWER MAIN
10		

LOCATION SKETCH:



GRID NO. 1735



MUNICIPALITY OF ANCHORAGE

DEPARTMENT OF PUBLIC WORKS CONSTRUCTION DIVISION

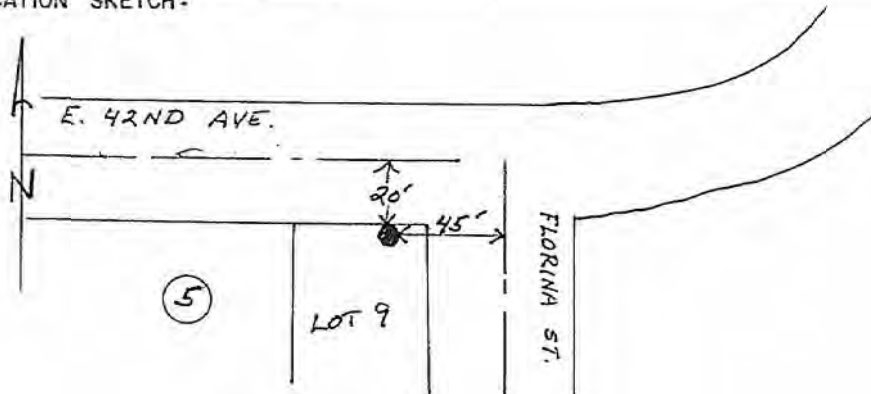
SOILS LOG

LOCATION Lot 9, Block 5, Athenian Village - SW corner of 42nd & Fairway
 COMMENTS Visual inspection only

HOLE NO. 13
 DATE 5/10/22
 BY LOH
 DEPTH 11'
 WATER TABLE 7'

DEPTH	UNIFIED CLASS	FROST GROUP	DESCRIPTION
0			
1	PT		PEAT w/ SOME ROCK & ORGANIC MATERIALS
2			
3			
4	SC		BLUE CLAYEY SAND
5			
6			
7			
8	GP		GRAY SAND w/ MEDIUM TO LARGE ROCK
9			
10			
11			BOTTOM EXCAVATION
12			
13			
14			

LOCATION SKETCH:



LEGEND

SYMBOL



TEST HOLE



WATER TABLE



FROZEN MATERIAL

ALL FROST CLASSIFICATION
 BASED ON THE .02mm = 50%
 OF THE #200 UNLESS
 OTHERWISE NOTED

GRID NO. 1225

MUNICIPALITY OF ANCHORAGE

DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION DIVISION

SOILS LOG

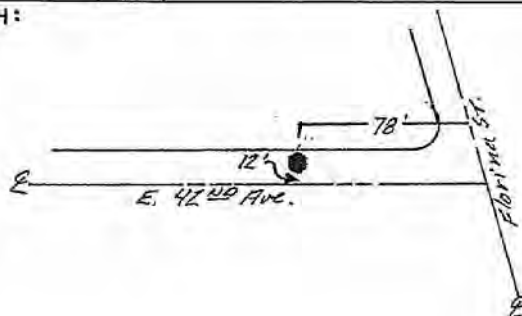
LOCATION E. 42ND Ave. / 12' North of E. 42ND Ave.
78' West of E. Florina St.

COMMENTS _____

(17)
 HOLE NO. 1
 DATE 8/13/87
 BY D. Rolles
 DEPTH 3rd
 WATER TABLE None

	DEPTH	UNIFIED CLASS	FROST GROUP	DESCRIPTION
1-A EX-402	0	GP	NFS	Existing Grade
1-B EX-403	1	GP/GM	NFS	Brown - Sandy (20%) Gravel (76%) Moisture = 2% Silt = 4% / Cobble = 3.5% / N.P. / Dense
1-C EX-404	2	GP	F1	Grey - Sandy (31%) Gravel (63%) w/ silt (6%) Moisture = 4% / Organics 1% by wt / some cobbles Moderately Low Density / N.P.
	3	GP	NFS	Brown - Gravel (89%) w/ sand (6%) and silt (5%) Organics = 2% by wt / (Cobbles in organic matrix) Moisture = 1% / Low Density / N.P.
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	11			
	12			
	13			
	14			

LOCATION SKETCH:



LEGEND

SYMBOL

- TEST HOLE
- WATER TABLE
- FROZEN MATERIAL

ALL FROST CLASSIFICATION
 BASED ON THE .02mm = 50%
 OF THE #200 UNLESS
 OTHERWISE NOTED

MUNICIPALITY OF ANCHORAGE

DEPARTMENT OF PUBLIC WORKS CONSTRUCTION DIVISION

SOILS LOG

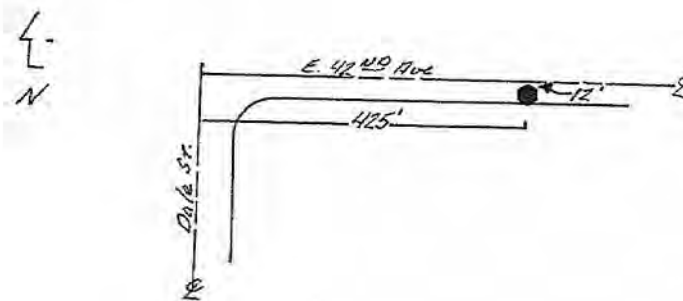
LOCATION E. 42ND Ave. / 12' south of E. E. 42ND Ave.
425' East of E. Dale St.

COMMENTS _____

(18)
 HOLE NO. 2
 DATE 8/13/92
 BY D. Ballas
 DEPTH 3.2'
 WATER TABLE None

	DEPTH	UNIFIED CLASS	FROST GROUP	DESCRIPTION
2-A EX-405	0	GW	NFS	Existing Grade
				Brown - Sandy (30%) Gravel (46%) / Moisture = 3%
2-B EX-402	1	GP	NFS	Silt = 4% / N.P. / High Density
	2			Brown - Sandy (20%) / Gravel (76%) / Silt = 4% / Cabbles = 35%
				Moderately Low Moisture / Low Density
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	11			
	12			
	13			
	14			

LOCATION SKETCH:



LEGEND

SYMBOL

- TEST HOLE
- WATER TABLE
- FROZEN MATERIAL

ALL FROST CLASSIFICATION
 BASED ON THE .02mm = 50%
 OF THE #200 UNLESS
 OTHERWISE NOTED

MUNICIPALITY OF ANCHORAGE

1735-D

DEPARTMENT OF PUBLIC WORKS
CONSTRUCTION DIVISION

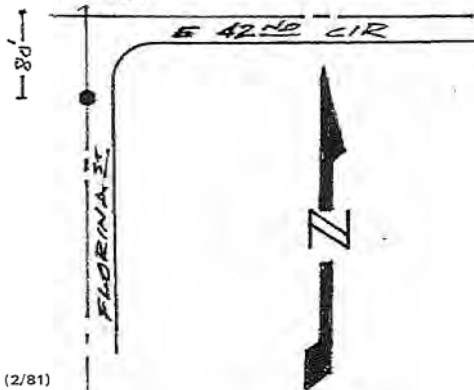
29

SOILS LOG

LOCATION ATHENIAN VILLAGE
80' S & E 42ND CIR. / 9 FLORINA STHOLE NO. 1DATE 1-6-82BY SLPCOMMENTS DOWN ENGINEERSDEPTH 17WATER TABLE 9'SB-10.5
SHEET 5 OF 5

DEPTH	UNIFIED CLASS	FROST GROUP	DESCRIPTION
0			
1	SM	F-2	SILTY GRAVELLY SAND
2			
3	SM	F-3	SILTY GRAVELLY SAND
4			
5			
6			
7	SP	NFS	VERY CLEAN COARSE SAND
8			
9			
10			
11			
12			
13			
14			

LOCATION SKETCH:



82-032 (2/81)

LEGEND

SYMBOL



TEST HOLE



WATER TABLE



FROZEN MATERIAL

ALL FROST CLASSIFICATION
BASED ON THE .02mm = 50%
OF THE #200 UNLESS
OTHERWISE NOTED

GRID NO. _____

Appendix E

BERG2 Thermal Analysis Output

Included in this section:

- 1) BERG2 Thermal Analysis Output – 2” Insulated Section
- 2) BERG2 Thermal Analysis Output – 3” Insulated Section

BERG2 Analysis – Limited Subgrade Frost Penetration Analysis – 2" Insulated Section

LOCATION/CLIMATE:

```

FAIRBANKS      ANCHORAGE      JUNEAU      MCKINLEY PARK
NORTHWAY       DILLINGHAM    POINT BARROW  BETHEL
KOTZEBUE       GULKANA       CENTRAL      USER INPUT

LOCATION NAME..... ANCHORAGE
THAW N FACTOR..... 1.7
FREEZE N FACTOR..... 1
DESIGN AIR THAWING INDEX °DAYS..... 4000
DESIGN AIR FREEZING INDEX °DAYS..... 3200
MEAN AIR THAWING INDEX °DAYS..... 3500
MEAN AIR FREEZING INDEX °DAYS..... 2300
MEAN ANNUAL AIR TEMP. °F..... 35.3
AMPL. OF AIR TEMP. SINE WAVE..... 24.7

DESIGN SURFACE THAWING INDEX °DAYS..... 6800
DESIGN SURFACE FREEZING INDEX °DAYS..... 3200
MEAN SURFACE THAWING INDEX °DAYS..... 5950      THAW SEASON      FREEZE SEASON
MEAN SURFACE FREEZING INDEX °DAYS..... 2300      LENGTH          LENGTH
MEAN ANNUAL SURFACE TEMP. °F..... 42      AIR  198        167
AMPL. OF SURFACE TEMP. SINE WAVE..... 34      SURF 217.2     147.8

INPUT FIRST LETTER OF DESIRED LOCATION
OR USE CURSOR CONTROL KEYS TO MOVE CURSOR AND CHANGE DATA

F1-COLOR  F2-SAVE  F3-LOAD  F4-DISK  S-SOILS  R-RUN  L-NEW SCREEN  O-QUIT

```

SOIL INPUTS

Layer	Thickness (ft)	Density (pcf)	M.C. (%)	Comment
Asphalt	0.17	138	-	-
Fill (Type II-A)	1.50	130	6.0	-
Insulation	0.17	1.8	-	-
Fill (Type II)	2.00	130	6.0	-
Subgrade	2.50	114	8.0	-

ANALYSIS RESULTS:

LOCATION	THAW N	FREZ N	MAAT	THAW	% F DAY	FREZ	% F DAY	THAW DAYS	FREZ DAYS
ANCHORAG	1.70	1.00	35		4000		3200	198	167
				1	2	3	4	5	
T C H Y A C W L E	FROZEN % MOIS.	0.0	6.0	0.0	6.0	8.0			
	FROZEN DENS.	138.0	130.0	1.8	130.0	114.0			
	LATENT HEAT	0	1123	0	1123	1313			
	FROZEN HEAT CAP	28.00	26.00	3.00	26.00	23.94			
	FROZEN COND.	0.86	1.58	0.02	1.58	1.18			
	THAWED % MOIS.	0.0	6.0	0.0	6.0	8.0			
	THAWED DENS.	138.0	130.0	1.8	130.0	114.0			
	THAWED HEAT CAP	28.00	29.90	3.00	29.90	28.50			
	THAWED COND.	0.86	1.57	0.02	1.57	1.19			
	INITIAL THICK	0.17	1.50	0.17	2.00	3.66			
F C R Y E C E L Z E E	AMOUNT THAWED	0.17	1.50	0.17	2.00	3.12			
	CONSOLIDATION	----	----	----	----	----			
	FINAL THICK	0.17	1.50	0.17	2.00	3.66			
	LATENT HEAT	0	1123	0	1123	1313			
	FROZEN DENS.	138.0	130.0	1.8	130.0	114.0			
	FROZEN HEAT CAP	28.00	26.00	3.00	26.00	23.94			
	FROZEN COND.	0.86	1.58	0.02	1.58	1.18			
	INITIAL THICK	0.17	1.50	0.17	2.00	3.66			
	AMOUNT FROZEN	0.17	1.50	0.17	2.00	0.33			

ESTIMATED THAW= 6.96

FREEZE= 4.17

PRINT LOCATION SOIL QUIT

RESULTS

Parameter	Value
Total Section Thickness	3.83 ft
Thaw Depth	6.96 ft
Freeze Depth	4.17 ft
Subgrade Frost Penetration	0.33 ft
Subgrade Frost Percent ¹	8.6%

1. Equal to Subgrade Frost Penetration divided by Total Section Thickness

BERG2 Analysis – Limited Subgrade Frost Penetration Analysis – 3” Insulated Section

LOCATION/CLIMATE:

FAIRBANKS	ANCHORAGE	JUNEAU	MCKINLEY PARK
NORTHWAY	DILLINGHAM	POINT BARROW	BETHEL
KOTZEBUE	GULKANA	CENTRAL	USER INPUT
LOCATION NAME..... ANCHORAGE			
THAW N FACTOR..... 1.7			
FREEZE N FACTOR..... 1			
DESIGN AIR THAWING INDEX °DAYS..... 4000			
DESIGN AIR FREEZING INDEX °DAYS..... 3200			
MEAN AIR THAWING INDEX °DAYS..... 3500			
MEAN AIR FREEZING INDEX °DAYS..... 2300			
MEAN ANNUAL AIR TEMP. °F..... 35.3			
AMPL. OF AIR TEMP. SINE WAVE..... 24.7			
DESIGN SURFACE THAWING INDEX °DAYS..... 6800			
DESIGN SURFACE FREEZING INDEX °DAYS..... 3200			
MEAN SURFACE THAWING INDEX °DAYS..... 5950			
MEAN SURFACE FREEZING INDEX °DAYS..... 2300			
MEAN ANNUAL SURFACE TEMP. °F..... 42			
AMPL. OF SURFACE TEMP. SINE WAVE..... 34			
THAW SEASON			
LENGTH			
FREEZE SEASON			
LENGTH			
AIR 198			
SURF 217.2			
147.8			
INPUT FIRST LETTER OF DESIRED LOCATION			
OR USE CURSOR CONTROL KEYS TO MOVE CURSOR AND CHANGE DATA			
F1-COLOR F2-SAVE F3-LOAD F4-DISK S-SOILS R-RUN L-NEW SCREEN Q-QUIT			

SOIL INPUTS

Layer	Thickness (ft)	Density (pcf)	M.C. (%)	Comment
Asphalt	0.17	138	-	-
Fill (Type II-A)	1.50	130	6.0	-
Insulation	0.25	1.8	-	-
Fill (Type II)	1.25	130	6.0	-
Subgrade	2.50	114	8.0	-

ANALYSIS RESULTS:

LOCATION	THAW N	FREZ N	MAAT	THAW °F DAY	FREZ °F DAY	THAW DAYS	FREZ DAYS
ANCHORAG	1.70	1.00	35	4000	3200	198	167
T H Y A C W L E			1	2	3	4	5
	FROZEN % MOIS.		0.0	6.0	0.0	6.0	8.0
	FROZEN DENS.		138.0	130.0	1.8	130.0	114.0
	LATENT HEAT		0	1123	0	1123	1313
	FROZEN HEAT CAP		28.00	26.00	3.00	26.00	23.94
	FROZEN COND.		0.86	1.58	0.02	1.58	1.18
	THAWED % MOIS.		0.0	6.0	0.0	6.0	8.0
	THAWED DENS.		138.0	130.0	1.8	130.0	114.0
	THAWED HEAT CAP		28.00	29.90	3.00	29.90	28.50
	THAWED COND.		0.86	1.57	0.02	1.57	1.19
F R Y E C E L Z E E	INITIAL THICK		0.17	1.50	0.25	1.25	3.66
	AMOUNT THAWED		0.17	1.50	0.25	1.25	2.26
	CONSOLIDATION		----	----	----	----	----
	FINAL THICK		0.17	1.50	0.25	1.25	3.66
	LATENT HEAT		0	1123	0	1123	1313
	FROZEN DENS.		138.0	130.0	1.8	130.0	114.0
FROZEN HEAT CAP			28.00	26.00	3.00	26.00	23.94
FROZEN COND.			0.86	1.58	0.02	1.58	1.18
INITIAL THICK			0.17	1.50	0.25	1.25	3.66
AMOUNT FROZEN			0.17	1.50	0.25	1.25	0.19
ESTIMATED THAW= 5.43				FREEZE= 3.36		PRINT LOCATION SOIL QUIT	

RESULTS

Parameter	Value
Total Section Thickness	3.17 ft
Thaw Depth	5.43 ft
Freeze Depth	3.36 ft
Subgrade Frost Penetration	0.19 ft
Subgrade Frost Percent ¹	6.0%

1. Equal to Subgrade Frost Penetration divided by Total Section Thickness

Traffic Data and Reports

Appendix H

48th and Cordova
Projected Traffic Volumes

By: rlcJDH
Date: 2/20/2020

Population Growth Rate 0.80% Anchorage 2040 LUP

Piper Street

AADT 4565 ADOT 2018 AADT GIS Map
30th Hour 9.50% TUDOR ROAD - WEST OF TUDOR CENTER DRIVE
Directional Distribution 75.00% 25%

42th Avenue (A) - Lake Otis to Laurel

AADT 2580 Adjusted based on Counts
30th Hour 9.50% TUDOR ROAD - WEST OF TUDOR CENTER DRIVE
Directional Distribution 70% 30%

42th Avenue (B) - Laurel to Piper

AADT 1840 Adjusted based on Counts
30th Hour 9.50% TUDOR ROAD - WEST OF TUDOR CENTER DRIVE
Directional Distribution 60% 40%

42th Avenue (C) - Piperto Dale

AADT 1310 Adjusted based on Counts
30th Hour 9.50% TUDOR ROAD - WEST OF TUDOR CENTER DRIVE
Directional Distribution 40% 60%

42th Avenue (D) - Dale to Florina

AADT 1490 Adjusted based on Counts
30th Hour 9.50% TUDOR ROAD - WEST OF TUDOR CENTER DRIVE
Directional Distribution 60% 40%

AADT Projections

Growth Rate 0.80%

<u>AADT Projections</u>	2020	2025	2045
Piper Street	4640	4830	5660
42th Avenue (A) - Lake Otis to Laurel	2620	2730	3200
42th Avenue (B) - Laurel to Piper	1870	1950	2280
42th Avenue (C) - Piperto Dale	1330	1390	1620
42th Avenue (D) - Dale to Florina	1510	1580	1850

Directional Distribution 2025

	AM Peak			PM Peak		
	NB/EB	SB/WB	Total	NB/EB	SB/WB	Total
Piper Street	115	344	459	344	115	459
42th Avenue (A) - Lake Otis to Laurel	78	182	259	182	78	259
42th Avenue (B) - Laurel to Piper	74	111	185	111	74	185
42th Avenue (C) - Piperto Dale	79	53	132	53	79	132
42th Avenue (D) - Dale to Florina	60	90	150	90	60	150

Directional Distribution 2045

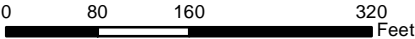
	AM Peak			PM Peak		
	NB/EB	SB/WB	Total	NB/EB	SB/WB	Total
Piper Street	134	403	538	403	134	538
42th Avenue (A) - Lake Otis to Laurel	91	213	304	213	91	304

CRASHES IN PROJECT AREA (2012-2018) & OBSERVED SPEEDS (2019)



Legend

- Pedestrian
- Parked Car
- Snowberm
- Bike
- Concrete Traffic Barrier
- Vehicle Angle
- Vehicle Rear End
- Vehicle side-swipe
- Vehicle Head On





Memorandum

Date: July 3, 2019
To: Julie Makela, PE - MOA PM&E Project Administrator
Through: Justin Keene, PE - CRW Engineering Group, LLC
From: Kelly Yanoshek, EIT - CRW Engineering Group, LLC
Project: 42nd Avenue Upgrade
Project No: MOA PM&E#18-06 (CRW#10142.00)
Subject: On-Street Parking Study

Introduction

The Municipality of Anchorage Project Management & Engineering Department (PM&E) plans to upgrade E. 42nd Avenue from Lake Otis Parkway to Florina Street. To aid in the design of the improvements, an on-street parking study was completed on E. 42nd Avenue within the project limits noted above. The purpose of the study was to document the current use of on-street parking for consideration in the design of the proposed improvements. Parked vehicles within the adjacent parking lots were also noted during the study to document available adjacent parking.

The E. 42nd Avenue corridor is 0.8 miles long and is located between, and runs parallel to, Tudor Road and E. 40th Avenue. The roadway currently doesn't have any on-street parking restrictions along the project corridor. There are many multi-family developments and businesses with on-site parking lots and/or some full frontage driveways/parking areas.

The parking study was based on observations from four separate site visits, documenting parked vehicles located along the roadway and in visible, adjacent parking lots. Site visits were organized to include one weekday afternoon/evening and one weekend afternoon/evening.

Observations

The observations took place Wednesday, June 26, 2019 and Saturday, June 29, 2019. Weather on both Wednesday and Saturday was sunny, with temperatures in the mid-70s. The following table summarizes the parked cars observed during the site visits:

	Wednesday, June 26, 2019				Saturday, June 29, 2019			
	12:00-12:30 pm		8:00-8:30 pm		12:00-12:30 pm		8:00-8:30 pm	
Reference Side Street	North	South	North	South	North	South	North	South
Lake Otis to Wright (42 nd Ave)	-	-	-	-	-	-	-	-
Wright to Piper (42 nd Ave)	-	-	-	-	-	-	-	-
Piper to Dale (42 nd Ave)	1 ¹	4 ³	2 ¹	3 ³	1 ¹	5 ⁴	3	4 ³
Dale to Florina (42 nd Ave)	1	2 ²	4	4 ²	3 ¹	2 ¹	2 ¹	1
¹ Count includes 1 unmoved vehicles; ² Count includes 2 unmoved vehicles; ³ Count includes 3 unmoved vehicles; ⁴ Count includes 4 unmoved vehicles								

Near the west side of the project area from Lake Otis Parkway to P Street, along E. 42nd Avenue, there are a handful of businesses that provide adequate parking for the amount of traffic the businesses serve. No on-street parked vehicles were observed in this section. The parking capacity of the businesses followed a similar pattern of fuller lots on weekdays compared to weekends and emptier lots during the evening hours compared to the afternoon.



There is one parking area located on the north side of E. 42nd Avenue just east of Parker Place that includes full frontage access and an angled parking area located south of the property owner's fence. This parking area provides angled parking for 5 to 6 vehicles. This parking area was counted as a parking lot since the vehicles are not parked parallel and on-street.

The east side of the project from Piper Street to Florina Street along E. 42nd Avenue is predominantly residential housing. There were eight unmoved vehicles that were observed during multiple counts along E. 42nd Avenue, six of which were moved at least once during the four site visits. On the attached figure, these vehicles are marked by a red circle. Generally, there was a similar level of on-street vehicles during all four site visits in this residential area. The adjacent parking lots/driveways were often very full during all site visits.

Conclusions

Off-street parking was sufficient during site visits for most of the project area but almost entirely occupied in a few specific lots, especially in the east half of the project.

The greatest demand for on-street parking is on the east side between Piper Street and Florina Street near the single-family residential housing and some apartment buildings off E. 42rd Avenue. These results can be seen on the attached figure.

The parking area near Parker Place, as mentioned above, appears to be within the ROW so likely will be impacted during construction. The proposed roadway improvements could include on-street parallel parking along the roadway in this location to replace the parking area removed.

Legend

East 42nd Avenue Parking Study: July 2019

- ★ Saturday Evening
- Saturday at Noon
- ★ Wednesday Evening
- Wednesday at Noon

Parking Lot Usage %
WN = Wednesday Noon
WE = Wednesday Evening
SN = Saturday Noon
SE = Saturday Evening





Memorandum

Date: November 11, 2019
To: Julie Makela, PE - MOA PM&E Project Administrator
Through: Justin Keene, PE - CRW Engineering Group, LLC
From: Kelly Yanoshek, EIT - CRW Engineering Group, LLC
Project: 42nd Avenue Upgrade
Project No: MOA PM&E#18-06 (CRW#10142.00)
Subject: On-Street Parking Study

Introduction

The Municipality of Anchorage Project Management & Engineering Department (PM&E) plans to upgrade E. 42nd Avenue from Lake Otis Parkway to Florina Street. To aid in the design of the improvements, an on-street parking study was completed on E. 42nd Avenue within the project limits noted above. The purpose of the study was to document the current use of on-street parking for consideration in the design of the proposed improvements. Parked vehicles within the adjacent parking lots were also noted during the study to document available adjacent parking.

The E. 42nd Avenue corridor is 0.8 miles long and is located between, and runs parallel to, Tudor Road and E. 40th Avenue. The roadway currently doesn't have any on-street parking restrictions along the project corridor. There are many multi-family developments and businesses with on-site parking lots and/or some full frontage driveways/parking areas.

The parking study was based on observations from four separate site visits, documenting parked vehicles located along the roadway and in visible, adjacent parking lots. Site visits were organized to include one weekday afternoon/evening and one weekend afternoon/evening.

Observations

The observations took place Wednesday, November 6, 2019 and Saturday, November 9, 2019. Weather on both Wednesday and Saturday was overcast, with temperatures in the mid-30s. The following table summarizes the parked cars observed during the site visits:

	Wednesday, November 6, 2019				Saturday, November 9, 2019			
	12:00-12:30 pm		8:00-8:30 pm		12:00-12:30 pm		8:00-8:30 pm	
Reference Side Street	North	South	North	South	North	South	North	South
Lake Otis to Parker (42 nd Ave)	-	-	-	1	-	-	-	1
Parker to Piper (42 nd Ave)	-	-	1 ¹	-	2 ²	-	3 ²	-
Piper to Dale (42 nd Ave)	1 ¹	2 ²	1	2 ²	1 ¹	6 ²	3	2 ²
Dale to Florina (42 nd Ave)	1	2 ¹	4 ¹	1	3	3 ²	3 ¹	2 ²
¹ Count includes 1 unmoved vehicles; ² Count includes 2 unmoved vehicles;								

Near the west side of the project area from Lake Otis Parkway to Folker Street, along E. 42nd Avenue, there are a handful of businesses that provide adequate parking for the amount of traffic the businesses serve. No on-street parked vehicles were observed in this section from Lake Otis Parkway to Folker Street. The parking capacity of the businesses followed a similar pattern of fuller lots on weekdays compared to weekends and emptier lots during the evening hours compared to the afternoon.

There is one parking area located on the north side of E. 42nd Avenue just east of Parker Place that includes full frontage access and an angled parking area located south of the property owner's fence.



For the first parking study, this area was used as an angled parking area, but for this secondary study the area was used for both parallel on-street and angled parking, therefore it was not counted as a parking lot.

The east side of the project from Parker Place to Florina Street along E. 42nd Avenue is predominantly residential housing. There were eight unmoved vehicles that were observed during multiple counts along E. 42nd Avenue, six of which were moved at least once during the four site visits. On the attached figure, these vehicles are marked by a red circle. Saturday afternoons had the most on-street parked vehicles.

Conclusions

Off-street parking was sufficient during site visits for most of the project area, but almost entirely occupied in a few specific lots, especially in the east half of the project.

The greatest demand for on-street parking is on the east side between Piper Street and Florina Street near the single-family residential housing and some apartment buildings off E. 42rd Avenue. These results can be seen on the attached figure.

The parking area near Parker Place, as mentioned above, appears to be within the ROW so likely will be impacted during construction. The proposed roadway improvements could include on-street parallel parking along the roadway in this location to replace the parking area removed.

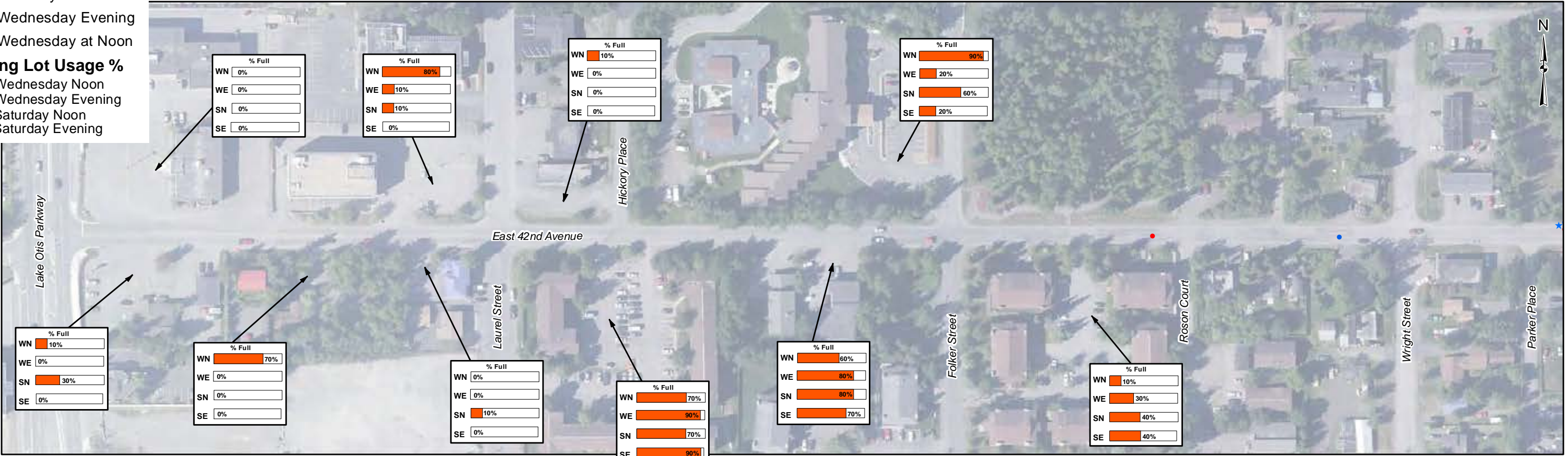
Legend

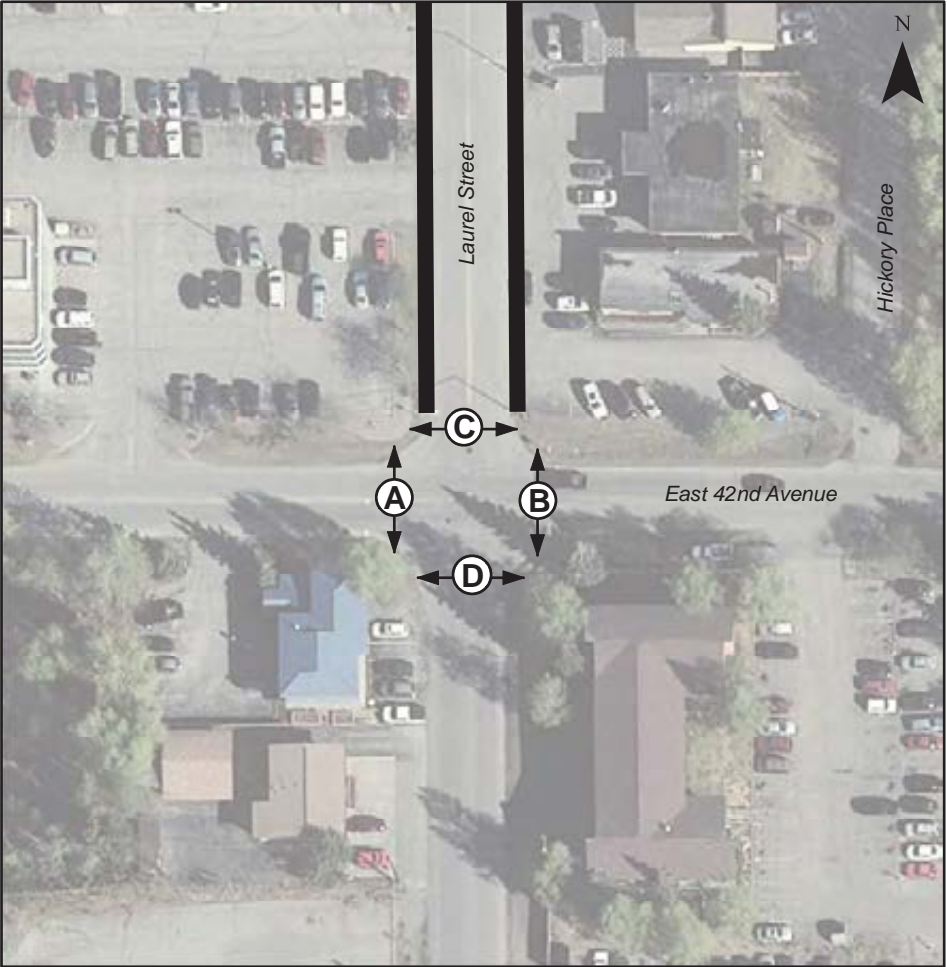
- Saturday Evening
- ★ Saturday at Noon
- Wednesday Evening
- ★ Wednesday at Noon

Parking Lot Usage %

WN = Wednesday Noon
WE = Wednesday Evening
SN = Saturday Noon
SE = Saturday Evening

East 42nd Avenue Parking Study : November 2019





Thursday Counts

10/3/2019 Pedestrians	Peak Hour Counts (2:30-3:30 pm)				24-Hour Counts				
	NB	SB	EB	WB	NB	SB	EB	WB	24-Hour Total
A	0	1	-	-	7	8	-	-	15
B	2	0	-	-	7	4	-	-	11
C	-	-	2	0	-	-	15	3	18
D	-	-	5	3	-	-	15	14	29

10/3/2019 Bicyclists	Peak Hour Counts (2:30-3:30 pm)				24-Hour Counts				
	NB	SB	EB	WB	NB	SB	EB	WB	24-Hour Total
A	1	0	-	-	1	0	-	-	1
B	0	0	-	-	0	0	-	-	0
C	-	-	0	0	-	-	0	0	0
D	-	-	0	0	-	-	0	0	0

Saturday Counts

10/5/2019 Pedestrians	Peak Hour Counts (3:15-4:15 pm)				24-Hour Counts				
	NB	SB	EB	WB	NB	SB	EB	WB	24-Hour Total
A	3	4	-	-	12	6	-	-	18
B	0	0	-	-	8	2	-	-	10
C	-	-	0	0	-	-	5	2	7
D	-	-	4	0	-	-	8	1	9

10/5/2019 Bicyclists	Peak Hour Counts (3:15-4:15 pm)				24-Hour Counts				
	NB	SB	EB	WB	NB	SB	EB	WB	24-Hour Total
A	0	0	-	-	0	0	-	-	0
B	0	0	-	-	0	0	-	-	0
C	-	-	0	0	-	-	1	0	1
D	-	-	0	0	-	-	0	0	0

Legend

— Sidewalks

0 40 80 160 Feet

Note: NB = northbound, SB = southbound, WB = westbound, EB = eastbound

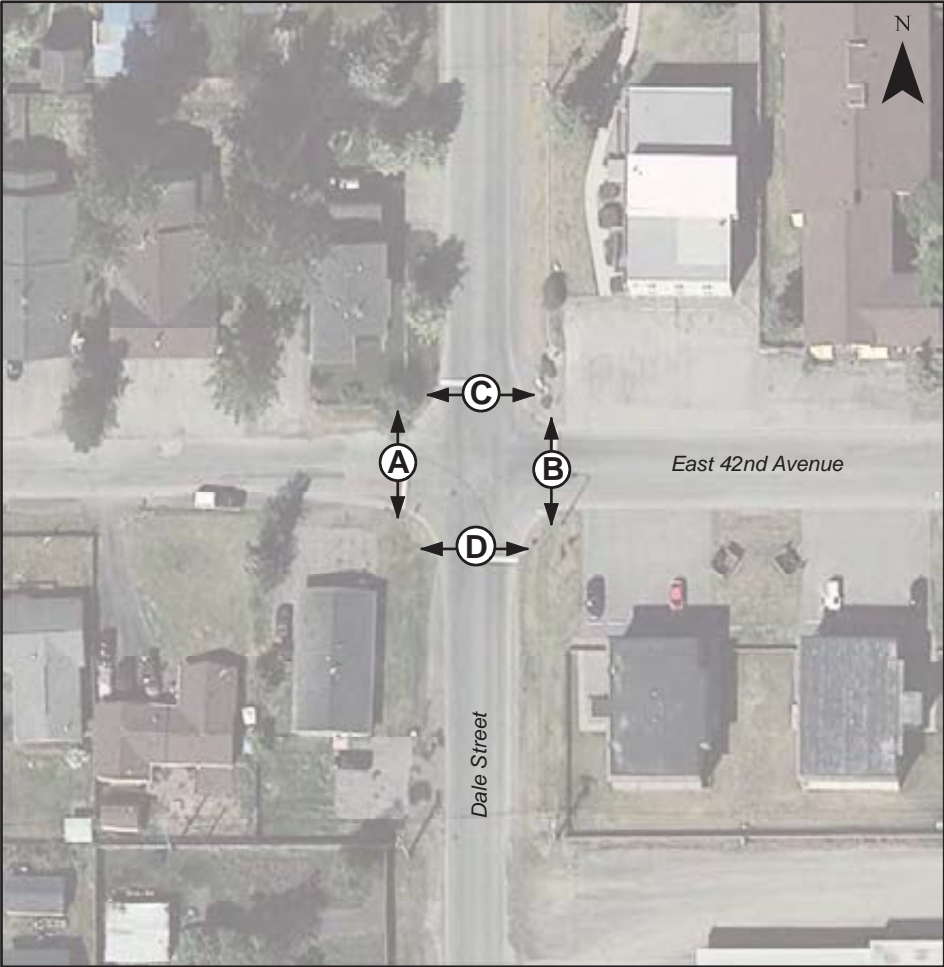
42nd Avenue Upgrade

Pedestrian and Bike Counts

42nd Avenue & Laurel Street Intersection

Date: NOV 2019

Page: 1 of 2



Thursday Counts

10/10/2019 Pedestrians	Peak Hour Counts (3:15-4:15 pm)				24-Hour Counts				
	NB	SB	EB	WB	NB	SB	EB	WB	24-Hour Total
A	0	1	-	-	1	5	-	-	6
B	0	1	-	-	2	6	-	-	8
C	-	-	0	2	-	-	7	10	17
D	-	-	1	5	-	-	10	14	24

10/10/2019 Bicyclists	Peak Hour Counts (3:15-4:15 pm)				24-Hour Counts				
	NB	SB	EB	WB	NB	SB	EB	WB	24-Hour Total
A	0	0	-	-	0	0	-	-	0
B	0	0	-	-	1	3	-	-	4
C	-	-	0	0	-	-	0	0	0
D	-	-	0	0	-	-	0	1	1

Saturday Counts

10/12/2019 Pedestrians	Peak Hour Counts (8:45-9:45 pm)				24-Hour Counts				
	NB	SB	EB	WB	NB	SB	EB	WB	24-Hour Total
A	0	1	-	-	4	7	-	-	11
B	0	1	-	-	3	7	-	-	10
C	-	-	0	4	-	-	5	11	16
D	-	-	2	1	-	-	4	22	26

10/12/2019 Bicyclists	Peak Hour Counts (8:45-9:45 pm)				24-Hour Counts				
	NB	SB	EB	WB	NB	SB	EB	WB	24-Hour Total
A	0	0	-	-	0	0	-	-	0
B	0	0	-	-	1	0	-	-	1
C	-	-	0	0	-	-	0	0	0
D	-	-	0	0	-	-	0	0	0

Legend

— Sidewalks

0 40 80 160 Feet

Notes:

- NB = northbound, SB = southbound, WB = westbound, EB = eastbound
- There are no designated sidewalks at this intersection.

42nd Avenue Upgrade

Pedestrian and Bike Counts

42nd Avenue & Dale Street Intersection

Date: NOV 2019

Page: 2 of 2

Intersection Accident Rate Calculations

Project: 42nd Avenue
Roadway: 42nd Avenue
Intersection: Laurel

Intersection Accident Rate

Begin Year:	2012
End Year:	2018
AADT:	3,900
No. of Accidents:	3
Millions of Vehicles Entering:	9.9645
Accident Rate:	0.30

Intersection Volumes

Year	ADT
2012	3,900
2013	3,900
2014	3,900
2015	3,900
2016	3,900
2017	3,900
2018	3,900

Intersection Critical Accident Rate

Statewide Average Accident Rate:	0.73
Millions of Vehicles Entering:	9.9645
Critical Accident Rate (90.0%):	1.13
Critical Accident Rate (95.0%):	1.23
Critical Accident Rate (99.5%):	1.48
Critical Accident Rate (99.9%):	1.62

"k " Factors

Level of Confidence	k
90.0%	1.282
95.0%	1.645
99.5%	2.576
99.9%	3.090

Intersection Accident Rate Calculations

Project: 42nd Avenue
Roadway: 42nd Avenue
Intersection: Folker

Intersection Accident Rate

Begin Year:	2012
End Year:	2018
AADT:	4,900
No. of Accidents:	4
Millions of Vehicles Entering:	12.5195
Accident Rate:	0.32

Intersection Volumes

Year	ADT
2012	4,900
2013	4,900
2014	4,900
2015	4,900
2016	4,900
2017	4,900
2018	4,900

Intersection Critical Accident Rate

Statewide Average Accident Rate:	0.73
Millions of Vehicles Entering:	12.5195
Critical Accident Rate (90.0%):	1.08
Critical Accident Rate (95.0%):	1.17
Critical Accident Rate (99.5%):	1.39
Critical Accident Rate (99.9%):	1.52

"k " Factors

Level of Confidence	k
90.0%	1.282
95.0%	1.645
99.5%	2.576
99.9%	3.090

Intersection Accident Rate Calculations

Project: 42nd Avenue
Roadway: 42nd Avenue
Intersection: Piper

Intersection Accident Rate

Begin Year:	2012
End Year:	2018
AADT:	7,500
No. of Accidents:	14
Millions of Vehicles Entering:	19.1625
Accident Rate:	0.73

Intersection Volumes

Year	ADT
2012	7,500
2013	7,500
2014	7,500
2015	7,500
2016	7,500
2017	7,500
2018	7,500

Intersection Critical Accident Rate

Statewide Average Accident Rate:	0.57
Millions of Vehicles Entering:	19.1625
Critical Accident Rate (90.0%):	0.82
Critical Accident Rate (95.0%):	0.88
Critical Accident Rate (99.5%):	1.04
Critical Accident Rate (99.9%):	1.13

"k " Factors

Level of Confidence	<i>k</i>
90.0%	1.282
95.0%	1.645
99.5%	2.576
99.9%	3.090

Intersection Accident Rate Calculations

Project: 42nd Avenue
Roadway: 42nd Avenue
Intersection: Wright

Intersection Accident Rate

Begin Year:	2012
End Year:	2018
AADT:	3,100
No. of Accidents:	6
Millions of Vehicles Entering:	7.9205
Accident Rate:	0.76

Intersection Volumes

Year	ADT
2012	3,100
2013	3,100
2014	3,100
2015	3,100
2016	3,100
2017	3,100
2018	3,100

Intersection Critical Accident Rate

Statewide Average Accident Rate:	0.57
Millions of Vehicles Entering:	7.9205
Critical Accident Rate (90.0%):	0.98
Critical Accident Rate (95.0%):	1.07
Critical Accident Rate (99.5%):	1.32
Critical Accident Rate (99.9%):	1.46

"k " Factors

Level of Confidence	k
90.0%	1.282
95.0%	1.645
99.5%	2.576
99.9%	3.090

Intersection Accident Rate Calculations

Project: 42nd Avenue
Roadway: 42nd Avenue
Intersection: Dale

Intersection Accident Rate

Begin Year:	2012
End Year:	2018
AADT:	6,100
No. of Accidents:	5
Millions of Vehicles Entering:	15.5855
Accident Rate:	0.32

Intersection Volumes

Year	ADT
2012	6,100
2013	6,100
2014	6,100
2015	6,100
2016	6,100
2017	6,100
2018	6,100

Intersection Critical Accident Rate

Statewide Average Accident Rate:	0.73
Millions of Vehicles Entering:	15.5855
Critical Accident Rate (90.0%):	1.04
Critical Accident Rate (95.0%):	1.12
Critical Accident Rate (99.5%):	1.32
Critical Accident Rate (99.9%):	1.43

"k " Factors

Level of Confidence	k
90.0%	1.282
95.0%	1.645
99.5%	2.576
99.9%	3.090

TUDOR ROAD - WEST OF TUDOR CENTER DRIVE - TOTAL

ROUTE: 133899

MILEPOINT: 4.396

STATION NUMBER: 10125449 0

PERMANENT STN SUMMARY: 2013

MNTH	MADT	% AADT	6AM - 10PM	10PM - 6AM	PERCENT OF AADT FOR DAY OF WEEK								HISTORY YEAR	AADT	PERCENT GROWTH
					MON	TUE	WED	THU	FRI	WKDY	SAT	SUN			
JAN	28303	93.7	89.4	10.6	102.6	102.7	111.4	111.7	115.4	108.8	86.7	69.5	2013	30203	-3.1
													2012	31155	-2.5
FEB	29839	98.8	89.7	10.3	103.1	107.9	108.1	110.3	111.7	108.2	88.2	70.6	2011	31949	-15.6
													2010	37832	-9.9
MAR	30260	100.2	89.6	10.4	101.2	107.2	109.2	108.7	112.1	107.7	88.6	73.0	2009	41999	0.9
													2008	41614	2.4
APR	31192	103.3	90.2	9.8	104.0	105.9	108.8	108.0	114.7	108.3	87.2	71.4	2007	40645	-0.5
													2006	40847	2.9
MAY	31280	103.6	89.7	10.3	97.0	108.1	110.5	110.2	114.0	108.0	84.1	76.1	2005	39690	-6.2
													2004	42299	-1.1
JUN	32254	106.8	88.7	11.3	106.0	107.8	108.2	109.6	110.7	108.5	84.9	72.9	2003	42775	1.8
													2002	42026	0.0
JUL	30516	101.0	88.5	11.5	110.1	112.5	113.0	100.7	108.5	109.0	81.5	73.6	2001	42046	0.1
													2000	41985	0.7
AUG	31736	105.1	89.5	10.5	105.5	106.6	108.6	109.0	111.3	108.2	82.9	76.1	1999	41688	1.0
													1998	41279	-2.7
SEP	30880	102.2	90.5	9.5	99.5	108.8	109.2	109.8	113.2	108.1	87.6	71.9	1997	42435	1.6
													1996	41785	1.2
OCT	31202	103.3	90.5	9.5	103.5	106.5	108.5	108.3	113.1	108.0	89.4	70.7	1995	41306	-0.6
													1994	41546	2.2
NOV	27870	92.3	90.0	10.0	108.2	112.6	112.8	101.2	108.9	108.7	86.4	70.0	1993	40638	3.1
													1992	39416	11.0
DEC	27106	89.7	88.6	11.4	109.9	108.7	100.5	105.0	114.2	107.7	88.5	73.2	1991	35503	-0.4
													1990	35638	4.5
AADT	30203		89.6	10.4	104.2	107.9	109.1	107.7	112.3	108.3	86.3	72.4	1989	34102	

HIGH DAYS	1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	9TH	10TH	AVG
VOLUME	37193	36661	36471	36451	36392	36310	36155	35955	35922	35847	36336
DAY	05/31	06/14	04/26	05/10	10/04	04/19	07/12	08/23	08/30	06/07	
% AADT	123.1	121.4	120.8	120.7	120.5	120.2	119.7	119.0	118.9	118.7	120.3

HIGH HOURS	1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	9TH	10TH	20TH	30TH	40TH	50TH	AVG
VOLUME	3003	2967	2958	2941	2938	2938	2930	2917	2907	2906	2895	2867	2851	2834	2941
HOUR	6PM	6PM	6PM	6PM	6PM	5PM	6PM	6PM	6PM	5PM	6PM	6PM	6PM	6PM	
DAY	04/04	03/19	07/16	10/23	07/10	04/26	06/11	04/17	06/05	10/04	01/11	06/06	04/15	04/05	
% AADT	9.9	9.8	9.8	9.7	9.7	9.7	9.7	9.7	9.6	9.6	9.6	9.5	9.4	9.4	9.7

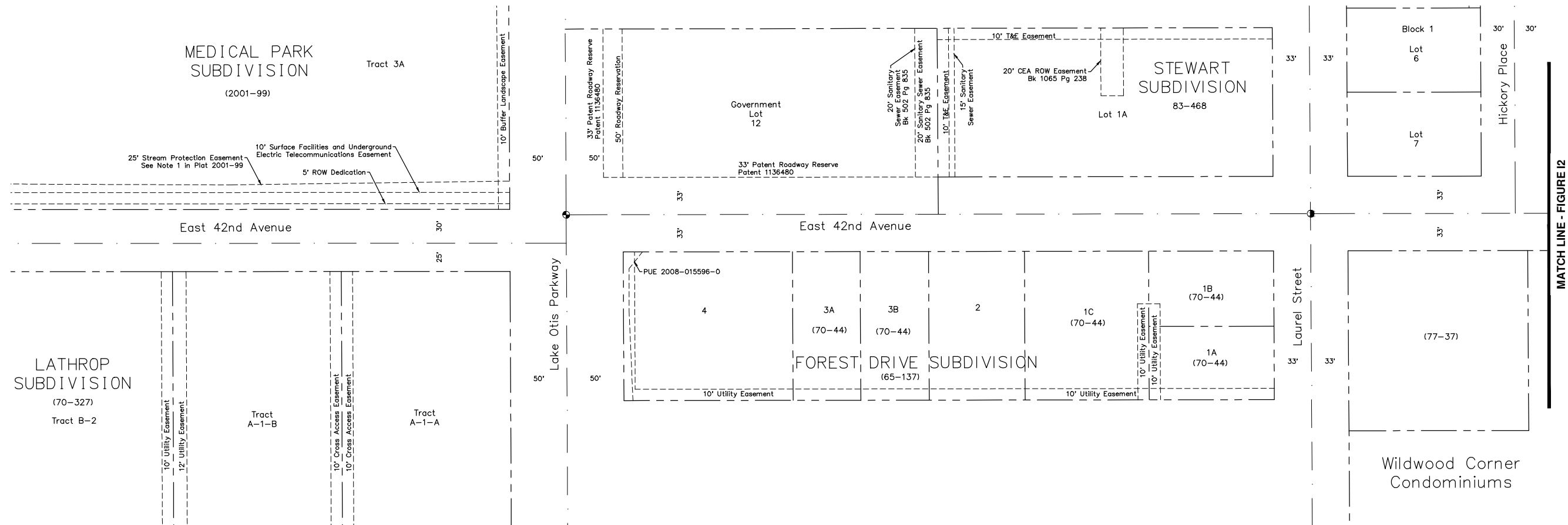
PERCENT OF AADT BY HOUR

1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	12AM
1.3	0.9	0.6	0.5	0.7	1.5	3.2	5.5	5.4	4.9	4.7	5.5	6.3	6.2	6.3	6.9	7.7	7.9	6.4	4.9	4.2	3.6	2.8	2.0

Existing ROW Maps and Easement
Spreadsheets

Appendix I

File: J:\JobsData\10142.00 42nd Avenue Upgrade\00_CADD\02 Figures\01_DSR\42nd Existing ROW Map.dwg



PROJECT: 18-06
STATUS: DSR

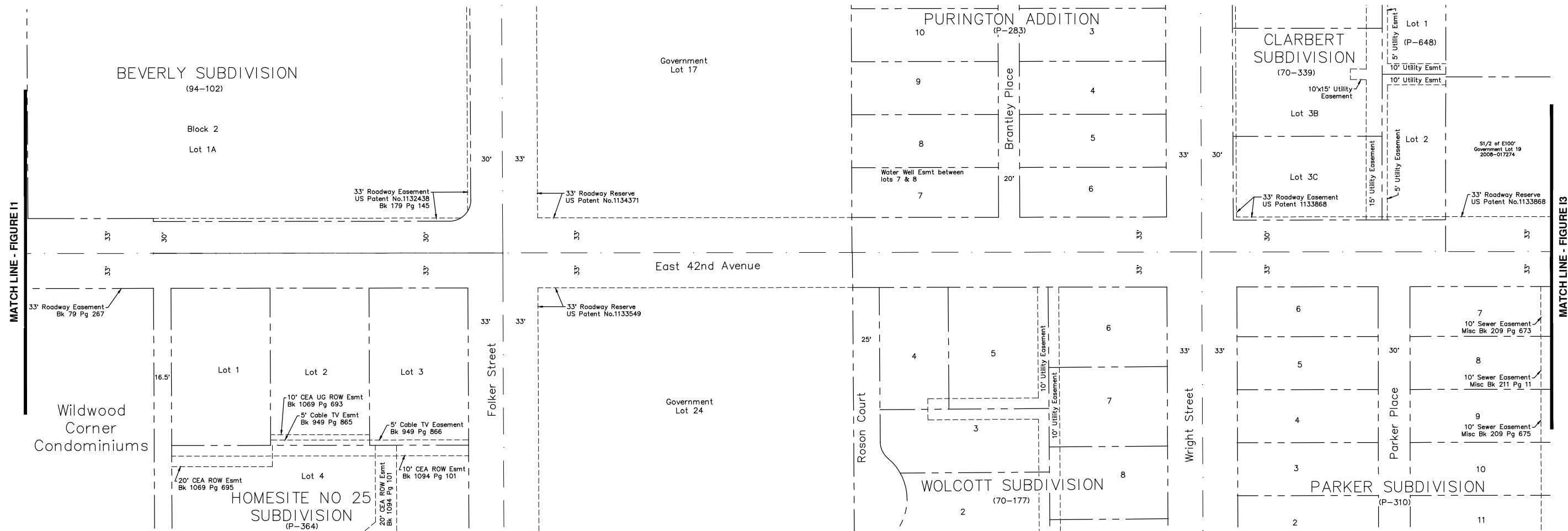


42ND AVENUE UPGRADE
LAKE OTIS PARKWAY TO FLORINA STREET

EXISTING ROW MAP

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
11 OF 14

File: J:\JobsData\10142.00_42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\42nd Existing ROW Map.dwg



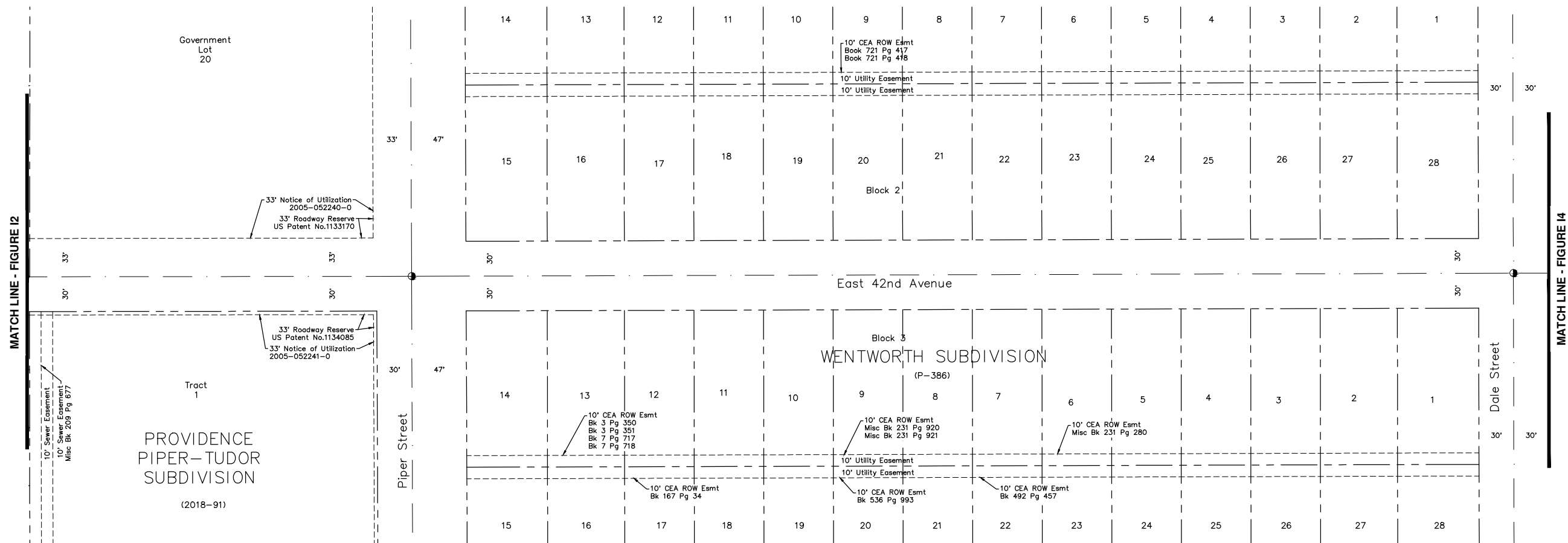
PROJECT: 18-06
STATUS: DSR



42ND AVENUE UPGRADE
LAKE OTIS PARKWAY TO FLORINA STREET
EXISTING ROW MAP

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
12 OF 14

File: J:\JobsData\10142.00_42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\42nd Existing ROW Map.dwg



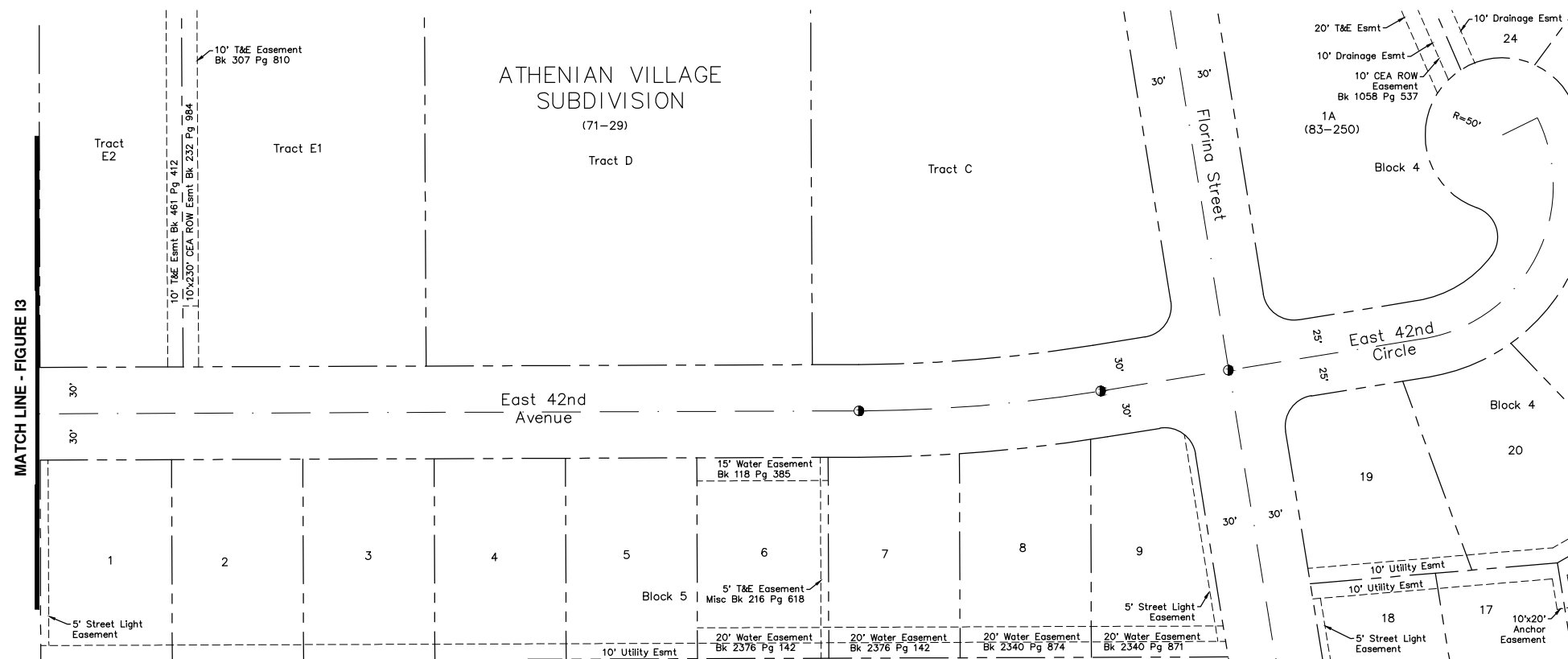
PROJECT: 18-06
STATUS: DSR



42ND AVENUE UPGRADE
LAKE OTIS PARKWAY TO FLORINA STREET
EXISTING ROW MAP

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
13 OF 14

File: J:\JobsData\10142.00_42nd Avenue Upgrade\00_CADD\02 Figures\01_DSR\42nd Existing ROW Map.dwg



PROJECT: 18-06
STATUS: DSR



42ND AVENUE UPGRADE
LAKE OTIS PARKWAY TO FLORINA STREET
EXISTING ROW MAP

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
14 OF 14

42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06

ROW REQUIREMENTS ESTIMATE - DRAFT DSR

42nd Ave Upgrade - Alternatives 1 & 2					
PARCEL	PUE	SE	TCE	Drainage Easement	# Of TCP's
100					0
101			X	X	2
102			X		3
103			X	X	1
104			X		1
105	X				0
106	X		X		1
107	X		X		1
108					1
109					0
110					1
111			X		1
112					0
113					2
114					1
115					1
116					1
117			X		1
118			X		1
119					1
120					1
121					1
122					1
123					1
124					1
125			X		1
126					1
127					1
128					4
129					1
130					0
131					0
132					1
133					1
134					1
135					1
136					1
137					1
138					1
139					1
140					1
141			X		1
142			X		1
143					1
144					1
145					1
146					1
147					2
148					2
149			X		1
150					1
151			X		1
152			X		1
153			X		1
154			X		1
155					1
156	X		X		1
157	X		X		1
158					1
159					2
160	X		X		1
161	X		X		3
162					1
163					1

42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06

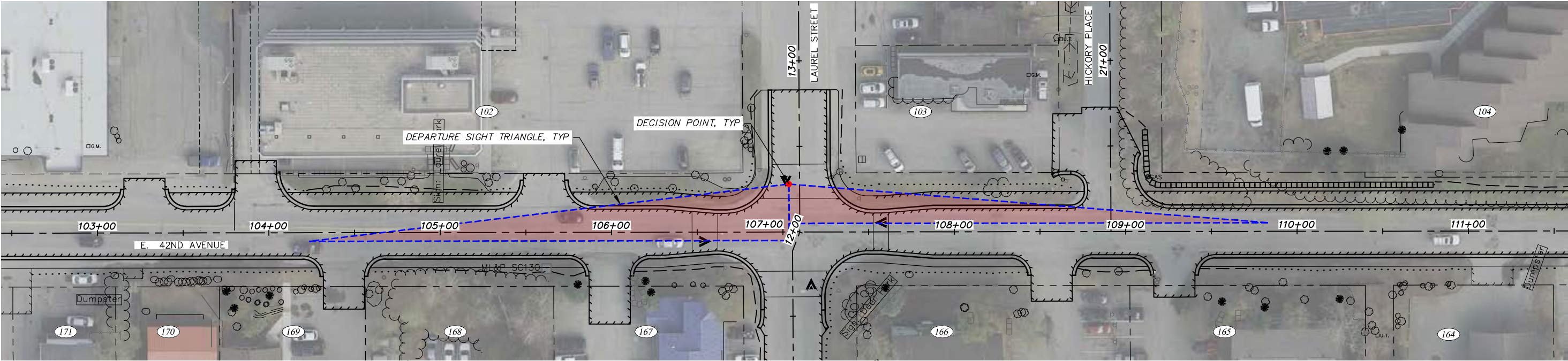
ROW REQUIREMENTS ESTIMATE - DRAFT DSR

42nd Ave Upgrade - Alternatives 1 & 2					
PARCEL	PUE	SE	TCE	Drainage Easement	# Of TCP's
164					1
165					1
166					1
167					1
168					0
169					2
170					2
171					1
172			X	X	2
173					0
174					0
175					0
176			X		2
177			X		0
TOTAL	7	0	24	3	83

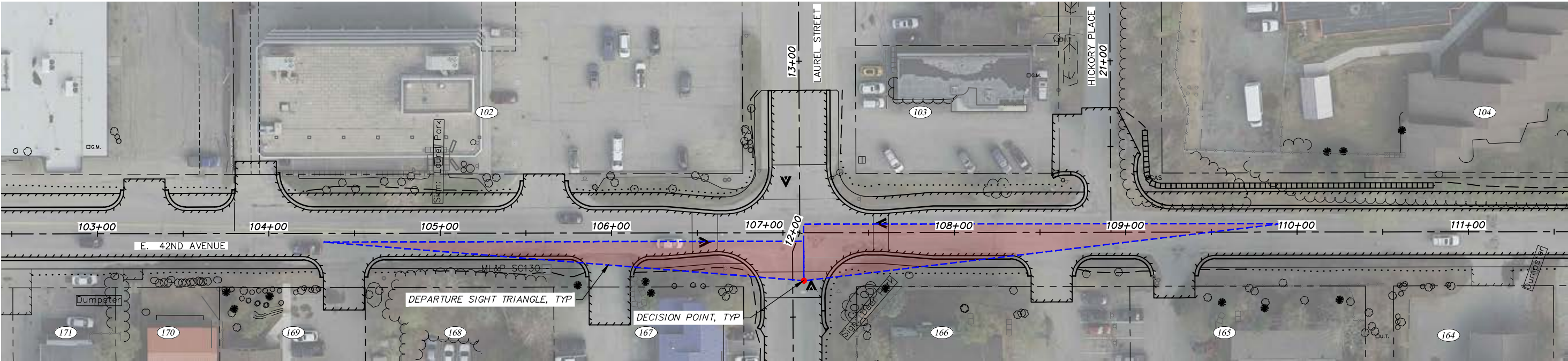
Intersection Departure Sight Triangles

Appendix J

File: J:\JobsData\10142.00 42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\03 Intx Sight Triangles\10142.00 Departure Sight Triangles - Alt 1.dwg



1 **E. 42ND AVENUE & LAUREL STREET INTERSECTION**
SCALE: GRAPHIC



2 **E. 42ND AVENUE & LAUREL STREET INTERSECTION**
SCALE: GRAPHIC

NOTE:
DECISION POINT FOR EACH INTERSECTION IS SETBACK 18'
FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE
MOA DCM. DESIGN SPEED OF 25 MPH FOR E. 42ND AVENUE
IS USED IN SIGHT DISTANCE ANALYSIS.

PROJECT: 18-06
STATUS: DSR



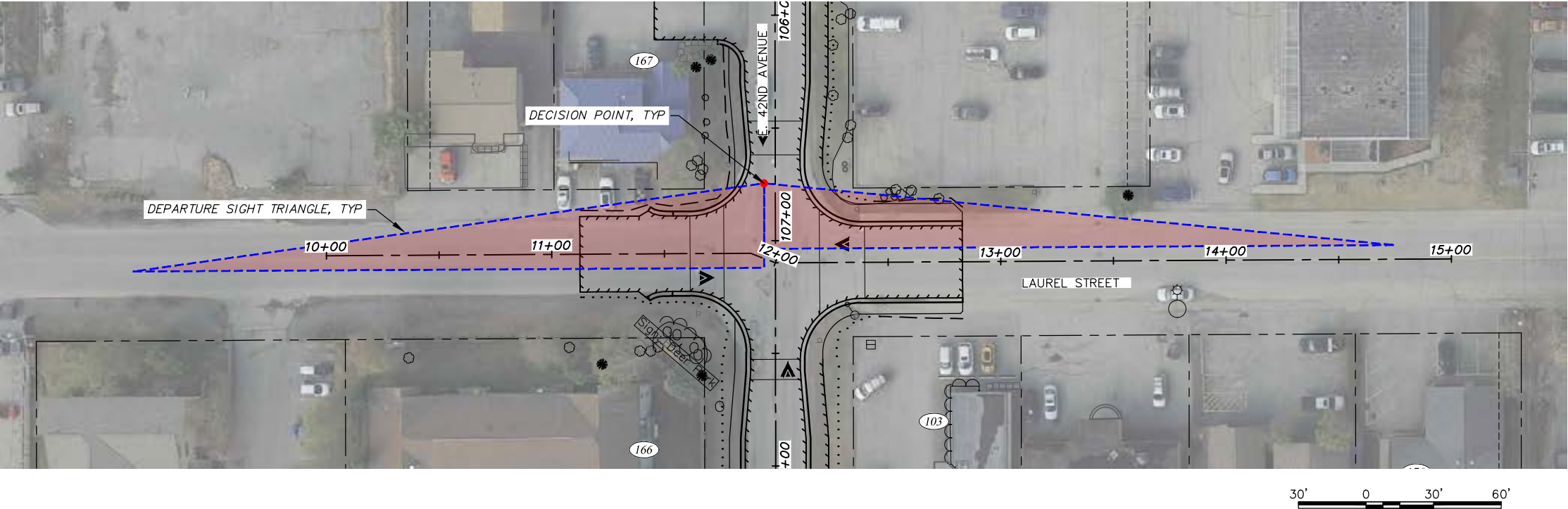
42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET

INTERSECTION DEPARTURE SIGHT TRIANGLE

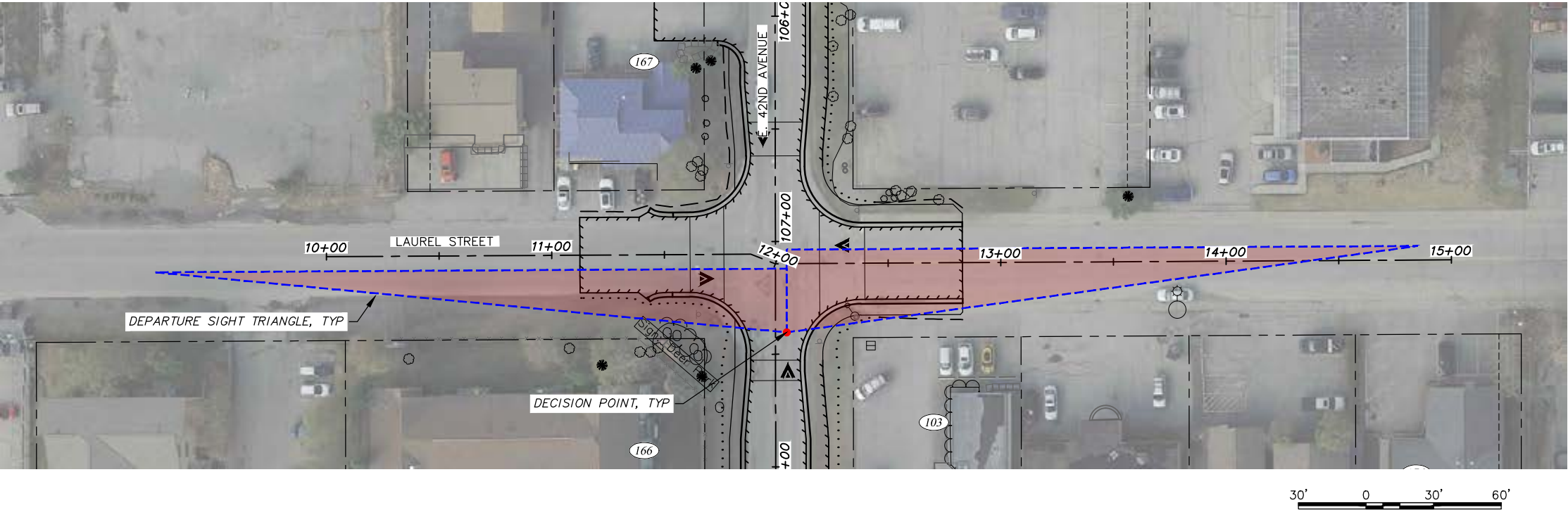
ALTERNATIVE 1

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J1 OF J15

File: J:\JobsData\10142.00_42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\03 Intx Sight Triangles\10142.00 Departure Sight Triangles - Alt 1.dwg



1 **E. 42ND AVENUE & LAUREL STREET INTERSECTION**
SCALE: GRAPHIC



2 **E. 42ND AVENUE & LAUREL STREET INTERSECTION**
SCALE: GRAPHIC

NOTE:
DECISION POINT FOR EACH INTERSECTION IS SETBACK 18'
FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE
MOA DCM. DESIGN SPEED OF 25 MPH FOR FOLKER STREET IS
USED IN SIGHT DISTANCE ANALYSIS.

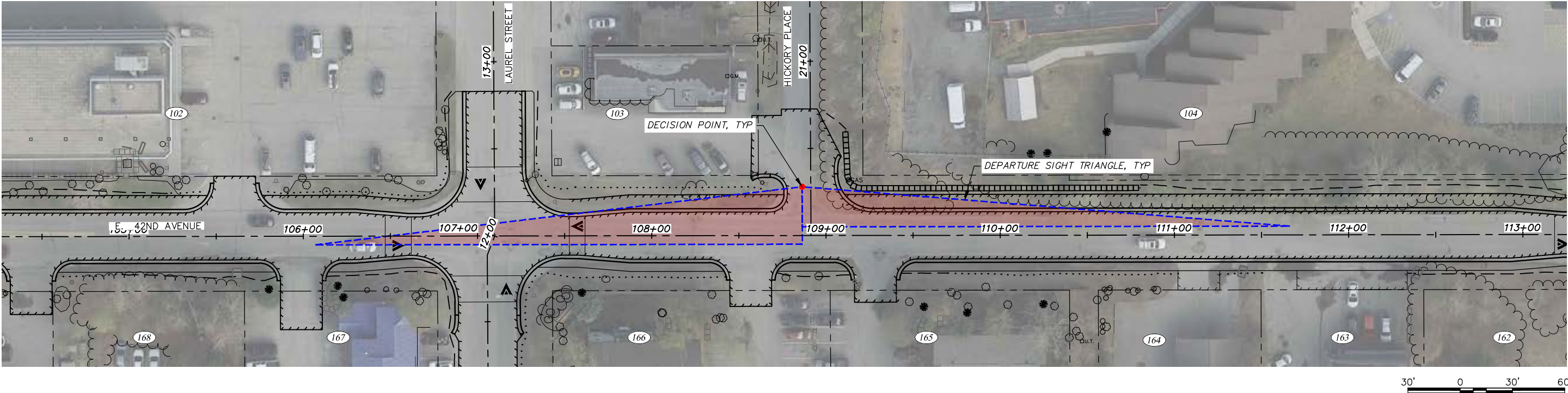
PROJECT: 18-06
STATUS: DSR



42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET
INTERSECTION DEPARTURE SIGHT TRIANGLE
ALTERNATIVE 1

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J2 OF J15

File: J:\JobsData\10142.00 42nd Avenue Upgrade\00_CADD\02 Figures\01_DSR\03 Intx Sight Triangles\10142.00 Departure Sight Triangles - Alt 1.dwg



1 **E. 42ND AVENUE & HICKORY PLACE INTERSECTION**
SCALE: GRAPHIC

NOTE:
DECISION POINT FOR EACH INTERSECTION IS SETBACK 18'
FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE
MOA DCM. DESIGN SPEED OF 25 MPH FOR E. 42ND AVENUE
IS USED IN SIGHT DISTANCE ANALYSIS.

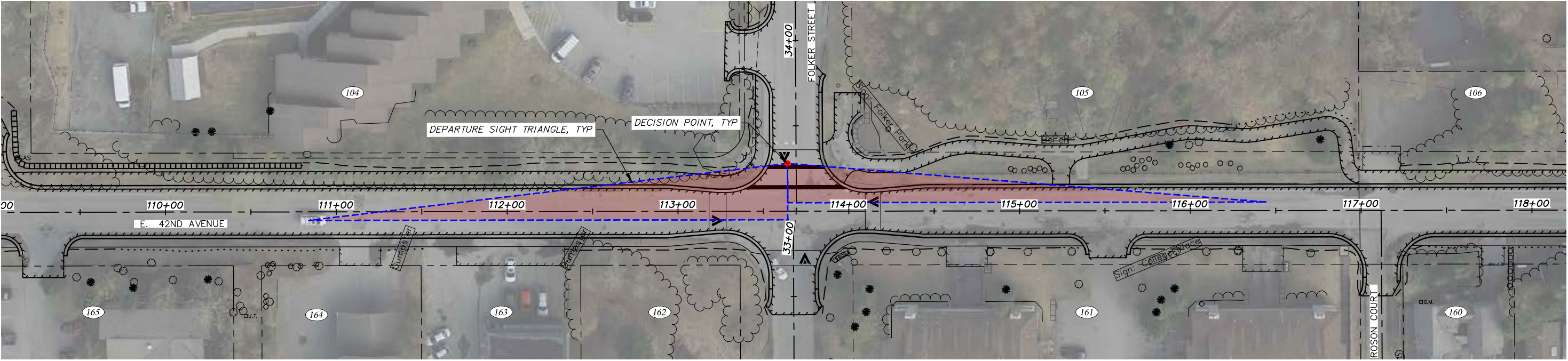
PROJECT: 18-06
STATUS: DSR



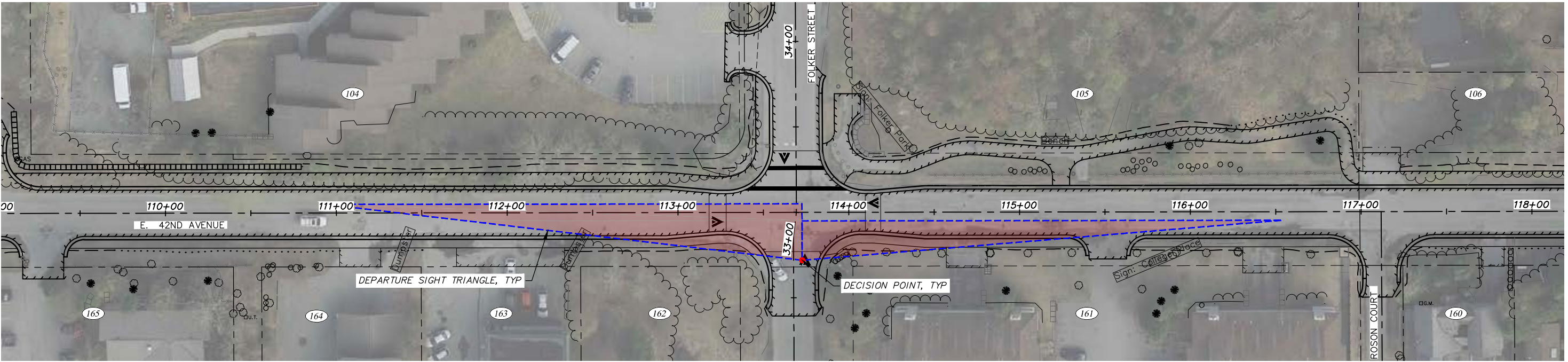
42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET
INTERSECTION DEPARTURE SIGHT TRIANGLE
ALTERNATIVE 1

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J3 OF J15

File: J:\JobsData\10142.00_42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\03 Intx Sight Triangles\10142.00 Departure Sight Triangles - Alt 1.dwg



1 **E. 42ND AVENUE & FOLKER STREET INTERSECTION**
SCALE: GRAPHIC



2 **E. 42ND AVENUE & FOLKER STREET INTERSECTION**
SCALE: GRAPHIC

NOTE:
DECISION POINT FOR EACH INTERSECTION IS SETBACK 18'
FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE
MOA DCM. DESIGN SPEED OF 25 MPH FOR E. 42ND AVENUE
IS USED IN SIGHT DISTANCE ANALYSIS.

PROJECT: 18-06
STATUS: DSR



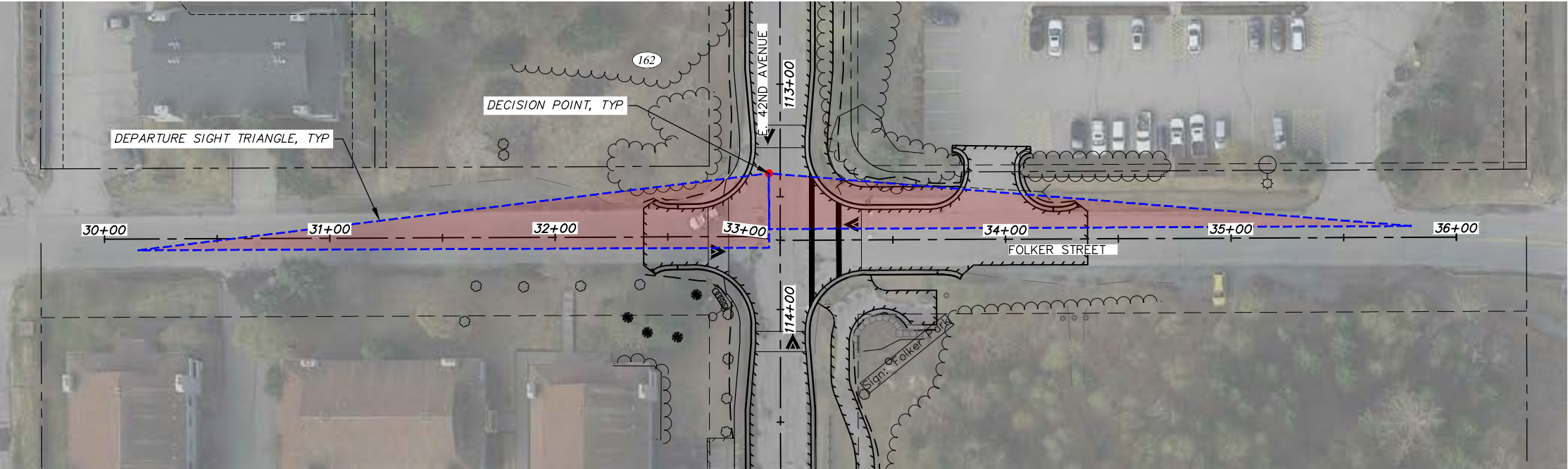
42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET

INTERSECTION DEPARTURE SIGHT TRIANGLE

ALTERNATIVE 1

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J4 OF J15

File: J:\JobsData\10142.00 42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\03 Intx Sight Triangles\10142.00 Departure Sight Triangles - Alt 1.dwg

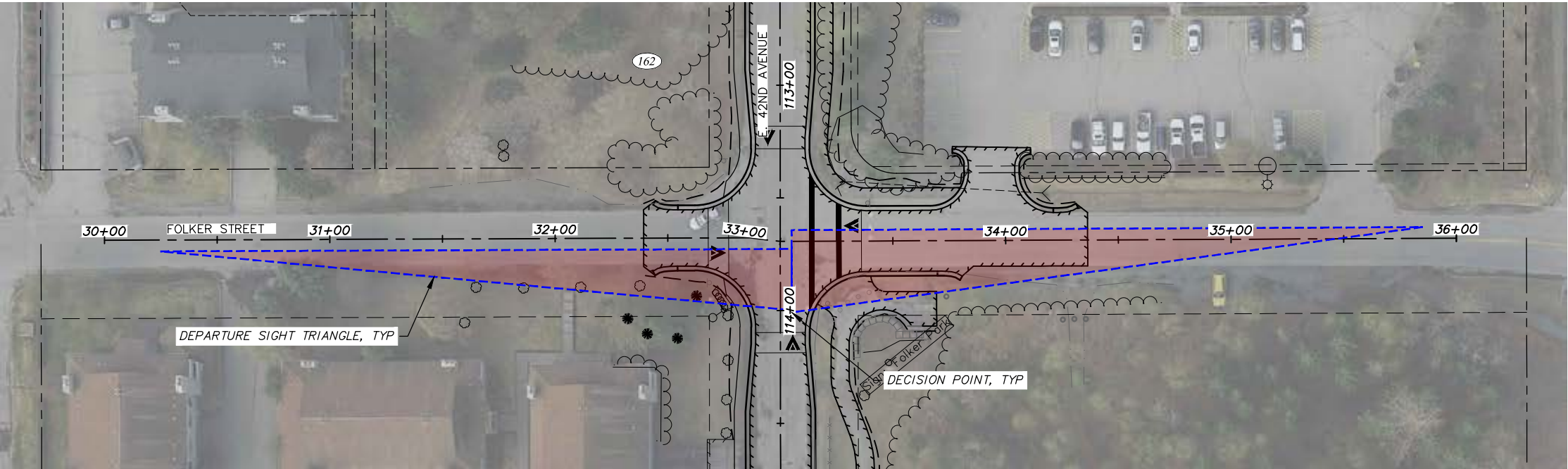


1

E. 42ND AVENUE & FOLKER STREET INTERSECTION

SCALE: GRAPHIC

30' 0 30' 60'



2

E. 42ND AVENUE & FOLKER STREET INTERSECTION

SCALE: GRAPHIC

30' 0 30' 60'

NOTE:

DECISION POINT FOR EACH INTERSECTION IS SETBACK 18' FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE MOA DCM. DESIGN SPEED OF 25 MPH FOR FOLKER STREET IS USED IN SIGHT DISTANCE ANALYSIS.

PROJECT: 18-06
STATUS: DSR



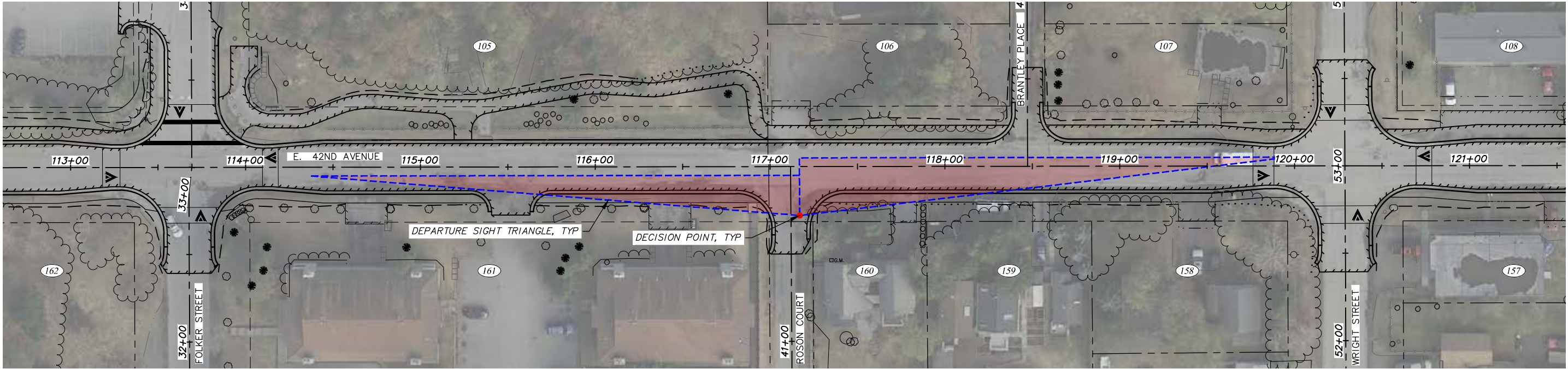
42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET

INTERSECTION DEPARTURE SIGHT TRIANGLE

ALTERNATIVE 1

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J5 OF J15

File: J:\JobsData\10142.00 42nd Avenue Upgrade\00_CADD\02 Figures\01_DSR\03 Intx Sight Triangles\10142.00 Departure Sight Triangles - Alt 1.dwg



2

E. 42ND AVENUE & ROSON COURT INTERSECTION

SCALE: GRAPHIC



NOTE:

DECISION POINT FOR EACH INTERSECTION IS SETBACK 18' FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE MOA DCM. DESIGN SPEED OF 25 MPH FOR E. 42ND AVENUE IS USED IN SIGHT DISTANCE ANALYSIS.

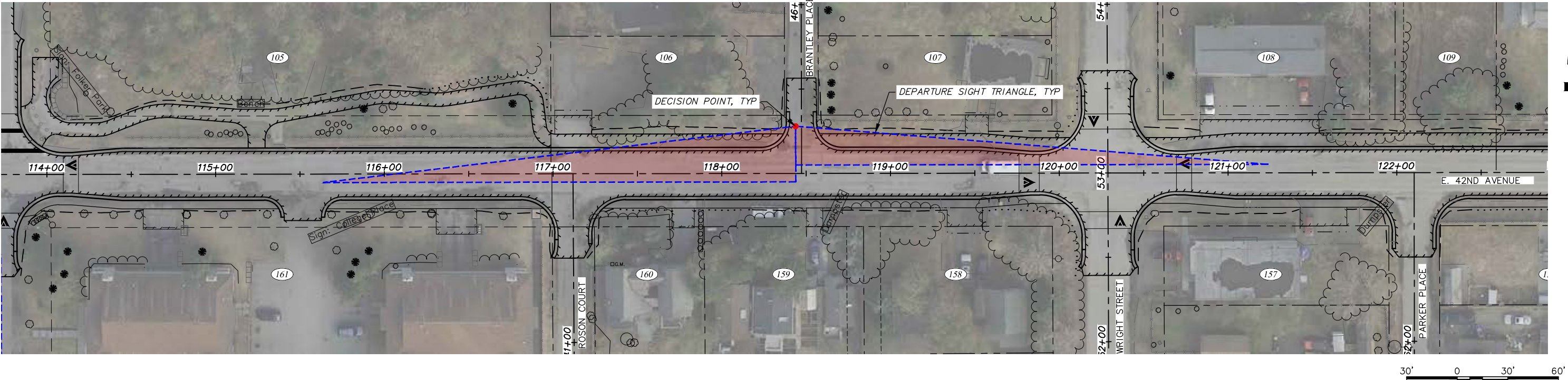
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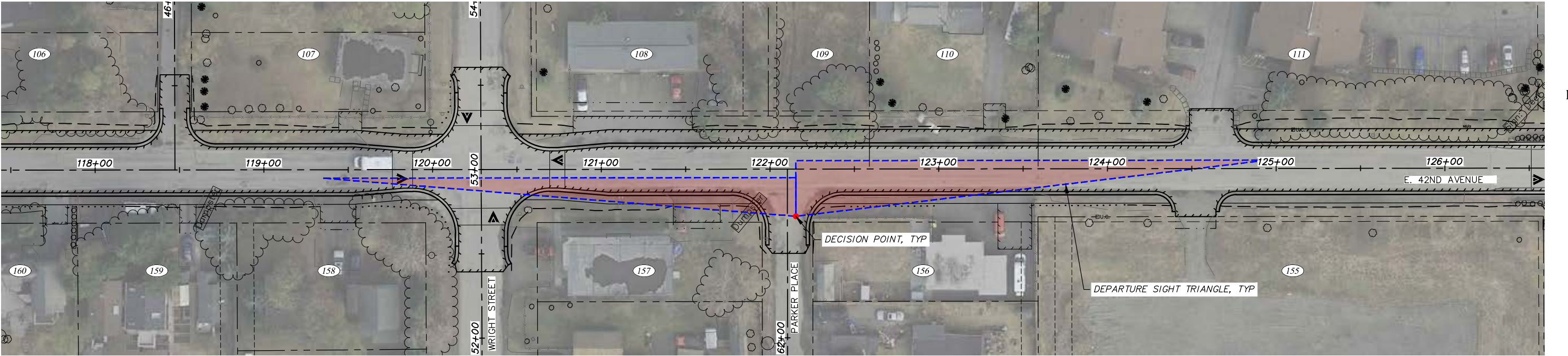
42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET
INTERSECTION DEPARTURE SIGHT TRIANGLE
ALTERNATIVE 1

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J6 OF J15

File: J:\JobsData\10142.00 42nd Avenue Upgrade\00 CADD\02 Figures\01 DSR\03 Intx Sight Triangles\10142.00 Departure Sight Triangles - Alt 1.dwg



1 **E. 42ND AVENUE & BRANTLEY PLACE INTERSECTION**
SCALE: GRAPHIC



2 **E. 42ND AVENUE & PARKER PLACE INTERSECTION**
SCALE: GRAPHIC

NOTE:
DECISION POINT FOR EACH INTERSECTION IS SETBACK 18'
FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE
MOA DCM. DESIGN SPEED OF 25 MPH FOR E. 42ND AVENUE
IS USED IN SIGHT DISTANCE ANALYSIS.

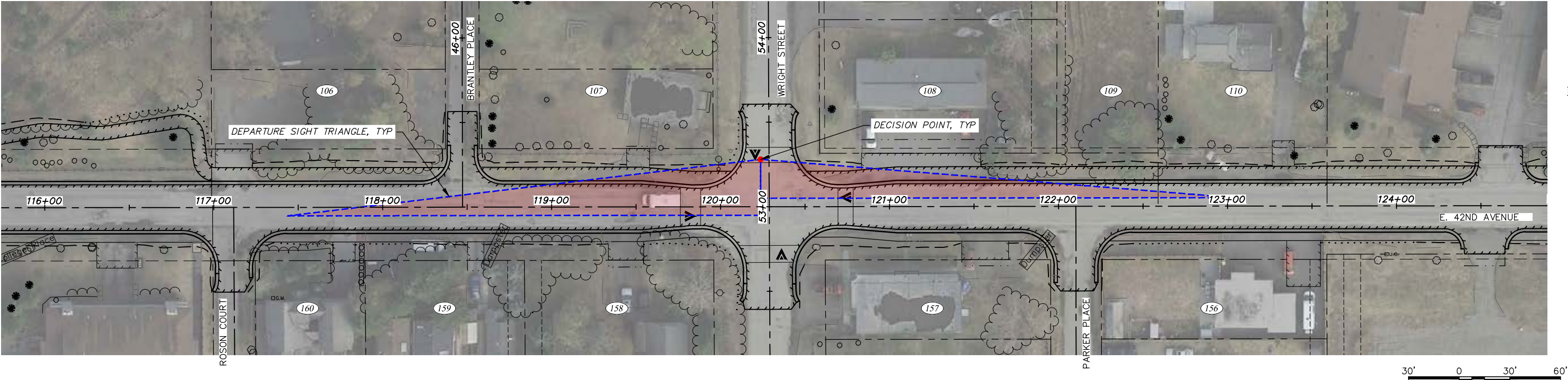
PROJECT: 18-06
STATUS: DSR



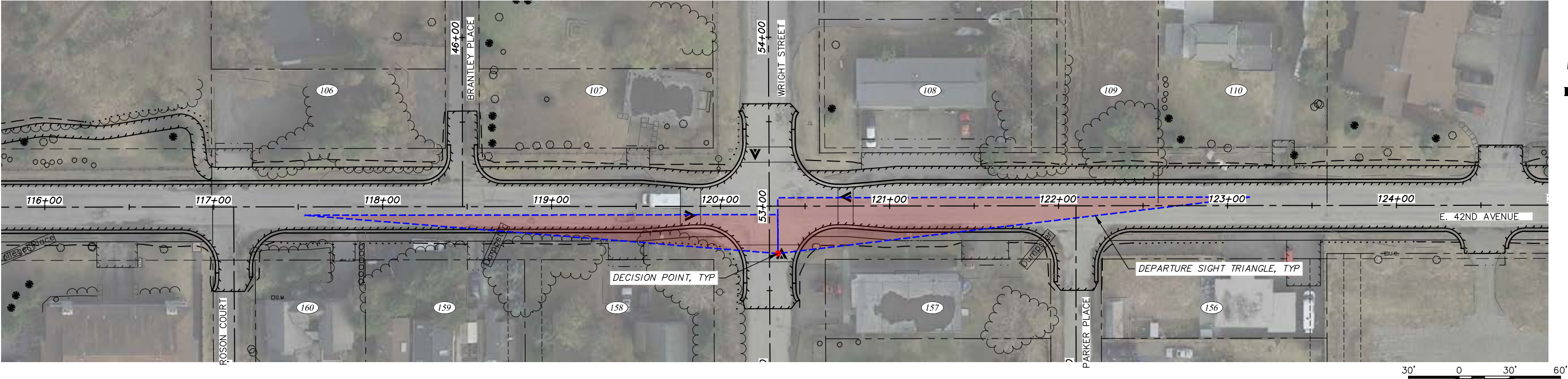
42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET
INTERSECTION DEPARTURE SIGHT TRIANGLE
ALTERNATIVE 1

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J7 OF J15

File: J:\JobsData\10142.00 42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\03_Intx_Sight_Triangles\10142.00 Departure Sight Triangles - Alt 1.dwg



1 **E. 42ND AVENUE & WRIGHT STREET INTERSECTION**
SCALE: GRAPHIC



2 **E. 42ND AVENUE & WRIGHT STREET INTERSECTION**
SCALE: GRAPHIC

NOTE:
DECISION POINT FOR EACH INTERSECTION IS SETBACK 18'
FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE
MOA DCM. DESIGN SPEED OF 25 MPH FOR E. 42ND AVENUE
IS USED IN SIGHT DISTANCE ANALYSIS.

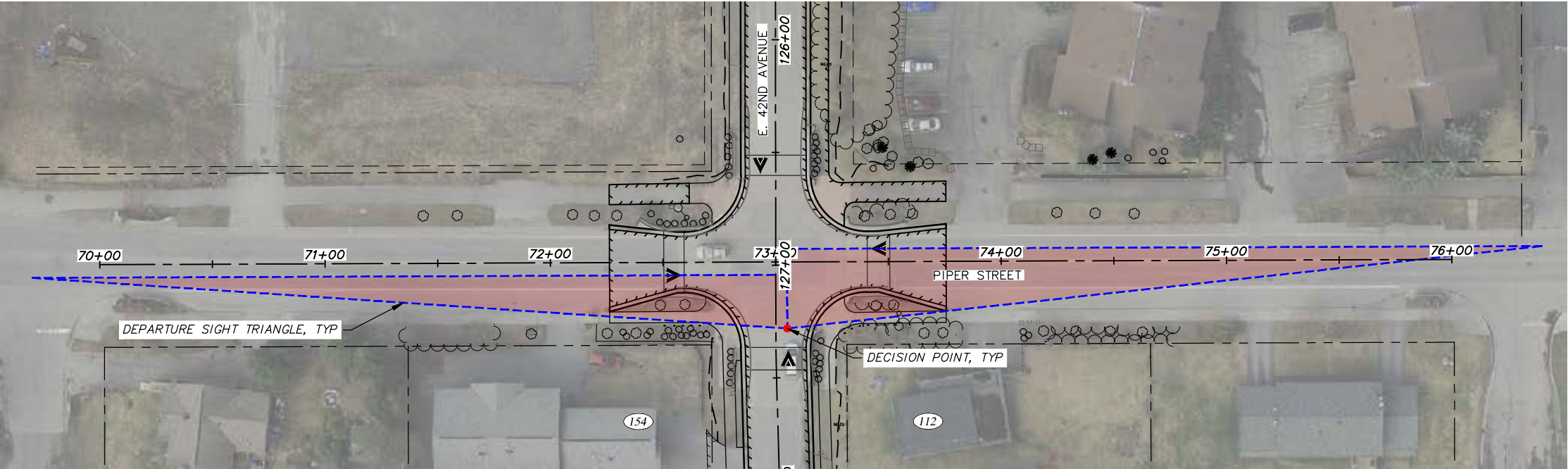
PROJECT: 18-06
STATUS: DSR



42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET
INTERSECTION DEPARTURE SIGHT TRIANGLE
ALTERNATIVE 1

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J8 OF J15

File: J:\JobsData\10142.00_42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\03_Intx Sight Triangles\10142.00_Departure Sight Triangles - Alt 1.dwg

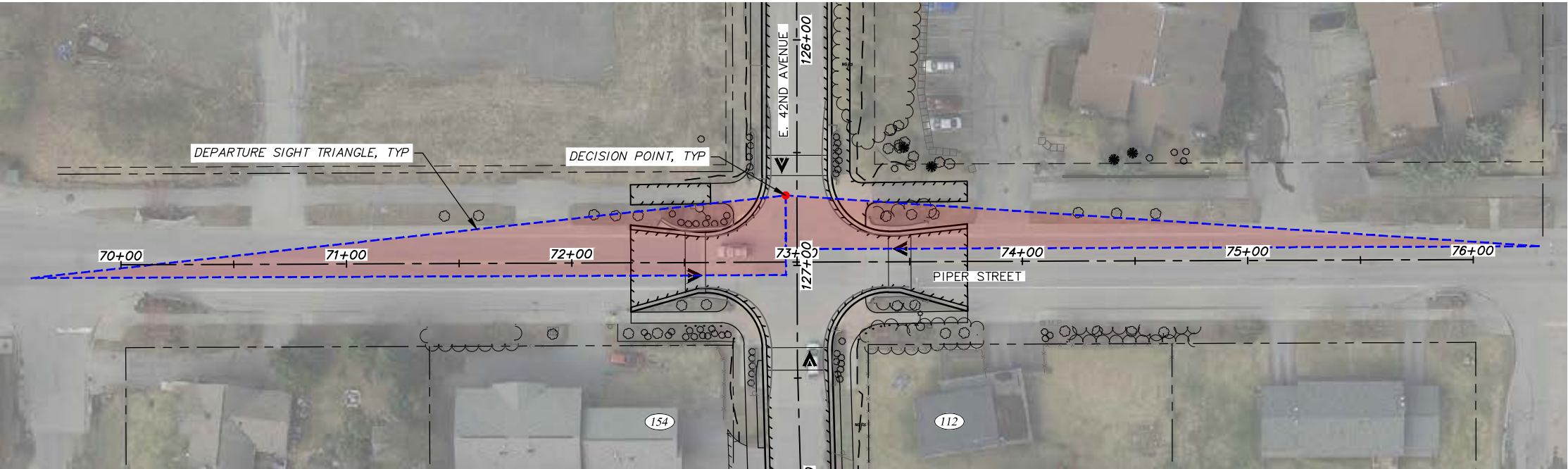


30' 0 30' 60'

1

E. 42ND AVENUE & PIPER STREET INTERSECTION

SCALE: GRAPHIC



30' 0 30' 60'

2

E. 42ND AVENUE & PIPER STREET INTERSECTION

SCALE: GRAPHIC

NOTE:

DECISION POINT FOR EACH INTERSECTION IS SETBACK 18' FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE MOA DCM. DESIGN SPEED OF 30 MPH FOR PIPER STREET IS USED IN SIGHT DISTANCE ANALYSIS.

PROJECT: 18-06
STATUS: DSR



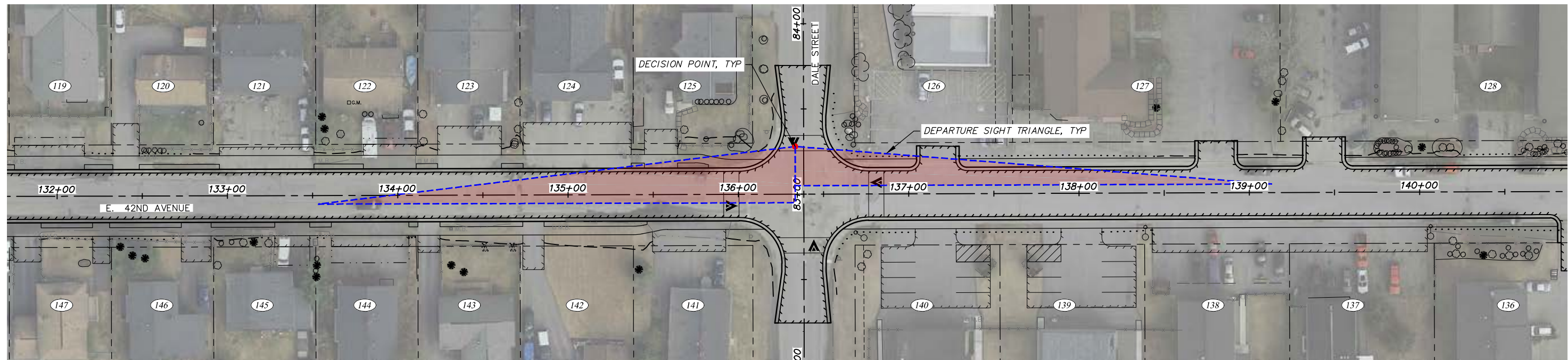
42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET

INTERSECTION DEPARTURE SIGHT TRIANGLE

ALTERNATIVE 1

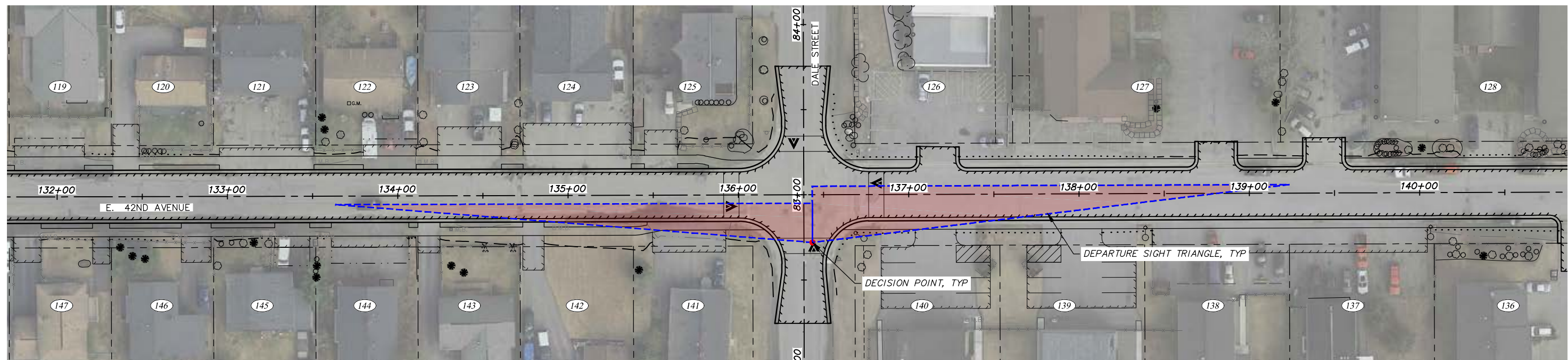
DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J9 OF J15

File: J:\JobsData\10142.00_42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\03 Intx Sight Triangles\10142.00 Departure Sight Triangles - Alt 1.dwg



1 **E. 42ND AVENUE & DALE STREET INTERSECTION**
SCALE: GRAPHIC

30' 0 30' 60'



2 **E. 42ND AVENUE & DALE STREET INTERSECTION**
SCALE: GRAPHIC

30' 0 30' 60'

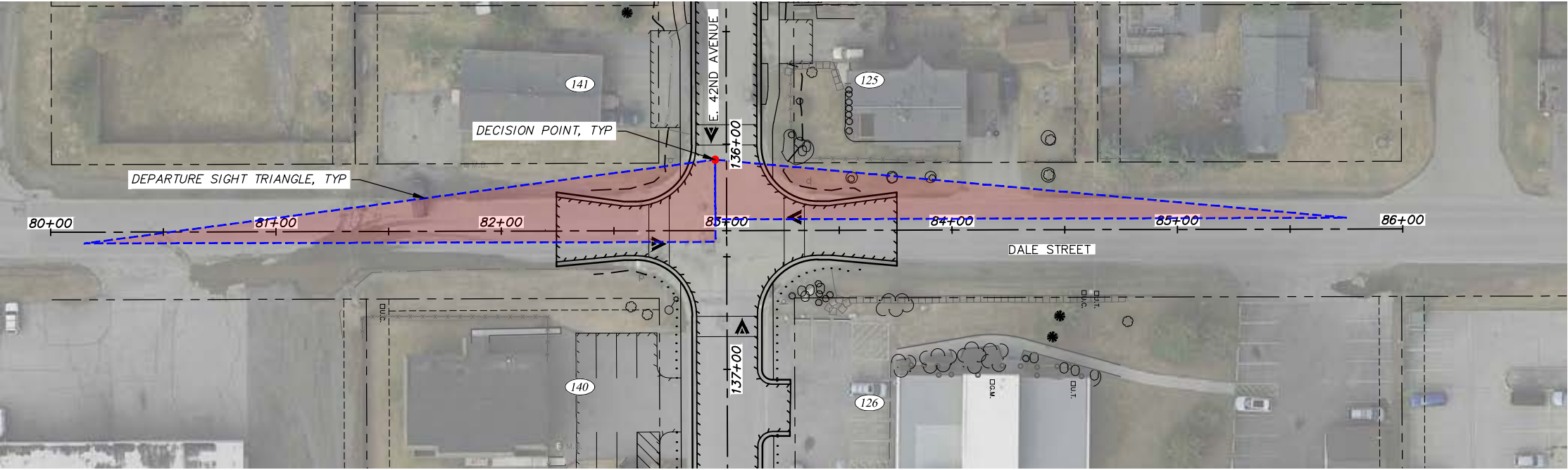
NOTE:
DECISION POINT FOR EACH INTERSECTION IS SETBACK 18'
FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE
MOA DCM. DESIGN SPEED OF 25 MPH FOR E. 42ND AVENUE
IS USED IN SIGHT DISTANCE ANALYSIS.

PROJECT: 18-06
STATUS: DSR



42ND AVENUE UPGRADE LAKE OTIS TO FLORINA STREET		DATE JUNE 2020
INTERSECTION DEPARTURE SIGHT TRIANGLE		SCALE GRAPHIC
		FIGURE J10 OF J15
ALTERNATIVE 1		

File: J:\JobsData\10142.00_42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\03_Intx_Sight_Triangles\10142.00_Departure_Sight_Triangles - Alt 1.dwg

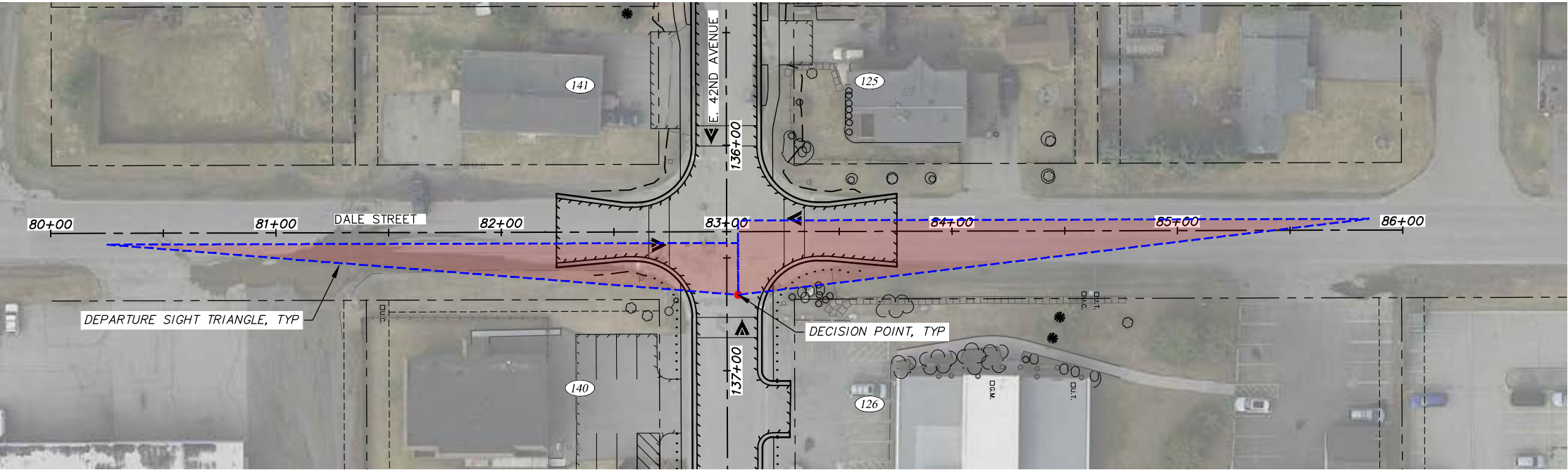


1

E. 42ND AVENUE & DALE STREET INTERSECTION

SCALE: GRAPHIC

30' 0 30' 60'



2

E. 42ND AVENUE & DALE STREET INTERSECTION

SCALE: GRAPHIC

30' 0 30' 60'

NOTE:
DECISION POINT FOR EACH INTERSECTION IS SETBACK 18'
FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE
MOA DCM. DESIGN SPEED OF 25 MPH FOR DALE STREET IS
USED IN SIGHT DISTANCE ANALYSIS.

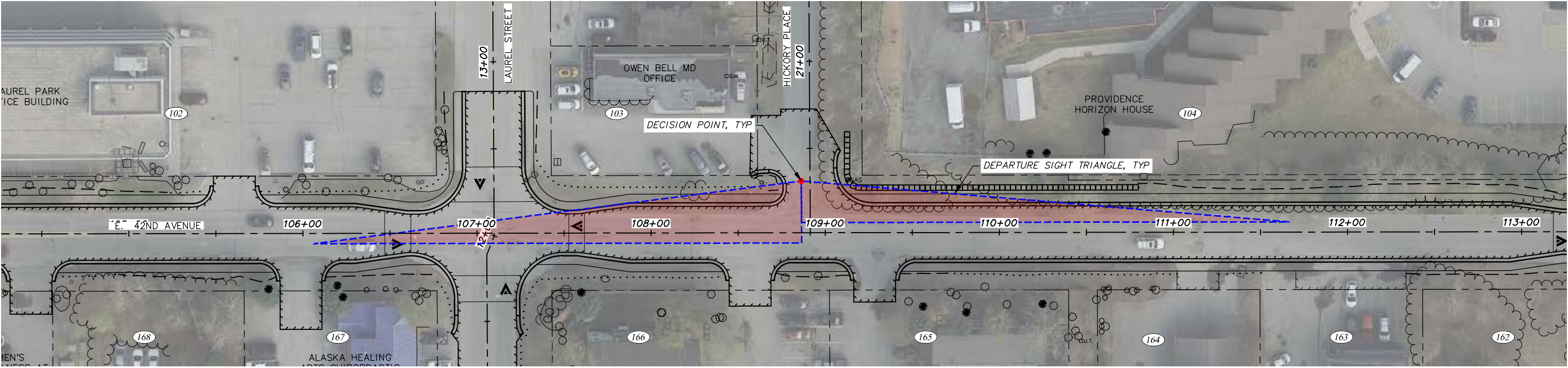
PROJECT: 18-06
STATUS: DSR



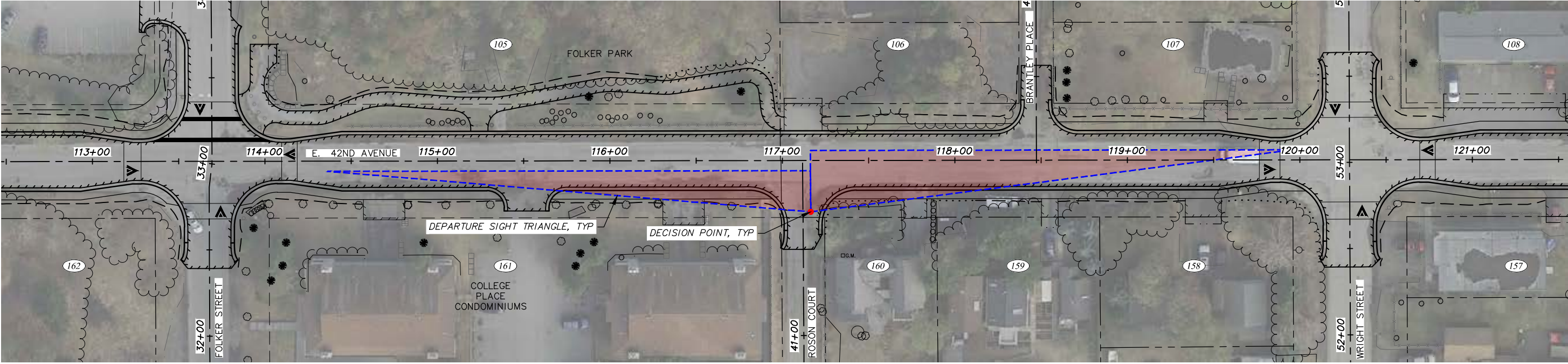
42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET
INTERSECTION DEPARTURE SIGHT TRIANGLE
ALTERNATIVE 1

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J11 OF J15

File: J:\JobsData\10142.00 42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\03_Intx Sight Triangles\10142.00 Departure Sight Triangles - Alt 2.dwg



1 **E. 42ND AVENUE & HICKORY PLACE INTERSECTION**
SCALE: GRAPHIC



2 **E. 42ND AVENUE & ROSON COURT INTERSECTION**
SCALE: GRAPHIC

NOTE:
DECISION POINT FOR EACH INTERSECTION IS SETBACK 18'
FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE
MOA DCM. DESIGN SPEED OF 25 MPH FOR E. 42ND AVENUE
IS USED IN SIGHT DISTANCE ANALYSIS.

PROJECT: 18-06
STATUS: DSR



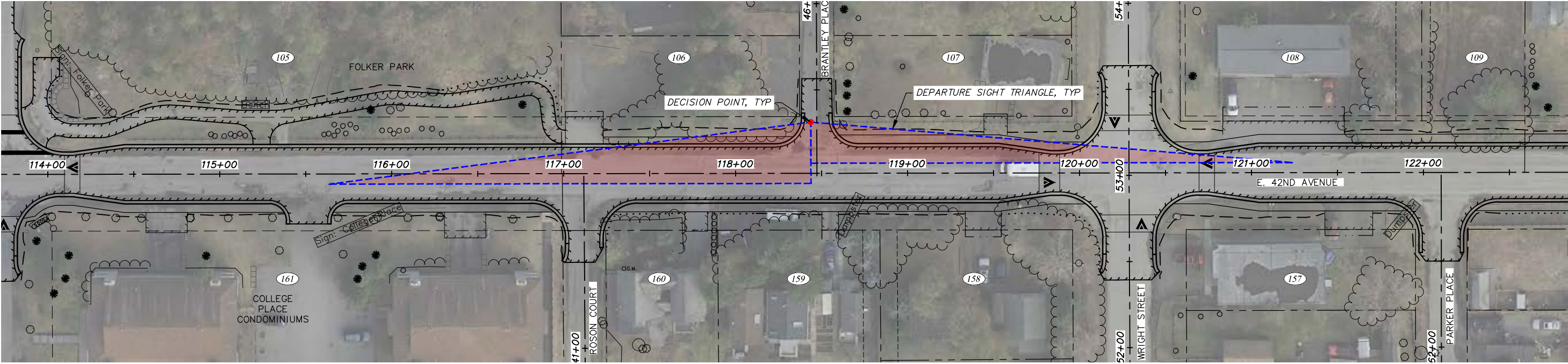
42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET

INTERSECTION DEPARTURE SIGHT TRIANGLE

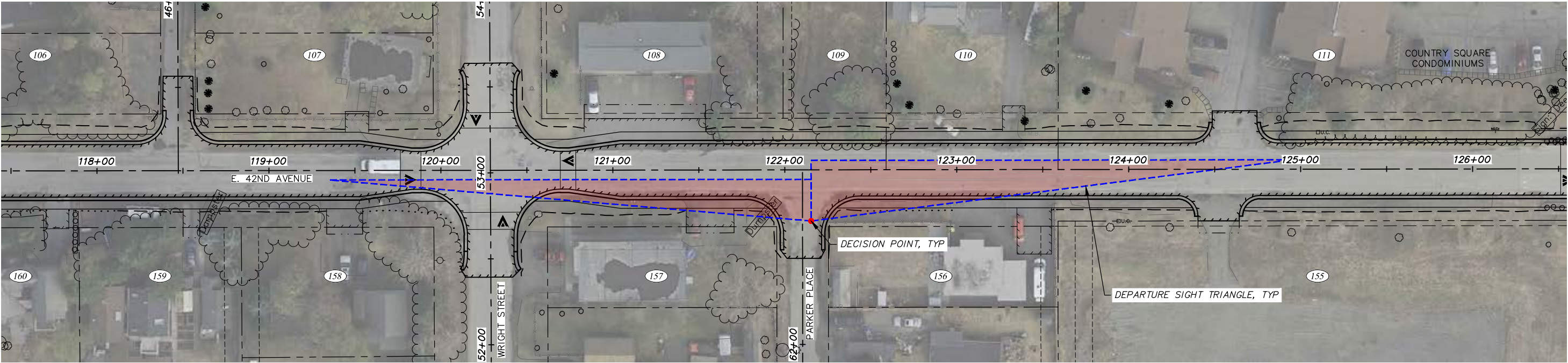
ALTERNATIVE 2

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J12 OF J15

File: J:\JobsData\10142.00 42nd Avenue Upgrade\00_CADD\02 Figures\01_DSR\03 Intx Sight Triangles\10142.00 Departure Sight Triangles - Alt 2.dwg



1 **E. 42ND AVENUE & BRANTLEY PLACE INTERSECTION**
SCALE: GRAPHIC



2 **E. 42ND AVENUE & PARKER PLACE INTERSECTION**
SCALE: GRAPHIC

NOTE:
DECISION POINT FOR EACH INTERSECTION IS SETBACK 18'
FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE
MOA DCM. DESIGN SPEED OF 25 MPH FOR E. 42ND AVENUE
IS USED IN SIGHT DISTANCE ANALYSIS.

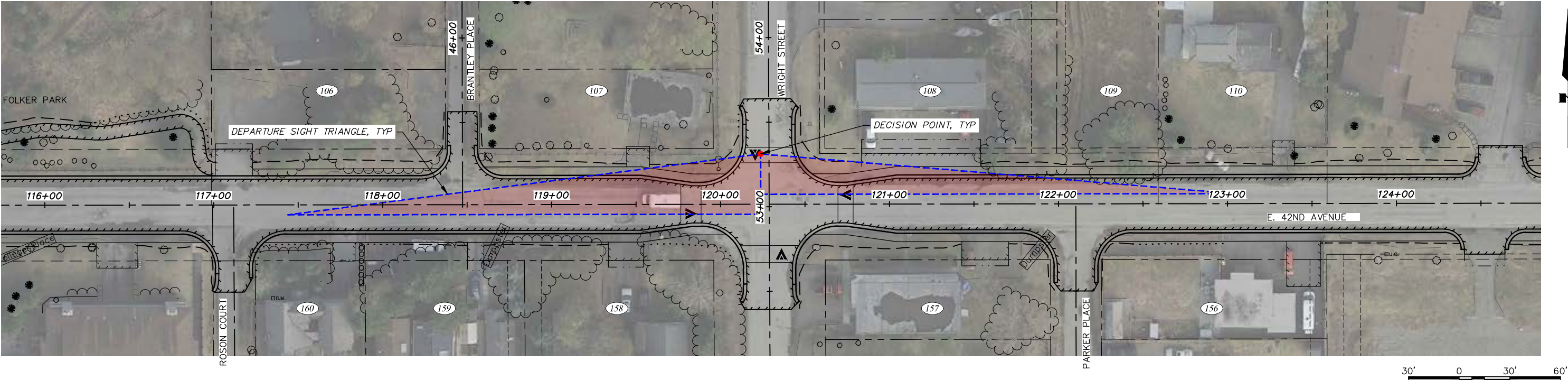
PROJECT: 18-06
STATUS: DSR



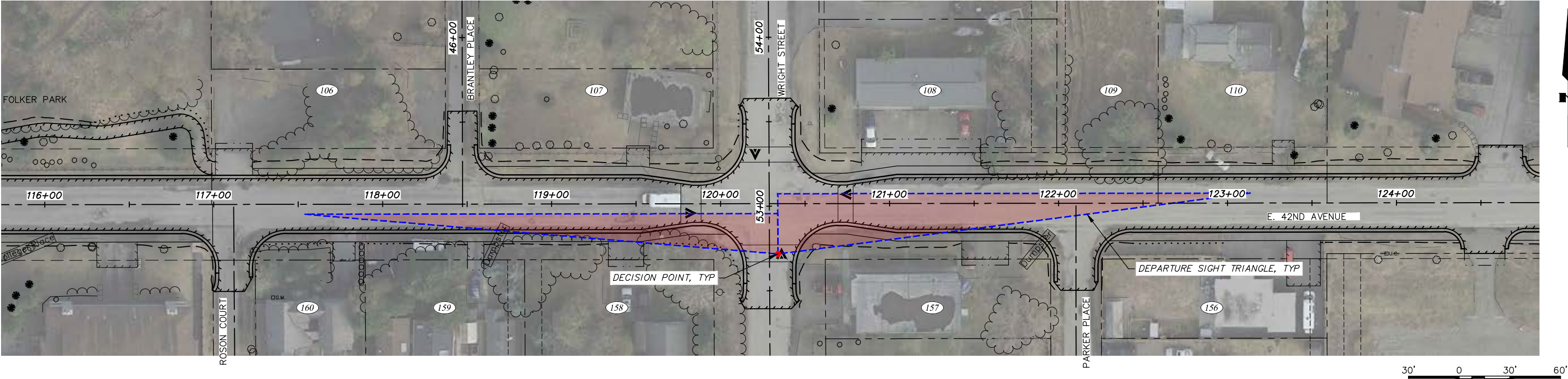
42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET
INTERSECTION DEPARTURE SIGHT TRIANGLE
ALTERNATIVE 2

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J13 OF J15

File: J:\JobsData\10142.00 42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\03_Intx Sight Triangles\10142.00 Departure Sight Triangles - Alt 2.dwg



1 **E. 42ND AVENUE & WRIGHT STREET INTERSECTION**
SCALE: GRAPHIC



2 **E. 42ND AVENUE & WRIGHT STREET INTERSECTION**
SCALE: GRAPHIC

NOTE:
DECISION POINT FOR EACH INTERSECTION IS SETBACK 18'
FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE
MOA DCM. DESIGN SPEED OF 25 MPH FOR E. 42ND AVENUE
IS USED IN SIGHT DISTANCE ANALYSIS.

PROJECT: 18-06
STATUS: DSR



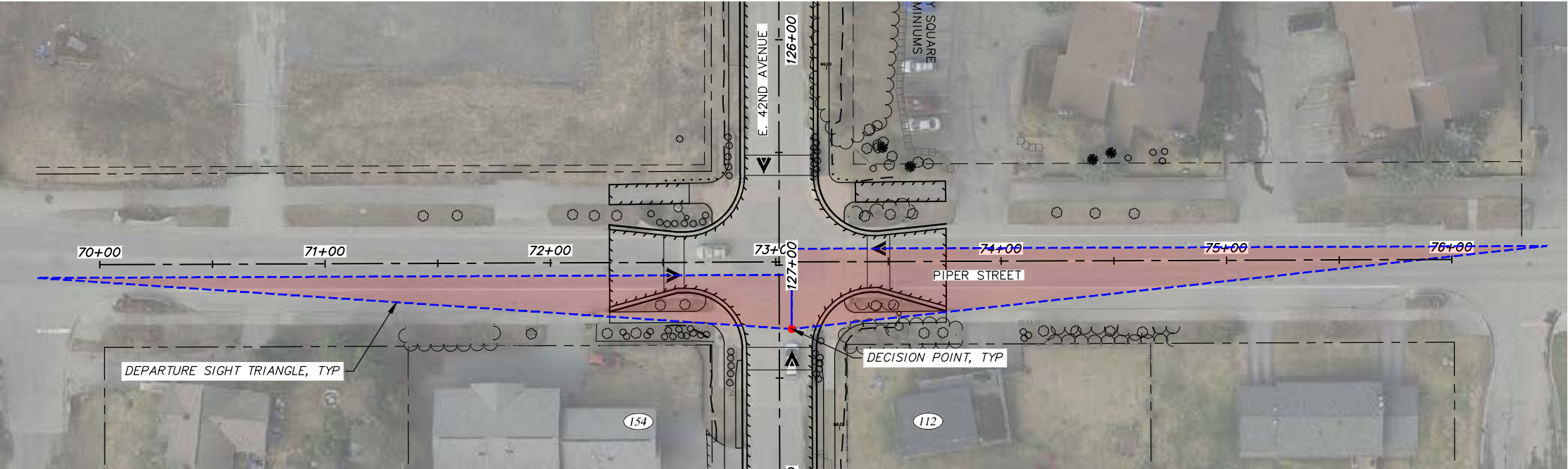
42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET

INTERSECTION DEPARTURE SIGHT TRIANGLE

ALTERNATIVE 2

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J14 OF J15

File: J:\JobsData\10142.00_42nd Avenue Upgrade\00_CADD\02_Figures\01_DSR\03 Intx Sight Triangles\10142.00 Departure Sight Triangles - Alt 2.dwg

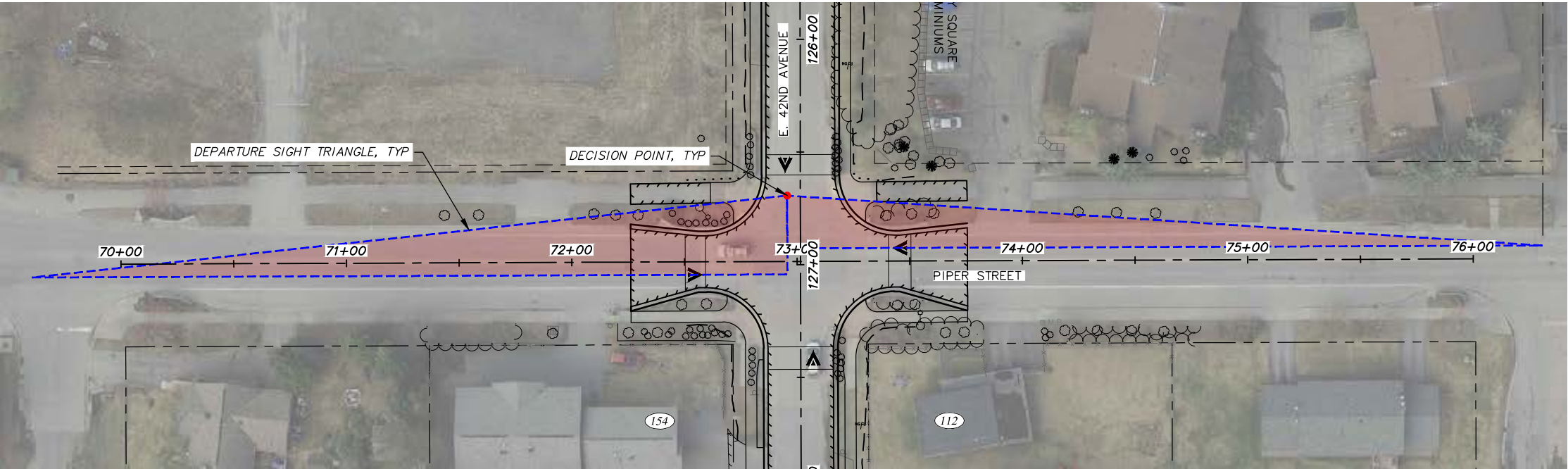


30' 0 30' 60'

1

E. 42ND AVENUE & PIPER STREET INTERSECTION

SCALE: GRAPHIC



30' 0 30' 60'

2

E. 42ND AVENUE & PIPER STREET INTERSECTION

SCALE: GRAPHIC

NOTE:

DECISION POINT FOR EACH INTERSECTION IS SETBACK 18' FROM EDGE OF TRAVELED WAY PER FIGURE 1-19 OF THE MOA DCM. DESIGN SPEED OF 30 MPH FOR PIPER STREET IS USED IN SIGHT DISTANCE ANALYSIS.

PROJECT: 18-06
STATUS: DSR



42ND AVENUE UPGRADE
LAKE OTIS TO FLORINA STREET
INTERSECTION DEPARTURE SIGHT TRIANGLE
ALTERNATIVE 2

DATE
JUNE 2020
SCALE
GRAPHIC
FIGURE
J15 OF J15

Project Cost Estimates

Appendix K

**42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06**

ENGINEER'S ESTIMATE - DRAFT DSR - ALTERNATIVE 1

ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedule A - Roadway Improvements									
A-1	20.02	Storm Water Pollution Prevention Plan (Type 3)	LS	1	1.00	0	1	\$44,000	\$44,000
A-2	20.03	Test Pit for Utility Locate	Hour	8	1.00	0	8	\$800	\$6,400
A-3	20.04	Clearing and Grubbing	LS	1	1.00	0	1	\$70,000	\$70,000
A-4	20.07	Remove Sidewalk or Concrete Apron	SY	703	1.00	0	703	\$15	\$10,545
A-5	20.08	Remove Curb and Gutter	LF	2,440	1.00	0	2,440	\$7	\$17,080
A-6	20.09	Remove Pavement	SY	20,250	1.00	0	20,250	\$4	\$81,000
A-7	20.10	Unusable Excavation	CY	31,009	1.25	-2	38,800	\$15	\$582,000
A-8	20.21	Classified Fill and Backfill (Type II)	Ton	32,812	1.25	-2	41,000	\$17	\$697,000
A-9	20.21	Classified Fill and Backfill (Type II-A)	Ton	23,712	1.25	-2	29,600	\$17	\$503,200
A-10	20.22	Leveling Course	Ton	2,017	1.08	-1	2,180	\$35	\$76,300
A-11	20.25	Geotextile (Type A)	SY	30,205	1.00	-1	30,200	\$2	\$60,400
A-12	20.26	Insulation Board (R-9)	SF	200,927	1.01	-1	202,940	\$3	\$608,820
A-13	20.26	Insulation Board (R-4.5)	SF	25,193	1.01	-1	25,440	\$2	\$50,880
A-14	20.28	Reconstruct Driveway	EA	47	1.00	0	47	\$3,250	\$152,750
A-15	30.02	P.C.C. Curb and Gutter (All Types)	LF	9,110	1.00	0	9,110	\$27	\$245,970
A-16	30.03	P.C.C. Sidewalk	SY	3,471	1.00	0	3,471	\$60	\$208,260
A-17	30.04	P.C.C. Curb Ramp (6" Thick)	EA	63	1.00	0	63	\$2,000	\$126,000
A-18	30.10	Colored Concrete	SY	41	1.00	0	41	\$160	\$6,560
A-19	30.05	Retaining Wall	LS	1	1.00	0	1	\$220,000	\$220,000
A-20	30.12	High-Performance Concrete (8" Thick, Natural, Broom Finish)	SY	637	1.05	0	669	\$330	\$220,770
A-21	30.12	High-Performance Concrete (8" Thick, Red, Broom Finish)	SY	46	1.05	0	48	\$380	\$18,240
A-22	40.06	A.C. Pavement (Class E)	Ton	2,088	1.06	-1	2,210	\$105	\$232,050
A-23	50.06	Remove and Replace Manhole Cone Section	EA	7	1.00	0	7	\$1,800	\$12,600
A-24	50.06	Remove and Replace Manhole Cover and Frame	EA	7	1.00	0	7	\$700	\$4,900
A-25	50.09	Adjust Cleanout to Finish Grade	EA	1	1.00	0	1	\$500	\$500
A-26	60.03	Remove and Replace Valve Box Top Section	EA	13	1.00	0	13	\$500	\$6,500
A-27	60.05	Adjust Key Box	EA	15	1.00	0	15	\$450	\$6,750
A-28	65.02	Construction Survey Measurement	LS	1	1.00	0	1	\$80,000	\$80,000
A-29	65.02	Two-Person Survey Crew	Hour	40	1.00	0	40	\$225	\$9,000
A-30	70.08	Remove and Reset Fence	LF	585	1.10	0	644	\$40	\$25,760
A-31	70.11	Standard Sign	SF	470	1.00	0	470	\$100	\$47,000
A-32	70.12	Traffic Maintenance	LS	1	1.00	0	1	\$350,000	\$350,000
A-33	70.13	Remove Bollard	EA	37	1.00	0	37	\$200	\$7,400
A-34	70.16	Temporary Group Mailboxes	LS	1	1.00	0	1	\$10,000	\$10,000
A-35	70.17	Relocate Mailbox	EA	27	1.00	0	27	\$500	\$13,500
A-36	70.23	Temporary Fencing	LF	585	1.10	0	644	\$10	\$6,440
A-37	70.24	Rain Garden	LS	1	1.00	0	1	\$10,000	\$10,000
A-38	75.02	Trees (type to be determined)	EA	30	1.00	0	30	\$500	\$15,000
A-39	75.02	Shrubs (type to be determined)	EA	50	1.00	0	50	\$75	\$3,750
A-40	75.03	Topsoil (4-inch Depth)	MSF	100.9	1.30	0	131	\$550	\$72,050
A-41	75.04	Seeding (Schedule A)	MSF	100.9	1.30	0	131	\$450	\$58,950
A-42	75.12	Temporary Tree Protection Fence	LF	700	1.00	0	700	\$7	\$4,900
A-43	75.13	Root Pruning	LF	250	1.00	0	250	\$25	\$6,250
TOTAL								\$4,989,475	

Schedule B - Drainage Improvements

B-1	20.13	Trench Dewatering	LS	1	1.00	0	1	\$10,000	\$10,000
B-2	20.13	Trench Excavation and Backfill (Various Depths)	LF	5,044	1.00	0	5,044	\$25	\$126,100
B-3	20.15	Furnish Trench Backfill (Type II)	Ton	1,000	1.30	0	1,300	\$17	\$22,100
B-4	20.16	Bedding Material (Class D)	LF	5,044	1.00	0	5,044	\$30	\$151,320
B-5	20.27	Disposal of Unusable or Surplus Material	CY	1,500	1.30	0	1,950	\$20	\$39,000
B-6	55.02	Furnish, Install, and Televis Pipe (12-Inch, Type S, CPEP)	LF	1,119	1.00	0	1,119	\$60	\$67,140
B-7	55.02	Furnish, Install, and Televis Pipe (18-Inch, Type S, CPEP)	LF	1,662	1.00	0	1,662	\$70	\$116,340
B-8	55.02	Furnish, Install, and Televis Pipe (24-Inch, Type S, CPEP)	LF	1,488	1.00	0	1,488	\$80	\$119,040
B-9	55.02	Furnish, Install, and Televis Pipe (30-Inch, Type S, CPEP)	LF	363	1.00	0	363	\$100	\$36,300
B-10	55.02	Furnish, Install, and Televis Pipe (36-Inch, Type S, CPEP)	LF	379	1.00	0	379	\$125	\$47,375
B-11	55.02	Furnish, Install, and Televis Pipe (48-Inch, Type S, CPEP)	LF	33	1.00	0	33	\$150	\$4,950
B-12	55.04	Connect to Existing Storm Drain System	EA	10	1.00	0	10	\$2,500	\$25,000
B-13	55.05	Construct (Type I) Manhole	EA	22	1.00	0	22	\$5,500	\$121,000
B-14	55.05	Construct (Type II) Manhole	EA	9	1.00	0	9	\$10,500	\$94,500
B-15	55.05	Construct (Type III, 96-inch Diameter) Manhole	EA	1	1.00	0	1	\$22,000	\$22,000
B-16	55.05	Construct (Type I) Catch Basin Manhole	EA	2	1.00	0	2	\$7,300	\$14,600
B-17	55.05	Construct (Type II) Catch Basin Manhole	EA	8	1.00	0	8	\$10,000	\$80,000
B-18	55.05	Construct (Type II) Bypass Manhole	EA	1	1.00	0	1	\$25,000	\$25,000
B-19	55.09	Construct Catch Basin	EA	44	1.00	0	44	\$4,500	\$198,000
B-20	55.11	Remove Manhole	EA	12	1.00	0	12	\$1,000	\$12,000
B-21	55.11	Remove Catch Basin	EA	14	1.00	0	14	\$900	\$12,600
B-22	55.19	Construct Open Ditch	LF	435	1.00	0	435	\$15	\$6,525
B-23	55.20	Culvert (36-Inch, Type S, CPEP)	LF	100	1.00	0	100	\$140	\$14,000
B-24	55.22	Oil and Grit Separator	EA	1	1.00	0	1	\$50,000	\$50,000
B-25	55.27	Storm Drain Bypass System	LS	1	1.00	0	1	\$20,000	\$20,000
B-26	55.28	Construct Bioretention Facility	LS	1	1.00	0	1	\$15,000	\$15,000
B-27	70.07	Remove Pipe	LF	2,856	1.00	0	2,856	\$13	\$37,128
TOTAL								\$1,487,018	

**42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06**

ENGINEER'S ESTIMATE - DRAFT DSR - ALTERNATIVE 1

ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedule C - Illumination Improvements									
C-1	80.01	Temporary Illumination	LS	1	1.00	0	1	\$10,000	\$10,000
C-2	80.02	Trench and Backfill (2'W x 3.5'D)	LF	4,110	1.10	-1	4,520	\$9	\$40,680
C-3	80.04	Driven Pole Luminaire Pole Foundations	EA	25	1.00	0	25	\$2,100	\$52,500
C-4	80.04	Load Center Foundation (Type 1A)	EA	2	1.00	0	2	\$4,000	\$8,000
C-5	80.05	Fixed Base Luminaire Pole (26-28')	EA	25	1.00	0	25	\$3,000	\$75,000
C-6	80.05	Luminaire Arm (6 - 17 Ft. Length)	EA	31	1.00	0	31	\$700	\$21,700
C-7	80.07	GRC Steel Conduit (2 inch)	LF	4,520	1.10	-1	4,970	\$17	\$84,490
C-8	80.08	Junction Box (Type IA)	EA	28	1.00	0	28	\$700	\$19,600
C-9	80.08	Junction Box (Type II)	EA	4	1.00	0	4	\$1,600	\$6,400
C-10	80.08	Remove Junction Box	EA	7	1.00	0	7	\$500	\$3,500
C-11	80.10	3 Conductor 8 AWG Type XHHW-2 Cable	LF	5,178	1.10	-1	5,700	\$5	\$28,500
C-12	80.14	Single-Meter Pad-Mount Load Center, Type 1A with Lighting Cont	EA	2	1.00	0	2	\$7,000	\$14,000
C-13	80.23	Luminaire (8,000 Lm, Medium, Type 2)	EA	2	1.00	0	2	\$1,200	\$2,400
C-14	80.23	Luminaire (10,000 Lm, Medium, Type 2)	EA	10	1.00	0	10	\$1,250	\$12,500
C-15	80.23	Luminaire (14,000 Lm, Medium Type 2)	EA	13	1.00	0	13	\$1,300	\$16,900
C-16	80.23	Luminaire (14,000 Lm, Medium Type 3)	EA	1	1.00	0	1	\$1,300	\$1,300
C-17	80.23	Luminaire (16,000 Lm, Medium Type 2)	EA	3	1.00	0	3	\$1,350	\$4,050
C-18	80.23	Luminaire (16,000 Lm, Medium Type 3)	EA	1	1.00	0	1	\$1,350	\$1,350
C-19	80.23	Luminaire (18,000 Lm, Medium Type 2)	EA	1	1.00	0	1	\$1,400	\$1,400
C-20	80.23	Spare Luminaire (8,000 Lm, Medium, Type 2)	EA	1	1.00	0	1	\$1,000	\$1,000
C-21	80.23	Spare Luminaire (10,000 Lm, Medium, Type 2)	EA	2	1.00	0	2	\$1,050	\$2,100
C-22	80.23	Spare Luminaire (14,000 Lm, Medium Type 2)	EA	2	1.00	0	2	\$1,100	\$2,200
C-23	80.23	Spare Luminaire (14,000 Lm, Medium Type 3)	EA	1	1.00	0	1	\$1,100	\$1,100
C-24	80.23	Spare Luminaire (16,000 Lm, Medium Type 2)	EA	1	1.00	0	1	\$1,150	\$1,150
C-25	80.23	Spare Luminaire (16,000 Lm, Medium Type 3)	EA	1	1.00	0	1	\$1,150	\$1,150
C-26	80.23	Spare Luminaire (18,000 Lm, Medium Type 2)	EA	1	1.00	0	1	\$1,200	\$1,200
C-27	80.28	Remove Load Center	EA	1	1.00	0	1	\$1,500	\$1,500
C-28	80.28	Remove Luminaire Pole	EA	7	1.00	0	7	\$700	\$4,900
TOTAL								\$420,570	

Schedule D - Water Improvements

D-1	20.13	Trench Dewatering	LS	1	1.00	0	1	\$30,000	\$30,000
D-2	20.13	Trench Excavation and Backfill (Various Depths)	LF	2,884	1.00	-3	3,000	\$25	\$75,000
D-3	20.15	Furnish Trench Backfill (Type II)	Ton	16,576	1.10	-3	18,000	\$16	\$288,000
D-4	20.16	Bedding Material (Class E)	LF	2,884	1.00	-1	2,880	\$30	\$86,400
D-5	20.26	Insulation Board (R-20)	SF	280	1.00	1	280	\$5	\$1,400
D-6	20.27	Disposal of Unusable or Surplus Material	CY	12,468	1.10	-2	13,700	\$20	\$274,000
D-7	60.02	Furnish and Install (6", PVC DR18) Pipe	LF	30	1.00	0	30	\$150	\$4,500
D-8	60.02	Furnish and Install (8", PVC DR18) Pipe	LF	2,854	1.00	0	2,854	\$160	\$456,640
D-9	60.02	Connect to Existing Water Line (6")	EA	5	1.00	0	5	\$5,000	\$25,000
D-10	60.02	Connect to Existing Water Line (8")	EA	7	1.00	0	7	\$8,000	\$56,000
D-11	60.02	Connect to Existing Water Line (16")	EA	1	1.00	0	1	\$10,000	\$10,000
D-12	60.03	Furnish and Install (8") Gate Valve	EA	20	1.00	3	20	\$5,500	\$110,000
D-13	60.04	Furnish and Install Fire Hydrant Assembly (Single Pumper)	EA	7	1.00	0	7	\$9,000	\$63,000
D-14	60.05	Furnish and Install (1" Copper) Water Service Line	LF	350	1.00	-1	350	\$150	\$52,500
D-15	60.05	Furnish and Install (1.5" Copper) Water Service Line	LF	151	1.00	-1	150	\$175	\$26,250
D-16	60.05	Furnish and Install (8" PVC) Water Service Line	LF	195	1.00	-1	200	\$220	\$44,000
D-17	60.06	Furnish and Install Anode	EA	56	1.00	0	56	\$250	\$14,000
D-18	60.07	Temporary Water System	LS	1	1.00	0	1	\$110,000	\$110,000
D-19	60.08	Decommission Fire Hydrant Assembly (Single Pumper)	EA	6	1.00	0	6	\$2,000	\$12,000
D-20	70.07	Remove Pipe	LF	2,872	1.00	-1	2,870	\$13	\$37,310
TOTAL								\$1,776,000	

SUMMARY

Schedule A - Roadway Improvements	\$4,989,475
Schedule B - Drainage Improvements	\$1,487,018
Schedule C - Illumination Improvements	\$420,570
Schedule D - Water Improvements	\$1,776,000
Subtotal	\$8,673,063

Total Estimated Construction Cost: \$8,670,000

**42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06**

Utility Relocation Summary Alternative 1	
Electric (ML&P)	\$505,000
Telephone (ACS)	\$152,000
Cable Television (GCI)	\$87,000
Natural Gas (Enstar)	\$373,000
<i>Subtotal:</i>	<i>\$1,117,000</i>
<i>Construction Contingency (15%)</i>	<i>\$168,000</i>
Total Utility Relocation Cost:	\$1,285,000

42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06
Alternative 1
MLP Utility Relocation Summary

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
MLP-1	100+76 - 104+50	RT	underground electric line in conduit	Within Roadway Structural Section	Relocate as needed	380	LF	\$0	\$0	Assume protect in place
MLP-2	100+81 - 104+50	RT	underground electric line in conduit	Within Roadway Structural Section	Relocate as needed	370	LF	\$0	\$0	Assume protect in place
MLP-3	101+06 - 101+50	LT	underground electric line	Conflict with Storm Drain/manhole	Relocate as needed	50	LF	\$500	\$25,000	Assume protect in place
MLP-4	101+50 - 105+63	RT	underground electric line in conduit	Within Roadway Structural Section	Relocate as needed	420	LF	\$0	\$0	Assume protect in place
MLP-5	101+50	RT	electric vault	Within Roadway Structural Section	Adjust as needed	1	EA	\$2,500	\$2,500	
MLP-6	101+55 - 101+79	LT	underground electric line	Within Driveway Section	Protect in place	25	LF	\$0	\$0	
MLP-7	102+80	RT	underground electric line in conduit	Potential conflict with storm drain	Verify Depth, lower as needed	25	LF	\$200	\$5,000	
MLP-8	103+15 - 103+39	LT	underground electric line	Within Driveway Section	Protect in place	25	LF	\$0	\$0	
MLP-9	103+80 - 104+05	LT	underground electric line	Within Driveway Section	Protect in place	30	LF	\$0	\$0	
MLP-10	104+00	RT	underground electric line in conduit	Potential conflict with storm drain	Verify Depth, lower as needed	25	LF	\$300	\$7,500	
MLP-11	105+49 - 105+60	LT	underground electric line	Within Driveway Section	Protect in place	25	LF	\$0	\$0	
MLP-12	105+63	CL	underground crossing	Within Roadway Structural Section/ conflict with storm drain	Relocate as needed	50	LF	\$200	\$10,000	
MLP-13	105+63	RT	Switch Cabinet	Within Roadway Typical Section	Relocate	1	EA	\$20,000	\$20,000	
MLP-14	105+63 - 111+75	RT	underground electric line in conduit	Within Roadway Structural Section	Relocate as needed	620	LF	\$200	\$124,000	
MLP-15	107+60	RT	underground electric line in conduit	Potential conflict with storm drain	Verify Depth, lower as needed	25	LF	\$0	\$0	Included in line relocation
MLP-16	107+30	LT	light pole	Within Pathway Section/to be abandoned	Remove	1	EA	\$1,500	\$1,500	remove light pole
MLP-17	110+55	RT	underground electric line in conduit	Potential conflict with storm drain	Verify Depth, lower as needed	25	LF	\$0	\$0	Can probably shift pipe to avoid.
MLP-18	111+75 - 113+50	RT	underground electric line in conduit	Within project area	Protect in place	180	LF	\$200	\$36,000	
MLP-19	113+50 - 116+90	RT	underground electric line in conduit	Within Roadway Structural Section	Protect in place	520	LF	\$200	\$104,000	
MLP-20	116+90	RT	electric vault	Within Cut Section	Adjust as needed	1	EA	\$10,000	\$10,000	maybe able to adjust
MLP-21	116+90 - 118+50	RT	underground electric line in conduit	Within Roadway Structural Section	Relocate as needed	160	LF	\$0	\$0	
MLP-22	117+40	RT	underground electric line in conduit	Conflict with Storm Drain/catch basin	Relocate as needed	25	LF	\$0	\$0	
MLP-23	118+50 - 120+50	RT	underground electric line in conduit	Within project area	Protect in place	200	LF	\$0	\$0	
MLP-24	120+15	RT	underground electric line in conduit	Potential conflict with storm drain	Verify Depth, lower as needed	25	LF	\$0	\$0	
MLP-25	120+50 - 127+40	RT	underground electric line in conduit	Within Roadway Structural Section	Relocate as needed	710	LF	\$0	\$0	
MLP-26	122+50	RT	underground electric line in conduit	Conflict with Storm Drain/catch basin	Relocate as needed	25	LF	\$0	\$0	
MLP-27	127+40	RT	electric vault	Within Cut Section	Adjust as needed	1	EA	\$10,000	\$10,000	maybe able to adjust

42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06
Alternative 1
MLP Utility Relocation Summary

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
MLP-28	127+40	CL	2 - underground crossing in conduit	Within Roadway Structural Section/potential storm drain	Lower as needed	25	LF	\$400	\$10,000	
MLP-29	131+59	RT	Light pole(ML&P owned)	To be abandoned	Remove	1	EA	\$1,500	\$1,500	
MLP-30	131+59 - 132+29	RT	overhead electric line (lighting)	To be abandoned	Remove	70	LF	\$0	\$0	
MLP-31	133+54	CL	overhead crossing - electric/telephone/cable	Verify overhead clearance	Protect in place	50	LF	\$0	\$0	
MLP-32	136+66	CL	underground electric line - direct bury	Within Roadway Structural Section	Relocate as needed	50	LF	\$200	\$10,000	
MLP-33	136+67	RT	Light pole(ML&P owned)	To be abandoned	Remove	1	EA	\$1,500	\$1,500	
MLP-34	141+68	CL	underground crossing	Within Roadway Structural Section	Lower as needed	50	LF	\$200	\$10,000	
MLP-35	144+14	CL	2 - underground electric lines - direct bury (1 abandoned)	Within Roadway Structural Section	Relocate as needed	50	LF	\$0	\$0	possibly both abandoned

Construction Costs: \$388,500
Engineering/Administration (30%): \$116,550
Total: \$505,000

42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06
Alternative 1
ACS Utility Relocation Summary

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
ACS-1	100+86	CL	underground crossing	Within Roadway Structural Section	Relocate as needed	50	LF	\$90	\$4,500	
ACS-2	100+93	CL	underground crossing - FO	Potential conflict with storm drain	Relocate as needed	100	LF	\$500	\$50,000	
ACS-3	100+86 - 127+50	RT	underground duct system	Within Roadway Structural Section	Relocate as needed	2670	LF	\$20	\$53,400	ACS may chose to abandon this system
ACS-4	141+69	CL	underground copper telecom crossing	Within Roadway Structural Section	Relocate as needed	50	LF	\$90	\$4,500	
ACS-5	144+14	CL	underground copper telecom crossing	Within Roadway Structural Section	Relocate as needed	50	LF	\$90	\$4,500	

Construction Costs: \$116,900

Engineering/Administration (30%): \$35,070

Total: \$152,000

42nd Avenue Upgrade - Lake Otis Parkway to Florina Street

MOA Project No. 18-06

Alternative 1

GCI Utility Relocation Summary

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
GCI-1	100+00	CL	underground crossing - FO	Potential conflict with storm drain	Relocate as needed	100	LF	\$500	\$50,000	
GCI-2	120+00	CL	overhead crossing - C	Verify overhead clearance	Protect in place	1	EA	\$0	\$0	
GCI-3	125+11 - 126+62	LT	underground coaxial cable	Within Roadway Structural Section	Relocate as needed	160	LF	\$80	\$12,800	
GCI-4	133+52	CL	overhead crossing - C	Verify overhead clearance	Protect in place	1	EA	\$0	\$0	
GCI-5	136+84	CL	underground crossing - C	Within Roadway Structural Section/conflict with storm drain	Relocate as needed	50	LF	\$80	\$4,000	

Construction Costs: \$66,800

Engineering/Administration (30%) \$20,040

Total: \$87,000

42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06
Alternative 1
ENSTAR Utility Relocation Summary

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
Enstar-1	100+02	CL	underground 4-inch plastic	Potential conflict with Storm Drain	Relocate as needed	50	EA	\$75	\$3,750	
Enstar-2	100+97	CL	underground 4-inch plastic	Within Roadway Structural Section	Relocate as needed	50	LF	\$75	\$3,750	
Enstar-3	101+00 - 102+00	RT	underground 1-1/4-inch steel	Within project area	Protect in Place	100	LF	\$0	\$0	
Enstar-4	102+00	RT	underground 1-1/4-inch steel	Conflict with proposed catch basin	Relocate in place	25	LF	\$108	\$2,700	
Enstar-5	102+00 - 106+81	RT	underground 1-1/4-inch steel	Within project area	Protect in Place	470	LF	\$0	\$0	
Enstar-6	103+40	CL	underground service	Within Roadway Structural Section	Relocate as needed	1	EA	\$2,250	\$2,250	
Enstar-7	104+00	RT	underground 1-1/4-inch steel	Conflict with proposed catch basin	Relocate in place	25	LF	\$75	\$1,875	
Enstar-8	106+81	CL	underground 1-1/4-inch steel	Within Roadway Structural Section	Relocate as needed	50	LF	\$108	\$5,400	
Enstar-9	106+81 - 107+50	RT	underground 2-inch plastic	Within Roadway Structural Section	Relocate as needed	70	LF	\$125	\$8,750	
Enstar-10	107+50-118+50	RT/LT	underground 2-inch plastic	Within Roadway Structural Section	Relocate as needed	1100	LF	\$75	\$82,500	
Enstar-11	118+50 - 120+50	LT	underground 1-1/4-inch steel	Within Roadway Structural Section	Relocate as needed	200	LF	\$75	\$15,000	assume replace to plastic
Enstar-12	120+50	CL	underground 2-inch steel	Within Roadway Structural Section	Relocate as needed	50	LF	\$125	\$6,250	
Enstar-13	120+50 - 122+50	RT	underground 2-inch steel	Within project area	Protect in Place	200	LF	\$0	\$0	
Enstar-14	122+50	RT	underground 2-inch steel	Conflict with proposed catch basin	Relocate in place	25	LF	\$125	\$3,125	
Enstar-15	122+50 - 126+20	RT	underground 2-inch steel	Within project area	Protect in Place	370	LF	\$0	\$0	
Enstar-16	126+20 - 127+70	LT/RT	underground 2-inch plastic	Within Roadway Structural Section	Relocate as needed	150	LF	\$150	\$22,500	
Enstar-17	126+50	RT	underground 2-inch steel	Conflict with proposed catch basin	Relocate in place	25	LF	\$140	\$3,500	
Enstar-18	127+70 - 136+75	RT	underground 2-inch steel	Within Roadway Structural Section	Relocate as needed	910	LF	\$75	\$68,250	assume replace to plastic
Enstar-19	136+20	CL	underground 1-1/4-inch steel	Within Roadway Structural Section	Relocate as needed	50	LF	\$108	\$5,400	
Enstar-20	136+75 - 144+00	RT	underground 1-1/4-inch steel	Within project area	Protect in Place	730	LF	\$0	\$0	
Enstar-21	Varies	CL	multiple services across 42nd Avenue	Within Roadway Structural Section	Relocate as needed	23	EA	\$2,250	\$51,750	

Construction Costs: \$286,750

Engineering/Administration (30%) \$86,025

Total: \$373,000

Date: 6/15/2020 **Basis:**
Project: 42nd Avenue Upgrade
Project Number: 19-019

Prepared By: CRW **Ver. 5.1**
Alternative 1
[B]=local bond; [S]=state grant; [F]= federal grant

DESIGN	Design Management	\$112,750	
<i>Start 20??</i>	PM&E Design Services	\$0	
	PM&E Design Survey	\$0	
	PM&E Design Soil	\$0	
	Contractual Dsgn Sers (Basic)	\$1,500,000	
	Contractual Dsgn Sers (Add'l)	\$400,000	
	Contractual Design Survey	\$150,000	
	Contractual Design Soils	\$75,000	
	Miscellaneous	\$0	
Subtotal			\$2,237,750

WEBPAGE DATA	
Environ	\$0
DS	\$559,437
Prelim Dsgn	\$1,118,875
Final Dsgn	\$559,437
ROW	\$162,000
Utilities	\$1,280,000
Const	\$13,220,207
Total	\$16,899,957

UTILITIES	AWWU	\$0	
<i>Start 20??</i>	MOA Shoring	\$0	
	ML&P	\$580,000	
	ACS	\$170,000	
	GCI	\$100,000	
	Enstar	\$430,000	
Subtotal			\$1,280,000

ROW	Real Estate Services	\$97,000	
<i>Start 20??</i>	Land Acquisition	\$65,000	
Subtotal			\$162,000

CONSTRUCTION	Construction Management	\$156,115	
<i>Start 20??</i>	Inspection	\$407,634	
	Materials Testing	\$86,731	
	Survey	\$60,711	
	Miscellaneous	\$0	
	Construction Contract	\$8,673,063	
Subtotal			\$9,384,254

MISCELLANEOUS	Bond Overhead (15.0%)	\$2,534,994	
	Grant Overhead (0.0%)	\$0	
	Contingency (15%)	\$1,300,959	
Subtotal			\$3,835,953

PROJECT TOTAL			<u><u>\$16,899,957</u></u>
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**42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06**

ENGINEER'S ESTIMATE - DRAFT DSR - ALTERNATIVE 2

ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedule A - Roadway Improvements									
A-1	20.02	Storm Water Pollution Prevention Plan (Type 3)	LS	1	1.00	0	1	\$44,000	\$44,000
A-2	20.03	Test Pit for Utility Locate	Hour	8	1.00	0	8	\$800	\$6,400
A-3	20.04	Clearing and Grubbing	LS	1	1.00	0	1	\$70,000	\$70,000
A-4	20.07	Remove Sidewalk or Concrete Apron	SY	708	1.00	0	708	\$15	\$10,620
A-5	20.08	Remove Curb and Gutter	LF	2,455	1.00	0	2,455	\$7	\$17,185
A-6	20.09	Remove Pavement	SY	20,298	1.00	0	20,298	\$4	\$81,192
A-7	20.10	Unusable Excavation	CY	32,013	1.25	-2	40,000	\$15	\$600,000
A-8	20.21	Classified Fill and Backfill (Type II)	Ton	33,549	1.25	-2	41,900	\$17	\$712,300
A-9	20.21	Classified Fill and Backfill (Type II-A)	Ton	23,890	1.25	-2	29,900	\$17	\$508,300
A-10	20.22	Leveling Course	Ton	1,987	1.08	-1	2,150	\$35	\$75,250
A-11	20.25	Geotextile (Type A)	SY	30,804	1.00	-1	30,800	\$2	\$61,600
A-12	20.26	Insulation Board (R-9)	SF	204,914	1.01	-1	206,960	\$3	\$620,880
A-13	20.26	Insulation Board (R-4.5)	SF	25,591	1.01	-1	25,850	\$2	\$51,700
A-14	20.28	Reconstruct Driveway	EA	47	1.00	0	47	\$3,250	\$152,750
A-15	30.02	P.C.C. Curb and Gutter (All Types)	LF	9,068	1.00	0	9,068	\$27	\$244,836
A-16	30.03	P.C.C. Sidewalk	SY	4,372	1.00	0	4,372	\$60	\$262,320
A-17	30.04	P.C.C. Curb Ramp (6" Thick)	EA	63	1.00	0	63	\$2,000	\$126,000
A-18	30.10	Colored Concrete	SY	41	1.00	0	41	\$160	\$6,560
A-19	30.05	Retaining Wall	LS	1	1.00	0	1	\$220,000	\$220,000
A-20	30.12	High-Performance Concrete (8" Thick, Natural, Broom Finish)	SY	651	1.05	0	684	\$330	\$225,720
A-21	30.12	High-Performance Concrete (8" Thick, Red, Broom Finish)	SY	50	1.05	0	52	\$380	\$19,760
A-22	40.06	A.C. Pavement (Class E)	Ton	2,057	1.06	-1	2,180	\$105	\$228,900
A-23	50.06	Remove and Replace Manhole Cone Section	EA	7	1.00	0	7	\$1,800	\$12,600
A-24	50.06	Remove and Replace Manhole Cover and Frame	EA	7	1.00	0	7	\$700	\$4,900
A-25	50.09	Adjust Cleanout to Finish Grade	EA	1	1.00	0	1	\$500	\$500
A-26	60.03	Remove and Replace Valve Box Top Section	EA	13	1.00	0	13	\$500	\$6,500
A-27	60.05	Adjust Key Box	EA	15	1.00	0	15	\$450	\$6,750
A-28	65.02	Construction Survey Measurement	LS	1	1.00	0	1	\$80,000	\$80,000
A-29	65.02	Two-Person Survey Crew	Hour	40	1.00	0	40	\$225	\$9,000
A-30	70.08	Remove and Reset Fence	LF	585	1.10	0	644	\$40	\$25,760
A-31	70.11	Standard Sign	SF	470	1.00	0	470	\$100	\$47,000
A-32	70.12	Traffic Maintenance	LS	1	1.00	0	1	\$350,000	\$350,000
A-33	70.13	Remove Bollard	EA	37	1.00	0	37	\$200	\$7,400
A-34	70.16	Temporary Group Mailboxes	LS	1	1.00	0	1	\$10,000	\$10,000
A-35	70.17	Relocate Mailbox	EA	27	1.00	0	27	\$500	\$13,500
A-36	70.22	Temporary Fencing	LF	585	1.10	0	644	\$10	\$6,440
A-37	70.23	Rain Garden	LS	1	1.00	0	1	\$10,000	\$10,000
A-38	75.02	Trees (type to be determined)	EA	30	1.00	0	30	\$500	\$15,000
A-39	75.02	Shrubs (type to be determined)	EA	50	1.00	0	50	\$75	\$3,750
A-40	75.03	Topsoil (4-inch Depth)	MSF	100.9	1.30	0	131	\$550	\$72,050
A-41	75.04	Seeding (Schedule A)	MSF	100.9	1.30	0	131	\$450	\$58,950
A-42	75.12	Temporary Tree Protection Fence	LF	700	1.00	0	700	\$7	\$4,900
A-43	75.13	Root Pruning	LF	250	1.00	0	250	\$25	\$6,250
TOTAL									\$5,097,523

Schedule B - Drainage Improvements

B-1	20.13	Trench Dewatering	LS	1	1.00	0	1	\$10,000	\$10,000
B-2	20.13	Trench Excavation and Backfill (Various Depths)	LF	5,044	1.00	0	5,044	\$25	\$126,100
B-3	20.15	Furnish Trench Backfill (Type II)	Ton	1,000	1.30	0	1,300	\$17	\$22,100
B-4	20.16	Bedding Material (Class D)	LF	5,044	1.00	0	5,044	\$30	\$151,320
B-5	20.27	Disposal of Unusable or Surplus Material	CY	1,500	1.30	0	1,950	\$20	\$39,000
B-6	55.02	Furnish, Install, and Televis Pipe (12-Inch, Type S, CPEP)	LF	1,119	1.00	0	1,119	\$60	\$67,140
B-7	55.02	Furnish, Install, and Televis Pipe (18-Inch, Type S, CPEP)	LF	1,662	1.00	0	1,662	\$70	\$116,340
B-8	55.02	Furnish, Install, and Televis Pipe (24-Inch, Type S, CPEP)	LF	1,488	1.00	0	1,488	\$80	\$119,040
B-9	55.02	Furnish, Install, and Televis Pipe (30-Inch, Type S, CPEP)	LF	363	1.00	0	363	\$100	\$36,300
B-10	55.02	Furnish, Install, and Televis Pipe (36-Inch, Type S, CPEP)	LF	379	1.00	0	379	\$125	\$47,375
B-11	55.02	Furnish, Install, and Televis Pipe (48-Inch, Type S, CPEP)	LF	33	1.00	0	33	\$150	\$4,950
B-12	55.04	Connect to Existing Storm Drain System	EA	10	1.00	0	10	\$2,500	\$25,000
B-13	55.05	Construct (Type I) Manhole	EA	22	1.00	0	22	\$5,500	\$121,000
B-14	55.05	Construct (Type II) Manhole	EA	9	1.00	0	9	\$10,500	\$94,500
B-15	55.05	Construct (Type III, 96-inch Diameter) Manhole	EA	1	1.00	0	1	\$22,000	\$22,000
B-16	55.05	Construct (Type I) Catch Basin Manhole	EA	2	1.00	0	2	\$7,300	\$14,600
B-17	55.05	Construct (Type II) Catch Basin Manhole	EA	8	1.00	0	8	\$10,000	\$80,000
B-18	55.05	Construct (Type II) Bypass Manhole	EA	1	1.00	0	1	\$25,000	\$25,000
B-19	55.09	Construct Catch Basin	EA	44	1.00	0	44	\$4,500	\$198,000
B-20	55.11	Remove Manhole	EA	12	1.00	0	12	\$1,000	\$12,000
B-21	55.11	Remove Catch Basin	EA	14	1.00	0	14	\$900	\$12,600
B-22	55.19	Construct Open Ditch	LF	435	1.00	0	435	\$15	\$6,525
B-23	55.20	Culvert (36-Inch, Type S, CPEP)	LF	100	1.00	0	100	\$140	\$14,000
B-24	55.22	Oil and Grit Separator	EA	1	1.00	0	1	\$50,000	\$50,000
B-25	55.27	Storm Drain Bypass System	LS	1	1.00	0	1	\$20,000	\$20,000
B-26	55.28	Construct Bioretention Facility	LS	1	1.00	0	1	\$15,000	\$15,000
B-27	70.07	Remove Pipe	LF	2,856	1.00	0	2,856	\$13	\$37,128
TOTAL									\$1,487,018

**42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06**

ENGINEER'S ESTIMATE - DRAFT DSR - ALTERNATIVE 2

ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedule C - Illumination Improvements									
C-1	80.01	Temporary Illumination	LS	1	1.00	0	1	\$10,000	\$10,000
C-2	80.02	Trench and Backfill (2'W x 3.5'D)	LF	4,110	1.10	-1	4,520	\$9	\$40,680
C-3	80.04	Driven Pole Luminaire Pole Foundations	EA	25	1.00	0	25	\$2,100	\$52,500
C-4	80.04	Load Center Foundation (Type 1A)	EA	2	1.00	0	2	\$4,000	\$8,000
C-5	80.05	Fixed Base Luminaire Pole (26-28')	EA	25	1.00	0	25	\$3,000	\$75,000
C-6	80.05	Luminaire Arm (6 - 17 Ft. Length)	EA	31	1.00	0	31	\$700	\$21,700
C-7	80.07	GRC Steel Conduit (2 inch)	LF	4,520	1.10	-1	4,970	\$17	\$84,490
C-8	80.08	Junction Box (Type IA)	EA	28	1.00	0	28	\$700	\$19,600
C-9	80.08	Junction Box (Type II)	EA	4	1.00	0	4	\$1,600	\$6,400
C-10	80.08	Remove Junction Box	EA	7	1.00	0	7	\$500	\$3,500
C-11	80.10	3 Conductor 8 AWG Type XHHW-2 Cable	LF	5,178	1.10	-1	5,700	\$5	\$28,500
C-12	80.14	Single-Meter Pad-Mount Load Center, Type 1A with Lighting Contro	EA	2	1.00	0	2	\$7,000	\$14,000
C-13	80.23	Luminaire (8,000 Lm, Medium, Type 2)	EA	2	1.00	0	2	\$1,200	\$2,400
C-14	80.23	Luminaire (10,000 Lm, Medium, Type 2)	EA	10	1.00	0	10	\$1,250	\$12,500
C-15	80.23	Luminaire (14,000 Lm, Medium Type 2)	EA	13	1.00	0	13	\$1,300	\$16,900
C-16	80.23	Luminaire (14,000 Lm, Medium Type 3)	EA	1	1.00	0	1	\$1,300	\$1,300
C-17	80.23	Luminaire (16,000 Lm, Medium Type 2)	EA	3	1.00	0	3	\$1,350	\$4,050
C-18	80.23	Luminaire (16,000 Lm, Medium Type 3)	EA	1	1.00	0	1	\$1,350	\$1,350
C-19	80.23	Luminaire (18,000 Lm, Medium Type 2)	EA	1	1.00	0	1	\$1,400	\$1,400
C-20	80.23	Spare Luminaire (8,000 Lm, Medium, Type 2)	EA	1	1.00	0	1	\$1,000	\$1,000
C-21	80.23	Spare Luminaire (10,000 Lm, Medium, Type 2)	EA	2	1.00	0	2	\$1,050	\$2,100
C-22	80.23	Spare Luminaire (14,000 Lm, Medium Type 2)	EA	2	1.00	0	2	\$1,100	\$2,200
C-23	80.23	Spare Luminaire (14,000 Lm, Medium Type 3)	EA	1	1.00	0	1	\$1,100	\$1,100
C-24	80.23	Spare Luminaire (16,000 Lm, Medium Type 2)	EA	1	1.00	0	1	\$1,150	\$1,150
C-25	80.23	Spare Luminaire (16,000 Lm, Medium Type 3)	EA	1	1.00	0	1	\$1,150	\$1,150
C-26	80.23	Spare Luminaire (18,000 Lm, Medium Type 2)	EA	1	1.00	0	1	\$1,200	\$1,200
C-27	80.28	Remove Load Center	EA	1	1.00	0	1	\$1,500	\$1,500
C-28	80.28	Remove Luminaire Pole	EA	7	1.00	0	7	\$700	\$4,900
								TOTAL	\$420,570

Schedule D - Water Improvements

D-1	20.13	Trench Dewatering	LS	1	1.00	0	1	\$30,000	\$30,000
D-2	20.13	Trench Excavation and Backfill (Various Depths)	LF	2,884	1.00	-3	3,000	\$25	\$75,000
D-3	20.15	Furnish Trench Backfill (Type II)	Ton	16,576	1.10	-3	18,000	\$16	\$288,000
D-4	20.16	Bedding Material (Class E)	LF	2,884	1.00	-1	2,880	\$30	\$86,400
D-5	20.26	Insulation Board (R-20)	SF	280	1.00	1	280	\$5	\$1,400
D-6	20.27	Disposal of Unusable or Surplus Material	CY	12,468	1.10	-2	13,700	\$20	\$274,000
D-7	60.02	Furnish and Install (6", PVC DR18) Pipe	LF	30	1.00	0	30	\$150	\$4,500
D-8	60.02	Furnish and Install (8", PVC DR18) Pipe	LF	2,854	1.00	0	2,854	\$160	\$456,640
D-9	60.02	Connect to Existing Water Line (6")	EA	5	1.00	0	5	\$5,000	\$25,000
D-10	60.02	Connect to Existing Water Line (8")	EA	7	1.00	0	7	\$8,000	\$56,000
D-11	60.02	Connect to Existing Water Line (16")	EA	1	1.00	0	1	\$10,000	\$10,000
D-12	60.03	Furnish and Install (8") Gate Valve	EA	20	1.00	3	20	\$5,500	\$110,000
D-13	60.04	Furnish and Install Fire Hydrant Assembly (Single Pumper)	EA	7	1.00	0	7	\$9,000	\$63,000
D-14	60.05	Furnish and Install (1" Copper) Water Service Line	LF	350	1.00	-1	350	\$150	\$52,500
D-15	60.05	Furnish and Install (1.5" Copper) Water Service Line	LF	151	1.00	-1	150	\$175	\$26,250
D-16	60.05	Furnish and Install (8" PVC) Water Service Line	LF	195	1.00	-1	200	\$220	\$44,000
D-17	60.06	Furnish and Install Anode	EA	56	1.00	0	56	\$250	\$14,000
D-18	60.07	Temporary Water System	LS	1	1.00	0	1	\$110,000	\$110,000
D-19	60.08	Decommission Fire Hydrant Assembly (Single Pumper)	EA	6	1.00	0	6	\$2,000	\$12,000
D-20	70.07	Remove Pipe	LF	2,872	1.00	-1	2,870	\$13	\$37,310
								TOTAL	\$1,776,000

SUMMARY

Schedule A - Roadway Improvements	\$5,097,523
Schedule B - Drainage Improvements	\$1,487,018
Schedule C - Illumination Improvements	\$420,570
Schedule D - Water Improvements	\$1,776,000
Subtotal	\$8,781,111

Total Estimated Construction Cost: \$8,780,000

**42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06**

Utility Relocation Summary Alternative 2	
Electric (ML&P)	\$505,000
Telephone (ACS)	\$152,000
Cable Television (GCI)	\$87,000
Natural Gas (Enstar)	\$373,000
<i>Subtotal:</i>	<i>\$1,117,000</i>
<i>Construction Contingency (15%)</i>	<i>\$168,000</i>
Total Utility Relocation Cost:	\$1,285,000

42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06
Alternative 2
MLP Utility Relocation Summary

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
MLP-1	100+76 - 104+50	RT	underground electric line in conduit	Within Roadway Structural Section	Relocate as needed	380	LF	\$0	\$0	Assume protect in place
MLP-2	100+81 - 104+50	RT	underground electric line in conduit	Within Roadway Structural Section	Relocate as needed	370	LF	\$0	\$0	Assume protect in place
MLP-3	101+06 - 101+50	LT	underground electric line	Conflict with Storm Drain/manhole	Relocate as needed	50	LF	\$500	\$25,000	Assume protect in place
MLP-4	101+50 - 105+63	RT	underground electric line in conduit	Within Roadway Structural Section	Relocate as needed	420	LF	\$0	\$0	Assume protect in place
MLP-5	101+50	RT	electric vault	Within Roadway Structural Section	Adjust as needed	1	EA	\$2,500	\$2,500	
MLP-6	101+55 - 101+79	LT	underground electric line	Within Driveway Section	Protect in place	25	LF	\$0	\$0	
MLP-7	102+80	RT	underground electric line in conduit	Potential conflict with storm drain	Verify Depth, lower as needed	25	LF	\$200	\$5,000	
MLP-8	103+15 - 103+39	LT	underground electric line	Within Driveway Section	Protect in place	25	LF	\$0	\$0	
MLP-9	103+80 - 104+05	LT	underground electric line	Within Driveway Section	Protect in place	30	LF	\$0	\$0	
MLP-10	104+00	RT	underground electric line in conduit	Potential conflict with storm drain	Verify Depth, lower as needed	25	LF	\$300	\$7,500	
MLP-11	105+49 - 105+60	LT	underground electric line	Within Driveway Section	Protect in place	25	LF	\$0	\$0	
MLP-12	105+63	CL	underground crossing	Within Roadway Structural Section/ conflict with storm drain	Relocate as needed	50	LF	\$200	\$10,000	
MLP-13	105+63	RT	Switch Cabinet	Within Roadway Typical Section	Relocate	1	EA	\$20,000	\$20,000	
MLP-14	105+63 - 111+75	RT	underground electric line in conduit	Within Roadway Structural Section	Relocate as needed	620	LF	\$200	\$124,000	
MLP-15	107+60	RT	underground electric line in conduit	Potential conflict with storm drain	Verify Depth, lower as needed	25	LF	\$0	\$0	Included in line relocation
MLP-16	107+30	LT	light pole	Within Pathway Section/to be abandoned	Remove	1	EA	\$1,500	\$1,500	remove light pole
MLP-17	110+55	RT	underground electric line in conduit	Potential conflict with storm drain	Verify Depth, lower as needed	25	LF	\$0	\$0	Can probably shift pipe to avoid.
MLP-18	111+75 - 113+50	RT	underground electric line in conduit	Within project area	Protect in place	180	LF	\$200	\$36,000	
MLP-19	113+50 - 116+90	RT	underground electric line in conduit	Within Roadway Structural Section	Protect in place	520	LF	\$200	\$104,000	
MLP-20	116+90	RT	electric vault	Within Cut Section	Adjust as needed	1	EA	\$10,000	\$10,000	maybe able to adjust
MLP-21	116+90 - 118+50	RT	underground electric line in conduit	Within Roadway Structural Section	Relocate as needed	160	LF	\$0	\$0	
MLP-22	117+40	RT	underground electric line in conduit	Conflict with Storm Drain/catch basin	Relocate as needed	25	LF	\$0	\$0	
MLP-23	118+50 - 120+50	RT	underground electric line in conduit	Within project area	Protect in place	200	LF	\$0	\$0	
MLP-24	120+15	RT	underground electric line in conduit	Potential conflict with storm drain	Verify Depth, lower as needed	25	LF	\$0	\$0	
MLP-25	120+50 - 127+40	RT	underground electric line in conduit	Within Roadway Structural Section	Relocate as needed	710	LF	\$0	\$0	
MLP-26	122+50	RT	underground electric line in conduit	Conflict with Storm Drain/catch basin	Relocate as needed	25	LF	\$0	\$0	
MLP-27	127+40	RT	electric vault	Within Cut Section	Adjust as needed	1	EA	\$10,000	\$10,000	maybe able to adjust

42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06
Alternative 2
MLP Utility Relocation Summary

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
MLP-28	127+40	CL	2 - underground crossing in conduit	Within Roadway Structural Section/potential storm drain	Lower as needed	25	LF	\$400	\$10,000	
MLP-29	131+59	RT	Light pole(ML&P owned)	To be abandoned	Remove	1	EA	\$1,500	\$1,500	
MLP-30	131+59 - 132+29	RT	overhead electric line (lighting)	To be abandoned	Remove	70	LF	\$0	\$0	
MLP-31	133+54	CL	overhead crossing - electric/telephone/cable	Verify overhead clearance	Protect in place	50	LF	\$0	\$0	
MLP-32	136+66	CL	underground electric line - direct bury	Within Roadway Structural Section	Relocate as needed	50	LF	\$200	\$10,000	
MLP-33	136+67	RT	Light pole(ML&P owned)	To be abandoned	Remove	1	EA	\$1,500	\$1,500	
MLP-34	141+68	CL	underground crossing	Within Roadway Structural Section	Lower as needed	50	LF	\$200	\$10,000	
MLP-35	144+14	CL	2 - underground electric lines - direct bury (1 abandoned)	Within Roadway Structural Section	Relocate as needed	50	LF	\$0	\$0	possibly both abandoned

Construction Costs: \$388,500
Engineering/Administration (30%): \$116,550
Total: \$505,000

42nd Avenue Upgrade - Lake Otis Parkway to Florina Street

MOA Project No. 18-06

Alternative 2

ACS Utility Relocation Summary

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
ACS-1	100+86	CL	underground crossing	Within Roadway Structural Section	Relocate as needed	50	LF	\$90	\$4,500	
ACS-2	100+93	CL	underground crossing - FO	Potential conflict with storm drain	Relocate as needed	100	LF	\$500	\$50,000	
ACS-3	100+86 - 127+50	RT	underground duct system	Within Roadway Structural Section	Relocate as needed	2670	LF	\$20	\$53,400	ACS may chose to abandon this system
ACS-4	141+69	CL	underground copper telecom crossing	Within Roadway Structural Section	Relocate as needed	50	LF	\$90	\$4,500	
ACS-5	144+14	CL	underground copper telecom crossing	Within Roadway Structural Section	Relocate as needed	50	LF	\$90	\$4,500	

Construction Costs: \$116,900

Engineering/Administration (30%): \$35,070

Total: \$152,000

42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06
Alternative 2
GCI Utility Relocation Summary

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
GCI-1	100+00	CL	underground crossing - FO	Potential conflict with storm drain	Relocate as needed	100	LF	\$500	\$50,000	
GCI-2	120+00	CL	overhead crossing - C	Verify overhead clearance	Protect in place	1	EA	\$0	\$0	
GCI-3	125+11 - 126+62	LT	underground coaxial cable	Within Roadway Structural Section	Relocate as needed	160	LF	\$80	\$12,800	
GCI-4	133+52	CL	overhead crossing - C	Verify overhead clearance	Protect in place	1	EA	\$0	\$0	
GCI-5	136+84	CL	underground crossing - C	Within Roadway Structural Section/conflict with storm drain	Relocate as needed	50	LF	\$80	\$4,000	

Construction Costs: \$66,800
Engineering/Administration (30%) \$20,040

Total: \$87,000

42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06
Alternative 2
ENSTAR Utility Relocation Summary

Id No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
Enstar-1	100+02	CL	underground 4-inch plastic	Potential conflict with Storm Drain	Relocate as needed	50	EA	\$75	\$3,750	
Enstar-2	100+97	CL	underground 4-inch plastic	Within Roadway Structural Section	Relocate as needed	50	LF	\$75	\$3,750	
Enstar-3	101+00 - 102+00	RT	underground 1-1/4-inch steel	Within project area	Protect in Place	100	LF	\$0	\$0	
Enstar-4	102+00	RT	underground 1-1/4-inch steel	Conflict with proposed catch basin	Relocate in place	25	LF	\$108	\$2,700	
Enstar-5	102+00 - 106+81	RT	underground 1-1/4-inch steel	Within project area	Protect in Place	470	LF	\$0	\$0	
Enstar-6	103+40	CL	underground service	Within Roadway Structural Section	Relocate as needed	1	EA	\$2,250	\$2,250	
Enstar-7	104+00	RT	underground 1-1/4-inch steel	Conflict with proposed catch basin	Relocate in place	25	LF	\$75	\$1,875	
Enstar-8	106+81	CL	underground 1-1/4-inch steel	Within Roadway Structural Section	Relocate as needed	50	LF	\$108	\$5,400	
Enstar-9	106+81 - 107+50	RT	underground 2-inch plastic	Within Roadway Structural Section	Relocate as needed	70	LF	\$125	\$8,750	
Enstar-10	107+50-118+50	RT/LT	underground 2-inch plastic	Within Roadway Structural Section	Relocate as needed	1100	LF	\$75	\$82,500	
Enstar-11	118+50 - 120+50	LT	underground 1-1/4-inch steel	Within Roadway Structural Section	Relocate as needed	200	LF	\$75	\$15,000	assume replace to plastic
Enstar-12	120+50	CL	underground 2-inch steel	Within Roadway Structural Section	Relocate as needed	50	LF	\$125	\$6,250	
Enstar-13	120+50 - 122+50	RT	underground 2-inch steel	Within project area	Protect in Place	200	LF	\$0	\$0	
Enstar-14	122+50	RT	underground 2-inch steel	Conflict with proposed catch basin	Relocate in place	25	LF	\$125	\$3,125	
Enstar-15	122+50 - 126+20	RT	underground 2-inch steel	Within project area	Protect in Place	370	LF	\$0	\$0	
Enstar-16	126+20 - 127+70	LT/RT	underground 2-inch plastic	Within Roadway Structural Section	Relocate as needed	150	LF	\$150	\$22,500	
Enstar-17	126+50	RT	underground 2-inch steel	Conflict with proposed catch basin	Relocate in place	25	LF	\$140	\$3,500	
Enstar-18	127+70 - 136+75	RT	underground 2-inch steel	Within Roadway Structural Section	Relocate as needed	910	LF	\$75	\$68,250	assume replace to plastic
Enstar-19	136+20	CL	underground 1-1/4-inch steel	Within Roadway Structural Section	Relocate as needed	50	LF	\$108	\$5,400	
Enstar-20	136+75 - 144+00	RT	underground 1-1/4-inch steel	Within project area	Protect in Place	730	LF	\$0	\$0	
Enstar-21	Varies	CL	multiple services across 42nd Avenue	Within Roadway Structural Section	Relocate as needed	23	EA	\$2,250	\$51,750	

Construction Costs: \$286,750

Engineering/Administration (30%) \$86,025

Total: \$373,000

Date: 6/15/2020 Basis:
Project: 42nd Avenue Upgrades
Project Number: 19-019

Prepared By: CRW
Alternative 2
[B]=local bond; [S]=state grant; [F]= federal grant

Ver. 5.1

DESIGN	Design Management	\$114,154	
<i>Start 20??</i>	PM&E Design Services	\$0	
	PM&E Design Survey	\$0	
	PM&E Design Soil	\$0	
	Contractual Dsgn Sers (Basic)	\$1,500,000	
	Contractual Dsgn Sers (Add'l)	\$400,000	
	Contractual Design Survey	\$150,000	
	Contractual Design Soils	\$75,000	
	Miscellaneous	\$0	
Subtotal			\$2,239,154

WEBPAGE DATA	
Environ	\$0
DS	\$559,789
Prelim Dsgn	\$1,119,577
Final Dsgn	\$559,789
ROW	\$164,000
Utilities	\$1,280,000
Const	\$13,377,414
Total	\$17,060,568

UTILITIES	AWWU	\$0	
<i>Start 20??</i>	MOA Shoring	\$0	
	ML&P	\$580,000	
	ACS	\$170,000	
	GCI	\$100,000	
	Enstar	\$430,000	
Subtotal			\$1,280,000

ROW	Real Estate Services	\$97,000	
<i>Start 20??</i>	Land Acquisition	\$67,000	
Subtotal			\$164,000

CONSTRUCTION	Construction Management	\$158,060	
<i>Start 20??</i>	Inspection	\$412,712	
	Materials Testing	\$87,811	
	Survey	\$61,468	
	Miscellaneous	\$0	
	Construction Contract	\$8,781,111	
Subtotal			\$9,501,162

MISCELLANEOUS	Bond Overhead (15.0%)	\$2,559,085	
	Grant Overhead (0.0%)	\$0	
	Contingency (15%)	\$1,317,167	
Subtotal			\$3,876,252

PROJECT TOTAL			\$17,060,568
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Public Involvement

Appendix L

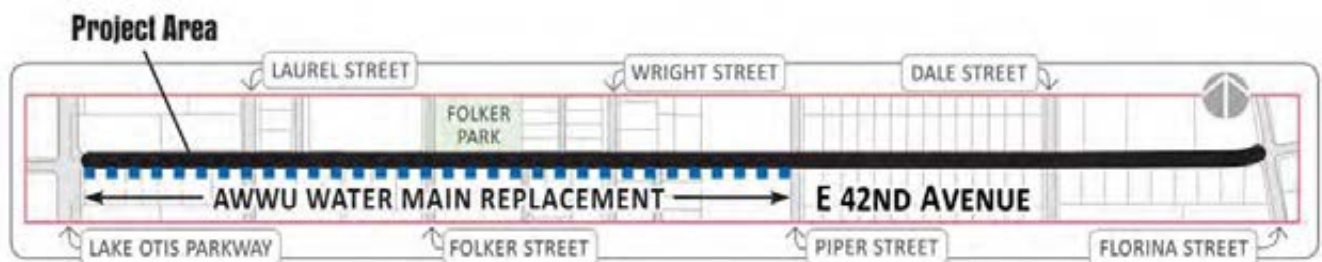


Project Scope and Background

This project will upgrade approximately 4,350 feet of East 42nd Avenue between Lake Otis Parkway and Florina Street to meet current Municipality of Anchorage (MOA) design criteria for a local roadway. Improvements are expected to include a new roadway structural section, pedestrian facilities, drainage improvements, traffic calming, street lighting, landscaping, and will replace approximately 3,000 feet of water main (as shown in map below).

The University Area Community Council has listed 42nd Avenue as their highest-priority project for many years and it is also listed in the 2016 U-Med District Plan as a roadway in need of improvement. The existing roadway is narrow with gravel shoulders in many areas, no pedestrian facilities, and discontinuous storm drain and lighting infrastructure. Numerous breaks in the existing cast iron water main indicates that it needs to be replaced.

Map of Project Area



Project Schedule and Funding

Data Collection.....Fall 2018/Spring 2019

Design Alternatives..... Summer 2019

Design Study Report.....Summer 2020

Design Phase.....Spring 2021

The project is funded through the design study phase. No funding for design or construction has been received at this time.

How to Get Involved

Visit the project website to sign up for email updates, view project documents, and stay current on upcoming meetings. You can also send comments or questions to the project team.

Project Team

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HUDDLE AK

Meeting Summary

42nd Avenue Upgrade – Lake Otis Parkway to Florina Street (PM&E# 18-06)

SUBJECT: University Area Community Council (UACC) Meeting

LOCATION: University Baptist Church, 4313 Wright Street

DATE: Wednesday, November 7, 2018, 7:00 PM

ATTENDEES: Russ Oswald (Project Management & Engineering), Holly Spoth-Torres (Huddle AK), 15-20 UACC Members

Summary

Russ and Holly attended the UACC meeting to provide information about the kick-off of the 42nd Avenue Upgrade project, answer any initial project questions, and listen to any preliminary comments and feedback from council members. The following topics were covered during a 15-minute presentation:

- The MOA, in coordination with AWWU, is investigating potential upgrades to 42nd Ave. between Lake Otis Parkway and Florina Street. The project team is in the information gathering phase of the project. Improvements could include a new road foundation, pedestrian facilities (sidewalks), street lighting, new asphalt, new storm drains, replacement of 3000 ft of water main (fire hydrants, new water service connection, pipe material and size upgrades). PM&E is coordinating with AWWU to implement road and water improvement projects simultaneously for funding efficiency and to minimize construction disruption to the neighborhood.
- There will be multiple opportunities for people to get information and stay involved in the project. The project team will present at the UACC a few times within the next year. There will be two public open houses; one likely in the late spring of 2019 and one in the fall of 2019. There is a project website with up-to-date project information. Finally, anyone can sign up for email updates to be notified when there are project updates.
- The Final Design Study Report is anticipated to be complete in February of 2020, so that design funds can be bonded for in April of 2020, preparing for construction in 2021 or 2022.
- A postcard was mailed to more than 1600 residents and property owners near the project corridor providing the same information.
- Residents should expect to receive a project questionnaire in January of 2019 to provide additional information to the project team during the information gathering phase of the project.

Comments/Questions from UACC Members

- A UACC resident asked if the AWWU portion of the project could be completed before the anticipated construction of 2021 or 2022. They indicated that 2 or 3 breaks in the water system have already occurred and they don't think the system will last that long! Russ answered that the road project and AWWU project will progress together for construction in 2021 or 2022. However, if another break does occur, AWWU has construction techniques to complete fixes in the interim (slip-lining). **Follow Up from AWWU:** The level of service of this pipe has reached a point in which AWWU has prioritized the repair or replacement of this portion of the water system. That does not mean that the system will cease to function, but it could mean that another break may occur between



HUDDLE AK

the time of project initiation to construction of the replacement system. AWWU operations and maintenance (O&M) crews are on standby 24/7 to tackle any emergency breaks and will typically have a compromised pipe by back in service within 24 hours or less. Crews can sometimes make repairs with the system under pressure, thus customers may see little or no impact to water service. Being a steward to rate payers in both of level of service and the rates, AWWU sees coordinating this project with PM&E's work being more beneficial in terms of cost, impacts and service than to complete it sooner as a standalone project.

- A UACC resident asked why the water main replacement was only going to Piper and not the entire length of the project corridor. Russ and Holly didn't know the specific reason, but will coordinate with AWWU and provide a response back to the council. **Follow-up from AWWU:** AWWU's Strategic Asset Services Section (SASS) reviewed historical break information, lifecycle model, and performed pipe condition assessment to conclude that the pipe east of Piper Street does not need to be replaced with this road project. The pipe condition assessment indicated that the pipe east of Piper Street had an average pipe wall loss of 8%. The pipe being replaced in conjunction with the PM&E 42nd Avenue Road project has a history of more breaks and in places has an average pipe wall loss approaching 40%. The age of the both areas of piping is nearly the same, thus there is much less corrosion on the pipe east of Piper Street.
- There was a comment about cars speeding down 42nd Avenue. Russ indicated that the project team would consider speeding during the information gathering phase and discuss possible solutions with the Municipal Traffic Department.
- A resident asked if the storm drains would be replaced. Russ answered that it was typical to upgrade stormwater infrastructure during road projects as the existing systems are typically old and don't meet current design criteria.
- A resident asked if lighting would be part of the project. In their opinion, it is too dark, and the streets don't feel safe for vehicles or pedestrians. Russ answered that street lighting will be considered as an option and presented as an alternative for all stakeholders to consider.
- A resident asked if curb and gutter would be included in the project. Russ responded that during the information gathering phase, the project team would analyze existing conditions (utilities, how much ROW is available, etc.) and then develop a range of feasible road section for further analysis and public comment.
- A resident commented that it would be nice if the project designers could avoid placing man-hole covers in the pathway of vehicle tires.
- A resident asked about the current funding in-hand and if there was a construction estimate. Russ answered that there is \$700K in bond funds to complete analysis and the design study report. A very rough and preliminary construction estimate is 18 million. By coupling this project with AWWU's planned upgrades, there are cost savings.



Meeting Summary

Date: October 2, 2019; 7:00 – 9:15 pm
Presenters: James Armstrong (AWWU), Justin Keene (CRW) & Holly Spoth-Torres (Huddle AK)
Location: University Baptist Church, 4313 Wright Street
Project: 42nd Avenue Upgrade – Lake Otis Parkway to Florina Street
Project No: 18-06 (CRW#10142.00)
Subject: University Area Community Council (UACC) Meeting
Attendees: About 30 UACC Members

Summary:

- Justin presented a brief project update with a display board showing the project limits (attached) and invited UACC members to Open House #1. The following topics were covered during the 5 minute presentation:
 - The MOA PM&E, in coordination with AWWU, is planning to upgrade 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements could include a new road foundation, pedestrian facilities (sidewalks), street lighting, new asphalt, new storm drains, replacement of 3,000 ft of water main from Lake Otis Parkway to Piper Street. PM&E is coordinating with AWWU to implement road and water improvement projects simultaneously for funding efficiency and to minimize construction disruption to the neighborhood. It's likely that this project will be phased construction due to funding.
 - After a summer of site investigations including a survey, geotechnical investigations, traffic analysis, and a community questionnaire, the project team is ready to present a range of conceptual roadway design cross-sections for the community to view, understand, and provide comments and feedback.
 - The dates of the upcoming Open House #1 (see attached flyer) were announced:
 - Open House #1
 - Thursday, October 17th
 - 4:30 - 6:30 PM
 - University Baptist Church
 - 4313 Wright Street, Same room as the UACC meeting room.
 - PM&E/AWWU welcomes and encourages the public and UACC members to attend this Open House to review and comment on the conceptual project information and provide feedback about existing conditions along the corridor.
 - Documents can be reviewed and comments can also be provided via the project website: www.42ndAvenueUpgrade.com

Comments/Questions from UACC Members:

- A UACC member asked if the project could be completed before the anticipated construction dates of 2022/2023. They indicated that 2 or 3 breaks in the water system have already occurred and they don't think the system will last that long! They were concerned at the length of time the project was taking. James answered that the road project and AWWU project will progress together for

construction in 2022/2023. This follows a typical capital project prioritization process for both the MOA and AWWU. However, if another break does occur, AWWU will fix water main so that it functions until completely replaced. Being a steward to rate payers in both of level of service and the rates, AWWU sees coordinating this project with PM&E's work being more beneficial in terms of cost, impacts and service than to complete it sooner as a standalone project. Holly added that projects like the 42nd Ave Upgrade project are needed all over the Anchorage Bowl and that the Assembly and Municipal Departments do their best to prioritize capital projects to deal with the most significant community needs.

- A UACC member asked why the water main replacement was only going to Piper Street and not the entire length of the project corridor. AWWU's Strategic Asset Services Section (SASS) reviewed historical break information, lifecycle model, and performed pipe condition assessment to conclude that the pipe east of Piper Street does not need to be replaced with this road project. The pipe condition assessment indicated that the pipe east of Piper Street had an average pipe wall loss of 8%. The pipe being replaced in conjunction with the PM&E 42nd Avenue Road project has a history of more breaks and in places has an average pipe wall loss approaching 40%. The age of the both areas of piping is nearly the same, thus there is much less corrosion on the pipe east of Piper Street.
- A UACC member asked about the current funding in-hand and if there was a construction estimate. Justin answered that initial capital project planning by the MOA estimates \$9.5 million, but until the project team gets into more detailed design, it is difficult to estimate. By coupling this project with AWWU's planned upgrades, there are cost savings. Due to funding constraints it is likely that construction could be phased over multiple years.
- A UACC member commented that they would like to see a safe crosswalk at 42nd Ave. and Folker St. so that people can walk safely between the Horizon House and Folker Park.
- A resident asked about heavy equipment located on 43rd Ave and wondered if this work was related to the 42nd Ave Upgrade project. James responded that this was a different AWWU project which he is also the Project Manager, the project is the E 43rd Avenue Piper to Dale Water Rehabilitation.

1. Role model good driving habits.
2. Ask children who are walking to put away mobile devices that can distract them.
3. Put reflective stickers or materials on outer clothing and bags or children.

KIDS:

1. Walk on sidewalks and use crosswalks. If no sidewalk is available, walk facing oncoming traffic.
2. Wear reflective clothing and blinking lights.
3. Always look left, right, then left again before crossing any street.

c. **UACC FCC Representative: Al Milspaugh.** No FCC meeting last month.

5. Old Business- None

6. New Business and Public Comment

A. 42nd Ave Project Resolution-Pipeline Leak, Replacement & Associated Roadbed-James Armstrong, AWWU and Russ Oswald, PM&E

Paul Stang introduced the resolution that addresses the continuing water main breakage problem affecting residents on 42nd Avenue and “wasting” of scarce funds in the continual piecemeal repair of the waterline. The resolution described the effects of these breaks on local residents. Barbara Garner also provided additional background information on the latest December 15th water main break on 42nd Avenue. She indicated there were 3 breaks on 42nd Avenue between Folker and Wright in 12 hours on this date. She said there was some water damage in homes within this area. Compared to previous cleanup efforts, AWWU, through their contractors did a good job in water removal and house cleanup.

Russ Oswald said that the project is a high priority for the Muni and AWWU, but construction will not start until at least 2023. Russ said that the water line needs to be replaced from Lake Otis to Piper while the road needs reconstruction from Lake Otis to Florina (further east). There was comment on what needs to be done to move it up to 2020 instead of 2023. Paul Stang indicated that the number of breaks on 42nd Avenue should make for a higher priority for the project. He said that there probably aren’t too many areas that need both the road repair and water line reconstruction. James Armstrong indicated that this is not that unusual for the aging Anchorage infrastructure and is not that unusual a project. He also said that 2023 construction date is a somewhat expedited schedule given normal funding cycles. The timing of the project will be for design funds to be approved in Aprils Road and Drainage bond, final design by, construction in 2022-23, and 2024-26 landscape and other 2nd phase projects being complete.

There was question about whether the water line needs to be replaced right now and not wait for the road design and subsequent construction, particularly to save on multiple repair costs. The reply was that this would be a very expensive process, and would not save money. James estimated that it would add an additional \$1,500,000 to the cost of \$19,000,000 for the project. The standalone pipeline reconstruction repair could double the cost of the pipeline replacement, with costs of upwards to \$2,000,000. Since the breaks cost “only” \$10,000 to \$15,000 to repair, so it makes economic sense to just do the repairs until the total project (road and waterline) can be reconstructed in sync.

Paul Stang made the point that this does not factor in community impacts and residents can anticipate further water damage from certain future breaks. Paul also wanted to know whether one break can cause further failures, and what can be done to assess the condition of the pipe. In replying was about the condition of the pipe, James indicated that “pinging”

Draft

the pipe indicates that the ductal pipe west of Piper has about 10% wall thickness remaining. The cast iron pipe east is about 50%. This makes replacement of the pipe west of Piper priority for the area. The pipe replacement will be with PVC, which is not subject to failure from joint expansion due to pressure fluctuations. Al Milspaugh wanted to know whether the earthquake and subsequent needed repairs has had an impact on when the 42nd Avenue project can proceed. James indicated that these repairs have been completed and do not now affect the timing of construction. Andy Josephson wanted to know how residents that have received water damage were and re-made whole by the Muni. James and Russ indicated that Muni's Risk Management Department deals with this. They didn't know the specific process, but said the impacted residents should go to the muni website, or could contact him at 907-343-6196. He also provided his business cards with this information.

Russ and James indicated they are ready to try to speed up the process, so they have no objection to the resolution being passed. Barbara Garner asked about how many breaks residents will need to suffer through before the pipe is repaired in 2023. They said they didn't know, but thought the muni might not want to spend additional millions to replace just the water line in 2020 because of the cost. Paul Stang thought he would talk with Assembly members to see if they can get the project done sooner. With that a motion was made to table the resolution. ***There was no objection to tabling the motion.***

B. Anchorage Gospel Rescue Mission Conditional Use Permit-Melissa Branch, Big City Engineers

The project is designed to improve the services to clients at the mission, but will not increase its capacity. It would also improve the parking at the site and enhance the landscaping. There would be a new wooden structure on the north side of the facility. The kitchen would be to the north, food storage would be even further to the north, and the current kitchen would be converted into a dining facility. Upstairs would be support services and a classroom. The structure would be a low profile gable structure. The paint would match the current facility. The parking would be improved by defining the spaces at the rear of the facility. The front of the facility would be cleaned up with new landscaping and better defined access to the front entrance. ***There was no opposition by the UACC to the proposal as presented.***

C. UACC Comments: Muni Case 2020-0014 Ernie Turner Center Site Re-Zone

Paul Stang detailed three Cook Inlet Tribal Councils (CITC) responses to the concerns that were surfaced by the UACC to the Ernie Turner Plan. First, the Tudor entrances will be eliminated, lessening the safety concerns brought up by UACC comments. Second, they do not plan on providing 148 parking spaces as previously indicated. They will work with the Muni to define the adequate number. They will also follow the stipulations on designs that are indicated in the UMED Plan. It was decided the UACC Executive Board will draft a new letter to CITC to revise UACC comments on the plan. Paul asked whether UACC supported the Board completing this letter. ***There was unanimous consent on the proposal.***

D. Election of UACC Officers/Call for Nominations of Board Members

It was moved to nominate the current UACC President Paul Stang, Vice President Al Milspaugh, Secretary /Treasurer Steve Zemke, and Members at Large Krista Scott and Joanie Nardini for the same positions for the 2020 calendar year. There were no other

ter drainage, along with physical abrasion from turbid running water caused the galvanized coating to be worn off and subject to excessive corrosion and subsequent failure. To alleviate this, new construction will include corrugated plastic pipe which is not subject to corrosion. Krista Davis had a question about who would bear the cost of storm drainage system in the large area just to the east of the project area. This area is currently undeveloped. Justin indicated that the developer in the area would be required to put in the drainage system and road system to meet standards stipulated in Title 21.

B. Resolution: Funding Priority for East 42nd Ave project between Folker and Wright Street- Paul Stang

Paul introduced this resolution (Attachment 4) that had been tabled from January meeting. Barbara Garner with second by Krista Davis moved to approve the resolution as presented. During discussion, Paul emphasized that reconstruction of this portion of 42nd Avenue has long been the UACC's highest priority for construction projects. Mark Fink questioned whether we should say that 42nd Avenue waterline reconstruction should be the highest priority for all of Anchorage. Paul Stang responded by stating that the water breakage issue has been a high priority for the last 20 years, but has not been dealt with other than emergency measures after breakage and flooding has occurred. The resolution states that the problem is constant and is getting much worse. Al Milspaugh noted that at the FCC level, Community Councils also asked that their road flooding projects go first to establish their priority. The question was called for vote on the motion. The vote for this motion was ***16 for, 1 opposed, with no abstentions.***

C. Election: FCC Rep/Alternates, Board Members/Standing Committee Chairmen: Safety (Community Protection), Parks & Recreation, & Others- Paul Stang

Paul asked for nominations for Executive Board members for the New Year. These are the FCC representative and the two alternatives to the FCC. Al Milspaugh, the current representative, described the duties for the FCC representative, primarily attending the FCC meeting once a month, provide UACC input to the FCC, and reporting back to the UACC on what was decided. Al Milspaugh was nominated as the FCC representative. Joanie Nardini was nominated for the FCC alternate representative. There were no other nominations for these positions. The vote for these nominations was ***16 for, 0 opposed, with no abstentions***

Paul Stang asked for nominations and election for the UACC Standing Committee Chairpersons for Safety, Parks and Recreation, Traffic and Transportation, and Planning and Zoning). Al Milspaugh was nominated for the



HUDDLE AK

Open House #1 Summary

Date: October 17, 2019
Attendees: See Sign-In Sheet
Reporter: Holly Spoth-Torres, Huddle AK
Location: University Baptist Church, 4313 Wright Street
Project: 42nd Avenue Upgrade Lake Otis Parkway to Florina Street
Project no: PM&E #18-06
Subject: Open House #1 Summary

Summary

The first Open House for the 42nd Avenue Upgrade from Lake Otis Parkway to Florina Street was held on Thursday, October 17th from 4:30 pm to 6:30 pm at the University Baptist Church at 4313 Wright Street which is located near the project limits. The goal of the meeting was to present the project to the community in an open format where attendees could talk to project representatives one-on-one and provide general feedback. Conceptual typical roadway cross-sections that were established in the Final Technical Memorandum were presented to the public for their comments.

The project team had a variety of project information presented on boards and scrolls including:

- Conceptual roadway cross-sections improvements for three different segments;
- Summary of Proposed Improvements
- Proposed AWWU watermain improvement cross-section;
- Project timeline; and,
- Project aerial scrolls: these showed the extent of the project area as well as conceptual cross-section options for different segments.

Attendees provided feedback by speaking with project representatives and writing their comments on either comment sheets or directly on the aerial scrolls.

A copy of all the meeting materials and a summary of comments are included as attachments to this report.

Open House Advertising

Community Council: The project Open House was announced by Justin Keene and Holly Spoth-Torres at the University Area Community Council meeting on Wednesday, October 2nd, 2019.

Mailing: A mailer invitation to the Open House was sent by postcard via the USPS mail on October 1st, 2019.

Web: The project Open House details, including the date, time, and location, were posted on the project website on September 30th, 2019.



HUDDLE AK

E-mail: Two Constant Contact emails were sent to the project email list announcing the Open House:

1. Announce Open House (10-2-2019)
2. Reminder for Open House (10-14-2019)

Open House Follow-up

Following the Open House, the graphical displays will be made available on the project website. An email will be sent to the project email list thanking those who were able to attend and giving updates to those who were not able to attend.

Attachments

1. Comment Summary
2. Written Comments Received
3. Sign-in Sheet
4. Graphical displays and maps
5. Advertisements



HUDDLE AK

Open House #1 Comment Summary

Date: October 17, 2019
Project: 42nd Avenue Upgrade Lake Otis Parkway to Florina Street
Project no: PM&E #18-06
Subject: Open House Scroll Comments

Source	Comment
Segments A & B	Downhill becomes icy and stops become difficult (east of Laurel St).
Segments A & B	Icy and slippery (east of Laurel St).
Segments A & B	Difficult for pedestrians (between Folker and Laurel).
Segments A & B	Narrow/dark (between Folker and Laurel).
Segments A & B	Consider a traffic circle here? (intersection of Folker and 42 nd)
Segments A & B	Ponding/Standing Water (intersection of Folker and 42 nd)
Segments A & B	All the 4-way stops in corridor seem warranted (intersection of Folker and 42 nd)
Segments A & B	Disagree to 4-way stop (intersection of Folker and 42 nd)
Segments A & B	Most people park here (west of Folker Park). Very few park along 42 nd .
Segments A & B	People parked along here during park dedication. (south of Folker park)
Segments A & B	Parcel 111 In favor of street lights in favor of pedestrian facilities (west of Piper).
Segments A & B	Concerned about losing trees. Suggest planting new trees. (west of Piper)
Segments A & B	Supportive of 8-foot path
Segments A & B	8-foot path good for elderly
Segments A & B	Like Option 1 better than Option 2
Segment C	Very very busy intersection; look at traffic circle? (Piper and 42 nd)
Segment C	Pedestrians have to wait a long time to cross; need pedestrian signs (crossing Piper).
Segment C	Causes sight issues but does provide place to sit and rest (northeast corner of Piper and 42 nd).
Segment C	Speeding (between Dale and Piper).
Segment C	Steep drive grade! (at lot 151) Reduce buffer width to lessen slope. Remove/don't include sidewalk?
Segment D	Sight issues with bush and dumpster (Florina and 42 nd).
Segment D	Ponding (Florina and 42 nd).
Segment D	Give someone this much and they will park. Give an inch take a mile (3.5-foot shoulders).
Segment D	Reduce roadway improvements to narrow it up.

PUBLIC COMMENT FORM

PM&E PROJECT #18-06



42ND AVENUE UPGRADE

LAKE OTIS PARKWAY TO FLORINA STREET



NAME	
ADDRESS	
EMAIL	
PHONE	

☐ Check here to sign up for email project updates!

COMMENTS:

LESS PAVEMENT, MORE GREEN SPACE.

1 SIDEWALK, NORTH SIDE OF ROAD FOR NORTHERN FRIENDLY

NO ONE STREET DEDICATED PARKING - SIDEWALK REMOVAL ISSUES.

DRAINAGE IS ISSUE ON 42ND BETWEEN PIPER + DALE

TRAFFIC CALMING - FIX CUTTHROUGH TRAFFIC

BY ADDING DIVERTERS AT 42ND + DALE

ADD ROUNDABOUT AT PIPER + 42ND, OR AT

LEAST FIX "BASED" INTERSECTION NOT BUILT RIGHT.

Please submit this comment form to any member of the project team or send to:
CRW Engineering Group, LLC • 3940 Arctic Boulevard, Suite 300 • Anchorage, AK 99503
Email: Comments@CRWEng.com

www.42AvenueUpgrade.com



42ND AVENUE UPGRADE

LAKE OTIS PARKWAY TO FLORINA STREET

Open House #1
Thursday, October 17, 2019
4:30 pm - 6:30 pm
University Baptist Church



NAME	ADDRESS	PHONE	EMAIL ADDRESS	CHECK HERE TO RECEIVE EMAIL UPDATES!
Pete Petersen				✓ already get them
Rita Spencer				✓
Tom Atkinson				
Darryl Pinkham				
BARBARA GARNER				✓
Sandy Baker				✓
Paige Brown				
Rodney Brown				✓
Phillip Todd				
Joanie Nardini				✓
Marcy Lee Lauinger ²				✓
Leanne Gillman				
ALLEN POLLARD ⁽²⁾				
Chad Harder ⁽²⁾				✓
Jeanene Forester				✓



PM&E PROJECT #18-06

University Baptist Church

[illegible]



Municipality of Anchorage
Project Management & Engineering Department
Anchorage Water & Wastewater Utility

42ND AVENUE UPGRADE

LAKE OTIS PARKWAY TO FLORINA STREET

Project Timeline



* Construction for this project is not yet funded.
Anticipate phased construction.
Limits of project phasing have not been set.

42ND AVENUE UPGRADE

LAKE OTIS PARKWAY TO FLORINA STREET

Summary of Proposed Improvements

- Roadway base and asphalt pavement
- Curb and gutter
- Piped drainage system
- Pedestrian facilities
- Street lighting
- 3,000 feet of water main replacement



42ND AVENUE UPGRADE

LAKE OTIS PARKWAY TO FLORINA STREET

Questionnaire Responses (Completed Feb 2019)

QUESTIONS	ANSWERS	
	Yes	No
1 Do you have concerns about speeding along 42 nd Avenue?	27	14
2 Do you think there should be on-street parking along 42 nd Avenue?	17	24
3 Have you noticed any sight distance problems along 42 nd Avenue?	17	23
4 Pedestrian facilities will be constructed as part of the proposed improvements. Should pedestrian facilities be constructed on both sides of the roadway?	25	16
5 Are you aware of any drainage problems within the project area that need to be corrected?	21	20



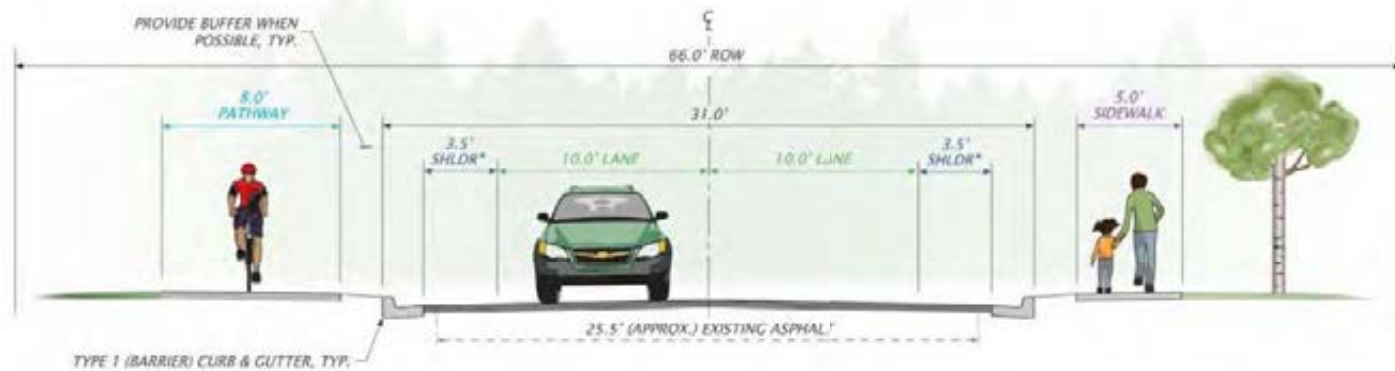
Municipality of Anchorage
Project Management & Engineering Department
Anchorage Water & Wastewater Utility

42ND AVENUE UPGRADE

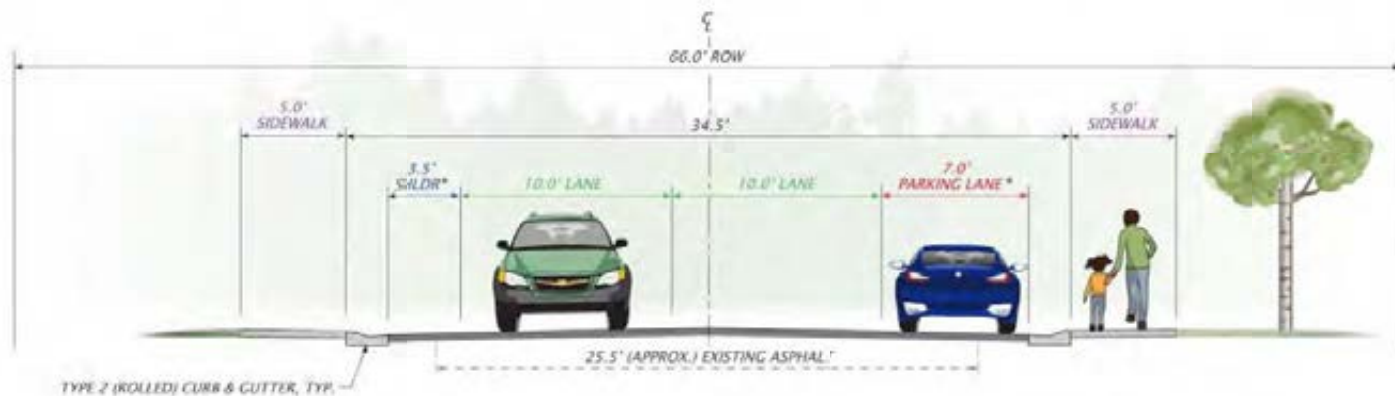
LAKE OTIS PARKWAY TO FLORINA STREET

Segments A & B – Lake Otis Parkway to Piper Street

Potential
Option 1



Potential
Option 2



* No roadway markings (e.g., centerline, shoulder, parking lane) are proposed.



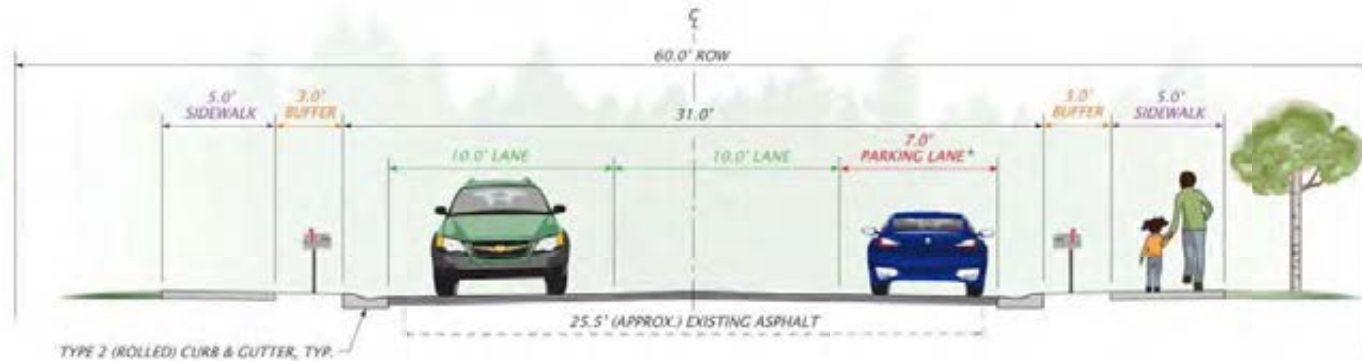
Municipality of Anchorage
Project Management & Engineering Department
Anchorage Water & Wastewater Utility

42ND AVENUE UPGRADE

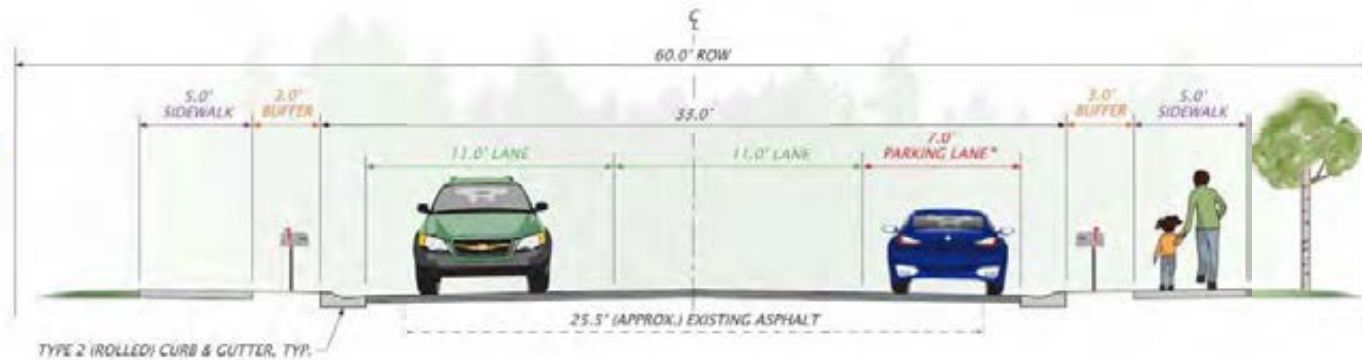
LAKE OTIS PARKWAY TO FLORINA STREET

Segment C – Piper Street to Dale Street

Conceptual
Option 1



Conceptual
Option 2



* No roadway markings (e.g., centerline, shoulder, parking lane) are proposed.



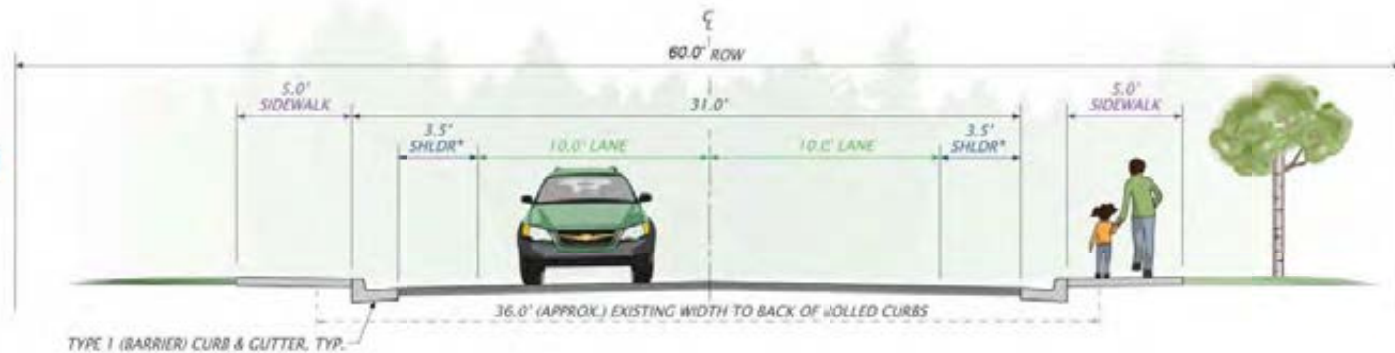
Municipality of Anchorage
Project Management & Engineering Department
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42ND AVENUE UPGRADE

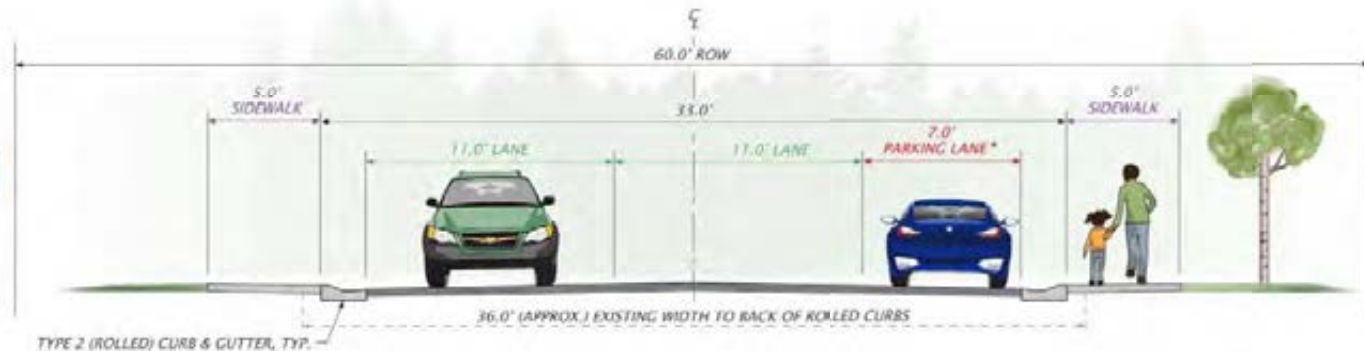
LAKE OTIS PARKWAY TO FLORINA STREET

Segment D – Dale Street to Florina Street

Conceptual
Option 1



Conceptual
Option 2



* No roadway markings (e.g., centerline, shoulder, parking lane) are proposed.



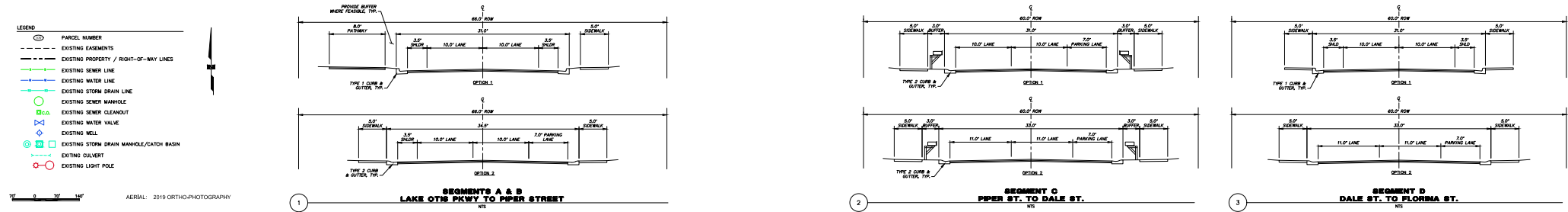
Municipality of Anchorage
Project Management & Engineering Department
Anchorage Water & Wastewater Utility

42ND AVENUE UPGRADE

LAKE OTIS PARKWAY TO FLORINA STREET

Proposed Water Improvements – Lake Otis Parkway to Piper Street







The Municipality of Anchorage (MOA) is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street (see map on back). Improvements are expected to include:



- New road foundation
- New asphalt pavement
- New storm drain system
- New pedestrian facilities
- Improved street lighting
- 3,000 ft of water main replacement

OPEN HOUSE #1: October 17, 2019, 4:30 pm - 6:30 pm

Univeristy Baptist Church, 4313 Wright Street

Attend the meeting to see a variety of alternatives that show what the roadway improvements could look like. We want to know what **you** think about potential road design concepts.

The MOA has contracted with CRW Engineering Group, LLC to provide preliminary engineering and design services. The project is funded through the Design Study Report (DSR) phase. No funding for construction has been received at this time.

YOU ARE INVITED!

OPEN HOUSE #1

WHEN: Thursday, October 17, 2019

WHERE: University Baptist Church
4313 Wright Street

TIME: 4:30 - 6:30 pm
Stop by anytime!

Talk to a project representative to ask questions, learn about the project, and tell us what you think.

For more information and to sign up for e-mail updates, please visit the web page or contact:

Holly Spoth-Torres,
Public Involvement

(907) 223-0136 • comments@crweng.com

www.42ndAvenueUpgrade.com



3940 Arctic Blvd. Suite 300
Anchorage, Alaska 99503

Project Area



42nd Avenue Upgrade

Lake Otis Parkway to Florina Street



www.42ndAvenueUpgrade.com

Holly Spoth-Torres

From: CRW Engineering Group LLC <crwadmin@crweng.ccsend.com> on behalf of CRW Engineering Group LLC <comments@crweng.com>
Sent: Wednesday, October 2, 2019 9:33 AM
To: Holly Spoth-Torres
Subject: You Are Invited! 42nd Avenue Upgrade - Open House #1



YOU ARE INVITED!

OPEN HOUSE #1

WHEN: Thursday, October 17, 2019

WHERE: University Baptist Church, [4313 Wright Street](#)

TIME: 4:30 PM - 6:30 PM (stop by anytime!)

Attend the meeting to see a variety of alternatives that show what 42nd Avenue roadway improvements could look like. We want to know what YOU think about potential road design concepts.

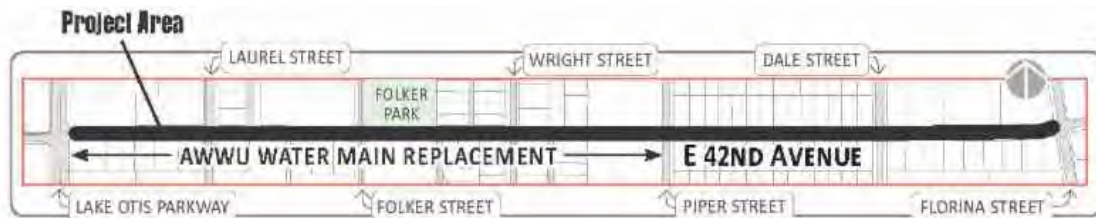
PROJECT BACKGROUND

The Municipality of Anchorage is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements are expected to include:

- New road foundation

- New pedestrian facilities
- Improved street lighting
- New asphalt pavement
- New storm drain system
- Replacement of 3,000 feet of existing AWWU water main:
 - Fire hydrant type and spacing improvements
 - Water service connection sizing study and upgrade
 - Hydraulic and flow analysis including a pipe sizing study
 - Flow control and redundancy planning
 - Pipe material selection

PROJECT AREA



GET INVOLVED

1. Attend Open House #1 on October 17, 2019 anytime between 4:30 PM and 6:30 PM at University Baptist Church (4313 Wright Street).
2. Visit the project website for meeting schedules and project documents.

For more information and to sign up for email updates, contact project staff or visit the project website:

Email: Comments@CRWEng.com



PROJECT WEBSITE

Holly Spoth-Torres

From: CRW Engineering Group LLC <crwadmin@crweng.ccsend.com> on behalf of CRW Engineering Group LLC <comments@crweng.com>
Sent: Monday, October 14, 2019 1:27 PM
To: Holly Spoth-Torres
Subject: REMINDER: This week! You Are Invited! 42nd Avenue Upgrade - Open House #1



REMINDER: YOU ARE INVITED!

OPEN HOUSE #1

WHEN: Thursday, October 17, 2019
WHERE: University Baptist Church, [4313 Wright Street](#)
TIME: 4:30 PM - 6:30 PM (stop by anytime!)

Attend the meeting to see a variety of alternatives that show what 42nd Avenue roadway improvements could look like. We want to know what YOU think about potential road design concepts.

PROJECT BACKGROUND

The Municipality of Anchorage is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements are expected to include:

- New road foundation

- New pedestrian facilities
- Improved street lighting
- New asphalt pavement
- New storm drain system
- Replacement of 3,000 feet of existing AWWU water main:
 - Fire hydrant type and spacing improvements
 - Water service connection sizing study and upgrade
 - Hydraulic and flow analysis including a pipe sizing study
 - Flow control and redundancy planning
 - Pipe material selection

PROJECT AREA



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Email: Comments@CRWEng.com

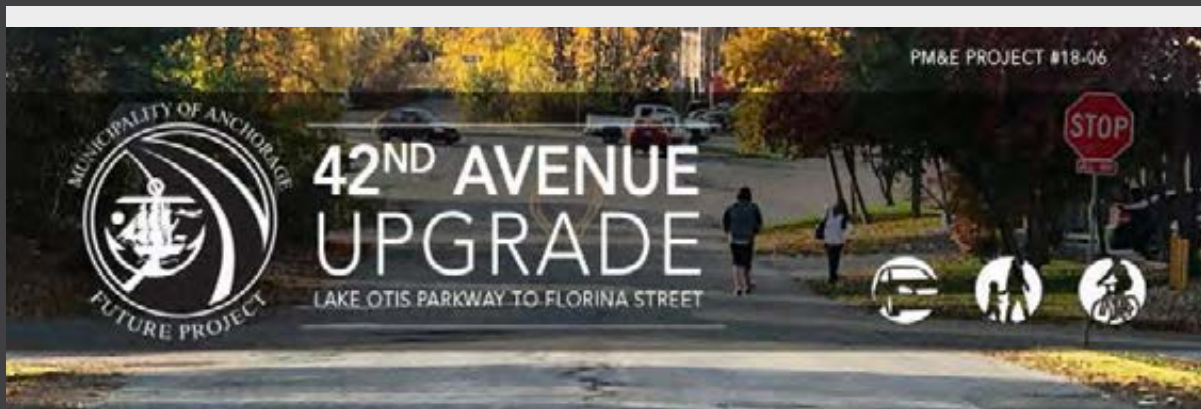


PROJECT WEBSITE

Justin Keene

From: CRW Engineering Group LLC <crwadmin@crweng.ccsend.com> on behalf of CRW Engineering Group LLC <comments@crweng.com>
Sent: Monday, October 28, 2019 10:33 AM
To: Justin Keene
Subject: Thank you for attending! 42nd Avenue Upgrade - Open House #1 & Business Stakeholder Meeting

Categories: Filed by Newforma



Thank you for attending!

Thank you for attending Open House #1 or the Business Stakeholder Meeting. It was great to meet you and talk about what the 42nd Avenue roadway improvements could look like. Your input and comments are important to the project team. If you want to provide additional comments or if you weren't able to attend, you can view meeting documents and provide comments via project website. Finally, as the project progresses you will receive email updates at important milestones.

www.42ndavenueupgrade.com

PROJECT BACKGROUND

The Municipality of Anchorage is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements are expected to include:

- New road foundation
- New pedestrian facilities
- Improved street lighting
- New asphalt pavement
- New storm drain system
- Replacement of 3,000 feet of existing AWWU water main:
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 - Flow control and redundancy planning
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PROJECT AREA



GET INVOLVED

Visit the project website for meeting schedules and project documents.

For more information and to sign up for email updates, contact project staff or visit the project website:

Email: Comments@CRWEng.com



PROJECT WEBSITE

CRW Engineering Group LLC | 3940 Arctic Boulevard, Suite 300, Anchorage, AK 99503

[Unsubscribe jkeene@crweng.com](mailto:jkeene@crweng.com)

[Update Profile](#) | [About Constant Contact](#)

Sent by comments@crweng.com in collaboration with





HUDDLE AK

Business Stakeholder Meeting Summary

Date: October 24, 2019
Attendees: See Sign-In Sheet
Reporter: Holly Spoth-Torres, Huddle AK
Location: University Baptist Church, 4313 Wright Street
Project: 42nd Avenue Upgrade Lake Otis Parkway to Florina Street
Project no: PM&E #18-06
Subject: Business Stakeholder Meeting Summary

Summary

The Business Stakeholder Meeting for the 42nd Avenue Upgrade from Lake Otis Parkway to Florina Street was held on Thursday, October 24th from 2:00 pm to 4:00 pm at the University Baptist Church at 4313 Wright Street which is located near the project limits. The goal of the meeting was to present the project to businesses in the corridor in an open format setting where attendees could talk to project representatives one-on-one and provide feedback. As a business in the project area, one-on-one time with project representatives is valuable as the project progresses. It is necessary to understand the complexities of business operations. Conceptual typical roadway cross-sections that were established in the Final Technical Memorandum were presented for comments.

The project team had a variety of project information presented on boards and scrolls including:

- Conceptual roadway cross-sections improvements for three different segments;
- Summary of Proposed Improvements
- Proposed AWWU watermain improvement cross-section;
- Project timeline; and,
- Project aerial scrolls: these showed the extent of the project area as well as conceptual cross-section options for different segments.

Attendees provided feedback by speaking with project representatives and writing their comments on either comment sheets or directly on the aerial scrolls. A copy of all the meeting materials and a summary of comments are included as attachments to this report.

Business Stakeholder Meeting Advertising

Door to Door: In order to make personal contact and introductions with building owners, business owners and property managers, Holly Spoth-Torres went door-to-door for 4-hours on Thursday, October 10th. Holly distributed a Business Stakeholder meeting invitation and collected contacts to be added to the project email list.

E-mail: Two emails were sent to the business/building owners and property managers:

1. Announce Business Stakeholder Meeting (10-14-2019)
2. Reminder for Open House (10-23-2019)



HUDDLE AK

Business Stakeholder Meeting

Following the Business Stakeholder meeting, the graphical displays will be made available on the project website. An email will be sent to the project email list thanking those who were able to attend and giving updates to those who were not able to attend.

Attachments

1. Comment Summary
2. Sign-in Sheet
3. Advertisements
4. Meeting Presentation Materials



HUDDLE AK

Business Stakeholder Meeting Comment Summary

Date: October 24, 2019
Project: 42nd Avenue Upgrade Lake Otis Parkway to Florina Street
Project no: PM&E #18-06
Subject: Open House Scroll Comments

Source	Comment
Segments A & B	Medical facilities need to be provided temporary water during construction.
Segments A & B	Please provide as much notice as possible for water disruption.
Segments A & B	Please switch/transition water service during non-business hours.
Segments A & B	The Geneva Woods Birth Center operates 24 hours/day, 365 days per year
Segments A & B	There are trees near/in the ROW on the north side of the Geneva Woods property. The Cottonwood are OK to remove, but would like to salvage, relocate, or transplant the Spruce.
Segments A & B	Geneva Woods Birth Center has a stub to connect to the storm drain system, however since they completed their parking lot improvements (dry well, swale, and other landscape improvements), all drainage is contained on site and ponding no longer occurs.

PM&E PROJECT #18-06



42ND AVENUE UPGRADE

LAKE OTIS PARKWAY TO FLORINA STREET

Business Stakeholder Meeting
Thursday, October 24, 2019
2:00 pm - 4:00 pm
University Baptist Church



STOP

NAME

ADDRESS

PHONE

EMAIL ADDRESS

CHECK HERE TO
RECEIVE EMAIL
UPDATES!

Kirsten McDaniel

Brad Cruz

Holly Spoth-Torres

From: Holly Spoth-Torres
Sent: Monday, October 14, 2019 11:53 AM
To: Justin Keene
Cc: Bill Johnson; Makela, Julie A; Armstrong, James R.
Subject: 42nd Ave Upgrade - Follow Up - Business Stakeholder Meeting

42nd Avenue Upgrade Stakeholder:

You are receiving this email because you are a business owner, building manager, and/or building owner near 42nd Ave. I've spoken with almost all of you in-person or over the phone. First, I want to THANK YOU for your time! It was nice to meet all of you while sharing a little information about the Municipality of Anchorage 42nd Avenue Upgrade Project.

Second, I wanted to follow up in writing so you have all the information we talked about at your fingertips. This email has the following:

- Link to the project website with the most updated project information (schedules, meetings, documents, contacts, link to provide comments, etc.)
<http://42ndavenueupgrade.com/>
- Information below (scroll to bottom of email) about the Business Stakeholder Meeting on **Thursday, October 24th from 2 PM – 4 PM at University Baptist Church (4313 Wright Street).**
- My contact details are below. Don't hesitate to call or write if you have questions about the project or need more information.

After this email, we will add you to the project email list and you will receive eNewsletters periodically at important milestones and when there is new information to share.

Holly Spoth-Torres
Principal



721 Depot Drive | Anchorage, AK 99501
Cell and Text (907) 223-0136
www.huddleak.com



The Municipality of Anchorage (MOA) is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street (see map on back). Improvements are expected to include:



- New road foundation
- New asphalt pavement
- New storm drain system
- New pedestrian facilities
- Improved street lighting
- 3,000 ft of water main replacement

BUSINESS STAKEHOLDER MEETING: October 24, 2019, 2:00 pm - 4:00 pm

Univeristy Baptist Church, 4313 Wright Street

Attend the meeting to see a variety of alternatives that show what the roadway improvements could look like. We want to know what **you** think about potential road design concepts.

The MOA has contracted with CRW Engineering Group, LLC to provide preliminary engineering and design services. The project is funded through the Design Study Report (DSR) phase. No funding for construction has been received at this time.

October 2019

YOU ARE INVITED

BUSINESS STAKEHOLDER MEETING

WHEN: Thursday, October 24, 2019

WHERE: University Baptist Church
4313 Wright Street

TIME: 2:00 - 4:00 pm
Stop by anytime!

Talk to a project representative, ask questions, learn about the project, and tell us what you think.

For more information and to sign up for e-mail updates, please visit the web page or contact:

Holly Spoth-Torres,
Public Involvement

(907) 223-0136 • comments@crweng.com

www.42ndAvenueUpgrade.com

Holly Spoth-Torres

From: Holly Spoth-Torres
Sent: Wednesday, October 23, 2019 8:25 AM
To: Justin Keene
Cc: Bill Johnson; Makela, Julie A; Armstrong, James R.
Subject: REMINDER: 42nd Ave Upgrade - Business Stakeholder Meeting - TOMORROW

42nd Avenue Upgrade Stakeholder:

Meeting reminder. See below!

From: Holly Spoth-Torres
Sent: Monday, October 14, 2019 11:53 AM
To: Justin Keene <jkeene@crweng.com>
Cc: Bill Johnson <bjohnson@crweng.com>; Makela, Julie A <julie.makela@anchorageak.gov>; Armstrong, James R. <James.Armstrong@awwu.biz>
Subject: 42nd Ave Upgrade - Follow Up - Business Stakeholder Meeting

42nd Avenue Upgrade Stakeholder:

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Second, I wanted to follow up in writing so you have all the information we talked about at your fingertips. This email has the following:

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<http://42ndavenueupgrade.com/>
- Information below (scroll to bottom of email) about the **Business Stakeholder Meeting on Thursday, October 24th from 2 PM – 4 PM at University Baptist Church (4313 Wright Street).**
- My contact details are below. Don't hesitate to call or write if you have questions about the project or need more information.

After this email, we will add you to the project email list and you will receive eNewsletters periodically at important milestones and when there is new information to share.

Holly Spoth-Torres
Principal



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- New asphalt pavement
- New storm drain system
- New pedestrian facilities
- Improved street lighting
- 3,000 ft of water main replacement

BUSINESS STAKEHOLDER MEETING: October 24, 2019, 2:00 pm - 4:00 pm

Univeristy Baptist Church, 4313 Wright Street

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October 2019

YOU ARE INVITED

BUSINESS STAKEHOLDER MEETING

WHEN: Thursday, October 24, 2019

WHERE: University Baptist Church
4313 Wright Street

TIME: 2:00 - 4:00 pm
Stop by anytime!

Talk to a project representative, ask questions, learn about the project, and tell us what you think.

For more information and to sign up for e-mail updates, please visit the web page or contact:

**Holly Spoth-Torres,
Public Involvement**

(907) 223-0136 • comments@crweng.com

www.42ndAvenueUpgrade.com



Municipality of Anchorage
Project Management & Engineering Department
Anchorage Water & Wastewater Utility

42ND AVENUE UPGRADE

LAKE OTIS PARKWAY TO FLORINA STREET

Project Timeline



* Construction for this project is not yet funded.
Anticipate phased construction.
Limits of project phasing have not been set.

42ND AVENUE UPGRADE

LAKE OTIS PARKWAY TO FLORINA STREET

Summary of Proposed Improvements

- Roadway base and asphalt pavement
- Curb and gutter
- Piped drainage system
- Pedestrian facilities
- Street lighting
- 3,000 feet of water main replacement





42ND AVENUE UPGRADE

LAKE OTIS PARKWAY TO FLORINA STREET

Questionnaire Responses (Completed Feb 2019)

QUESTIONS	ANSWERS	
	Yes	No
1 Do you have concerns about speeding along 42 nd Avenue?	27	14
2 Do you think there should be on-street parking along 42 nd Avenue?	17	24
3 Have you noticed any sight distance problems along 42 nd Avenue?	17	23
4 Pedestrian facilities will be constructed as part of the proposed improvements. Should pedestrian facilities be constructed on both sides of the roadway?	25	16
5 Are you aware of any drainage problems within the project area that need to be corrected?	21	20



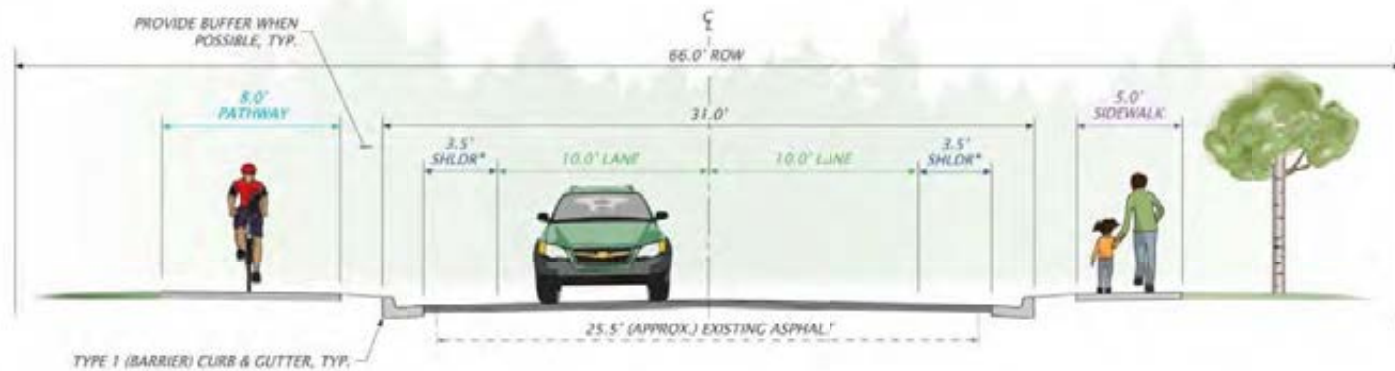
Municipality of Anchorage
Project Management & Engineering Department
Anchorage Water & Wastewater Utility

42ND AVENUE UPGRADE

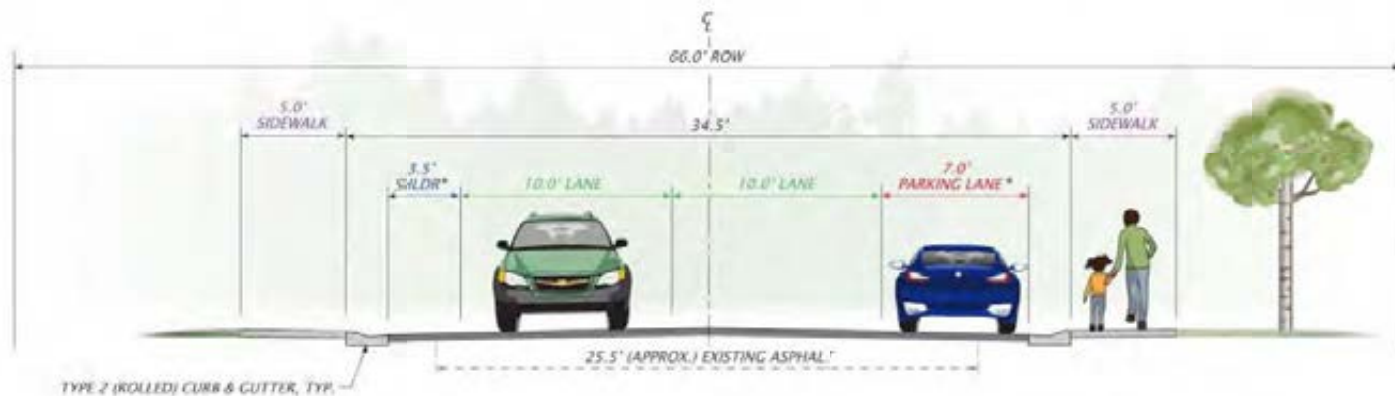
LAKE OTIS PARKWAY TO FLORINA STREET

Segments A & B – Lake Otis Parkway to Piper Street

Potential
Option 1



Potential
Option 2



* No roadway markings (e.g., centerline, shoulder, parking lane) are proposed.



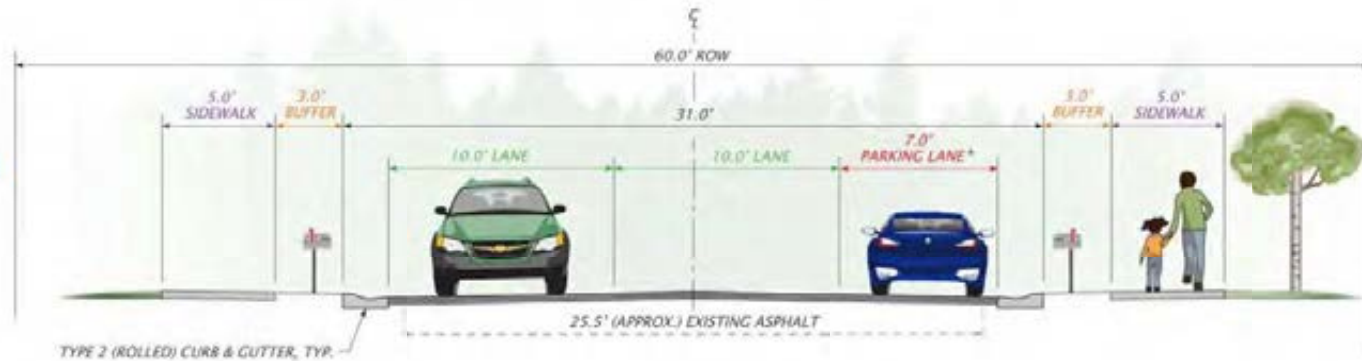
Municipality of Anchorage
Project Management & Engineering Department
Anchorage Water & Wastewater Utility

42ND AVENUE UPGRADE

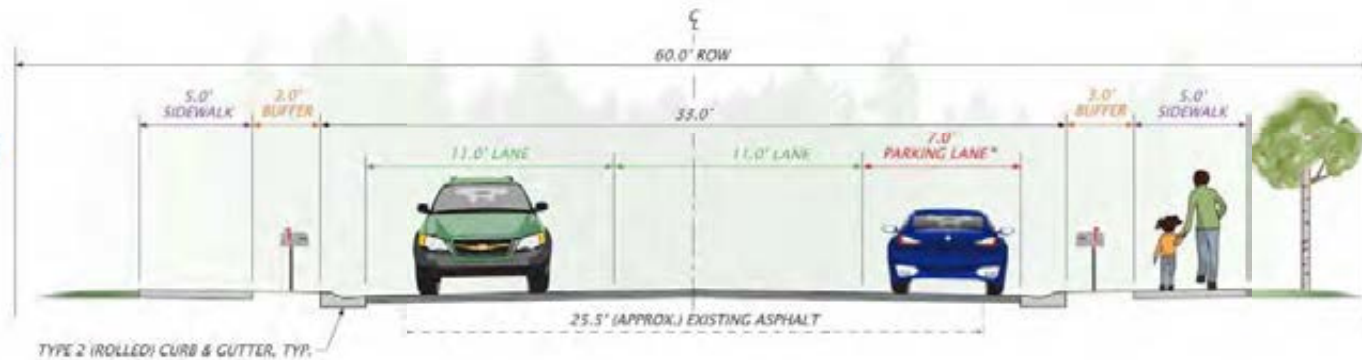
LAKE OTIS PARKWAY TO FLORINA STREET

Segment C – Piper Street to Dale Street

Conceptual
Option 1



Conceptual
Option 2



* No roadway markings (e.g., centerline, shoulder, parking lane) are proposed.



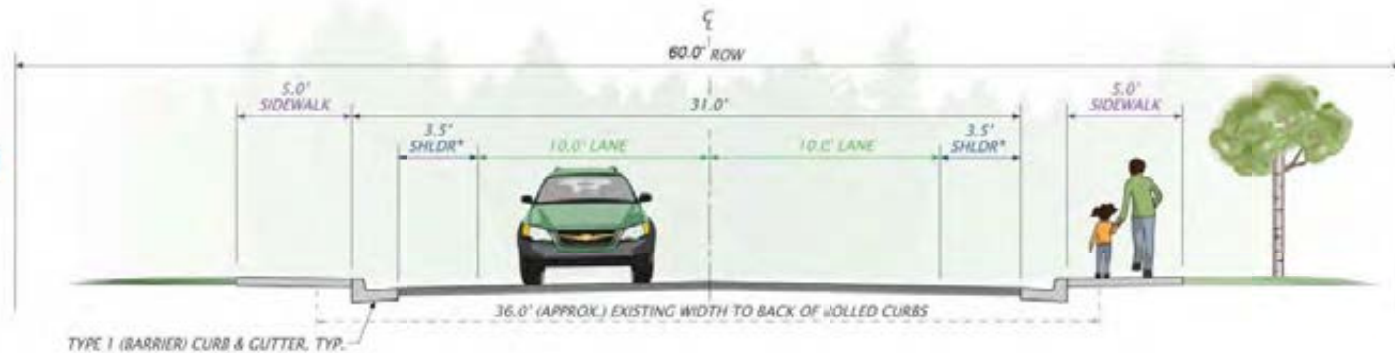
Municipality of Anchorage
Project Management & Engineering Department
Anchorage Water & Wastewater Utility

42ND AVENUE UPGRADE

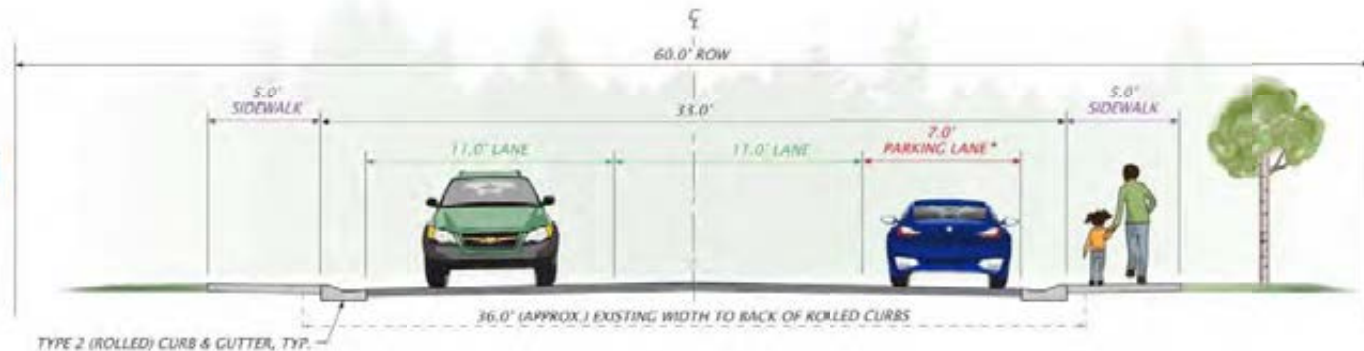
LAKE OTIS PARKWAY TO FLORINA STREET

Segment D – Dale Street to Florina Street

Conceptual
Option 1



Conceptual
Option 2



* No roadway markings (e.g., centerline, shoulder, parking lane) are proposed.



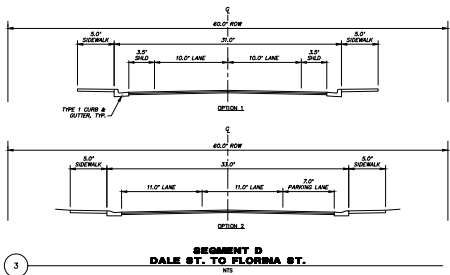
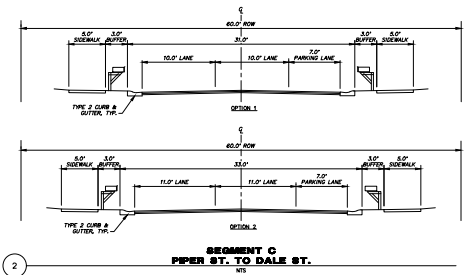
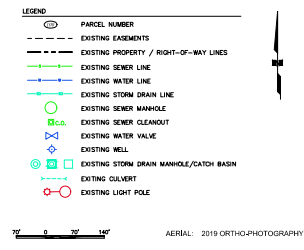
Municipality of Anchorage
Project Management & Engineering Department
Anchorage Water & Wastewater Utility

42ND AVENUE UPGRADE

LAKE OTIS PARKWAY TO FLORINA STREET

Proposed Water Improvements – Lake Otis Parkway to Piper Street





Holly Spoth-Torres

From: Justin Keene <jkeene@crweng.com>
Sent: Friday, November 09, 2018 3:52 PM
To: [REDACTED]
Subject: RE: 42nd Ave Upgrade

Hello Steve,

I'm the Design Project Manager for the 42nd Avenue Upgrade project, thank you for your e-mail.

We apologize that the flyer didn't make it out to better coincide when our survey crews began surveying out along E. 42nd Avenue. However rest assured that we have not been onto your property surveying in the backyard and typically don't need to access backyard properties unless we have a unique situation where we need to pick up a back property corner. If we do need access to your property, we'll coordinate with you to gain approval before entering into your backyard. I also left a voice mail with you by calling [REDACTED]. If you would like to discuss in more detail don't hesitate to call me back at 646-5632 at your convenience or if you have any questions, comments or concerns throughout the project.

If you would like to sign up for Constant Contact e-mail updates throughout the project duration please let me know or feel free to sign up by selecting this link:

https://visitor.r20.constantcontact.com/manage/optin?v=001ESuSGaJpYPCTQdwUHDv-Kx-XmkvBW7UxUf1d_Ci55dqllbAVe4z_7xTzDVtfSUZephRIZZ9ONqEB8horjxO2qSlxwSGm9nqwwdfzR6FvR7M%3D

Again, sorry for the misstep and hope you have a nice weekend.

Thank you,
Justin

Justin Keene, PE

Civil Engineer

CRW Engineering Group, LLC

3940 Arctic Blvd, Ste. 300

Anchorage AK 99503

Office 907-562-3252 | Direct 907-646-5632

www.crweng.com

From: [REDACTED]
Sent: Friday, November 9, 2018 6:02 AM
To: Comments
Cc: Cheryl Evans
Subject: 42nd Ave Upgrade

Thanks for sending out the flyer on the upgrade. I'm not sure who is responsible for project timing and your notifications but I think that a flyer that comes in the mail yesterday (November 8) saying to expect to see survey crews in the neighborhood in late October is a little late. Should have gone out before the crews started their work. P.S, if those crews were in the back yard of my property putting up stakes and had to go through my gate to the back yard, I would have liked to see a notice on my front door saying something like,

hey we were here doing what not, instead of me coming home and saying, what the - - -. I know it isn't required but it would be neighborly.

v/r, [REDACTED] E. 42nd Ave.

Holly Spoth-Torres

From: Justin Keene <jkeene@crweng.com>
Sent: Thursday, October 03, 2019 11:13 AM
To: [REDACTED]
Cc: Oswald, Russ H.; Makela, Julie A; Bill Johnson; Holly Spoth-Torres
Subject: RE: You Are Invited! 42nd Avenue Upgrade - Open House #1

Good Morning Karen,

Thank you for your comment regarding the request for a crosswalk. We understand that the University Area Community Council has been requesting a crosswalk be installed at the Folker Street/42nd Avenue north side crossing location. We will add your comment to our master comment list and will coordinate with the MOA Traffic Department about a crosswalk at this location as we develop our design for upgrades to 42nd Avenue.

Note, MOA would like to meet with the you and the residents at Horizon House to present the material from 42nd Avenue Upgrade Open House #1 in case some of your residents can't attend the Open House #1. They will be coordinating with you within the next month to setup a meeting.

Thank you,
Justin

Justin Keene, PE
Principal/Civil Engineer
CRW Engineering Group, LLC
3940 Arctic Blvd, Ste. 300
Anchorage AK 99503
Office 907-562-3252 | Direct 907-646-5632
www.crweng.com

Hello,

I wanted to voice my opinion regarding the crosswalk that needs to be put in by Providence Horizon House. I walk often with residents over to Folker Park. Cars do not stop for people with walkers at times. Please for the safety of our elders please put in a marked cross-walka the corner of Folker and 42nd street.

[REDACTED]

From: CRW Engineering Group LLC [<mailto:crwadmin@crweng.ccsend.com>] **On Behalf Of** CRW Engineering Group LLC
Sent: Wednesday, October 02, 2019 9:33 AM

Holly Spoth-Torres

From: Justin Keene <jkeene@crweng.com>
Sent: Thursday, December 05, 2019 2:20 PM
To: Makela, Julie A
Cc: Oswald, Russ H.; Erica Jensen; Holly Spoth-Torres
Subject: 18-06 42nd Avenue - [REDACTED]) Phone Call Summary

Hi Julie,

I caught up with [REDACTED] Parcel 1 [REDACTED] today to see if [REDACTED] was still planning on submitting comments based upon the concepts presented at the first Open House & after she reviewed the Final Tech Memo posted on the website, here is a summary of our conversation:

- [REDACTED] hasn't had time to provide written comments yet. [REDACTED] not sure when or if she is going to have time so she gave me some verbal comments that I told her I would share with PM&E.
- [REDACTED] would like to see the street width be narrower than what was presented in the concept cross sections to try and dissuade speeding and minimize traffic using the roadway.
- [REDACTED] really would like to see less vehicular traffic using 42nd Avenue and promote traffic to use 40th Avenue instead.
- [REDACTED] wants our 42nd Avenue improvements to focus on increasing safety for the neighborhood, especially the non-motorized traffic.
- I asked if [REDACTED] thought we should install a pedestrian facility on both sides of the roadway and she explained that if vehicular traffic is lower on the roadway then only one pedestrian facility is really needed. However she wasn't against providing two pedestrian facilities since it would provide increased safety for non-motorized traffic.

Thanks,
Justin

Justin Keene, PE
Principal/Civil Engineer

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Anchorage AK 99503
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www.crweng.com

Holly Spoth-Torres

From: [REDACTED]
Sent: Monday, November 19, 2018 7:46 PM
To: comments@crweng.com; Holly Spoth-Torres
Subject: 42nd Avenue Upgrade

This is a public comment on the 42nd Avenue Upgrade project: the section of Folker Street in front of Providence Horizon House (immediately north of 42nd) does not have sidewalks. The 42nd Ave Upgrade project should add sidewalks to Folker St, for the safety of the senior citizens at PHH who like to get out and walk around the block, or across the street to Folker Park, or to the shops along Tudor.

Ideally, the 42nd Avenue Upgrade project would add sidewalks on both sides of Folker from Tudor to 41st.

At a minimum, the 42nd Avenue Upgrade project should add a sidewalk from the PHH parking area south entrance to the proposed crosswalk shown in the 2017 updated Folker Park site plan (see link below).

These comments are from:

[REDACTED]
[REDACTED] Galewood St.

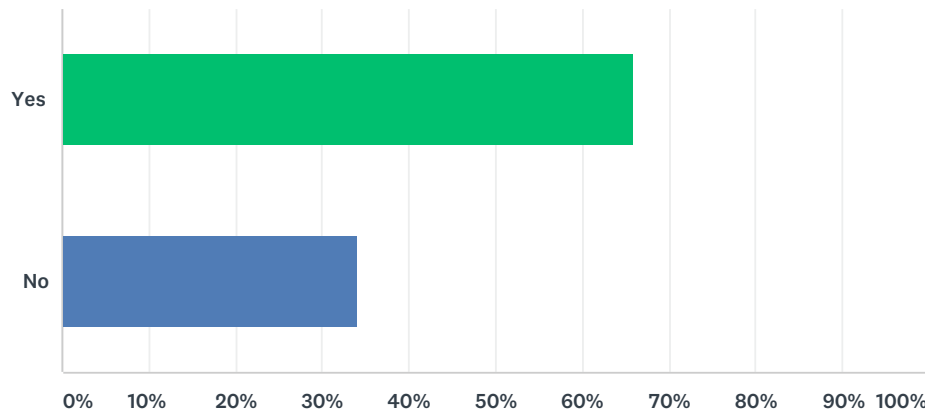
links:

www.42ndAvenueUpgrade.com

<https://www.muni.org/Departments/parks/Documents/Folker%20Site%20Plan.pdf>

Q1 Do you have any concerns about speeding along 42nd Avenue within the project limits? Please check one.

Answered: 41 Skipped: 0



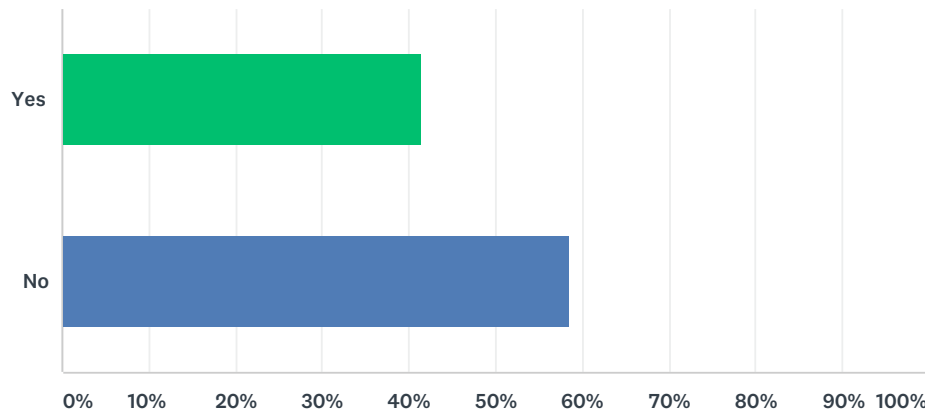
ANSWER CHOICES	RESPONSES
Yes	65.85% 27
No	34.15% 14
TOTAL	41

#	PLEASE EXPLAIN.	DATE
1	Yes, I've almost been hit several times walking from Horizon House to Folker Park. There is no crosswalk or sidewalk.	2/28/2019 2:31 PM
2	they speed now even with frost heaves on 42nd	2/27/2019 3:41 PM
3	Transient traffic from apartments at end of 42nd as well as cutthrough traffic. Diverters at Dale and roundabout at 42nd and Piper would help.	2/27/2019 10:54 AM
4	Excessive speeds on Florina and 42nd have been witnessed many times. This is a concern of mine, in that, I have tenants with young children who play in the front yard.	2/25/2019 9:16 PM
5	We have had two mail boxes knocked out in the time that we have lived her. It is better since Tudor Bingo moved and 40th Street was upgraded.	2/24/2019 5:16 PM
6	Occasionally vehicles speed along 42th, but not very often. BTW, 40th is like a racetrack during the summer at night.	2/21/2019 2:36 PM
7	Cars roll through the stop sign not looking for traffic or pedestrians.	2/18/2019 10:11 AM
8	water main replacement- will this affect businesses in the immediate area during business hours (mainly medical offices)?	2/13/2019 1:55 PM
9	Cars already speed so I don't believe that will change.	2/12/2019 8:48 PM
10	With the new park going in and more traffic, I hope that speeding will be at a minimum on 42nd.	2/12/2019 6:41 AM
11	some cars and even larger cargo vans speed. Besides being dangerous for children and adults walking the speeding vehicles hit potholes and other bumps and the impact reverberates into the houses. Sometimes feels like a small earthquake in the house. There are stop signs on 42nd at Dale and at Piper but people stop then speed for one block then stop again.	2/12/2019 6:16 AM
12	This street has residents who live along the road. Once the improvements are made, drivers may opt to use this nicely paved road to go east/west. Sidewalks and street lighting must be a part of the improvements. The Folker park is not well lighted. Street lights on E 42nd will help.	2/11/2019 2:24 PM

13	With minimal pedestrian areas and drivers moving quickly there are often seeding cars near pedestrians.	2/10/2019 10:03 AM
14	People in a hurry to get to prov or the university cut through 42nd.	2/10/2019 8:41 AM
15	It is not uncommon to see vehicles speed down 42nd after turning from piper and is concerning due to lack of lighting and pedestrian walkways(a lot of people walk down 42nd)	2/9/2019 8:49 AM
16	Current speeding cut through traffic of transients and Providence visitors/employees make it unsafe for walkers and children in the neighborhood.	2/7/2019 11:58 AM
17	more in the evening than during the day.	2/6/2019 2:03 PM
18	The stretch between Piper and Dale is notorious for speeding. From Piper to Lake Otis less so but people still do. From Dale to Florina isn't bad because so many people park on the side of the road, though if that were to change than I could see speeding being and issue there as well.	2/5/2019 10:16 PM
19	I lived there, people constantly speeding and bottoming out their vehicles in the beat up road.	2/5/2019 8:08 PM
20	traffic too fast for the condition of the road	2/5/2019 5:39 PM
21	Haven't noticed it before.	2/5/2019 3:40 PM
22	I've heard that speeding has been a historical issue along 42nd. Especially since it's a school bus route with kids waiting in the dark. Lots of stop signs please.	2/3/2019 11:23 AM
23	Vehicles rush by constantly, including large delivery vehicles.	2/3/2019 8:08 AM
24	especially in summer, people travel over speed limit	2/2/2019 10:07 AM
25	Folker-42nd intersection often busy, all streets. Cut-thru traffic common. 42nd from W still used to access Piper-Tudor signal. Does appear more using LakeOtis-40th to Tudor via round-a-bout. Others using Folker to reach 40th.	2/1/2019 7:37 PM

Q2 Do you think there should be on-street parking along 42nd Avenue within the project limits? Please check one.

Answered: 41 Skipped: 0



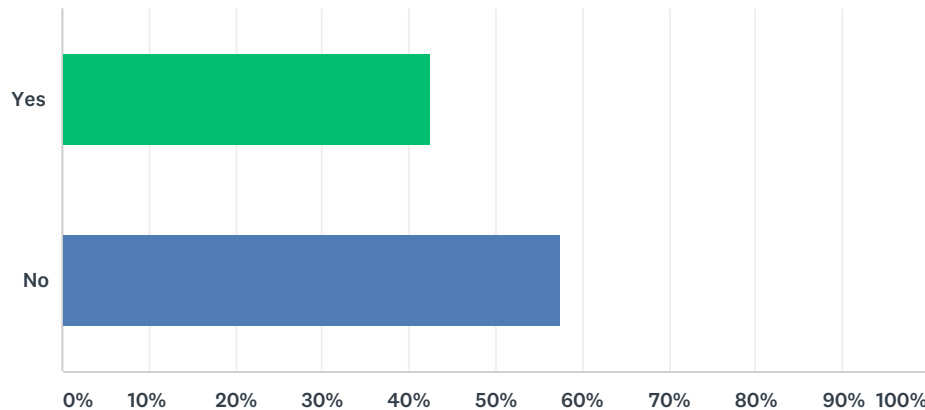
ANSWER CHOICES	RESPONSES	
Yes	41.46%	17
No	58.54%	24
TOTAL		41

#	PLEASE EXPLAIN WHERE YOU THINK PARKING SHOULD BE PROVIDED, OR IF NOT, WHY NOT?	DATE
1	I believe the apartments have adequate parking	2/28/2019 5:17 PM
2	Residents park along 42nd, but we need sidewalks.	2/28/2019 2:31 PM
3	No space...no one parks on the road now...	2/27/2019 3:41 PM
4	We should have offstreet parking overnight. Otherwise it will interfere with snow removal and blight the neighborhood.	2/27/2019 10:54 AM
5	Parking and a walking path.	2/25/2019 9:16 PM
6	it is more convenient for people who live here, but I don't care if it is there or not.	2/24/2019 5:16 PM
7	In certain areas, yes, but generally parking should not be needed.	2/21/2019 2:36 PM
8	Possible along the areas where there are single family residences, depending upon how it affects the owners of those residents.	2/20/2019 6:52 AM
9	The street is not wide enough for parking. Adding parking would take away from the development of Folker Park.	2/18/2019 10:11 AM
10	I don't think there's enough room for parking on the street. There is very little now.	2/12/2019 8:48 PM
11	Parking could be on Folker in front of park entrance. West side of the park. Directly across from Providence Horizon House.	2/12/2019 6:41 AM
12	the people next to me have many cars and occasionally they park one of them for several days in front of my house. Makes it really difficult for the post office truck to deliver to my mail box. I would be OK with maximum 2 hour parking for visitors but probably unrealistic to enforce. Seems like most people have driveways that accommodate multiple cars.	2/12/2019 6:16 AM
13	will shrink flow traffic lane	2/11/2019 4:40 PM

14	Between Laurel east to Wright street. Folker park needs parking for park users. Depending on what happens on the property at 42nd and Piper, that development may need overflow parking - so maybe extend on street all the way to Piper as well.	2/11/2019 2:24 PM
15	The area is heavily residential and space is limited . I would prefer Pedestrian and bike allotments over parking.	2/10/2019 10:03 AM
16	People already dump their cars along here.	2/10/2019 8:41 AM
17	If there is space it would be nice, but pedestrian walkways should come first	2/9/2019 8:49 AM
18	Because codes require adequate offstreet parking. If street parking is allowed, it should be prohibited overnight to allow for snow removal.	2/7/2019 11:58 AM
19	More by folker park if the renovations are going to be completed and the park is going to be more popular.	2/7/2019 11:08 AM
20	It is not needed. Everyone seems to have plenty of parking.	2/6/2019 10:30 PM
21	on street parking is convenient when my kids visit, but if there are going to be sidewalks this might not be possible.	2/6/2019 2:03 PM
22	This would only be good on certain stretches of road and not along the whole length. The ideal places for on-street parking would be Laurel to Wright, and Dale to Florina. These are the only lengths of 42nd Avenue that people regularly use for on-street parking, and the other stretches not mentioned would only increase the likelihood of accidents. This would also solve some of the speeding issue between Dale and Florina as I commented previously.	2/5/2019 10:16 PM
23	Driveway off street parking. No need for snowplows to have to go around vehicles.	2/5/2019 8:08 PM
24	Somewhere off the street. People park on the side of the street all the time already. Hard to drive around sometimes.	2/5/2019 3:40 PM
25	This would be nice, especially by the park. Also, a lot of people tend to park awkwardly along parts of 42nd, which in the winter conditions can make it hard to navigate.	2/3/2019 8:22 PM
26	Homes need on-street parking for visitors. Maybe 2 hour limited?	2/3/2019 11:23 AM
27	Maintain current parking on private property, driveways, car ports, garages. It's not legal to park on 42nd overnight except weekends. Rare to see vehicles parked overnight parallel w/ street - at least between Lake O and Piper.	2/1/2019 7:37 PM
28	This would be helpful between Dale street and Florina Street where there is a lot of housing.	2/1/2019 3:08 PM

Q3 Have you noticed any sight distance problems along 42nd Avenue within the project limits that need to be corrected? (i.e. trees, signs or structures that block your view when you are driving, or that block a driver's view of you when you are walking or bicycling) Please check one.

Answered: 40 Skipped: 1



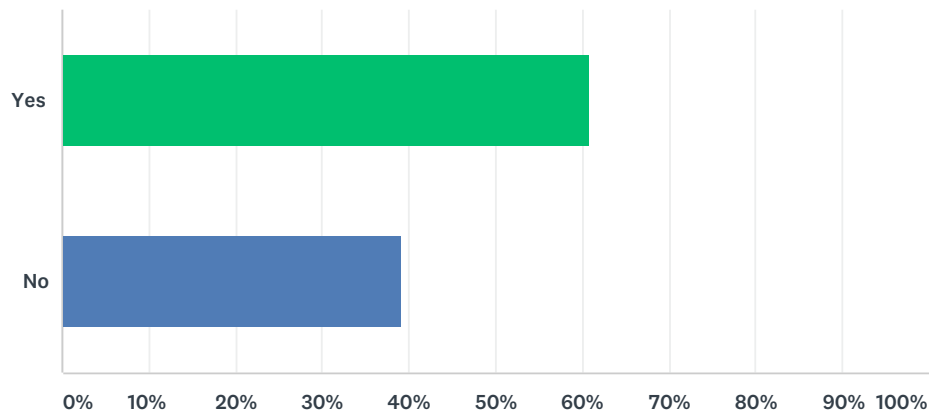
ANSWER CHOICES	RESPONSES
Yes	42.50% 17
No	57.50% 23
TOTAL	40

#	IF YES, PLEASE EXPLAIN AND IDENTIFY THE LOCATION.	DATE
1	The vehicles parked on the street	2/28/2019 5:17 PM
2	Several of the intersections have over-grown vegetation either on private property or in the ROW.	2/28/2019 2:31 PM
3	At Piper and 42nd the decorative things make this a difficult corner to sight around	2/27/2019 3:41 PM
4	There are collector street vegetation improvements on Piper that should be encouraged and continued as part of traffic calming designs. More green space should be encouraged as it will slow traffic. Please don't take our trees.	2/27/2019 10:54 AM
5	A few trees and shrubs need to be trimmed. More maintenance than anything else.	2/21/2019 2:36 PM
6	Bushes and structures at intersection of 42nd and Piper block view.	2/20/2019 6:52 AM
7	the piper intersection area.	2/14/2019 9:32 AM
8	The corner of 42nd and Piper seems really well done.	2/12/2019 6:16 AM
9	Dumpsters placed in the ROW are an eye sore and a disgrace. As part of this road improvement, work with those property owners to relocate those internal to their property.	2/11/2019 2:24 PM
10	At 42nd and wright it is unclear sometimes for drivers whether to stop or Go on through . Trees and snow sometimes are problems here .	2/10/2019 10:03 AM
11	Turning right onto 42nd from Wright street(it can be difficult to see cars coming from the left)	2/9/2019 8:49 AM
12	Although the park could be more appealing and looked after.	2/6/2019 10:30 PM
13	large boulder in right of way Alders overgrown	2/6/2019 7:38 PM

14	The intersection at 42nd and Piper is a dangerous corner for any compact to mid-size vehicles, as the large bushes and trees obstruct most of your vision would trying to turn onto or from Piper. This is also true for the other intersections along Piper, which have similar designs in bushes and trees. The walls are not obstructive and actually serve as a safety measure in case of slides, for both vehicles and pedestrians waiting to cross.	2/5/2019 10:16 PM
15	42nd going west and turning north or south on Piper has horrible visibility from all that artsy decorative crap at the intersection.	2/5/2019 8:08 PM
16	At the corner of Florina and 42 there is a huge bush that blocks vision in the summertime	2/4/2019 4:34 AM
17	Better lighting at corssings, without ample street lights people tend to miss or not understand which intersections are thru and which are stops.	2/3/2019 8:22 PM
18	This is a problem all over the city. Unpruned plants growing out too close to intersections. I'm originally from Madison, WI. The city there would just cut out plants that were i the right-of-way.	2/3/2019 11:23 AM
19	42nd-Piper shrubs block Piper traffic (I trim in warm months). Difficult for 42nd vehicles to enter Piper during higher traffic periods. Keep lower Piper tree branches pruned. They block 42nd traffic view. 42nd-Wright similar on SW corner. Many vehicles move faster than 25mph between Folker-Piper.	2/1/2019 7:37 PM

Q4 Pedestrian facilities (sidewalks, pathways) will be constructed as part of the proposed improvements. Should pedestrian facilities be provided on both sides of the roadway? Please check one.

Answered: 41 Skipped: 0



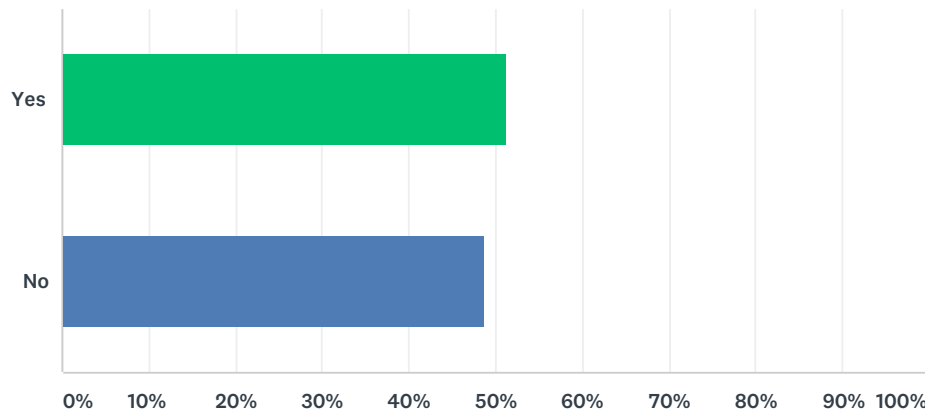
ANSWER CHOICES	RESPONSES	
Yes	60.98%	25
No	39.02%	16
TOTAL		41

#	PLEASE EXPLAIN.	DATE
1	save \$	2/28/2019 5:17 PM
2	Not necessarily, but if not on both sides then crosswalks should be provided at intersections so that a safe, ADA route is provided.	2/28/2019 2:31 PM
3	I have seen foot traffic increase significantly in the last 15 years	2/27/2019 3:41 PM
4	One side only, preferably on the north side of the street with more southern exposure to assist with northern friendly design.	2/27/2019 10:54 AM
5	Pedestrian scale lighting is needed, bollard lighting, along with some sort of pedestrian walkway areas.	2/21/2019 2:36 PM
6	Sidewalks need to be on both sides for safety reasons. A pedestrian should walk against traffic as to see what is coming toward them.	2/18/2019 10:11 AM
7	I think only one side of the road will work for all.	2/12/2019 8:48 PM
8	Folker park will have a perimeter trail so that the muni would not have to put a sidewalk on that side of the street by the park.	2/12/2019 6:41 AM
9	This would mean that there would be no on street parking. Pedestrian walkway on both sides would be really nice. What does that mean for front easements? How much front yard would we lose. How does that affect the road width?	2/12/2019 6:16 AM
10	nice to have and provides a safer passage during winter snow	2/11/2019 4:40 PM
11	I would like bike and pedestrians to have designated areas . I don't have the expertise to say if it should be both or one side.	2/10/2019 10:03 AM
12	One side should be sufficient	2/10/2019 8:41 AM
13	I think one side would be sufficient. Preferably on the side that is closest to Tudor	2/9/2019 8:49 AM

14	Unnecessary expense and loss of natural vegetation. One side should be sufficient.	2/7/2019 11:58 AM
15	Midtown is becoming increasing urban, bike facilities on both side of the road would encourage more non-motorized transportation, increase safety for current pedestrians/cyclists and decrease congestion due to traffic. The addition of pedestrian facilities is the most efficient way (per dollar) to improve our transit system, decrease environmental impacts (like pollution) and increase public health by encouraging exercise. Please put pedestrian facilities on both side of the road.	2/7/2019 11:11 AM
16	One side is enough.	2/7/2019 10:22 AM
17	I think that pedestrian facilities are a great idea.	2/6/2019 2:03 PM
18	Need sidewalks Along 42nd Avenue to Lake Otis. A lot of foot traffic and Elders trying to walk on this street.	2/6/2019 9:50 AM
19	Yes, everywhere along 42nd would work with sidewalk on both sides, except the stretch between Piper and Dale; it is already rather tight and I think it wouldn't be necessary to have sidewalk on both sides. I think which side would be best determined by the planning crew.	2/5/2019 10:16 PM
20	There is absolutely no walkway now and a high volume of pedestrians. Huge apartment and condo complexes along 42nd, plus the college campus and homeless. Massive foot traffic!	2/5/2019 8:08 PM
21	Just on one side is enough.	2/5/2019 3:40 PM
22	Not necessary, a single sidewalk would be ample.	2/3/2019 8:22 PM
23	My answer is based on if there is space. I've noticed that east of Piper, the whole curb in front of some dwellings is driveway. That makes on-street parking, sidewalks and plowing difficult to pull off.	2/3/2019 11:23 AM
24	Unsure. What is standard?	2/3/2019 8:08 AM
25	We have lots of foot traffic on e. 42nd & it's much safer w/ sidewalks	2/2/2019 10:07 AM
26	Tall, wooded vegetation on S sides keeps plowed snow from sun access. N side of 42nd melts a month earlier than S side. Muni plowed snow from Roson Ct is moved around corner onto 42nd. Similar these blocks. Muni does blow excess snow onto private property, major cause for delayed S side melting. Most Springs snow has not melted until third week of May.	2/1/2019 7:37 PM
27	In the dark it is hard to see pedestrians walking in the road.	2/1/2019 3:08 PM

Q5 Are you aware of any drainage problems within the project area that need to be corrected? Please check one.

Answered: 41 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	51.22%	21
No	48.78%	20
TOTAL		41

#	IF YES, PLEASE EXPLAIN.	DATE
1	YES...most intersections, especially the intersection of Folker St and E 42nd has a massive pot holes. Numerous pot holes all along E 42nd, the whole road is like dodging craters.	2/28/2019 2:31 PM
2	just general lack of drains along 42nd Ave	2/27/2019 3:41 PM
3	Major drainage issues on 42nd between Piper and Dale.	2/27/2019 10:54 AM
4	Not sure on this one, I think it has improved recently. There was an area between Dale and Piper that was a problem in the past.	2/24/2019 5:16 PM
5	Intersections collect too much water.	2/21/2019 2:36 PM
6	the drain on the northwest corner of Folker and 42nd is not large enough and gets clogged up easily. This cause water to build up across 42nd. Thus creating a dangerous situation.	2/18/2019 10:11 AM
7	Yes Yes Yes!! The drainage manhole in front of my house floods and water backs up past my driveway (several inches) with a small lake in front of the neighboring house. Then it freezes and turns to slush!	2/12/2019 6:16 AM
8	Ponding that occurs due to depressions on the road. This is especially challenging during freeze thaw in the late winter/early spring.	2/11/2019 2:24 PM
9	42nd And Wright 42nd And folker	2/10/2019 10:03 AM
10	The road is pretty uneven with some big dips so there are epic puddles at some of the intersections.	2/8/2019 9:50 PM
11	Major drainage issues exist, causing large puddles every time it rains.	2/7/2019 11:58 AM
12	When rain/ snow melt there is are standing puddles @/near the intersections of 42nd and lake Otis and 42nd and Folker.	2/7/2019 11:11 AM
13	Rain water runs off 42nd Ave and onto low-lying properties between Laurel and Lake Otis.	2/6/2019 7:38 PM
14	At College Place Condominiums Entrance way.	2/6/2019 9:50 AM

15	Between Piper and Dale get flooded whenever we have heavy rains, and between Laurel and Wright there are frequently large pools of water along both sides of 42nd.	2/5/2019 10:16 PM
16	Oh my god my house is 3220 east 42nd. The whole street in that vicinity floods every spring break up, has huge puddles during rain that have nowhere to drain, warm and melting spells during winter are a constant problem. My neighbors and I have been dealing with this lack of drainage forever!	2/5/2019 8:08 PM
17	puddles form between Folker st and Laue st.	2/5/2019 5:39 PM
18	SW corner of 42nd and Wright has a drain, but still frequently floods.	2/3/2019 11:23 AM
19	beyond Piper, our area routinely floods during break up	2/3/2019 8:08 AM
20	between Piper and Dale we always have water backup	2/2/2019 10:07 AM
21	42nd ponding after rains, or during snow melt. 42nd-Folker has long history of breakup season ponds.	2/1/2019 7:37 PM
22	Folker street has terrible drainage especially after a rain.	2/1/2019 3:08 PM

Q6 If you could change three (3) things about the 42nd Avenue roadway within the project limits, what would they be?

Answered: 35 Skipped: 6

ANSWER CHOICES	RESPONSES
Priority #1	100.00% 35
Priority #2	88.57% 31
Priority #3	82.86% 29

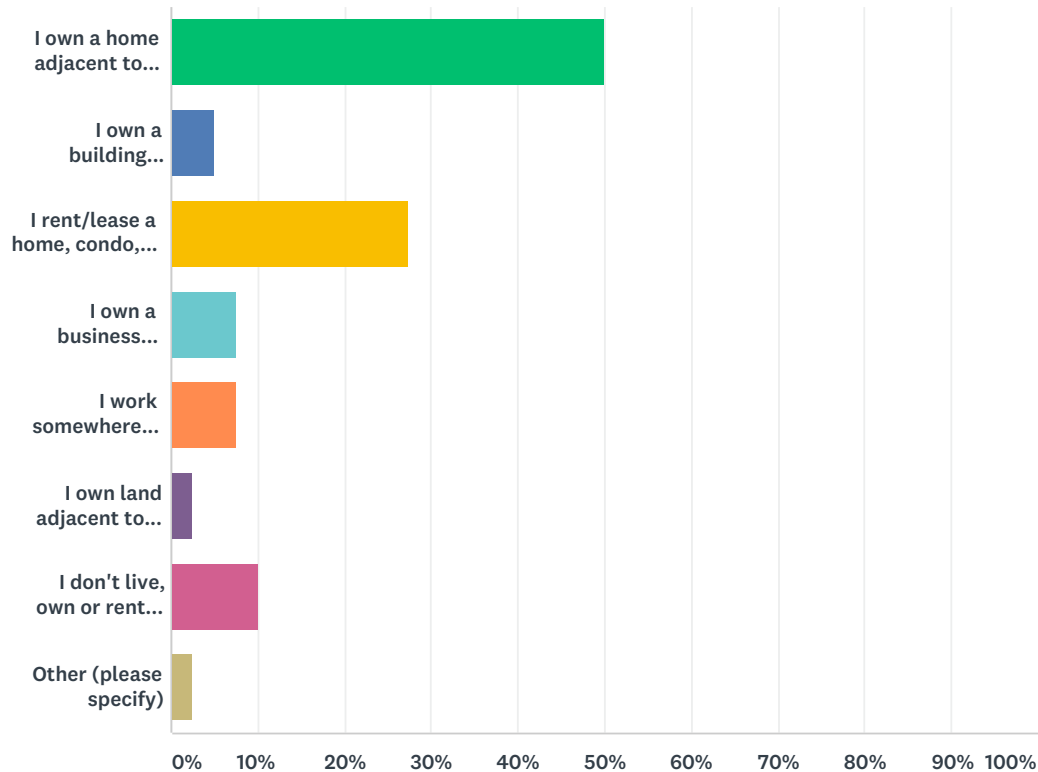
#	PRIORITY #1	DATE
1	Crosswalks at Folker St. and E 42nd with access to park	2/28/2019 2:31 PM
2	make it happen	2/27/2019 3:41 PM
3	Drainage	2/27/2019 10:54 AM
4	Lighting	2/25/2019 9:16 PM
5	get rid of all the pott holes, cracks and bumps in the road	2/24/2019 5:16 PM
6	Pedestrian scale lighting, bollard type	2/21/2019 2:36 PM
7	add sidewalks	2/18/2019 10:11 AM
8	Smooth road surface	2/17/2019 2:55 PM
9	People pay more attention to the stop signs.	2/12/2019 8:48 PM
10	More street lights	2/12/2019 6:41 AM
11	stop people from speeding!	2/12/2019 6:16 AM
12	Sidewalks	2/11/2019 2:24 PM
13	Pedestrian and bike area	2/10/2019 10:03 AM
14	Safety for pedestrians and cyclists	2/10/2019 8:41 AM
15	Pedestrian walkways	2/9/2019 8:49 AM
16	Sidewalks would be great. There is so much foot traffic on that road.	2/8/2019 9:50 PM
17	Improved drainage	2/7/2019 11:58 AM
18	Seperated pedestrian Facilites	2/7/2019 11:11 AM
19	Sidewalks	2/7/2019 11:08 AM
20	Maybe level out the hill down by the union hall. That is very bad in the winter.	2/7/2019 10:22 AM
21	Visual appeal	2/6/2019 10:30 PM
22	sidewalks and crosswalks	2/6/2019 7:38 PM
23	potholes	2/6/2019 2:03 PM
24	Road Condition	2/6/2019 9:50 AM
25	Less obstructions, more visibility.	2/5/2019 10:16 PM
26	Drainage	2/5/2019 8:08 PM
27	improved surface	2/5/2019 5:39 PM
28	Maintain the roads. The roads right now are full of potholes.	2/5/2019 3:40 PM
29	Level and repave	2/4/2019 4:34 AM

30	Potholes	2/3/2019 8:22 PM
31	Safer for pedestrians and bicyclists	2/3/2019 11:23 AM
32	Speeding	2/3/2019 8:08 AM
33	for awwu to replace old water lines to include piper to dale,they are just as old as those up to piper	2/2/2019 10:07 AM
34	Non-motorized safety. History of multiple pedestrians, runners, bikers, skateboarders, scooters. It's a warm weather playground.	2/1/2019 7:37 PM
35	Intersection Laurel and 42nd is very icy & steep in the winter which makes it hard to stop at the stop sign.	2/1/2019 3:08 PM
#	PRIORITY #2	DATE
1	Sidewalk along entire corridor	2/28/2019 2:31 PM
2	make it happen soon	2/27/2019 3:41 PM
3	Traffic calming	2/27/2019 10:54 AM
4	Pedestrian walkway	2/25/2019 9:16 PM
5	Maybe a roundabouts so there aren't so many stops	2/24/2019 5:16 PM
6	Raised intersections to slow traffic	2/21/2019 2:36 PM
7	improve sewer drainage	2/18/2019 10:11 AM
8	Pedestrian/bike crossing notification at Piper St. crossing	2/17/2019 2:55 PM
9	I wish there would be less traffic.	2/12/2019 8:48 PM
10	place to cross for residents to PHH into the Folker park	2/12/2019 6:41 AM
11	address the flooding issue in front of my house (3241)	2/12/2019 6:16 AM
12	Ponding/repave street	2/11/2019 2:24 PM
13	Lighting	2/10/2019 10:03 AM
14	Better lighting	2/10/2019 8:41 AM
15	Lighting	2/9/2019 8:49 AM
16	Lighting would be nice too. Would make it feel safer at night.	2/8/2019 9:50 PM
17	Traffic calming, add roundabout at Piper/42nd	2/7/2019 11:58 AM
18	Increased street lighting/ nighttime visibility (people walk down the road in the dark with dark clothes and are hard to see)	2/7/2019 11:11 AM
19	lighting	2/7/2019 11:08 AM
20	Sidewalks	2/6/2019 10:30 PM
21	storm water runoff	2/6/2019 7:38 PM
22	42nd between dale and piper is the WORST. Please fix. It's like a roller coaster.	2/6/2019 2:03 PM
23	Sidewalks need to be added	2/6/2019 9:50 AM
24	Speed bumps to prevent speeding.	2/5/2019 10:16 PM
25	Curb and sidewalk	2/5/2019 8:08 PM
26	pedestrian facilities	2/5/2019 5:39 PM
27	Lighting	2/3/2019 8:22 PM
28	Lots of stops to keep cars below 25mph	2/3/2019 11:23 AM
29	Drainage	2/3/2019 8:08 AM
30	Keep 42nd narrow, signed intersections, slow vehicles	2/1/2019 7:37 PM
31	More lighting	2/1/2019 3:08 PM
#	PRIORITY #3	DATE

1	Slow down the traffic with design	2/28/2019 2:31 PM
2	make it happen asap :]	2/27/2019 3:41 PM
3	Pedestrian improvements	2/27/2019 10:54 AM
4	Speed bumps to slow down flow	2/25/2019 9:16 PM
5	restrooms at the Folker park	2/24/2019 5:16 PM
6	fix drainage	2/21/2019 2:36 PM
7	sufficient street lighting	2/18/2019 10:11 AM
8	Continued maintenance	2/12/2019 8:48 PM
9	speed bumps to keep pedestrains safe	2/12/2019 6:41 AM
10	make it more pedestrian and bicycle friendly	2/12/2019 6:16 AM
11	Drainage	2/11/2019 2:24 PM
12	Drainage	2/10/2019 10:03 AM
13	More police presence	2/10/2019 8:41 AM
14	Enforce speed limit	2/9/2019 8:49 AM
15	Fixing the road so it is less prone to potholes and frost heaves. Those are also epic along that road, though they do act as natural speed bumps which is why speeding isn't a huge issue there.	2/8/2019 9:50 PM
16	Pedestrian friendly features	2/7/2019 11:58 AM
17	Make the crossing @ Piper street more pedestrain friendly (eg round about, flashing ped x-ing sign or something to this effect)	2/7/2019 11:11 AM
18	plowing sidewalks in winter	2/7/2019 11:08 AM
19	Accessibility	2/6/2019 10:30 PM
20	i would love to have sidewalks.	2/6/2019 2:03 PM
21	Lighting needs to be better for safety.	2/6/2019 9:50 AM
22	Better light along the entire length, similar to 40th Avenue upgrade.	2/5/2019 10:16 PM
23	Road bed	2/5/2019 8:08 PM
24	bike facilities	2/5/2019 5:39 PM
25	Walkways	2/3/2019 8:22 PM
26	Limit driveway width	2/3/2019 11:23 AM
27	Potholes	2/3/2019 8:08 AM
28	Maintain the full grown natural landscaping.	2/1/2019 7:37 PM
29	bike lanes	2/1/2019 3:08 PM

Q7 What best describes you? (please check all that apply, but you must select at least one!)

Answered: 40 Skipped: 1



ANSWER CHOICES		RESPONSES	
I own a home adjacent to 42nd Avenue within the project limits (single family home, duplex, condo, apartment).		50.00%	20
I own a building adjacent to 42nd Avenue within the project limits.		5.00%	2
I rent/lease a home, condo, duplex, apartment, office, or building adjacent to 42nd Avenue within the project limits.		27.50%	11
I own a business adjacent to 42nd Avenue within the project limits.		7.50%	3
I work somewhere adjacent to 42nd Avenue within the project limits.		7.50%	3
I own land adjacent to 42nd Avenue within the project limits.		2.50%	1
I don't live, own or rent property adjacent to 42nd Avenue within the project limits, but I live nearby and/or drive, walk, or bike in the project area.		10.00%	4
Other (please specify)		2.50%	1
Total Respondents: 40			

#	OTHER (PLEASE SPECIFY)	DATE
1	I drive/bike it everyday and my kid does too.	2/3/2019 11:26 AM

Q8 Please help us by providing your property location and contact information. We will only use this information to help aid in design solutions to solve any issues you identify in the next series of questions.

Answered: 31 Skipped: 10

ANSWER CHOICES	RESPONSES	
Name	93.55%	29
Physical Address	100.00%	31
Phone	90.32%	28

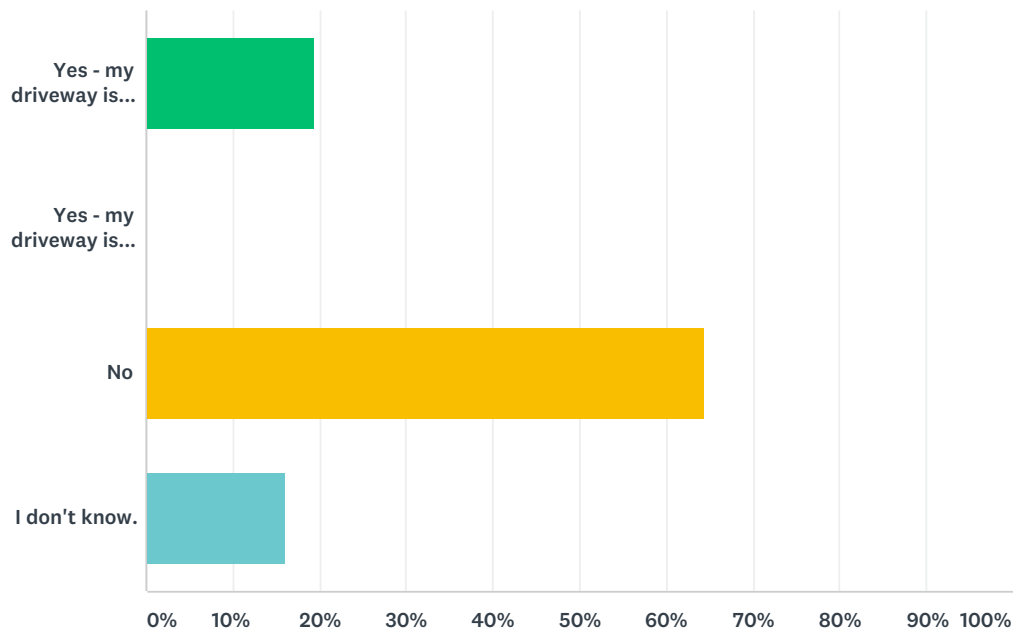
#	NAME	DATE
1		2/28/2019 5:18 PM
2	Personal Contact Information REMOVED	2/27/2019 3:43 PM
3		2/25/2019 9:23 PM
4		2/24/2019 5:17 PM
5		2/20/2019 6:53 AM
6		2/18/2019 10:14 AM
7		2/17/2019 2:56 PM
8		2/12/2019 8:50 PM
9		2/12/2019 6:20 AM
10		2/11/2019 4:42 PM
11		2/10/2019 10:04 AM
12		2/9/2019 8:51 AM
13		2/8/2019 9:51 PM
14		2/7/2019 12:00 PM
15		2/7/2019 11:13 AM
16		2/7/2019 11:12 AM
17		2/7/2019 10:24 AM
18		2/6/2019 7:39 PM
19		2/6/2019 2:08 PM
20		2/6/2019 9:51 AM
21		2/5/2019 10:18 PM
22		2/5/2019 8:10 PM
23		2/5/2019 5:40 PM
24		2/5/2019 3:42 PM
25		2/4/2019 4:37 AM
26		2/3/2019 8:24 PM
27		2/3/2019 8:09 AM
28		2/2/2019 10:12 AM

29	B B Garner	2/1/2019 7:47 PM
#	PHYSICAL ADDRESS	DATE
1	3501 E 42nd Ave #112	2/28/2019 5:18 PM
2	3111 E 42nd Ave #A	2/27/2019 3:43 PM
3	3111 E 42nd Ave	2/27/2019 10:37 AM
4	4200 Florina st.	2/25/2019 9:23 PM
5	3320 E 42nd Ave	2/24/2019 5:17 PM
6	3320 E. 42nd Ave	2/20/2019 6:53 AM
7	4140 Folker Street	2/18/2019 10:14 AM
8	3251 East 41st	2/17/2019 2:56 PM
9	4120 Laurel St	2/13/2019 1:56 PM
10	4211 Folker St E202	2/12/2019 8:50 PM
11	3241 East 42nd Avenue	2/12/2019 6:20 AM
12	1865 E Tudor Rd	2/11/2019 4:42 PM
13	2936 Kimberlie court	2/10/2019 10:04 AM
14	3061 E 42nd Ave 703	2/9/2019 8:51 AM
15	2400 E 42nd Ave	2/8/2019 9:51 PM
16	3160 E 42nd Ave	2/7/2019 12:00 PM
17	4231 Folker St Unit 102	2/7/2019 11:13 AM
18	4230 Folker St APT A 103	2/7/2019 11:12 AM
19	3001 e 42 ave apt 105.	2/7/2019 10:24 AM
20	2400 E 42nd Ave	2/6/2019 7:39 PM
21	2740 E 42nd Ave #B201 Anchorage, AK 99508	2/6/2019 2:08 PM
22	2700 E. 42nd Avenue #A201	2/6/2019 9:51 AM
23	3301 East 43rd Ave	2/5/2019 10:18 PM
24	3220 east 42nd avenue	2/5/2019 8:10 PM
25	4201 Folker St.	2/5/2019 5:40 PM
26	4131 Florina St Apt 7 Anchorage, AK 99508	2/5/2019 3:42 PM
27	3531 E 42nd Ave Apt 417	2/4/2019 4:37 AM
28	4231 Laurel St Apt 320	2/3/2019 8:24 PM
29	3211 E 42nd Ave	2/3/2019 8:09 AM
30	3301 e. 42nd ave. and also 3250 e. 42nd ave./anch ak 99508	2/2/2019 10:12 AM
31	2814 East 42nd Avenue	2/1/2019 7:47 PM
#	PHONE	DATE
1		2/28/2019 5:18 PM
2	Personal Contact Information REMOVED	2/27/2019 3:43 PM
3		2/25/2019 9:23 PM
4		2/24/2019 5:17 PM
5		2/20/2019 6:53 AM
6		2/17/2019 2:56 PM
7		2/13/2019 1:56 PM

8		2/12/2019 8:50 PM
9	Personal Contact Information REMOVED	2/12/2019 6:20 AM
10		2/10/2019 10:04 AM
11		2/9/2019 8:51 AM
12		2/8/2019 9:51 PM
13		2/7/2019 12:00 PM
14		2/7/2019 11:13 AM
15		2/7/2019 11:12 AM
16		2/7/2019 10:24 AM
17		2/6/2019 7:39 PM
18		2/6/2019 2:08 PM
19		2/6/2019 9:51 AM
20		2/5/2019 10:18 PM
21		2/5/2019 8:10 PM
22		2/5/2019 5:40 PM
23		2/5/2019 3:42 PM
24		2/4/2019 4:37 AM
25		2/3/2019 8:24 PM
26		2/3/2019 8:09 AM
27		2/2/2019 10:12 AM
28		2/1/2019 7:47 PM

Q9 Is your driveway constructed with concrete or heated?

Answered: 31 Skipped: 10

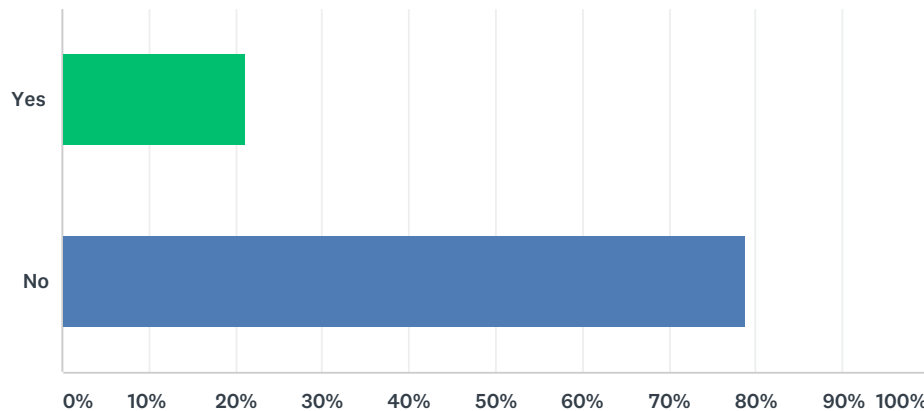


ANSWER CHOICES	RESPONSES
Yes - my driveway is concrete.	19.35% 6
Yes - my driveway is concrete AND heated.	0.00% 0
No	64.52% 20
I don't know.	16.13% 5
TOTAL	31

#	PLEASE EXPLAIN.	DATE
1	asphalt	2/27/2019 3:43 PM
2	The complex has a parking lot.	2/18/2019 10:14 AM
3	NA	2/13/2019 1:56 PM
4	blacktop	2/12/2019 6:20 AM
5	I believe country square is asphalt	2/9/2019 8:51 AM
6	Asphalt driveway/parking structure non-heated	2/7/2019 11:12 AM
7	Asphalt	2/6/2019 9:51 AM
8	asphalt surface	2/5/2019 5:40 PM
9	just gravel at this point	2/2/2019 10:12 AM
10	Driveway is asphalt.	2/1/2019 7:47 PM

Q10 Have you experienced groundwater problems in your crawl space or basement? Please check one.

Answered: 33 Skipped: 8

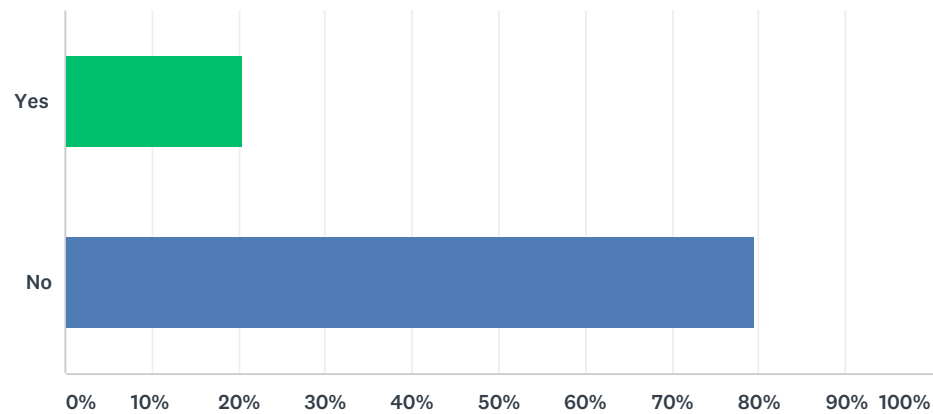


ANSWER CHOICES	RESPONSES
Yes	21.21% 7
No	78.79% 26
TOTAL	33

#	IF YES, PLEASE EXPLAIN.	DATE
1	2012 flooding occurred Was told by MUNI that it was due to a business located east of us	2/27/2019 3:43 PM
2	When storage unit building was constructed it diverted water towards my building.	2/25/2019 9:23 PM
3	NA	2/13/2019 1:56 PM
4	unknown live in condo, check with association for College place, property management services 907-562-2929	2/7/2019 11:13 AM
5	French drains dont drain fast.	2/7/2019 10:24 AM
6	In the past we've had flooded basements	2/5/2019 8:10 PM
7	Not sure.	2/3/2019 8:24 PM
8	Fills with water every few years	2/3/2019 8:09 AM
9	When AWWU cast iron waterline broke NW corner of this Lot 4, Wolcott Sub. Water flowed S via driveway, under the house, onto 2/3 of garage floor, S along E side of house into botanical garden. Was 6" depth thruout garden. Many perennials were destroyed.	2/1/2019 7:47 PM

Q11 Do you have a foundation drain or sump pump? Please check one.

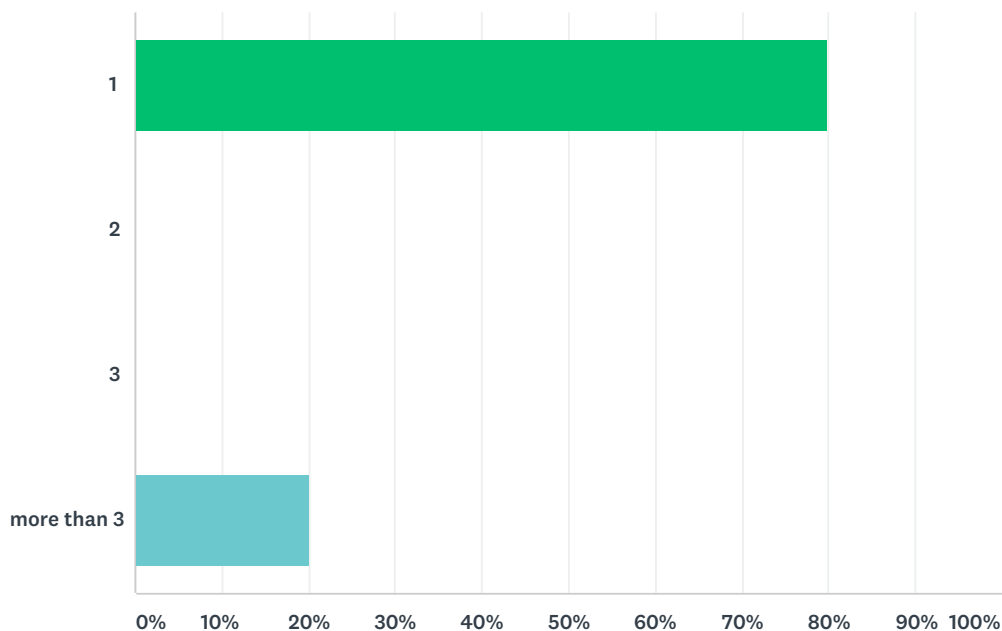
Answered: 34 Skipped: 7



ANSWER CHOICES	RESPONSES	
Yes	20.59%	7
No	79.41%	27
TOTAL		34

Q12 How many foundation drains or sump pumps do you have?

Answered: 5 Skipped: 36

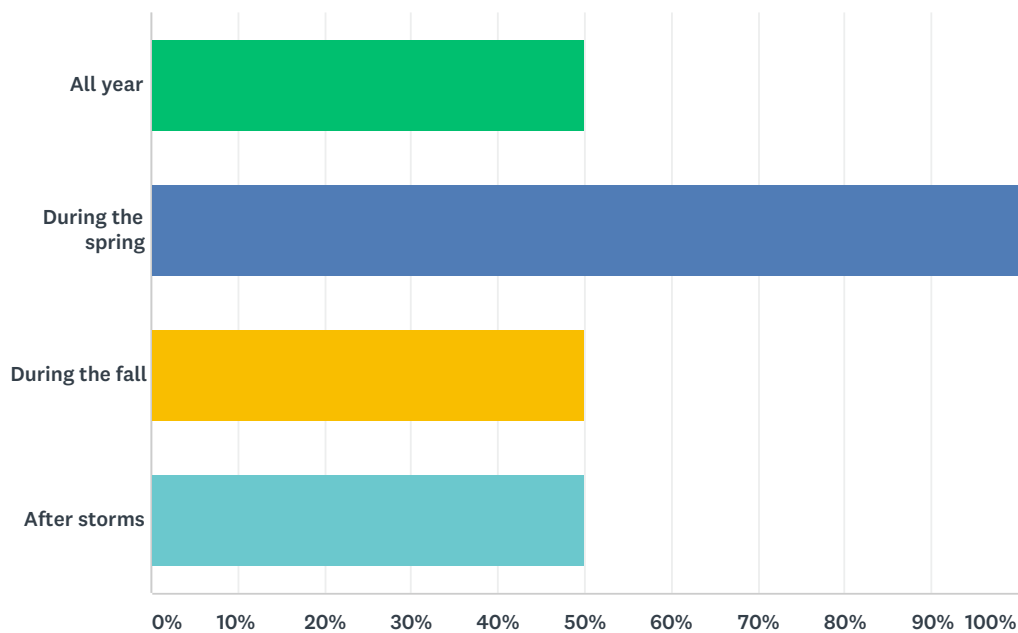


ANSWER CHOICES	RESPONSES
1	80.00% 4
2	0.00% 0
3	0.00% 0
more than 3	20.00% 1
TOTAL	5

#	WHERE ARE THEY LOCATED AND TO WHERE DO THEY DRAIN?	DATE
1	On South-side of building, draining south.	2/25/2019 9:25 PM
2	I don't know	2/12/2019 8:51 PM
3	I believe each building has a drain in our garage. Unknown location of where they drain to	2/9/2019 8:52 AM
4	Garage floor drains.	2/7/2019 10:25 AM
5	drains outside the building	2/6/2019 7:40 PM
6	In the parking garage	2/6/2019 9:52 AM
7	It's a manual one I have to hook up when it floods	2/3/2019 8:10 AM

Q13 How often does the pump run? Select all that apply.

Answered: 2 Skipped: 39

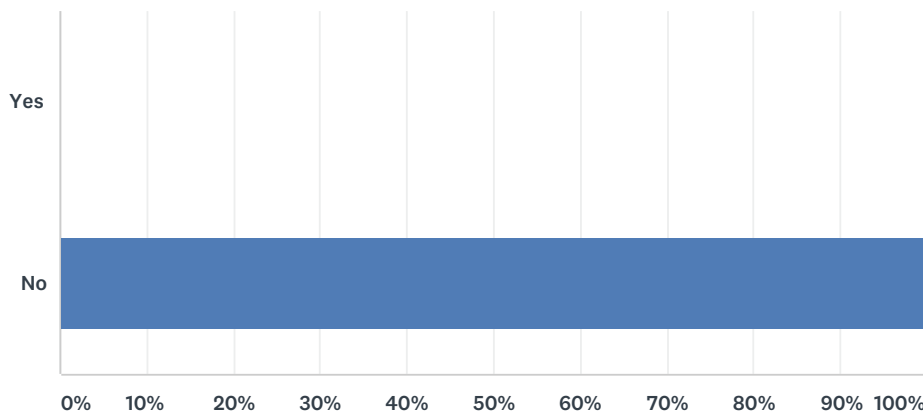


ANSWER CHOICES	RESPONSES
All year	50.00% 1
During the spring	100.00% 2
During the fall	50.00% 1
After storms	50.00% 1
Total Respondents: 2	

#	OTHER (PLEASE SPECIFY).	DATE
1	No idea	2/12/2019 8:51 PM
2	Never goes on	2/6/2019 7:40 PM
3	It is a drain	2/6/2019 9:52 AM

Q14 Do you have any known issues with your water service? Please check one.

Answered: 32 Skipped: 9

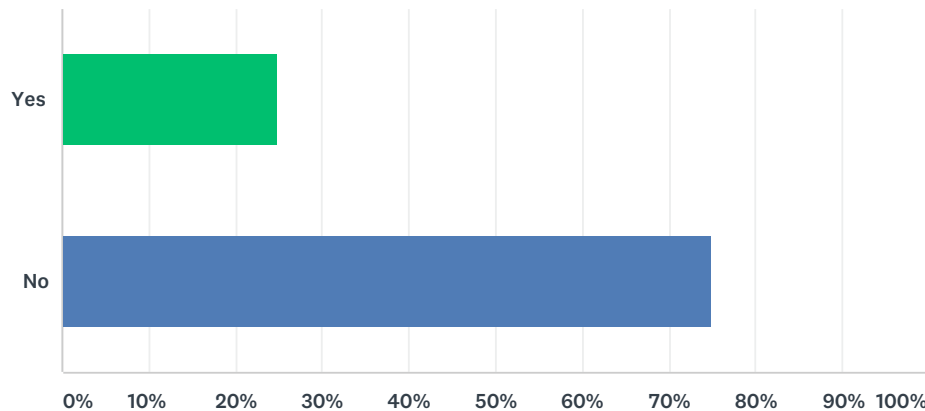


ANSWER CHOICES		RESPONSES	
Yes		0.00%	0
No		100.00%	32
TOTAL			32

#	IF YES, PLEASE EXPLAIN.	DATE
1	unknown live in condo, check with association for College place, property management services 907-562-2929	2/7/2019 11:14 AM
2	I am on a well	2/3/2019 8:11 AM

Q15 Are there any special conditions on your property that you feel the design team should be aware of?

Answered: 32 Skipped: 9



ANSWER CHOICES	RESPONSES
Yes	25.00% 8
No	75.00% 24
TOTAL	32

#	IF YES, PLEASE EXPLAIN.	DATE
1	Sidewalks need to include handicap wheelchair and walker access as required by law.	2/18/2019 10:16 AM
2	Our portable water is provided by a well on our property. Interference/disturbance to groundwater table could impact our potable water supply.	2/17/2019 2:58 PM
3	many of these houses were built in the 1960s and may still have the old buried sewer/water enclosures. Mine caved in about 10 years ago.	2/12/2019 6:24 AM
4	Our property hasn't had No problems with drainage but all around us during break up there are problematic drainage areas . The road at wright and Kimberlie seems to develop pot holes very frequently likely secondary to drainage problems	2/10/2019 10:06 AM
5	Country Square uses our ground level yard area near 42nd to plow snow in a pile to avoid the cost of hauling. We would be appreciative if any upgrades would keep any impact on that ability to a minimum.	2/9/2019 8:54 AM
6	We need to have 24/7 access to our property for our patients. We are a functioning birth center, with patients arriving in labor at any hour of the day or night, potentially. We are also concerned about construction noise during the day, as I'm sure other businesses around us are as well. We hope there's a plan to mitigate the worst of all that... ??	2/8/2019 9:53 PM
7	no public parking in condo complex, sidewalks to/around folker park would be amazing	2/7/2019 11:14 AM
8	Part of our property and our neighbor to the West are below road grade.	2/6/2019 7:41 PM
9	vision triangles and any need to remove vegetation	2/5/2019 5:41 PM
10	I live at Deer Park apartments, and am concerned with the ability to safely pull in to and out of our parking lot when the project is going on. Also, given the location of the project, is something being done to make sure that Eastbound traffic can flow smoothly? Many use Piper to access eastbound Tudor, we have 40th to get to Piper, but will it be enough?	2/3/2019 8:27 PM

11	Maintained woodsy trees/vegetation between house and ROW. There is a Lodgepole Pine with upper 360 vinyl fencing near ROW. Originally 42nd had 66' width. MOA reduced it to 60ft, returning 3ft to adjacent N & S property owners. Required \$3K for each owner to process. College Place condos were built 1983 - the extra 3ft included when they bought their 2 acre property.	2/1/2019 8:00 PM
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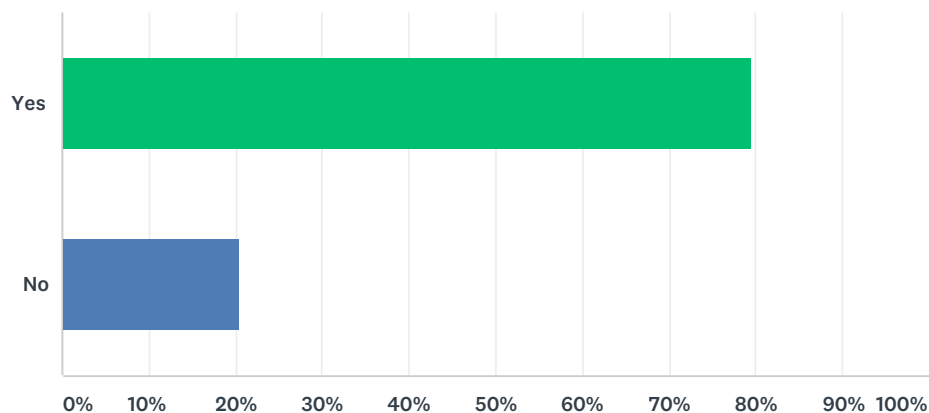
Q16 Did we miss anything? Please include any other comments you may have.

Answered: 16 Skipped: 25

#	RESPONSES	DATE
1	I just want to be able to pull in and out of my residence	2/28/2019 5:20 PM
2	There are kids and seniors in this neighborhood, what will you do to provide safer pedestrian facilities?	2/28/2019 2:32 PM
3	Don't make the road and pedestrian surfaces any wider than necessary. Most roads are unnecessarily wide and this encourages speeding and decreases green and permeable spaces.	2/27/2019 10:57 AM
4	Can't think of anything that was missed.	2/21/2019 2:38 PM
5	Try to keep away from any designs that need additional upkeep after they are made. An example is the roundabouts that have bushes planted and then it is left to let weeds grow. Waste of money. Another is decorative concrete barriers and 42nd and Piper. All scratched up by snow removal equipment.	2/20/2019 7:06 AM
6	How is the actual project going to be paid for?	2/18/2019 10:18 AM
7	Please design the project work schedule to be respectful of the surrounding neighborhood and the impact of noise and construction on the lives of local residents.	2/17/2019 3:01 PM
8	Thanks so much for taking my input!	2/12/2019 6:43 AM
9	I sometimes drive 42nd toward lake otis wish there were provisions to turn left.	2/11/2019 4:45 PM
10	This area is one of the few adjoining residential areas near the Providence and UAA campus. Residents who live here can walk, bike to these campus for class or services once the road is fixed and lighted, ensuring greater safety.	2/11/2019 2:27 PM
11	The intersection of laurel st and 42nd is extremely slick in the winter and is hard to stop at when icy. Integration of pedestrian facilities with/through Folker park may increase its usage and help decrease crime in the area. The park as is gets little use.	2/7/2019 11:15 AM
12	There are lots of pedestrians on this street.	2/6/2019 7:41 PM
13	no. I think it's wonderful.	2/6/2019 2:09 PM
14	Consider roundabouts in place of 4-Way stops in some locations. I feel it could be more efficient, or just change them to 2-Way stops for better traffic flow along 42nd.	2/5/2019 10:21 PM
15	Can think of anything right now. Thanks !	2/3/2019 11:27 AM
16	Will there be any changes to Folker park along 42nd avenue?	2/1/2019 3:11 PM

Q17 Can we send you future project updates via email?

Answered: 39 Skipped: 2



ANSWER CHOICES	RESPONSES	
Yes	79.49%	31
No	20.51%	8
TOTAL		39

#	PLEASE ENTER YOUR EMAIL HERE:	Personal Contact Information REMOVED	DATE
1			2/28/2019 5:20 PM
2			2/27/2019 3:43 PM
3			2/27/2019 10:37 AM
4			2/25/2019 9:27 PM
5			2/24/2019 5:18 PM
6			2/21/2019 2:38 PM
7			2/20/2019 7:06 AM
8			2/18/2019 10:18 AM
9			2/17/2019 3:01 PM
10			2/12/2019 8:51 PM
11			2/12/2019 6:43 AM
12			2/12/2019 6:24 AM
13			2/11/2019 2:27 PM
14			2/10/2019 10:06 AM
15			2/9/2019 8:58 AM
16			2/8/2019 9:53 PM
17			2/7/2019 11:15 AM
18			2/7/2019 11:14 AM
19			2/7/2019 10:26 AM
20			2/6/2019 7:41 PM

21	I don't have an email address.	2/6/2019 2:09 PM
22		2/5/2019 10:21 PM
23		2/5/2019 8:10 PM
24		2/5/2019 5:41 PM
25		2/5/2019 3:42 PM
26		2/3/2019 8:27 PM
27		2/3/2019 11:27 AM
28		2/3/2019 8:11 AM
29		2/2/2019 10:13 AM
30		2/1/2019 8:01 PM
31		2/1/2019 3:11 PM

November 2018



The Municipality of Anchorage (MOA) is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street (see map on back). Improvements are expected to include:



- New road foundation
- New asphalt pavement
- New storm drain system
- New pedestrian facilities
- Improved street lighting
- 3,000 ft of water main replacement

The MOA has contracted with CRW Engineering Group, LLC to provide preliminary engineering and design services. The project is funded through the Design Study Report (DSR) phase. No funding for construction has been received at this time.

Starting in late October, expect to see geotechnical and survey crews in your neighborhood. They will be drilling within the public right-of-way to collect soil and groundwater data, and mapping important features including driveways, utilities, and building corners. Thank you in advance for your patience, and please use caution when driving near the field crews.

How to get involved:

- Attend the University Area Community Council Meeting: The project team will present updates at a few council meetings starting late 2018.
- Attend a public open house: Two open house meetings are planned for 2019.
- Visit the project website for meeting schedules, project documents, and to sign up for e-mail updates.

For more information and to sign up for e-mail updates, please visit the web page or contact:

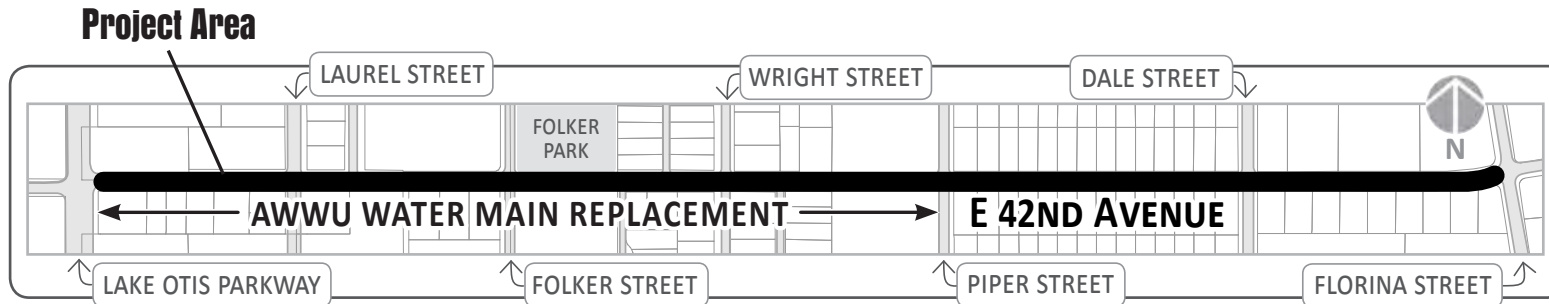
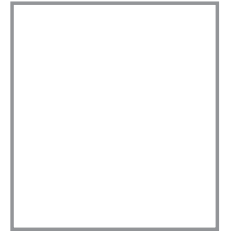
Holly Spoth-Torres,
Public Involvement

(907) 223-0136 • comments@crweng.com

www.42ndAvenueUpgrade.com



3940 Arctic Blvd. Suite 300
Anchorage, Alaska 99503



42nd Avenue Upgrade

Lake Otis Parkway to Florina Street



www.42ndAvenueUpgrade.com



The Municipality of Anchorage (MOA) is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street (see map on back). Improvements are expected to include:



- New road foundation
- New asphalt pavement
- New storm drain system
- New pedestrian facilities
- Improved street lighting
- 3,000 ft of water main replacement

We Want to Hear From You!
FILL OUT THE PROJECT QUESTIONNAIRE:
www.42ndAvenueUpgrade.com



The MOA has contracted with CRW Engineering Group, LLC to provide preliminary engineering and design services. The project is funded through the Design Study Report (DSR) phase. No funding for design or construction has been programmed at this time.

February 2019

FILL OUT THE PROJECT QUESTIONNAIRE:

To access the questionnaire visit:

www.42ndAvenueUpgrade.com

- Visit the project website to fill out an online questionnaire by February 28, 2019.
- Tell us about existing conditions along 42nd Avenue.
- Tell us what improvements you think are needed.

For more information, to sign up for e-mail updates, or if you **prefer to take the questionnaire over the phone**, please call:

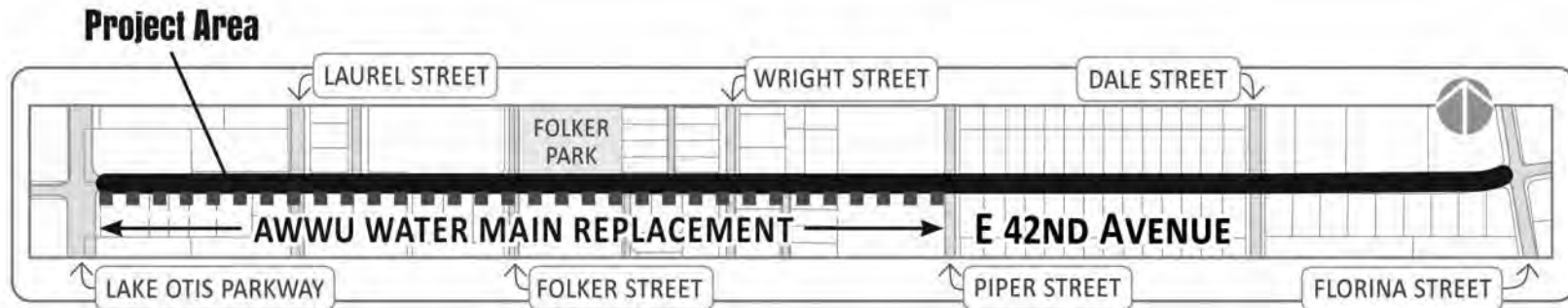
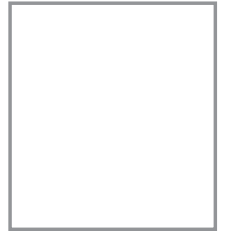
Holly Spoth-Torres,
Public Involvement

(907) 223-0136 • comments@crweng.com

www.42ndAvenueUpgrade.com



3940 Arctic Blvd. Suite 300
Anchorage, Alaska 99503



42nd Avenue Upgrade

Lake Otis Parkway to Florina Street



TAKE THE ONLINE QUESTIONNAIRE AT:
www.42ndAvenueUpgrade.com

October 2019



The Municipality of Anchorage (MOA) is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street (see map on back). Improvements are expected to include:



- New road foundation
- New asphalt pavement
- New storm drain system
- New pedestrian facilities
- Improved street lighting
- 3,000 ft of water main replacement

OPEN HOUSE #1: October 17, 2019, 4:30 pm - 6:30 pm

Univeristy Baptist Church, 4313 Wright Street

Attend the meeting to see a variety of alternatives that show what the roadway improvements could look like. We want to know what **you** think about potential road design concepts.

The MOA has contracted with CRW Engineering Group, LLC to provide preliminary engineering and design services. The project is funded through the Design Study Report (DSR) phase. No funding for construction has been received at this time.

YOU ARE INVITED!

OPEN HOUSE #1

WHEN: Thursday, October 17, 2019

WHERE: University Baptist Church
4313 Wright Street

TIME: 4:30 - 6:30 pm
Stop by anytime!

Talk to a project representative to ask questions, learn about the project, and tell us what you think.

For more information and to sign up for e-mail updates, please visit the web page or contact:

Holly Spoth-Torres,
Public Involvement

(907) 223-0136 • comments@crweng.com

www.42ndAvenueUpgrade.com



3940 Arctic Blvd. Suite 300
Anchorage, Alaska 99503

Project Area



42nd Avenue Upgrade

Lake Otis Parkway to Florina Street



www.42ndAvenueUpgrade.com

Holly Spoth-Torres

From: CRW Engineering Group LLC <crwadmin@crweng.ccsend.com> on behalf of CRW Engineering Group LLC <comments@crweng.com>
Sent: Tuesday, November 06, 2018 11:08 AM
To: Holly Spoth-Torres
Subject: 42nd Avenue Upgrade - Project Update



PROJECT UPDATE

The Municipality of Anchorage is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements are expected to include:

- New road foundation
- New pedestrian facilities
- Improved street lighting
- New asphalt pavement
- New storm drain system
- Replacement of 3,000 feet of existing AWWU water main:
 - Fire hydrant type and spacing improvements
 - Water service connection sizing study and upgrade
 - Hydraulic and flow analysis including a pipe sizing study
 - Flow control and redundancy planning
 - Pipe material selection

Starting this winter, expect to see geotechnical and survey crews in your neighborhood. Crews will be drilling within the public right-of-way to collect soil and groundwater data, and mapping important features including driveways, utilities, and building corners. Thank you in advance for your patience, and please use caution when driving near the field crews.

PROJECT AREA



HOW TO GET INVOLVED

1. Attend the University Area Community Council Meeting: The project team will present updates at a few council meetings starting in late 2018. The first presentation will be at the Wednesday, November 7, 2018 meeting.
2. Attend a public open house: Two open house meetings are planned for 2019.
3. Visit the project website for meeting schedules and project documents.

For more information and to sign up for email updates, contact project staff or visit the project website:

Email: Comments@CRWEng.com

PROJECT WEBSITE

CRW Engineering Group LLC | 3940 Arctic Boulevard, Suite 300, Anchorage, AK 99503

[Unsubscribe holly@huddleAK.com](mailto:holly@huddleAK.com)

[Update Profile](#) | [About our service provider](#)

Sent by comments@crweng.com in collaboration with

Constant Contact
Try it free today

Holly Spoth-Torres

From: CRW Engineering Group LLC <crwadmin@crweng.ccsend.com> on behalf of CRW Engineering Group LLC <comments@crweng.com>
Sent: Friday, February 01, 2019 2:30 PM
To: Holly Spoth-Torres
Subject: 42nd Avenue Upgrade - Project Questionnaire



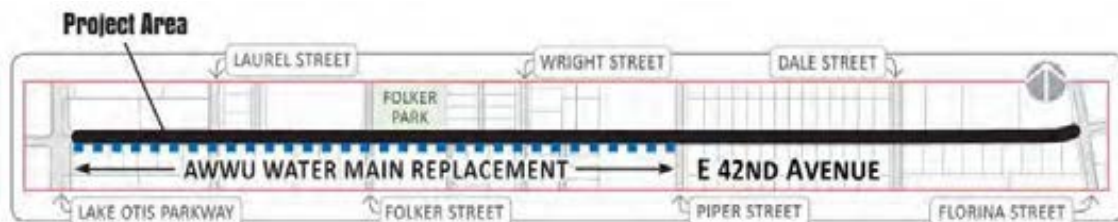
FILL OUT THE PROJECT QUESTIONNAIRE!

Please take a few minutes of your time to fill out the project questionnaire. Your participation is important - the information you provide will be used to help design the project improvements. **PROJECT QUESTIONNAIRE**

You can access the questionnaire at the link above to tell us about existing conditions along 42nd Avenue and about what improvements you think are needed. **Please complete the questionnaire by February 28, 2019.**

If you prefer to take the questionnaire over the phone, please call 907-223-0136.

PROJECT AREA



PROJECT INFORMATION

The Municipality of Anchorage is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements are expected to include:

- New road foundation
- New pedestrian facilities
- Improved street lighting
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PROJECT QUESTIONNAIRE

For more information and to sign up for email updates, contact project staff or visit the project website:

Email: Comments@CRWEng.com

PROJECT WEBSITE

CRW Engineering Group LLC | 3940 Arctic Boulevard, Suite 300, Anchorage, AK 99503

[Unsubscribe holly@huddleAK.com](mailto:holly@huddleAK.com)

[Update Profile](#) | [About our service provider](#)

Sent by comments@crweng.com in collaboration with

Constant Contact 
Try it free today

Holly Spoth-Torres

From: CRW Engineering Group LLC <crwadmin@crweng.ccsend.com> on behalf of CRW Engineering Group LLC <comments@crweng.com>
Sent: Wednesday, February 27, 2019 10:27 AM
To: Holly Spoth-Torres
Subject: REMINDER! Did You Complete the 42nd Avenue Upgrade Project Questionnaire?



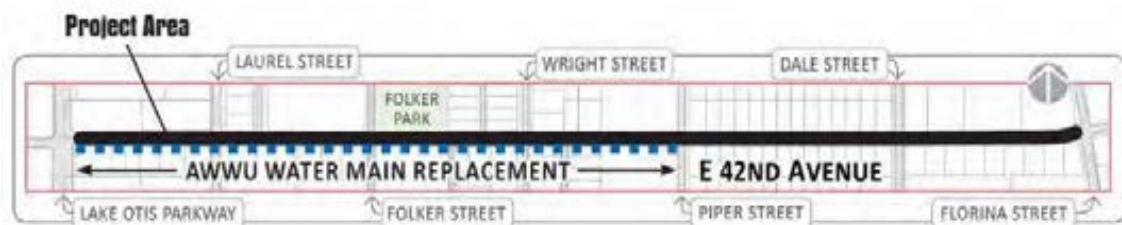
REMINDER! FILL OUT THE PROJECT QUESTIONNAIRE!

Please take a few minutes of your time to fill out the project questionnaire. Your participation is important - the information you provide will be used to help design the project improvements. **PROJECT QUESTIONNAIRE**

You can access the questionnaire at the link above to tell us about existing conditions along 42nd Avenue and about what improvements you think are needed. **Please complete the questionnaire by February 28, 2019.**

If you prefer to take the questionnaire over the phone, please call 907-223-0136.

PROJECT AREA



PROJECT INFORMATION

The Municipality of Anchorage is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements are expected to include:

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PROJECT QUESTIONNAIRE

For more information and to sign up for email updates, contact project staff or visit the project website:

Email: Comments@CRWEng.com

PROJECT WEBSITE

CRW Engineering Group LLC | 3940 Arctic Boulevard, Suite 300, Anchorage, AK 99503

[Unsubscribe holly@huddleAK.com](mailto:holly@huddleAK.com)

[Update Profile](#) | [About our service provider](#)

Sent by comments@crweng.com in collaboration with

Constant Contact 
Try it free today

Holly Spoth-Torres

From: CRW Engineering Group LLC <crwadmin@crweng.ccsend.com> on behalf of CRW Engineering Group LLC <comments@crweng.com>
Sent: Friday, March 29, 2019 11:26 AM
To: Holly Spoth-Torres
Subject: Upcoming Field Work - 42nd Avenue Upgrade Project



Surveyors will be in your neighborhood!

Beginning in April, survey crews will be in the project area. You will see surveyors working in the project area as they collect data and measurements. Survey work will continue throughout the entire month of April, at a minimum. Please drive with caution near the crews.

If you have any questions, please don't hesitate to contact us!

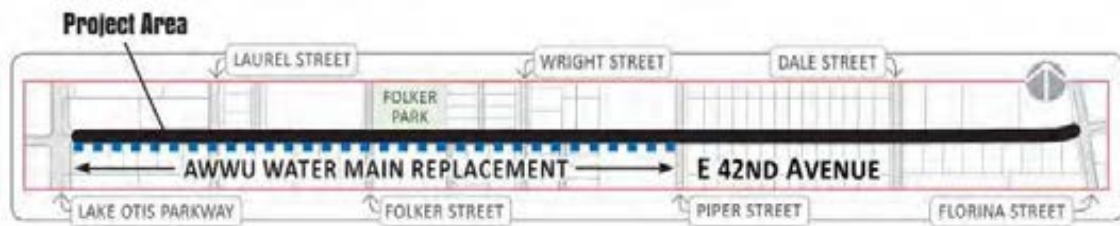
PROJECT CONTACTS

Holly Spoth-Torres
Public Involvement
Huddle AK
907-223-0136
holly@huddleak.com

Julie Makela, PE
Project Administrator
Municipality of Anchorage
Project Management & Engineering Department
907-343-7598
julie.makela@anchorage.gov



PROJECT AREA



PROJECT INFORMATION

The Municipality of Anchorage is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements are expected to include:

- New road foundation
- New pedestrian facilities
- Improved street lighting
- New asphalt pavement
- New storm drain system
- Replacement of 3,000 feet of existing AWWU water main:
 - Fire hydrant type and spacing improvements
 - Water service connection sizing study and upgrade
 - Hydraulic and flow analysis including a pipe sizing study
 - Flow control and redundancy planning
 - Pipe material selection

The MOA has contracted with CRW Engineering Group, LLC to provide preliminary engineering and design services.

For more information and to sign up for email updates, contact project staff or visit the project website:

Email: Comments@CRWEng.com

Holly Spoth-Torres

From: CRW Engineering Group LLC <crwadmin@crweng.ccsend.com> on behalf of CRW Engineering Group LLC <comments@crweng.com>
Sent: Wednesday, April 24, 2019 8:20 AM
To: Holly Spoth-Torres
Subject: Upcoming Field Work - 42nd Avenue Upgrade Project



Geotechnical crews will be in your neighborhood!

Beginning in late April or early May, geotechnical crews will be in the project area. You will see crews working as they collect data and measurements about subsurface soil conditions. Please drive with caution near the crews.

If you have any questions, please don't hesitate to contact us!

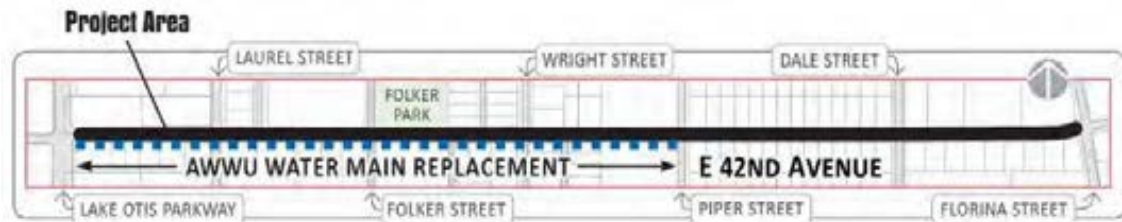
PROJECT CONTACTS

Holly Spoth-Torres
Public Involvement
Huddle AK
907-223-0136
holly@huddleak.com

Julie Makela, PE
Project Administrator
Municipality of Anchorage
Project Management & Engineering Department
907-343-7598
julie.makela@anchorage.gov



PROJECT AREA



PROJECT INFORMATION

The Municipality of Anchorage is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements are expected to include:

- New road foundation
- New pedestrian facilities
- Improved street lighting
- New asphalt pavement
- New storm drain system
- Replacement of 3,000 feet of existing AWWU water main:
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 - Flow control and redundancy planning
 - Pipe material selection

The MOA has contracted with CRW Engineering Group, LLC to provide preliminary engineering and design services.

For more information and to sign up for email updates, contact project staff or visit the project website:

Email: Comments@CRWEng.com

Holly Spoth-Torres

From: CRW Engineering Group LLC <crwadmin@crweng.ccsend.com> on behalf of CRW Engineering Group LLC <comments@crweng.com>
Sent: Wednesday, October 2, 2019 9:33 AM
To: Holly Spoth-Torres
Subject: You Are Invited! 42nd Avenue Upgrade - Open House #1



YOU ARE INVITED!

OPEN HOUSE #1

WHEN: Thursday, October 17, 2019

WHERE: University Baptist Church, [4313 Wright Street](#)

TIME: 4:30 PM - 6:30 PM (stop by anytime!)

Attend the meeting to see a variety of alternatives that show what 42nd Avenue roadway improvements could look like. We want to know what YOU think about potential road design concepts.

PROJECT BACKGROUND

The Municipality of Anchorage is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements are expected to include:

- New road foundation

- New pedestrian facilities
- Improved street lighting
- New asphalt pavement
- New storm drain system
- Replacement of 3,000 feet of existing AWWU water main:
 - Fire hydrant type and spacing improvements
 - Water service connection sizing study and upgrade
 - Hydraulic and flow analysis including a pipe sizing study
 - Flow control and redundancy planning
 - Pipe material selection

PROJECT AREA



GET INVOLVED

1. Attend Open House #1 on October 17, 2019 anytime between 4:30 PM and 6:30 PM at University Baptist Church (4313 Wright Street).
2. Visit the project website for meeting schedules and project documents.

For more information and to sign up for email updates, contact project staff or visit the project website:

Email: Comments@CRWEng.com



PROJECT WEBSITE

Holly Spoth-Torres

From: CRW Engineering Group LLC <crwadmin@crweng.ccsend.com> on behalf of CRW Engineering Group LLC <comments@crweng.com>
Sent: Monday, October 14, 2019 1:27 PM
To: Holly Spoth-Torres
Subject: REMINDER: This week! You Are Invited! 42nd Avenue Upgrade - Open House #1



REMINDER: YOU ARE INVITED!

OPEN HOUSE #1

WHEN: Thursday, October 17, 2019
WHERE: University Baptist Church, [4313 Wright Street](#)
TIME: 4:30 PM - 6:30 PM (stop by anytime!)

Attend the meeting to see a variety of alternatives that show what 42nd Avenue roadway improvements could look like. We want to know what YOU think about potential road design concepts.

PROJECT BACKGROUND

The Municipality of Anchorage is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements are expected to include:

- New road foundation

- New pedestrian facilities
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PROJECT AREA



GET INVOLVED

1. Attend Open House #1 on October 17, 2019 anytime between 4:30 PM and 6:30 PM at University Baptist Church (4313 Wright Street).
2. Visit the project website for meeting schedules and project documents.

For more information and to sign up for email updates, contact project staff or visit the project website:

Email: Comments@CRWEng.com



PROJECT WEBSITE

Holly Spoth-Torres

From: CRW Engineering Group LLC <crwadmin@crweng.ccsend.com> on behalf of CRW Engineering Group LLC <comments@crweng.com>
Sent: Monday, October 28, 2019 10:33 AM
To: Holly Spoth-Torres
Subject: Thank you for attending! 42nd Avenue Upgrade - Open House #1 & Business Stakeholder Meeting



Thank you for attending!

Thank you for attending Open House #1 or the Business Stakeholder Meeting. It was great to meet you and talk about what the 42nd Avenue roadway improvements could look like. Your input and comments are important to the project team. If you want to provide additional comments or if you weren't able to attend, you can view meeting documents and provide comments via project website. Finally, as the project progresses you will receive email updates at important milestones.

www.42ndavenueupgrade.com

PROJECT BACKGROUND

The Municipality of Anchorage is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements are expected to include:

- New road foundation

- New pedestrian facilities
- Improved street lighting
- New asphalt pavement
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 - Pipe material selection

PROJECT AREA



GET INVOLVED

Visit the project website for meeting schedules and project documents.

For more information and to sign up for email updates, contact project staff or visit the project website:

Email: Comments@CRWEng.com



PROJECT WEBSITE

Holly Spoth-Torres

From: CRW Engineering Group LLC <comments@crweng.com>
Sent: Friday, January 17, 2020 2:31 PM
To: Holly Spoth-Torres
Subject: 2020 Anchorage Transportation Fair - 42nd Avenue Upgrade



Anchorage Transportation Fair

The 42nd Avenue Upgrade project will be presented at the **2020 Anchorage Transportation Fair** along with many other upcoming transportation projects. Attend to learn about the project, view preliminary designs, see meeting schedules, and talk to project representatives.

Anchorage Transportation Fair

WHEN: Thursday, January 23, 2020
3:00 PM - 7:00 PM

WHERE: UAA Alaska Airlines Center
3550 Providence Drive

The Transportation Fair is FREE! Anyone can attend. There is no fee for parking.



TRANSPORTATION FAIR

An open house showcasing transportation
projects and plans in Anchorage

THURSDAY, JANUARY 23, 2020
3 TO 7 PM

ALASKA AIRLINES CENTER
3550 PROVIDENCE DRIVE

The Anchorage Transportation Fair is free and
open to the public. There is no cost for parking and
you can take bus routes 10, 20 or 55.

PROJECTS AND PLANS INCLUDE:
TRANSIT ON THE MOVE,
2040 METROPOLITAN TRANSPORTATION PLAN,
RESURFACING COMMERCIAL DRIVE,
DOWNTOWN LIGHTING AND SIGNALS UPGRADE,
& MANY MORE!

PROJECT BACKGROUND

The Municipality of Anchorage is planning to upgrade E. 42nd Avenue between Lake Otis Parkway and Florina Street. Improvements are expected to include:

- New road foundation
- New pedestrian facilities
- Improved street lighting

- New asphalt pavement
- New storm drain system
- Replacement of 3,000 feet of existing AWWU water main:
 - Fire hydrant type and spacing improvements
 - Water service connection sizing study and upgrade
 - Hydraulic and flow analysis including a pipe sizing study
 - Flow control and redundancy planning
 - Pipe material selection

PROJECT AREA



GET INVOLVED

Visit the project website for meeting schedules and project documents.

For more information and to sign up for email updates, contact project staff or visit the project website:

Email: Comments@CRWEng.com



PROJECT WEBSITE

CRW Engineering Group LLC | 3940 Arctic Boulevard, Suite 300, Anchorage, AK 99503

[Unsubscribe holly@huddleak.com](mailto:Unsubscribe_holly@huddleak.com)

[Update Profile](#) | [About Constant Contact](#)

42nd Avenue Interactive Map Summary

Comment ID	Comment Category	For whom is this an issue?	Additional Information	CreationDate
Lines				
12	High vehicle speeds or volumes	Pedestrians	cut through traffic, courriers, pizza delivery, appartments near university	10/31/2019 5:26 PM
Points				
9	Maintenance/repair needed here			10/31/2019 5:26 PM
10	Maintenance/repair needed here			10/31/2019 5:26 PM
11	Maintenance/repair needed here			10/31/2019 5:26 PM
12	Add/improve crossing or connection			10/31/2019 5:26 PM
19	Add/improve crossing or connection	Drivers	Raised intersection was NOT implemented correct. Intersection is NOT raised up as it was supposed to be, so Piper traffic is too fast and the traffic calming design that was intended is not working.	10/31/2019 5:26 PM
20	Add/improve crossing or connection	Drivers	Consider adding raised intersection or roundabout here. Cuthrough traffic can sometimes cause congestion, and people regularly blow stopsigns.	10/31/2019 5:26 PM
21	Add/improve crossing or connection	Drivers	Consider adding roundabout here. Would slow traffic and alleviate some congestion at peak travel times.	10/31/2019 5:26 PM
22	Add your own idea	Pedestrians	Make it northern friendly by adding sidewalks to north side of road if they are added. This will give more sun exposure and less ice/cold. We have lots of elderly and even blind walkers.	10/31/2019 5:26 PM
23	Maintenance/repair needed here			10/31/2019 5:26 PM
24	Maintenance/repair needed here	Pedestrians	Major drainage issues leave standing water, practially a lake each rainfall or breakup.	10/31/2019 5:26 PM
25	Add your own idea	Drivers	Offsite parking unnecessary. Each property should have adequate offstreet parking. We need more green space and less pavement.	10/31/2019 5:26 PM
26	Add/improve lighting here	Pedestrians	A streetlamp somewhere around here would be nice	10/31/2019 5:26 PM
27	I travel to a destination here	Drivers	24/7 business access needed to birth center for laboring families and staff. Literally 24/7.	10/31/2019 5:26 PM
28	Add/improve lighting here	Pedestrians	It is very dark in this area.	10/31/2019 5:26 PM
29	Add your own idea	Drivers	Add drainage. Lots of water pooling after heavy rains and during break-up.	10/31/2019 5:26 PM
30	Add/improve lighting here	Drivers	Extremely difficult to see pedestrians when turning east on 42nd from Piper.	10/31/2019 5:26 PM



Summary of Driveway Grades

Appendix M

**42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06**

ALTERNATIVE 1 - DRIVEWAY SUMMARY

SHEET	PARCEL	CENTERLINE REFERENCE		EXISTING GRADE	PROPOSED GRADE	REMARKS
		STATION	OFFSET			
B1.1	172	101+44.4	RT	-3.6%	-4.8%	
B1.1	101 West	101+66.8	LT	-3.5%	-5.9%	
B1.1	171/172	102+48.6	RT	-8.3%	-5.7%	
B1.1	170	103+20.9	RT	-6.2%	-6.2%	
B1.1	101 East	103+27.4	LT	-4.7%	-8.7%	
B1.1	102 West	103+92.4	LT	1.0%	1.0%	
B1.1	169	104+43.8	RT	-1.2%	-1.7%	
B1.1	102 East	105+60.6	LT	3.9%	1.2%	
B1.1	167	105+98.8	RT	14.5%	13.5%	
B1.2	166	108+56.8	RT	-6.5%	-6.0%	
B1.2	165	109+28.3	RT	-10.6%	-4.4%	
B1.2	164	111+13.9	RT	1.3%	1.5%	
B1.2	163	112+09.5	RT	-1.6%	3.5%	
B1.2	161 West	114+69.1	RT	2.5%	2.4%	
B1.2	161 Middle	115+52.7	RT	1.0%	1.3%	
B1.3	161 East	116+42.7	RT	-0.4%	4.3%	
B1.3	106	117+11.4	LT	5.0%	8.4%	
B1.3	160	117+77.0	RT	1.4%	1.7%	
B1.3	159	118+55.0	RT	-0.8%	3.5%	
B1.3	158	119+44.0	RT	1.5%	3.4%	
B1.3	107	119+51.2	LT	0.3%	2.0%	
B1.3	108	121+18.7	LT	9.3%	10.0%	
B1.3	157	121+56.6	RT	7.5%	8.7%	
B1.3	110	123+33.1	LT	5.7%	5.5%	
B1.3	156	123+35.1	RT	1.4%	0.6%	
B1.4	155	124+52.2	RT	-10.1%	-3.4%	
B1.4	111	124+60.6	LT	0.8%	2.6%	
B1.4	154	127+88.9	RT	9.4%	9.8%	
B1.4	153	128+12.3	RT	10.4%	6.7%	
B1.4	113 West	128+21.2	LT	3.6%	1.0%	
B1.4	113 East	128+55.4	LT	2.3%	0.5%	
B1.4	114	128+84.5	LT	3.8%	1.7%	
B1.4	152	128+97.3	RT	8.6%	6.5%	
B1.4	115	129+41.4	LT	1.4%	1.0%	
B1.4	151	129+62.4	RT	10.8%	10.8%	
B1.4	150	130+03.4	RT	9.5%	9.4%	
B1.4	116	130+21.7	LT	3.1%	4.6%	
B1.4	149	130+64.4	RT	2.7%	4.3%	
B1.4	117	130+90.9	LT	4.5%	5.7%	

**42nd Avenue Upgrade - Lake Otis Parkway to Florina Street
MOA Project No. 18-06**

ALTERNATIVE 1 - DRIVEWAY SUMMARY (CONTINUED)

SHEET	PARCEL	CENTERLINE REFERENCE		EXISTING GRADE	PROPOSED GRADE	REMARKS
		STATION	OFFSET			
B1.5	148 West	131+22.3	RT	2.4%	6.8%	
B1.5	118	131+44.7	LT	4.2%	7.7%	
B1.5	148 East	131+65.2	RT	3.2%	3.7%	
B1.5	147 West	131+82.6	RT	2.8%	3.4%	
B1.5	119	131+95.5	LT	6.9%	8.6%	
B1.5	147 East	132+25.8	RT	5.1%	3.7%	
B1.5	120	132+41.1	LT	2.0%	1.7%	
B1.5	146	132+81.6	RT	3.0%	1.6%	
B1.5	121	133+23.1	LT	5.6%	5.6%	
B1.5	145	133+38.0	RT	2.1%	2.0%	
B1.5	144	133+83.7	RT	3.4%	1.4%	
B1.5	122	133+95.4	LT	6.9%	8.3%	
B1.5	143	134+18.3	RT	4.3%	4.5%	
B1.5	123	134+42.2	LT	6.7%	8.8%	
B1.5	142	134+79.6	RT	3.4%	7.0%	
B1.5	124	135+05.4	LT	7.4%	8.0%	
B1.5	125	135+54.6	LT	7.1%	8.8%	
B1.5	141	135+71.1	RT	7.3%	8.2%	
B1.5	140	137+11.3	RT	5.3%	4.7%	
B1.5	126	137+17.2	LT	12.5%	10.3%	
B1.5	139	138+08.8	RT	4.7%	6.3%	
B1.6	127 West	138+80.6	LT	12.0%	N/A	DRIVEWAY WON'T BE RECONSTRUCTED
B1.6	127 East	138+80.6	LT	7.1%	7.5%	
B1.6	138	138+83.4	RT	8.2%	8.8%	
B1.6	128 West	139+43.9	LT	4.6%	7.5%	
B1.6	137	139+58.0	RT	5.3%	8.4%	
B1.6	135/136	140+94.1	RT	0.9%	0.8%	
B1.6	128 East	141+38.4	LT	0.8%	3.5%	
B1.6	129 West	141+81.6	LT	0.8%	4.5%	
B1.6	134 West	142+13.8	RT	1.5%	3.4%	
B1.6	129 Middle	142+22.0	LT	2.9%	4.7%	
B1.6	134 East	142+44.8	RT	3.3%	1.4%	
B1.6	133 West	142+80.3	RT	3.0%	1.6%	
B1.6	133 East	143+11.3	RT	3.3%	3.1%	
B1.6	129 East	143+46.4	LT	11.0%	N/A	DRIVEWAY WON'T BE RECONSTRUCTED
B1.6	132	143+72.4	RT	3.2%	4.2%	

Business List

Appendix N

I. Businesses along the 42nd Avenue Upgrade Project Corridor

1) 4201 Lake Otis Parkway (Parcel 172)

- a) Lake Otis Medical Supply
- b) DG's Espresso (drive thru coffee stand)

2) 2400 E. 42nd Avenue (Parcel 169)

- a) Women's Wellness at the Nest
- b) Geneva Woods Birth Center

3) 2401 E. 42nd Avenue (Parcel 102) - Laurel Park Office Building Various Businesses

- a) Alaska Speech & Hearing Clinic LLC – Suite 101
- b) Anchorage Project Access – Suite 104
- c) Veritas Wealth Management – Suite 202
- d) Pediatric Neurology Clinic of Alaska – Suite 306

4) 2490 E. 42nd Avenue (Parcel 167) – Alaska Healing Arts Chiropractic, Inc.

5) 2501 E. 42nd Avenue (Parcel 103) – Owen R. Bell, MD, APC

6) 4140 Folker Street (Parcel 104) – Providence Horizon House

7) 3401 E. 42nd Avenue (Parcel 126) – Office Building Various Businesses

- a) Cindy and Vic's R&R, Inc – Suite 101

Final Technical Memorandum

Appendix O



Final Technical Memorandum

Date: September 27, 2019
To: Julie Makela, PE; Russ Oswald, PE, LS (MOA PM&E)
Stephanie Mormilo, PE; Kris Langley (MOA Traffic)
Paul VanLandingham (MOA Street Maintenance)
From: Justin Keene, PE; Erica Jensen, PE, PTOE (CRW Engineering Group, LLC)
Project: 42nd Avenue Upgrade
Project No: PM&E #18-06 (CRW#10142.00)
Subject: Final Technical Memorandum

A. Purpose and Background

The Municipality of Anchorage Project Management and Engineering (MOA PM&E) has contracted with CRW Engineering Group, LLC to provide professional services to develop and evaluate alternatives to upgrade East 42nd Avenue (42nd Avenue) from Lake Otis Parkway to Florina Street (see [FIGURE 1](#) for project boundary). The purpose of the project is to upgrade 42nd Avenue to meet current MOA Design Criteria for a local roadway; improvements also include replacing the water main from Lake Otis Parkway to Piper Street.

The purpose of this Technical Memorandum is to gain concurrence from MOA PM&E, MOA Traffic Department, and MOA Street Maintenance Department on the conceptual roadway design elements before presenting the concepts to the public and beginning the Design Study Report (DSR). A meeting was held on August 5th, 2019 with PM&E, Traffic, and Street Maintenance to discuss the conceptual roadway design elements. The draft Technical Memorandum was submitted for their review and comment. Review comments and responses from the draft Technical Memorandum are included in [APPENDIX C](#) and have been incorporated into this Final Technical Memorandum.

B. Existing Conditions

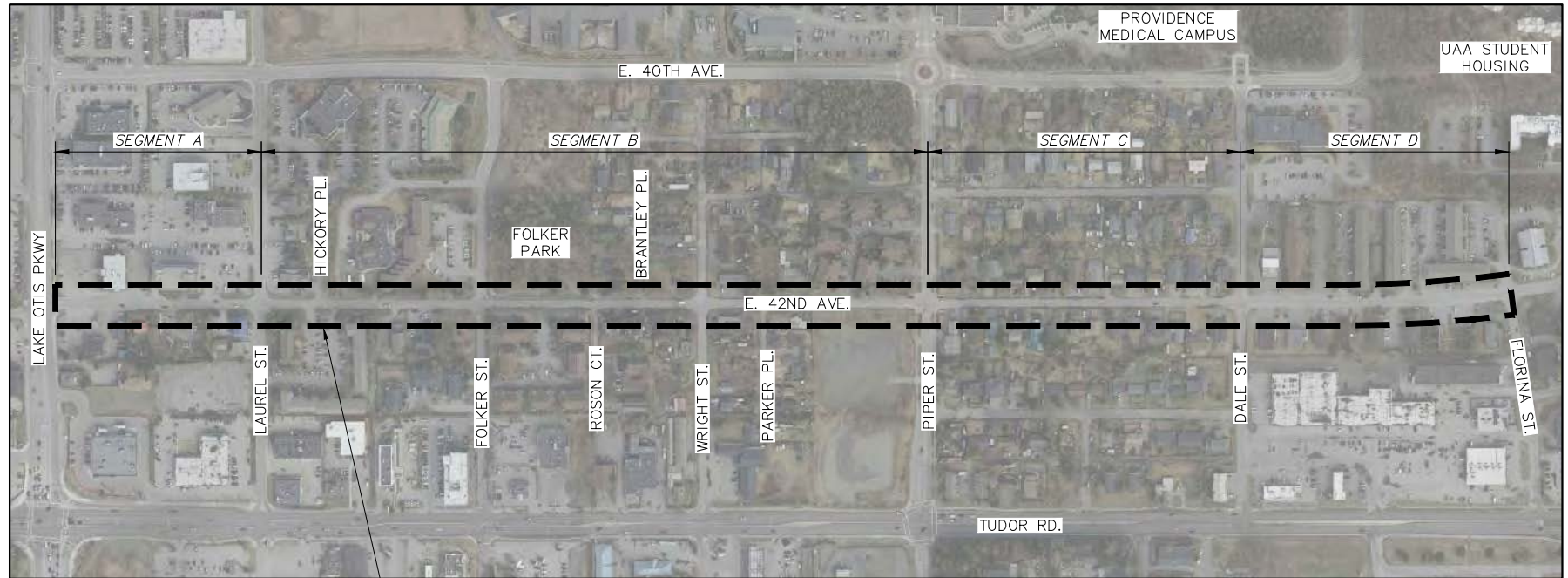
1. Neighborhood Context and Zoning

42nd Avenue from Lake Otis Parkway to Florina Street is a local road situated north of Tudor Road and south of the Providence Medical Center complex and University of Alaska Anchorage (UAA) campus.

The neighborhood is zoned RO “Residential Office”, R-2M “Mixed Residential”, and R-3 “Mixed Residential”. There are four distinct context segments along 42nd Avenue in the project area as defined below:

Segment	From (street)	To (street)	Characteristics
A	Lake Otis Parkway	Laurel Street	Businesses with off-street parking
B	Laurel Street	Piper Street	Primarily multi-family residential, with defined driveways to off-street parking, Folker Park is located north of 42 nd Avenue and east of Folker Street along this segment
C	Piper Street	Dale Street	Primarily single to four-plex family homes with closely spaced driveways, individual mailboxes, and close setbacks to structures
D	Dale Street	Florina Street	High density multi-family residential, many with full-frontage driveways

FILE NAME: J:\JobsData\10142.00 42nd Avenue Upgrade\00_CADD\02 Figures\01 DSR\42nd Project Area.dwg



PROJECT AREA



3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
PHONE: (907) 562-3252
#AECL882-AK

250' 0 250' 500'

42ND AVENUE UPGRADE LAKE OTIS PARKWAY TO FLORINA STREET

PROJECT AREA

Project No: 10142.00

Drawn By: EJ

Scale: GRAPHIC

Date: 9-27-2019

Figure: 1

TECH MEMO

2. Traffic and Parking

The posted speed along the entire project corridor is 25 miles per hour (mph). Existing annual average daily traffic (AADT) volumes and 85th percentile speeds (data collected over a four day period in late June and early July) are shown in TABLE 1. The traffic data collected was adjusted for day and month, based on the nearest permanent traffic recorder. For reference, historic traffic data from 2006, before upgrades to the parallel collector roadway of East 40th Avenue were completed, are shown in TABLE 2. Traffic volumes along 42nd Avenue have dropped significantly following the completion of the parallel collector roadway, 40th Avenue. Crash data from 2012-2017 are summarized in TABLE 3.

Due to the close proximity to the UAA campus, the multi-family apartments in the project area often house students attending UAA. Another traffic volume study, including pedestrian volumes and a parking study, will be conducted in early October 2019, when UAA is in session. The results of these studies will be presented in the DSR.

Table 1. Existing Conditions – Traffic Data (2019)

Location	AADT	85 th Percentile speed (mph)
42 nd Avenue at Folker Park	1,663	29
42 nd Avenue between Piper and Dale Streets	661	26

Table 2. Historic Traffic Data (2006)

Location	AADT	85 th Percentile speed (mph)
42 nd Avenue: Lake Otis Parkway to Piper Street	4,500	29
42 nd Avenue: Piper Street to Florina Street	2,200	29

Table 3. Existing Conditions – Crash Data (2012-2017)

Street	Cross-Street Reference	Total Number of Crashes	Number of Crashes involving bicycle/ pedestrian	Number of Intersection Related Crashes
42 nd Avenue	Lake Otis Parkway	2	1	2
42 nd Avenue	Laurel Street	3	0	3
42 nd Avenue	Folker Street	2	0	2
42 nd Avenue	Wright Street	6	0	6
42 nd Avenue	Piper Street	12	0	11
42 nd Avenue	Dale Street	2	1	2

A parking study was conducted to document the current use of on-street parking for consideration in the design of the proposed improvements. Parked vehicles within the adjacent parking lots were

also noted during the study. The parking study was based on observations from four separate site visits. Site visits were organized to include one weekday afternoon/evening and one weekend afternoon/evening and took place on Wednesday, June 26, 2019 and Saturday, June 29, 2019 (see [APPENDIX A](#) for the parking study memo). Parking demand is summarized below in [TABLE 4](#). Generally the off-street parking lots appeared to provide adequate parking with some lots nearly full during some of the site visits.

Table 4. On-street parking demand summary

Segment	Maximum on-street parking demand observed (vehicle count)
A (Lake Otis to Laurel)	0
B (Laurel to Piper)	0
C (Piper to Dale)	6
D (Dale to Florina)	8

3. Intersection and Access Control

There are eleven side streets within the project corridor, inclusive of Lake Otis Parkway and Florina Street. Of these, four are three-way intersections, with the side street not continuing across 42nd Avenue: Hickory Place, Roson Court, Brantley Place, and Parker Place. Of the eleven intersections, six require 42nd Avenue traffic to stop, including the west terminus of the project at Lake Otis Parkway, Laurel Street, Folker Street, Piper Street, Dale Street, and the east terminus of the project at Florina Street intersections. Of these six, three intersections are all-way stop intersections: Laurel Street, Folker Street, and Dale Street. An all-way stop analysis at these three intersections shall be completed during the DSR to determine whether the all-way stop control warrants from the Manual on Uniform Traffic Control Devices (MUTCD) are currently met.

4. Roadway and Drainage

The existing roadway grades in the project area are generally very flat, between 0.1% and 0.8% with the exception of one hill, with a grade of approximately 4.0%. The existing conditions of the roadway pavement is generally poor with cracking, settling, and ponding. There is no curb and gutter along 42nd Avenue, except between Dale Street and Florina Street. There are no sidewalks along 42nd Avenue except there is a separated pathway north of 42nd Avenue within Folker Park. Three side streets have curb and gutter and sidewalks: Lake Otis Parkway, Laurel Street, and Piper Street. The intersection of 42nd Avenue and Piper Street is a raised intersection.

Other existing roadway conditions are summarized in [TABLE 5](#) on the following page.

Table 5. Existing Conditions – 42nd Avenue

Item	Value	Notes
Right-of-Way (ROW) Width: Lake Otis Parkway to Piper Street Piper Street to Florina Street	66 ft. 60 ft.	Existing improvements are centered in the ROW
Roadway width: Lake Otis Parkway to Dale Street ¹ Dale Street to Florina Street ²	26 ft. 36 ft.	
Curb type Lake Otis Parkway to Dale Street Dale Street to Florina Street	N/A rolled	No curb along 42 nd Avenue from Lake Otis Parkway to Dale Street
Sidewalk width	N/A	No sidewalks along 42 nd Avenue; separated pathway parallel to 42 nd Avenue within Folker Park
Posted speed	25 mph	

1. Roadway width is measure from edge of pavement to edge of pavement
2. Roadway width is measured from back of curb to back of curb

The existing storm drain system along 42nd Avenue is discontinuous and aged. East of Piper Street, the roadway drainage flows north to outfall along Dale Street and Piper Street. At Wright Street and Folker Street, storm drainage flows south to the Alaska Department of Transportation and Public Facilities (ADOT&PF) Tudor Road storm drain system before it returns back to 42nd Avenue along Laurel Street. This system then flows westward across Lake Otis Parkway and outfalls into the headwaters of Fish Creek, just west of Lake Otis Parkway. This system has no treatment structures.

The Anchorage 2040 Land Use Plan lists 42nd Avenue as a Greenway-Supported Development (GSD) Corridor as, historically, the headwaters of Fish Creek were located at approximately 42nd Avenue and Laurel Street. GSD elements include restoring creek sections or other natural features, when redeveloping areas. The MOA Assembly recently passed a resolution (AR No. 2018-277) supporting daylighting of Fish Creek.

5. Utilities

The neighborhood is generally served by public sewer and water, with the exception of three parcels that are served by a water well. The project area also includes existing “shallow” utilities and associated appurtenances such as electric, cable television, natural gas, and telephone/communication lines, junction boxes, pedestals, etc. Further information regarding the existing water and sewer systems and shallow utilities, and any impacts to these systems, will be analyzed and discussed in the DSR.

6. Illumination

42nd Avenue, within the project area, only has continuous roadway lighting from Dale Street to Florina Street. Otherwise, illumination currently only exists at intersections. It is anticipated that the roadway lighting along the project corridor will upgraded to meet current MOA lighting standards. A full illumination analysis and design recommendations will be provided in the DSR.

C. Survey Questionnaire

A survey questionnaire was mailed and e-mailed out to the neighborhood in February of 2019. A total of 40 responses were received, of which 35 lived, worked, or owned property along the project corridor and 5 live nearby and/or walk, drive, or bike regularly along the project corridor (see [APPENDIX B](#) for survey responses). Relevant roadway related responses to the questions are summarized in [TABLE 6](#).

Table 6. Roadway Related Questionnaire Responses

Question	Answers
Do you have concerns about speeding along 42 nd Avenue? ¹	Yes (27) No (14)
Do you think there should be on-street parking along 42 nd Avenue?	No (24) Yes (17)
Have you noticed any sight distance problems along 42 nd Avenue?	No (23) Yes (17)
Pedestrian facilities will be constructed as part of the proposed improvements. Should pedestrian facilities be constructed on both sides of the roadway? ¹	Yes (25) No (16)

1. A Tudor Area Traffic Calming Study conducted in 2006 also noted that the “most common concerns identified during the public process for this street [42nd Avenue] are the lack of pedestrian facilities, the amount of cut-through traffic, and perceived high traffic speeds.”

D. Design Challenges

Some of the significant design challenges associated with the 42nd Avenue project area include:

- Street grades are typically flat, as low as 0.1% percent and most of the roadway is strip-paved with no curb or gutter. Roadway improvements will most likely require forced high and low spots to facilitate adequate drainage. Grading beyond the roadway improvements may be a challenge with the forced high spots combined with the addition of curb.
- Many parcels have full-frontage access to their parking lots, driveways, or garages. Residents may resist eliminating their full-frontage access with the construction of barrier curb with driveway cuts. Some parcels may be allowed to be grandfathered for non-conforming rights, depending on when development occurred.
- In Segment C, the closely spaced driveways, limited setback to existing structures, individual mailboxes, and multi-unit homes (some up to four-plexes) limit design options.
- The limited ROW and adjacent developed parcels make for incorporating GSD elements difficult along the project corridor.

E. Design Criteria & Proposed Design

1. [Roadway Design Criteria](#)

The MOA Design Criteria Manual (DCM) requires roadway improvements to be centered in the ROW; the existing roadway improvements are centered in the ROW. It is anticipated that the proposed roadway centerline alignment will also be centered in the ROW.

The design criteria values from the DCM for an urban secondary (local) roadway typical section are summarized in [Table 7](#). Typical sections alternatives are discussed in the following section.

Table 7. Roadway Design Values

AADT	Street Width ¹	Number of Lanes		Shoulder Width	Curb & Gutter Type	Pedestrian facilities ⁴	Design Speed (mph)
		Moving	Parking ²				
301 – 1,000	33'	2 – 11'	1 – 7'	3.5'	Type 2 ³ (rolled)	5-foot wide, both sides	25
> 1,000	38'	2 – 10'	2 – 7'	3.5'	Type 2 ³ (rolled)	5-foot wide, both sides	30

1. Street width is measured from back of curb to back of curb.
2. When off street parking is utilized, the parking lane may be eliminated and the street width reduced. Minimum 3.5' shoulder sections are required if parking is eliminated.
3. Anchorage Municipal Code 21.08.050.G requires the use of vertical, Type 1 curb and gutter.
4. Anchorage Municipal Code 21.07.060.E.2 also requires sidewalks to be installed on both sides of all streets in Class A zoning districts. This area falls under Class A per 21.08.050.B, Table 21.08-1.

2. Typical Cross Section Alternatives

Three typical cross sections alternatives per segment (including the “Do Nothing” alternative) will be analyzed in detail during the DSR phase for grading, access, drainage, and other impacts. The proposed typical section alternatives were reviewed and discussed at the meeting with PM&E, Traffic, and Street Maintenance; the two alternatives, other than “Do Nothing”, are shown in [Figures 2 - 3](#).

The typical sections aim to balance the context of the segment with design criteria, driveway allowances and standards, and on-street parking demands versus off-street parking availability. Every typical section includes pedestrian facilities along both sides of the roadway, since “improved pedestrian facilities” has been an on-going priority of the neighborhood. The typical sections will be presented to the public during the first open house of the project to gather comments and feedback before beginning the DSR.

3. Roadway Profile

The proposed vertical profile geometry will generally follow the existing terrain but forced high and low spots will likely be added to increase the roadway grades to provide adequate drainage. The forced high and low spots will improve drainage but be located to minimize impacts to existing development. The vertical profile will be further analyzed and refined in the DSR and design phases.

F. Proposed Traffic Calming

Based on the neighborhood survey questionnaire, residents expressed concern with speeding in their neighborhood. However, three traffic studies spanning thirteen years (2006, 2014, and 2019) indicate the 85th-percentile speed is at or below 29 mph along 42nd Avenue, except for the westbound traffic in the 2014 study was noted at 36 mph. The posted speed is 25 mph.

The 2006 Tudor Area Traffic Calming Study recommended a diverter be installed at the intersection of 42nd Avenue and Folker Street. This study and recommendation were completed prior to the upgrades along East 40th Avenue. Additionally, at the time of the study, a traffic signal was located at Folker Street and Tudor Road. Since the completion of East 40th Avenue, the traffic volumes along 42nd Avenue have reduced significantly.

Preliminary analysis indicates additional traffic calming measures are not warranted along 42nd Avenue based on the existing 85th-percentile speed and presence of six stop controlled intersections. However,

during the DSR phase, the all-way stop controlled intersections will be analyzed to determine if they meet warrants. Additional traffic calming measures, such as neckdowns or raised intersections, will also be considered and analyzed during the DSR phase.

G. Proposed Storm Drainage

A full storm drain analysis and preliminary design will be included in the DSR.

H. Recommended Design – Typical Section

Based on the design challenges and public input listed above, it is recommended to prioritize pedestrian improvements along the corridor. Preliminary analysis indicates that in general, full frontage driveways may not be necessary, with adequate off-street parking available in parking lots. A detailed analysis will be conducted during the DSR phase to determine if some parcels require wider driveways to access four-plex garages or parking spaces, have grandfathered rights to allow for continued full frontage access, or if off-street parking lots can be reconfigured to construct a designated driveway. Each typical section will be further analyzed for impacts, grading, and access in the DSR.

Although the typical sections do not fully meet DCM requirements for curb type or travel lane width they balance the context of the segment with design criteria, driveway allowances and standards, and on-street parking demands versus off-street parking availability. Parking lanes would not be included when there is off-street parking, as allowed by the DCM.

I. Design Variance

Design variances will be required from MOA Traffic & the Municipal Engineer for those items which do not adhere to the DCM or Title 21. Design variances are anticipated for:

- Curb type: Type 1 curb and gutter is proposed for some of the sections (DCM requires Type 2). Type 2 curb and gutter is proposed for some of the sections (Title 21 requires Type 1).
- Travel lane: 10-foot travel lanes are proposed for the entire project corridor (DCM requires 11-foot lanes for AADT between 301 and 1,000 and 10-foot lanes for AADT above 1,000)
- Posted and design speed: the posted and design speed is proposed at 25 mph for the entire project corridor (DCM requires 30 mph design speed for AADT over 1,000)
- Driveway widths: some proposed driveways widths may need to exceed the allowed widths

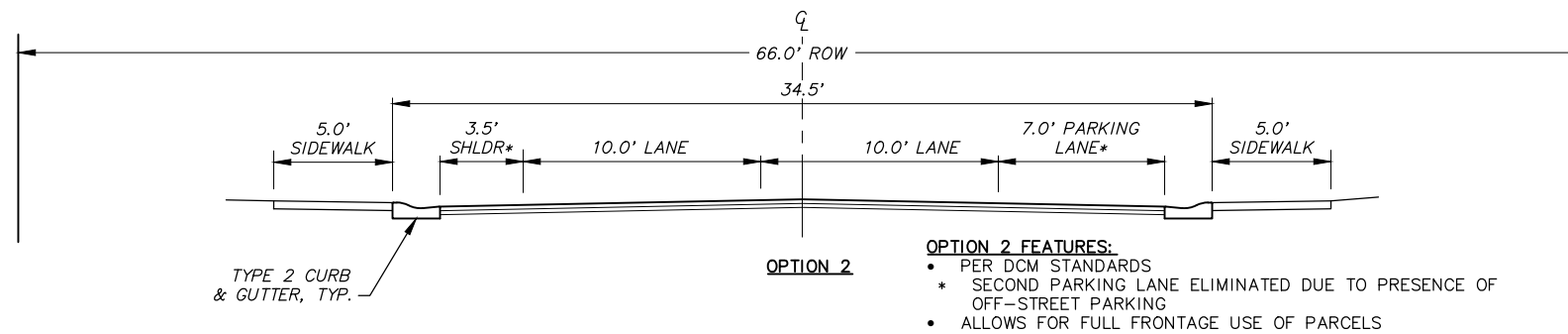
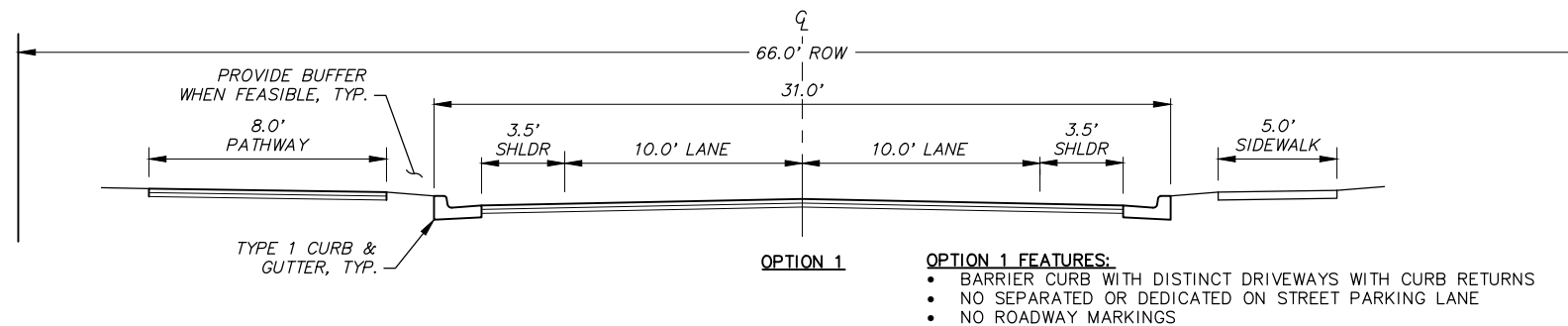
J. Cost Estimate

A cost estimate will be prepared for the DSR.

K. Summary and Next Steps

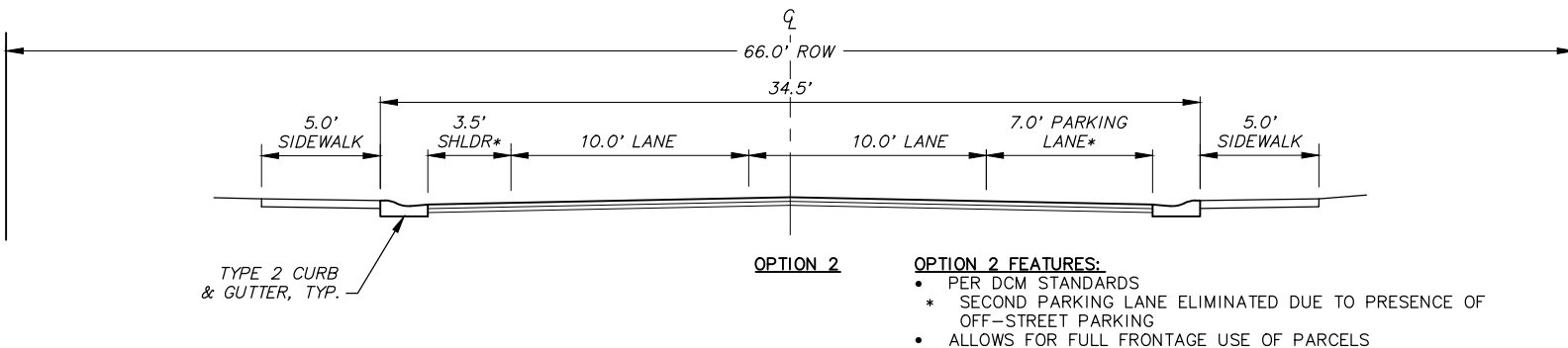
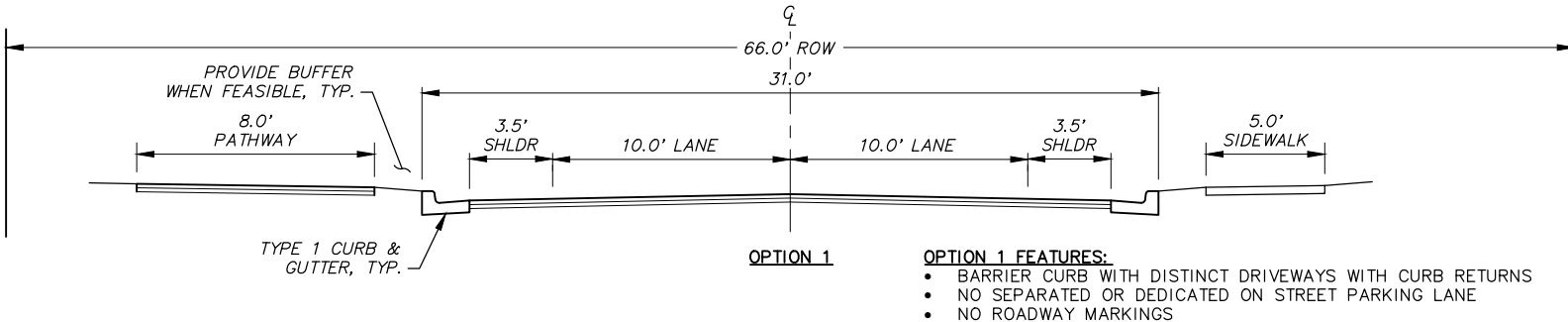
Based upon support from MOA PM&E, Traffic, and Street Maintenance the Draft Design Study Report will be prepared to further analyze the proposed typical section alternatives and include recommended typical sections.

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SEGMENT A
LAKE OTIS PKWY TO LAUREL ST.

NTS



SEGMENT B
LAUREL ST. TO PIPER ST.

NTS

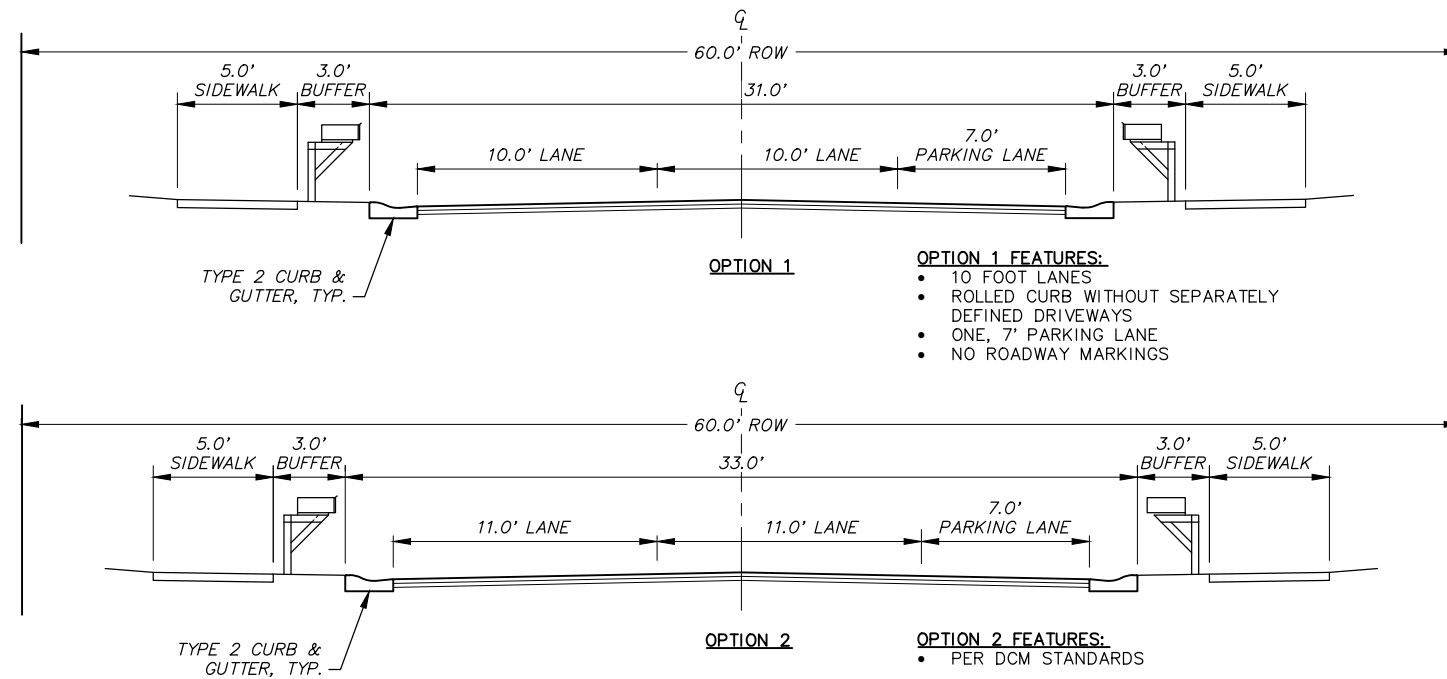
PROJECT: 10142.00
STATUS: TECH MEMO



42nd Avenue Upgrade
PM&E No. 18-06
CONCEPTUAL TYPICAL SECTIONS

DATE
9-27-2019
SCALE
NTS
FIGURE
2

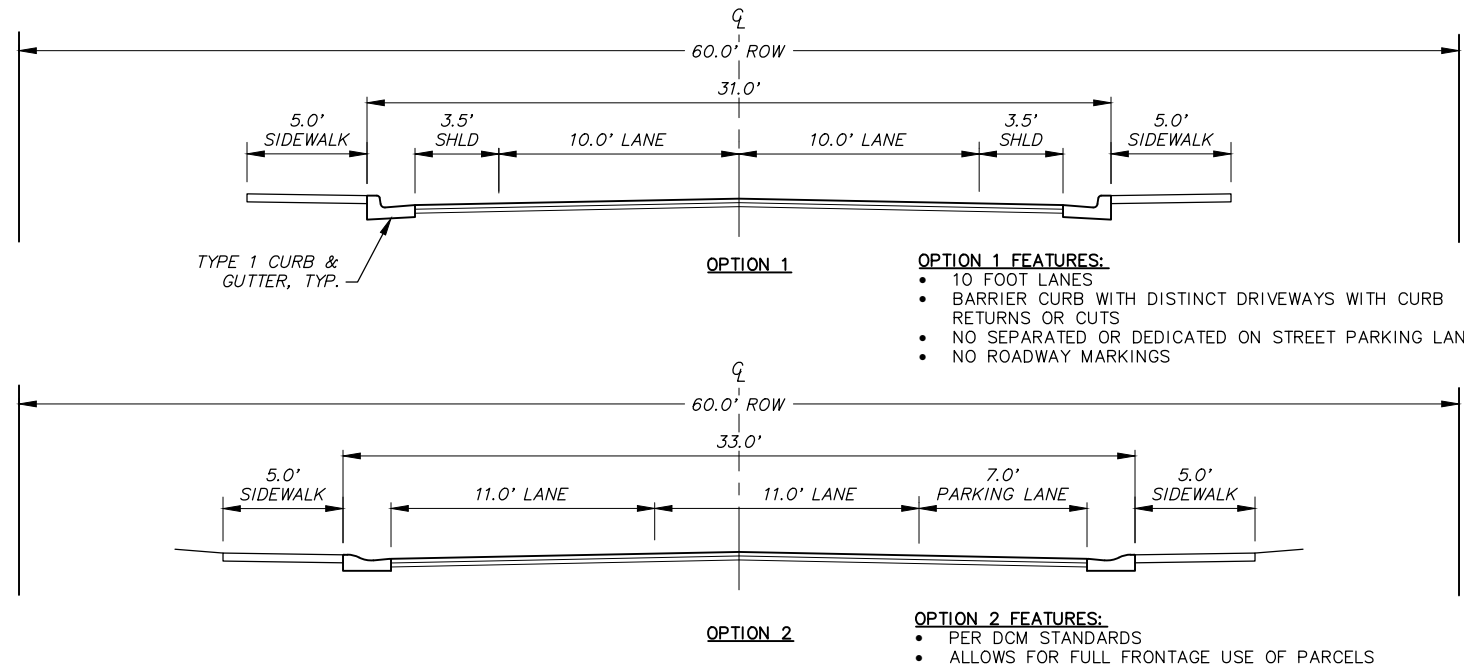
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3

SEGMENT C
PIPER ST. TO DALE ST.

NTS



4

SEGMENT D
DALE ST. TO FLORINA ST.

NTS

PROJECT: 10142.00
STATUS: TECH MEMO



42nd Avenue Upgrade
PM&E No. 18-06

CONCEPTUAL TYPICAL SECTIONS

DATE
9-27-2019

SCALE
NTS

FIGURE
3

APPENDIX A
Parking Study



Memorandum

Date: July 3, 2019
To: Julie Makela, PE - MOA PM&E Project Administrator
Through: Justin Keene, PE - CRW Engineering Group, LLC
From: Kelly Yanoshek, EIT - CRW Engineering Group, LLC
Project: 42nd Avenue Upgrade
Project No: MOA PM&E#18-06 (CRW#10142.00)
Subject: On-Street Parking Study

Introduction

The Municipality of Anchorage Project Management & Engineering Department (PM&E) plans to upgrade E. 42nd Avenue from Lake Otis Parkway to Florina Street. To aid in the design of the improvements, an on-street parking study was completed on E. 42nd Avenue within the project limits noted above. The purpose of the study was to document the current use of on-street parking for consideration in the design of the proposed improvements. Parked vehicles within the adjacent parking lots were also noted during the study to document available adjacent parking.

The E. 42nd Avenue corridor is 0.8 miles long and is located between, and runs parallel to, Tudor Road and E. 40th Avenue. The roadway currently doesn't have any on-street parking restrictions along the project corridor. There are many multi-family developments and businesses with on-site parking lots and/or some full frontage driveways/parking areas.

The parking study was based on observations from four separate site visits, documenting parked vehicles located along the roadway and in visible, adjacent parking lots. Site visits were organized to include one weekday afternoon/evening and one weekend afternoon/evening.

Observations

The observations took place Wednesday, June 26, 2019 and Saturday, June 29, 2019. Weather on both Wednesday and Saturday was sunny, with temperatures in the mid-70s.

Reference Side Street	Wednesday, June 26, 2019				Saturday, June 29, 2019			
	12:00-12:30 pm		8:00-8:30 pm		12:00-12:30 pm		8:00-8:30 pm	
Reference Side Street	North	South	North	South	North	South	North	South
Lake Otis to Wright (42 nd Ave)	-	-	-	-	-	-	-	-
Wright to Piper (42 nd Ave)	-	-	-	-	-	-	-	-
Piper to Dale (42 nd Ave)	1 ¹	4 ³	2 ¹	3 ³	1 ¹	5 ⁴	3	4 ³
Dale to Florina (42 nd Ave)	1	2 ²	4	4 ²	3 ¹	2 ¹	2 ¹	1
¹ Count includes 1 unmoved vehicles; ² Count includes 2 unmoved vehicles; ³ Count includes 3 unmoved vehicles; ⁴ Count includes 4 unmoved vehicles								

Near the west side of the project area from Lake Otis Parkway to P Street, along E. 42nd Avenue, there are a handful of businesses that provide adequate parking for the amount of traffic the businesses serve. No on-street parked vehicles were observed in this section. The parking capacity of the businesses followed a similar pattern of fuller lots on weekdays compared to weekends and emptier lots during the evening hours compared to the afternoon.

There is one parking area located on the north side of E. 42nd Avenue just east of Parker Place that includes full frontage access and an angled parking area located south of the property owner's fence.



This parking area provides angled parking for 5 to 6 vehicles. This parking area was counted as a parking lot since the vehicles are not parked parallel and on-street.

The east side of the project from Piper Street to Florina Street along E. 42nd Avenue is predominantly residential housing. There were eight unmoved vehicles that were observed during multiple counts along E. 42nd Avenue, six of which were moved at least once during the four site visits. On the attached figure, these vehicles are marked by a red circle. Generally, there was a similar level of on-street vehicles during all four site visits in this residential area. The adjacent parking lots/driveways were often very full during all site visits.

Conclusions

Off-street parking was sufficient during site visits for most of the project area but almost entirely occupied in a few specific lots, especially in the east half of the project.

The greatest demand for on-street parking is on the east side between Piper Street and Florina Street near the single-family residential housing and some apartment buildings off E. 42nd Avenue. These results can be seen on the attached figure.

The parking area near Parker Place, as mentioned above, appears to be within the ROW so likely will be impacted during construction. The proposed roadway improvements could include on-street parallel parking along the roadway in this location to replace the parking area removed.

Legend

- ★ Saturday Evening
- Saturday at Noon
- ★ Wednesday Evening
- Wednesday at Noon
- Unmoved Car

Parking Lot Usage %

WN = Wednesday Noon
WE = Wednesday Evening
SN = Saturday Noon
SE = Saturday Evening

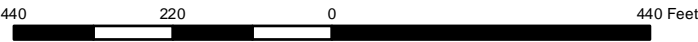
East 42nd Avenue Parking Study



East 42nd Avenue (from Lake Otis Parkway to Parker Place)



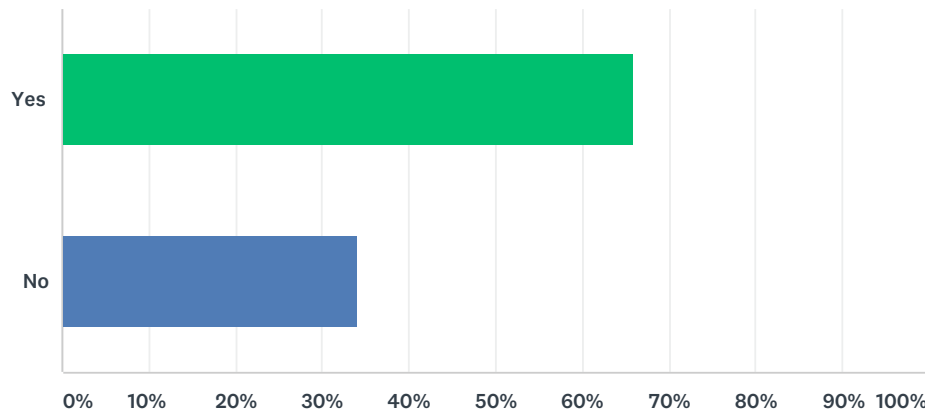
East 42nd Avenue (from Wright Street to Florina Street)



APPENDIX B
Survey Responses

Q1 Do you have any concerns about speeding along 42nd Avenue within the project limits? Please check one.

Answered: 41 Skipped: 0



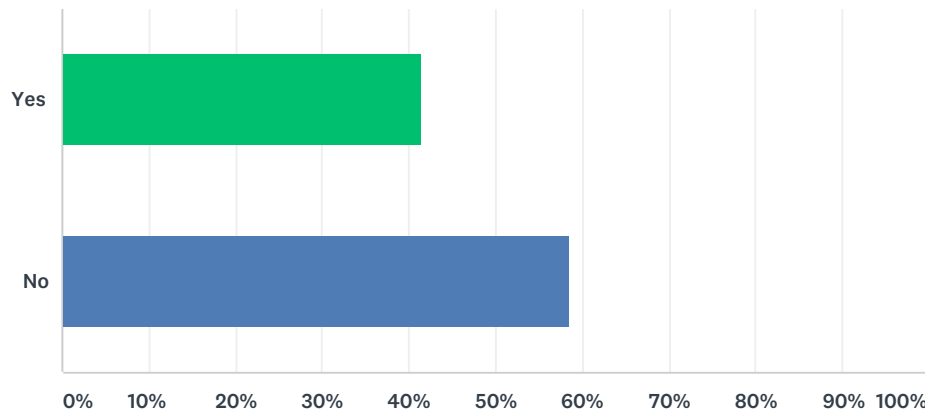
ANSWER CHOICES	RESPONSES	
Yes	65.85%	27
No	34.15%	14
TOTAL		41

#	PLEASE EXPLAIN.	DATE
1	Yes, I've almost been hit several times walking from Horizon House to Folker Park. There is no crosswalk or sidewalk.	2/28/2019 2:31 PM
2	they speed now even with frost heaves on 42nd	2/27/2019 3:41 PM
3	Transient traffic from apartments at end of 42nd as well as cutthrough traffic. Diverters at Dale and roundabout at 42nd and Piper would help.	2/27/2019 10:54 AM
4	Excessive speeds on Florina and 42nd have been witnessed many times. This is a concern of mine, in that, I have tenants with young children who play in the front yard.	2/25/2019 9:16 PM
5	We have had two mail boxes knocked out in the time that we have lived her. It is better since Tudor Bingo moved and 40th Street was upgraded.	2/24/2019 5:16 PM
6	Occasionally vehicles speed along 42th, but not very often. BTW, 40th is like a racetrack during the summer at night.	2/21/2019 2:36 PM
7	Cars roll through the stop sign not looking for traffic or pedestrians.	2/18/2019 10:11 AM
8	water main replacement- will this affect businesses in the immediate area during business hours (mainly medical offices)?	2/13/2019 1:55 PM
9	Cars already speed so I don't believe that will change.	2/12/2019 8:48 PM
10	With the new park going in and more traffic, I hope that speeding will be at a minimum on 42nd.	2/12/2019 6:41 AM
11	some cars and even larger cargo vans speed. Besides being dangerous for children and adults walking the speeding vehicles hit potholes and other bumps and the impact reverberates into the houses. Sometimes feels like a small earthquake in the house. There are stop signs on 42nd at Dale and at Piper but people stop then speed for one block then stop again.	2/12/2019 6:16 AM
12	This street has residents who live along the road. Once the improvements are made, drivers may opt to use this nicely paved road to go east/west. Sidewalks and street lighting must be a part of the improvements. The Folker park is not well lighted. Street lights on E 42nd will help.	2/11/2019 2:24 PM

13	With minimal pedestrian areas and drivers moving quickly there are often seeding cars near pedestrians.	2/10/2019 10:03 AM
14	People in a hurry to get to prov or the university cut through 42nd.	2/10/2019 8:41 AM
15	It is not uncommon to see vehicles speed down 42nd after turning from piper and is concerning due to lack of lighting and pedestrian walkways(a lot of people walk down 42nd)	2/9/2019 8:49 AM
16	Current speeding cut through traffic of transients and Providence visitors/employees make it unsafe for walkers and children in the neighborhood.	2/7/2019 11:58 AM
17	more in the evening than during the day.	2/6/2019 2:03 PM
18	The stretch between Piper and Dale is notorious for speeding. From Piper to Lake Otis less so but people still do. From Dale to Florina isn't bad because so many people park on the side of the road, though if that were to change than I could see speeding being and issue there as well.	2/5/2019 10:16 PM
19	I lived there, people constantly speeding and bottoming out their vehicles in the beat up road.	2/5/2019 8:08 PM
20	traffic too fast for the condition of the road	2/5/2019 5:39 PM
21	Haven't noticed it before.	2/5/2019 3:40 PM
22	I've heard that speeding has been a historical issue along 42nd. Especially since it's a school bus route with kids waiting in the dark. Lots of stop signs please.	2/3/2019 11:23 AM
23	Vehicles rush by constantly, including large delivery vehicles.	2/3/2019 8:08 AM
24	especially in summer, people travel over speed limit	2/2/2019 10:07 AM
25	Folker-42nd intersection often busy, all streets. Cut-thru traffic common. 42nd from W still used to access Piper-Tudor signal. Does appear more using LakeOtis-40th to Tudor via round-a-bout. Others using Folker to reach 40th.	2/1/2019 7:37 PM

Q2 Do you think there should be on-street parking along 42nd Avenue within the project limits? Please check one.

Answered: 41 Skipped: 0



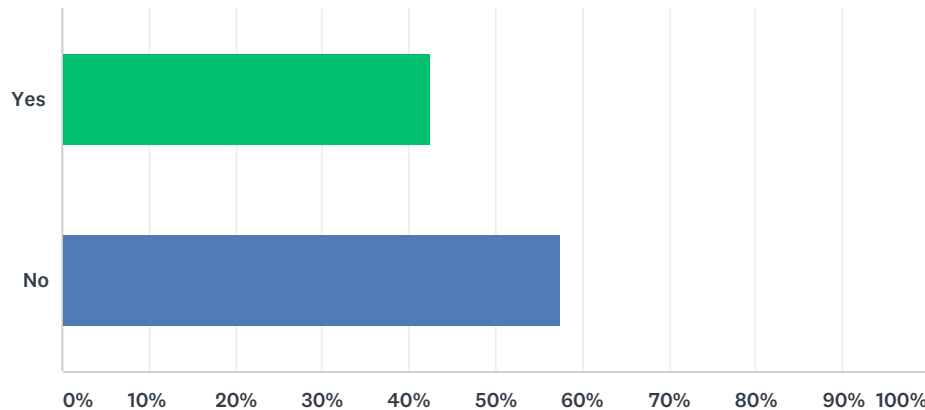
ANSWER CHOICES	RESPONSES	
Yes	41.46%	17
No	58.54%	24
TOTAL		41

#	PLEASE EXPLAIN WHERE YOU THINK PARKING SHOULD BE PROVIDED, OR IF NOT, WHY NOT?	DATE
1	I believe the apartments have adequate parking	2/28/2019 5:17 PM
2	Residents park along 42nd, but we need sidewalks.	2/28/2019 2:31 PM
3	No space...no one parks on the road now...	2/27/2019 3:41 PM
4	We should have offstreet parking overnight. Otherwise it will interfere with snow removal and blight the neighborhood.	2/27/2019 10:54 AM
5	Parking and a walking path.	2/25/2019 9:16 PM
6	it is more convenient for people who live here, but I don't care if it is there or not.	2/24/2019 5:16 PM
7	In certain areas, yes, but generally parking should not be needed.	2/21/2019 2:36 PM
8	Possible along the areas where there are single family residences, depending upon how it affects the owners of those residents.	2/20/2019 6:52 AM
9	The street is not wide enough for parking. Adding parking would take away from the development of Folker Park.	2/18/2019 10:11 AM
10	I don't think there's enough room for parking on the street. There is very little now.	2/12/2019 8:48 PM
11	Parking could be on Folker in front of park entrance. West side of the park. Directly across from Providence Horizon House.	2/12/2019 6:41 AM
12	the people next to me have many cars and occasionally they park one of them for several days in front of my house. Makes it really difficult for the post office truck to deliver to my mail box. I would be OK with maximum 2 hour parking for visitors but probably unrealistic to enforce. Seems like most people have driveways that accommodate multiple cars.	2/12/2019 6:16 AM
13	will shrink flow traffic lane	2/11/2019 4:40 PM

14	Between Laurel east to Wright street. Folker park needs parking for park users. Depending on what happens on the property at 42nd and Piper, that development may need overflow parking - so maybe extend on street all the way to Piper as well.	2/11/2019 2:24 PM
15	The area is heavily residential and space is limited . I would prefer Pedestrian and bike allotments over parking.	2/10/2019 10:03 AM
16	People already dump their cars along here.	2/10/2019 8:41 AM
17	If there is space it would be nice, but pedestrian walkways should come first	2/9/2019 8:49 AM
18	Because codes require adequate offstreet parking. If street parking is allowed, it should be prohibited overnight to allow for snow removal.	2/7/2019 11:58 AM
19	More by folker park if the renovations are going to be completed and the park is going to be more popular.	2/7/2019 11:08 AM
20	It is not needed. Everyone seems to have plenty of parking.	2/6/2019 10:30 PM
21	on street parking is convenient when my kids visit, but if there are going to be sidewalks this might not be possible.	2/6/2019 2:03 PM
22	This would only be good on certain stretches of road and not along the whole length. The ideal places for on-street parking would be Laurel to Wright, and Dale to Florina. These are the only lengths of 42nd Avenue that people regularly use for on-street parking, and the other stretches not mentioned would only increase the likelihood of accidents. This would also solve some of the speeding issue between Dale and Florina as I commented previously.	2/5/2019 10:16 PM
23	Driveway off street parking. No need for snowplows to have to go around vehicles.	2/5/2019 8:08 PM
24	Somewhere off the street. People park on the side of the street all the time already. Hard to drive around sometimes.	2/5/2019 3:40 PM
25	This would be nice, especially by the park. Also, a lot of people tend to park awkwardly along parts of 42nd, which in the winter conditions can make it hard to navigate.	2/3/2019 8:22 PM
26	Homes need on-street parking for visitors. Maybe 2 hour limited?	2/3/2019 11:23 AM
27	Maintain current parking on private property, driveways, car ports, garages. It's not legal to park on 42nd overnight except weekends. Rare to see vehicles parked overnight parallel w/ street - at least between Lake O and Piper.	2/1/2019 7:37 PM
28	This would be helpful between Dale street and Florina Street where there is a lot of housing.	2/1/2019 3:08 PM

Q3 Have you noticed any sight distance problems along 42nd Avenue within the project limits that need to be corrected? (i.e. trees, signs or structures that block your view when you are driving, or that block a driver's view of you when you are walking or bicycling) Please check one.

Answered: 40 Skipped: 1



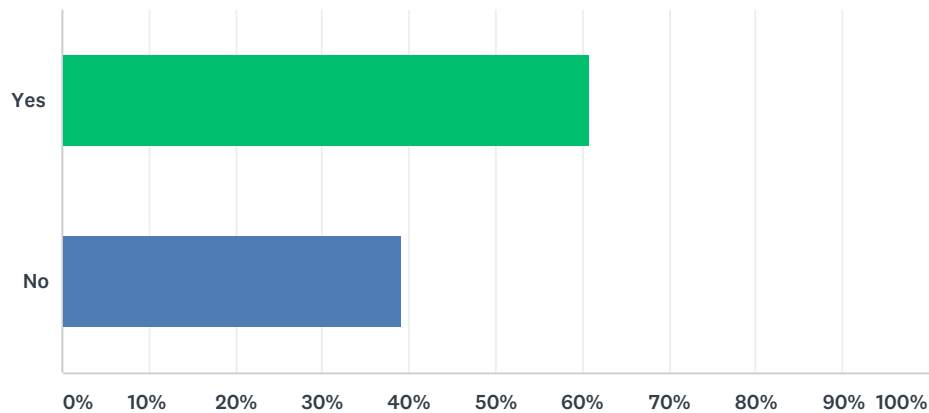
ANSWER CHOICES	RESPONSES
Yes	42.50% 17
No	57.50% 23
TOTAL	40

#	IF YES, PLEASE EXPLAIN AND IDENTIFY THE LOCATION.	DATE
1	The vehicles parked on the street	2/28/2019 5:17 PM
2	Several of the intersections have over-grown vegetation either on private property or in the ROW.	2/28/2019 2:31 PM
3	At Piper and 42nd the decorative things make this a difficult corner to sight around	2/27/2019 3:41 PM
4	There are collector street vegetation improvements on Piper that should be encouraged and continued as part of traffic calming designs. More green space should be encouraged as it will slow traffic. Please don't take our trees.	2/27/2019 10:54 AM
5	A few trees and shrubs need to be trimmed. More maintenance than anything else.	2/21/2019 2:36 PM
6	Bushes and structures at intersection of 42nd and Piper block view.	2/20/2019 6:52 AM
7	the piper intersection area.	2/14/2019 9:32 AM
8	The corner of 42nd and Piper seems really well done.	2/12/2019 6:16 AM
9	Dumpsters placed in the ROW are an eye sore and a disgrace. As part of this road improvement, work with those property owners to relocate those internal to their property.	2/11/2019 2:24 PM
10	At 42nd and wright it is unclear sometimes for drivers whether to stop or Go on through . Trees and snow sometimes are problems here .	2/10/2019 10:03 AM
11	Turning right onto 42nd from Wright street(it can be difficult to see cars coming from the left)	2/9/2019 8:49 AM
12	Although the park could be more appealing and looked after.	2/6/2019 10:30 PM
13	large boulder in right of way Alders overgrown	2/6/2019 7:38 PM

14	The intersection at 42nd and Piper is a dangerous corner for any compact to mid-size vehicles, as the large bushes and trees obstruct most of your vision would trying to turn onto or from Piper. This is also true for the other intersections along Piper, which have similar designs in bushes and trees. The walls are not obstructive and actually serve as a safety measure in case of slides, for both vehicles and pedestrians waiting to cross.	2/5/2019 10:16 PM
15	42nd going west and turning north or south on Piper has horrible visibility from all that artsy decorative crap at the intersection.	2/5/2019 8:08 PM
16	At the corner of Florina and 42 there is a huge bush that blocks vision in the summertime	2/4/2019 4:34 AM
17	Better lighting at corssings, without ample street lights people tend to miss or not understand which intersections are thru and which are stops.	2/3/2019 8:22 PM
18	This is a problem all over the city. Unpruned plants growing out too close to intersections. I'm originally from Madison, WI. The city there would just cut out plants that were i the right-of-way.	2/3/2019 11:23 AM
19	42nd-Piper shrubs block Piper traffic (I trim in warm months). Difficult for 42nd vehicles to enter Piper during higher traffic periods. Keep lower Piper tree branches pruned. They block 42nd traffic view. 42nd-Wright similar on SW corner. Many vehicles move faster than 25mph between Folker-Piper.	2/1/2019 7:37 PM

Q4 Pedestrian facilities (sidewalks, pathways) will be constructed as part of the proposed improvements. Should pedestrian facilities be provided on both sides of the roadway? Please check one.

Answered: 41 Skipped: 0



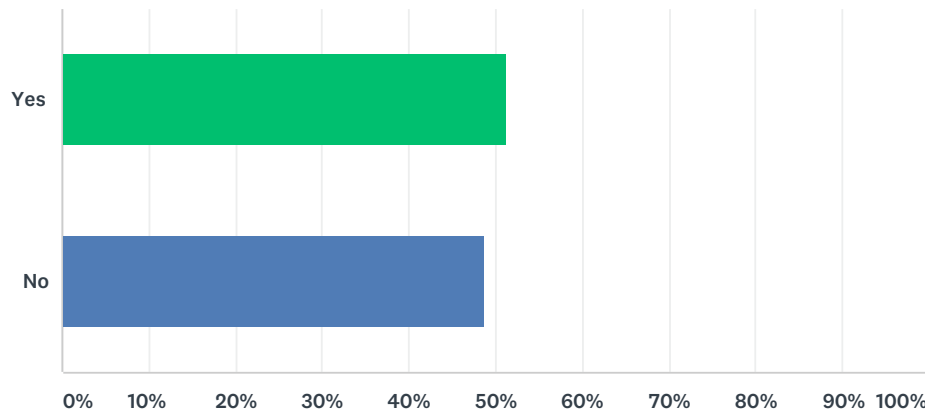
ANSWER CHOICES	RESPONSES	
Yes	60.98%	25
No	39.02%	16
TOTAL		41

#	PLEASE EXPLAIN.	DATE
1	save \$	2/28/2019 5:17 PM
2	Not necessarily, but if not on both sides then crosswalks should be provided at intersections so that a safe, ADA route is provided.	2/28/2019 2:31 PM
3	I have seen foot traffic increase significantly in the last 15 years	2/27/2019 3:41 PM
4	One side only, preferably on the north side of the street with more southern exposure to assist with northern friendly design.	2/27/2019 10:54 AM
5	Pedestrian scale lighting is needed, bollard lighting, along with some sort of pedestrian walkway areas.	2/21/2019 2:36 PM
6	Sidewalks need to be on both sides for safety reasons. A pedestrian should walk against traffic as to see what is coming toward them.	2/18/2019 10:11 AM
7	I think only one side of the road will work for all.	2/12/2019 8:48 PM
8	Folker park will have a perimeter trail so that the muni would not have to put a sidewalk on that side of the street by the park.	2/12/2019 6:41 AM
9	This would mean that there would be no on street parking. Pedestrian walkway on both sides would be really nice. What does that mean for front easements? How much front yard would we lose. How does that affect the road width?	2/12/2019 6:16 AM
10	nice to have and provides a safer passage during winter snow	2/11/2019 4:40 PM
11	I would like bike and pedestrians to have designated areas . I don't have the expertise to say if it should be both or one side.	2/10/2019 10:03 AM
12	One side should be sufficient	2/10/2019 8:41 AM
13	I think one side would be sufficient. Preferably on the side that is closest to Tudor	2/9/2019 8:49 AM

14	Unnecessary expense and loss of natural vegetation. One side should be sufficient.	2/7/2019 11:58 AM
15	Midtown is becoming increasing urban, bike facilities on both side of the road would encourage more non-motorized transportation, increase safety for current pedestrians/cyclists and decrease congestion due to traffic. The addition of pedestrian facilities is the most efficient way (per dollar) to improve our transit system, decrease environmental impacts (like pollution) and increase public health by encouraging exercise. Please put pedestrian facilities on both side of the road.	2/7/2019 11:11 AM
16	One side is enough.	2/7/2019 10:22 AM
17	I think that pedestrian facilities are a great idea.	2/6/2019 2:03 PM
18	Need sidewalks Along 42nd Avenue to Lake Otis. A lot of foot traffic and Elders trying to walk on this street.	2/6/2019 9:50 AM
19	Yes, everywhere along 42nd would work with sidewalk on both sides, except the stretch between Piper and Dale; it is already rather tight and I think it wouldn't be necessary to have sidewalk on both sides. I think which side would be best determined by the planning crew.	2/5/2019 10:16 PM
20	There is absolutely no walkway now and a high volume of pedestrians. Huge apartment and condo complexes along 42nd, plus the college campus and homeless. Massive foot traffic!	2/5/2019 8:08 PM
21	Just on one side is enough.	2/5/2019 3:40 PM
22	Not necessary, a single sidewalk would be ample.	2/3/2019 8:22 PM
23	My answer is based on if there is space. I've noticed that east of Piper, the whole curb in front of some dwellings is driveway. That makes on-street parking, sidewalks and plowing difficult to pull off.	2/3/2019 11:23 AM
24	Unsure. What is standard?	2/3/2019 8:08 AM
25	We have lots of foot traffic on e. 42nd & it's much safer w/ sidewalks	2/2/2019 10:07 AM
26	Tall, wooded vegetation on S sides keeps plowed snow from sun access. N side of 42nd melts a month earlier than S side. Muni plowed snow from Roson Ct is moved around corner onto 42nd. Similar these blocks. Muni does blow excess snow onto private property, major cause for delayed S side melting. Most Springs snow has not melted until third week of May.	2/1/2019 7:37 PM
27	In the dark it is hard to see pedestrians walking in the road.	2/1/2019 3:08 PM

Q5 Are you aware of any drainage problems within the project area that need to be corrected? Please check one.

Answered: 41 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	51.22%	21
No	48.78%	20
TOTAL		41

#	IF YES, PLEASE EXPLAIN.	DATE
1	YES...most intersections, especially the intersection of Folker St and E 42nd has a massive pot holes. Numerous pot holes all along E 42nd, the whole road is like dodging craters.	2/28/2019 2:31 PM
2	just general lack of drains along 42nd Ave	2/27/2019 3:41 PM
3	Major drainage issues on 42nd between Piper and Dale.	2/27/2019 10:54 AM
4	Not sure on this one, I think it has improved recently. There was an area between Dale and Piper that was a problem in the past.	2/24/2019 5:16 PM
5	Intersections collect too much water.	2/21/2019 2:36 PM
6	the drain on the northwest corner of Folker and 42nd is not large enough and gets clogged up easily. This cause water to build up across 42nd. Thus creating a dangerous situation.	2/18/2019 10:11 AM
7	Yes Yes Yes!! The drainage manhole in front of my house floods and water backs up past my driveway (several inches) with a small lake in front of the neighboring house. Then it freezes and turns to slush!	2/12/2019 6:16 AM
8	Ponding that occurs due to depressions on the road. This is especially challenging during freeze thaw in the late winter/early spring.	2/11/2019 2:24 PM
9	42nd And Wright 42nd And folker	2/10/2019 10:03 AM
10	The road is pretty uneven with some big dips so there are epic puddles at some of the intersections.	2/8/2019 9:50 PM
11	Major drainage issues exist, causing large puddles every time it rains.	2/7/2019 11:58 AM
12	When rain/ snow melt there is are standing puddles @/near the intersections of 42nd and lake Otis and 42nd and Folker.	2/7/2019 11:11 AM
13	Rain water runs off 42nd Ave and onto low-lying properties between Laurel and Lake Otis.	2/6/2019 7:38 PM
14	At College Place Condominiums Entrance way.	2/6/2019 9:50 AM

15	Between Piper and Dale get flooded whenever we have heavy rains, and between Laurel and Wright there are frequently large pools of water along both sides of 42nd.	2/5/2019 10:16 PM
16	Oh my god my house is 3220 east 42nd. The whole street in that vicinity floods every spring break up, has huge puddles during rain that have nowhere to drain, warm and melting spells during winter are a constant problem. My neighbors and I have been dealing with this lack of drainage forever!	2/5/2019 8:08 PM
17	puddles form between Folker st and Laue st.	2/5/2019 5:39 PM
18	SW corner of 42nd and Wright has a drain, but still frequently floods.	2/3/2019 11:23 AM
19	beyond Piper, our area routinely floods during break up	2/3/2019 8:08 AM
20	between Piper and Dale we always have water backup	2/2/2019 10:07 AM
21	42nd ponding after rains, or during snow melt. 42nd-Folker has long history of breakup season ponds.	2/1/2019 7:37 PM
22	Folker street has terrible drainage especially after a rain.	2/1/2019 3:08 PM

Q6 If you could change three (3) things about the 42nd Avenue roadway within the project limits, what would they be?

Answered: 35 Skipped: 6

ANSWER CHOICES	RESPONSES	
Priority #1	100.00%	35
Priority #2	88.57%	31
Priority #3	82.86%	29

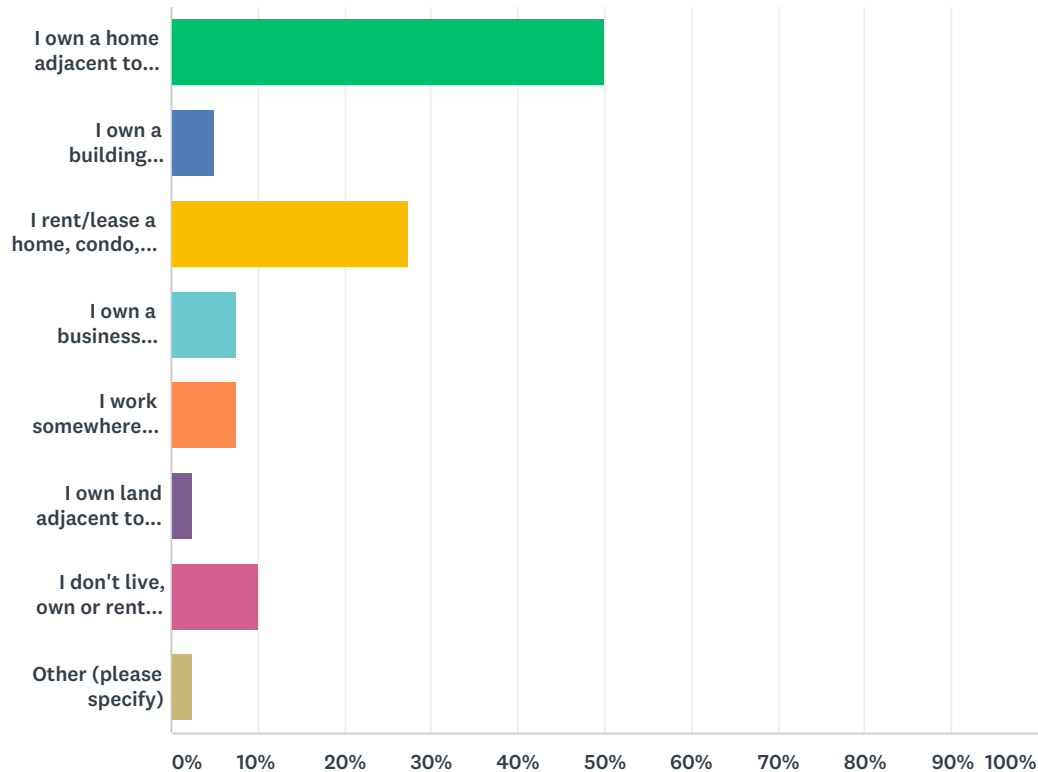
#	PRIORITY #1	DATE
1	Crosswalks at Folker St. and E 42nd with access to park	2/28/2019 2:31 PM
2	make it happen	2/27/2019 3:41 PM
3	Drainage	2/27/2019 10:54 AM
4	Lighting	2/25/2019 9:16 PM
5	get rid of all the pott holes, cracks and bumps in the road	2/24/2019 5:16 PM
6	Pedestrian scale lighting, bollard type	2/21/2019 2:36 PM
7	add sidewalks	2/18/2019 10:11 AM
8	Smooth road surface	2/17/2019 2:55 PM
9	People pay more attention to the stop signs.	2/12/2019 8:48 PM
10	More street lights	2/12/2019 6:41 AM
11	stop people from speeding!	2/12/2019 6:16 AM
12	Sidewalks	2/11/2019 2:24 PM
13	Pedestrian and bike area	2/10/2019 10:03 AM
14	Safety for pedestrians and cyclists	2/10/2019 8:41 AM
15	Pedestrian walkways	2/9/2019 8:49 AM
16	Sidewalks would be great. There is so much foot traffic on that road.	2/8/2019 9:50 PM
17	Improved drainage	2/7/2019 11:58 AM
18	Seperated pedestrian Facilites	2/7/2019 11:11 AM
19	Sidewalks	2/7/2019 11:08 AM
20	Maybe level out the hill down by the union hall. That is very bad in the winter.	2/7/2019 10:22 AM
21	Visual appeal	2/6/2019 10:30 PM
22	sidewalks and crosswalks	2/6/2019 7:38 PM
23	potholes	2/6/2019 2:03 PM
24	Road Condition	2/6/2019 9:50 AM
25	Less obstructions, more visibility.	2/5/2019 10:16 PM
26	Drainage	2/5/2019 8:08 PM
27	improved surface	2/5/2019 5:39 PM
28	Maintain the roads. The roads right now are full of potholes.	2/5/2019 3:40 PM
29	Level and repave	2/4/2019 4:34 AM

30	Potholes	2/3/2019 8:22 PM
31	Safer for pedestrians and bicyclists	2/3/2019 11:23 AM
32	Speeding	2/3/2019 8:08 AM
33	for awwu to replace old water lines to include piper to dale,they are just as old as those up to piper	2/2/2019 10:07 AM
34	Non-motorized safety. History of multiple pedestrians, runners, bikers, skateboarders, scooters. It's a warm weather playground.	2/1/2019 7:37 PM
35	Intersection Laurel and 42nd is very icy & steep in the winter which makes it hard to stop at the stop sign.	2/1/2019 3:08 PM
#	PRIORITY #2	DATE
1	Sidewalk along entire corridor	2/28/2019 2:31 PM
2	make it happen soon	2/27/2019 3:41 PM
3	Traffic calming	2/27/2019 10:54 AM
4	Pedestrian walkway	2/25/2019 9:16 PM
5	Maybe a roundabouts so there aren't so many stops	2/24/2019 5:16 PM
6	Raised intersections to slow traffic	2/21/2019 2:36 PM
7	improve sewer drainage	2/18/2019 10:11 AM
8	Pedestrian/bike crossing notification at Piper St. crossing	2/17/2019 2:55 PM
9	I wish there would be less traffic.	2/12/2019 8:48 PM
10	place to cross for residents to PHH into the Folker park	2/12/2019 6:41 AM
11	address the flooding issue in front of my house (3241)	2/12/2019 6:16 AM
12	Ponding/repave street	2/11/2019 2:24 PM
13	Lighting	2/10/2019 10:03 AM
14	Better lighting	2/10/2019 8:41 AM
15	Lighting	2/9/2019 8:49 AM
16	Lighting would be nice too. Would make it feel safer at night.	2/8/2019 9:50 PM
17	Traffic calming, add roundabout at Piper/42nd	2/7/2019 11:58 AM
18	Increased street lighting/ nighttime visibility (people walk down the road in the dark with dark clothes and are hard to see)	2/7/2019 11:11 AM
19	lighting	2/7/2019 11:08 AM
20	Sidewalks	2/6/2019 10:30 PM
21	storm water runoff	2/6/2019 7:38 PM
22	42nd between dale and piper is the WORST. Please fix. It's like a roller coaster.	2/6/2019 2:03 PM
23	Sidewalks need to be added	2/6/2019 9:50 AM
24	Speed bumps to prevent speeding.	2/5/2019 10:16 PM
25	Curb and sidewalk	2/5/2019 8:08 PM
26	pedestrian facilities	2/5/2019 5:39 PM
27	Lighting	2/3/2019 8:22 PM
28	Lots of stops to keep cars below 25mph	2/3/2019 11:23 AM
29	Drainage	2/3/2019 8:08 AM
30	Keep 42nd narrow, signed intersections, slow vehicles	2/1/2019 7:37 PM
31	More lighting	2/1/2019 3:08 PM
#	PRIORITY #3	DATE

1	Slow down the traffic with design	2/28/2019 2:31 PM
2	make it happen asap :]	2/27/2019 3:41 PM
3	Pedestrian improvements	2/27/2019 10:54 AM
4	Speed bumps to slow down flow	2/25/2019 9:16 PM
5	restrooms at the Folker park	2/24/2019 5:16 PM
6	fix drainage	2/21/2019 2:36 PM
7	sufficient street lighting	2/18/2019 10:11 AM
8	Continued maintenance	2/12/2019 8:48 PM
9	speed bumps to keep pedestrains safe	2/12/2019 6:41 AM
10	make it more pedestrian and bicycle friendly	2/12/2019 6:16 AM
11	Drainage	2/11/2019 2:24 PM
12	Drainage	2/10/2019 10:03 AM
13	More police presence	2/10/2019 8:41 AM
14	Enforce speed limit	2/9/2019 8:49 AM
15	Fixing the road so it is less prone to potholes and frost heaves. Those are also epic along that road, though they do act as natural speed bumps which is why speeding isn't a huge issue there.	2/8/2019 9:50 PM
16	Pedestrian friendly features	2/7/2019 11:58 AM
17	Make the crossing @ Piper street more pedestrain friendly (eg round about, flashing ped x-ing sign or something to this effect)	2/7/2019 11:11 AM
18	plowing sidewalks in winter	2/7/2019 11:08 AM
19	Accessibility	2/6/2019 10:30 PM
20	i would love to have sidewalks.	2/6/2019 2:03 PM
21	Lighting needs to be better for safety.	2/6/2019 9:50 AM
22	Better light along the entire length, similar to 40th Avenue upgrade.	2/5/2019 10:16 PM
23	Road bed	2/5/2019 8:08 PM
24	bike facilities	2/5/2019 5:39 PM
25	Walkways	2/3/2019 8:22 PM
26	Limit driveway width	2/3/2019 11:23 AM
27	Potholes	2/3/2019 8:08 AM
28	Maintain the full grown natural landscaping.	2/1/2019 7:37 PM
29	bike lanes	2/1/2019 3:08 PM

Q7 What best describes you? (please check all that apply, but you must select at least one!)

Answered: 40 Skipped: 1

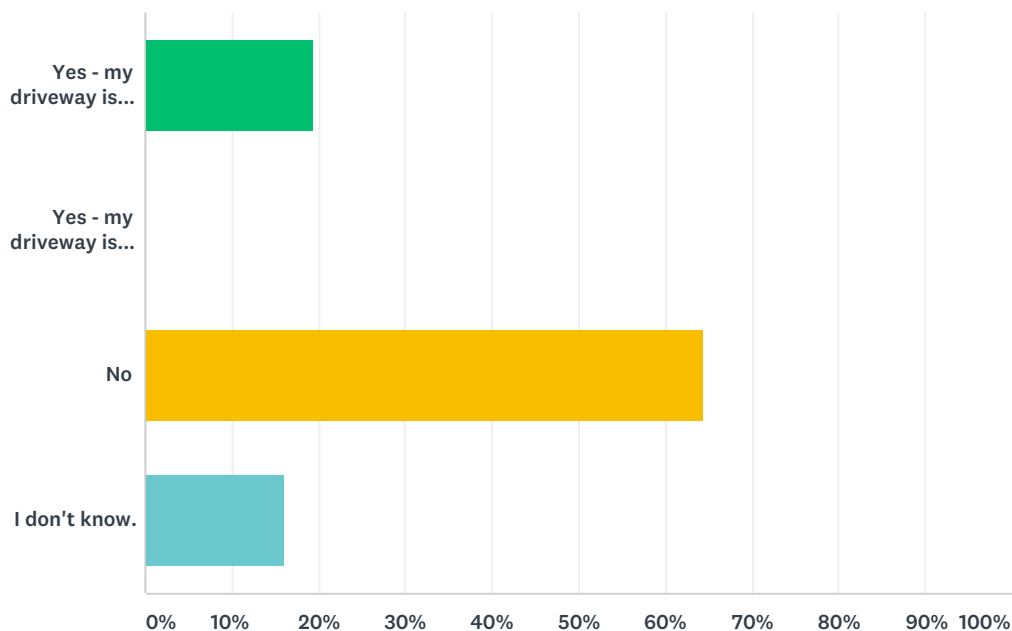


ANSWER CHOICES	RESPONSES	
I own a home adjacent to 42nd Avenue within the project limits (single family home, duplex, condo, apartment).	50.00%	20
I own a building adjacent to 42nd Avenue within the project limits.	5.00%	2
I rent/lease a home, condo, duplex, apartment, office, or building adjacent to 42nd Avenue within the project limits.	27.50%	11
I own a business adjacent to 42nd Avenue within the project limits.	7.50%	3
I work somewhere adjacent to 42nd Avenue within the project limits.	7.50%	3
I own land adjacent to 42nd Avenue within the project limits.	2.50%	1
I don't live, own or rent property adjacent to 42nd Avenue within the project limits, but I live nearby and/or drive, walk, or bike in the project area.	10.00%	4
Other (please specify)	2.50%	1
Total Respondents: 40		

#	OTHER (PLEASE SPECIFY)	DATE
1	I drive/bike it everyday and my kid does too.	2/3/2019 11:26 AM

Q9 Is your driveway constructed with concrete or heated?

Answered: 31 Skipped: 10

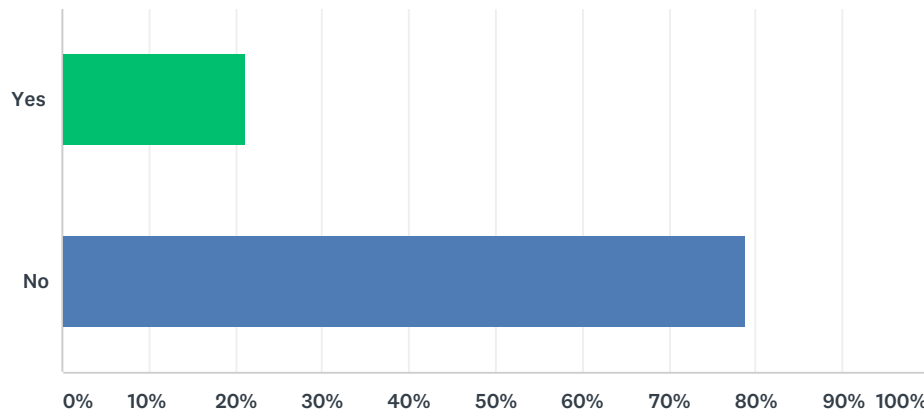


ANSWER CHOICES	RESPONSES	
Yes - my driveway is concrete.	19.35%	6
Yes - my driveway is concrete AND heated.	0.00%	0
No	64.52%	20
I don't know.	16.13%	5
TOTAL		31

#	PLEASE EXPLAIN.	DATE
1	asphalt	2/27/2019 3:43 PM
2	The complex has a parking lot.	2/18/2019 10:14 AM
3	NA	2/13/2019 1:56 PM
4	blacktop	2/12/2019 6:20 AM
5	I believe country square is asphalt	2/9/2019 8:51 AM
6	Asphalt driveway/parking structure non-heated	2/7/2019 11:12 AM
7	Asphalt	2/6/2019 9:51 AM
8	asphalt surface	2/5/2019 5:40 PM
9	just gravel at this point	2/2/2019 10:12 AM
10	Driveway is asphalt.	2/1/2019 7:47 PM

Q10 Have you experienced groundwater problems in your crawl space or basement? Please check one.

Answered: 33 Skipped: 8

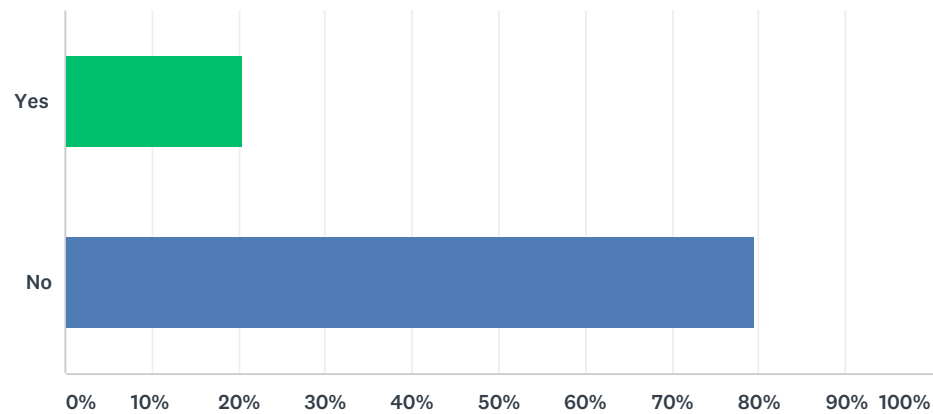


ANSWER CHOICES	RESPONSES	
Yes	21.21%	7
No	78.79%	26
TOTAL		33

#	IF YES, PLEASE EXPLAIN.	DATE
1	2012 flooding occurred Was told by MUNI that it was due to a business located east of us	2/27/2019 3:43 PM
2	When storage unit building was constructed it diverted water towards my building.	2/25/2019 9:23 PM
3	NA	2/13/2019 1:56 PM
4	unknown live in condo, check with association for College place, property management services 907-562-2929	2/7/2019 11:13 AM
5	French drains dont drain fast.	2/7/2019 10:24 AM
6	In the past we've had flooded basements	2/5/2019 8:10 PM
7	Not sure.	2/3/2019 8:24 PM
8	Fills with water every few years	2/3/2019 8:09 AM
9	When AWWU cast iron waterline broke NW corner of this Lot 4, Wolcott Sub. Water flowed S via driveway, under the house, onto 2/3 of garage floor, S along E side of house into botanical garden. Was 6" depth thruout garden. Many perennials were destroyed.	2/1/2019 7:47 PM

Q11 Do you have a foundation drain or sump pump? Please check one.

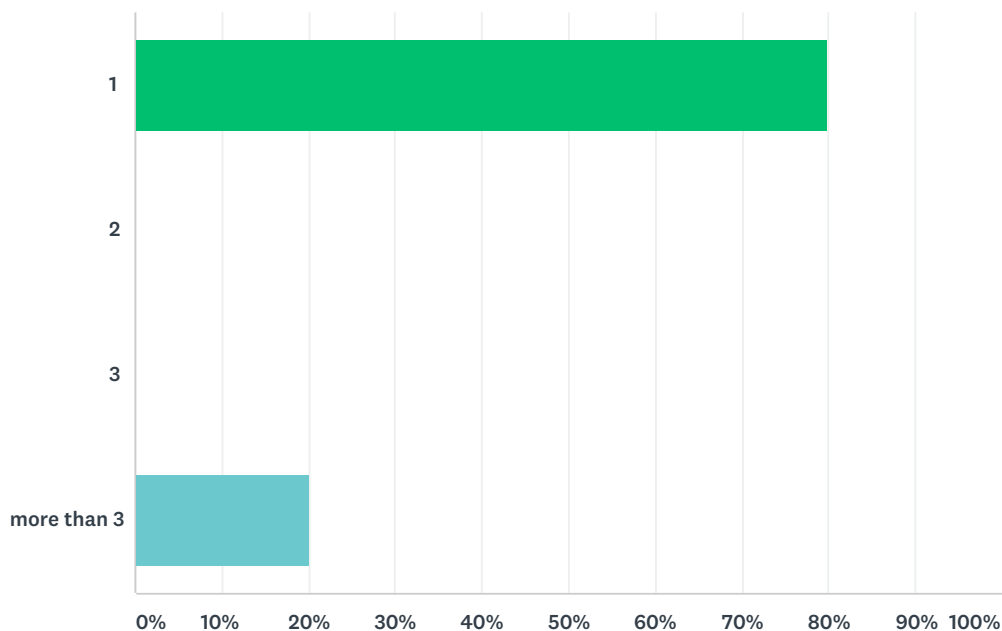
Answered: 34 Skipped: 7



ANSWER CHOICES	RESPONSES	
Yes	20.59%	7
No	79.41%	27
TOTAL		34

Q12 How many foundation drains or sump pumps do you have?

Answered: 5 Skipped: 36

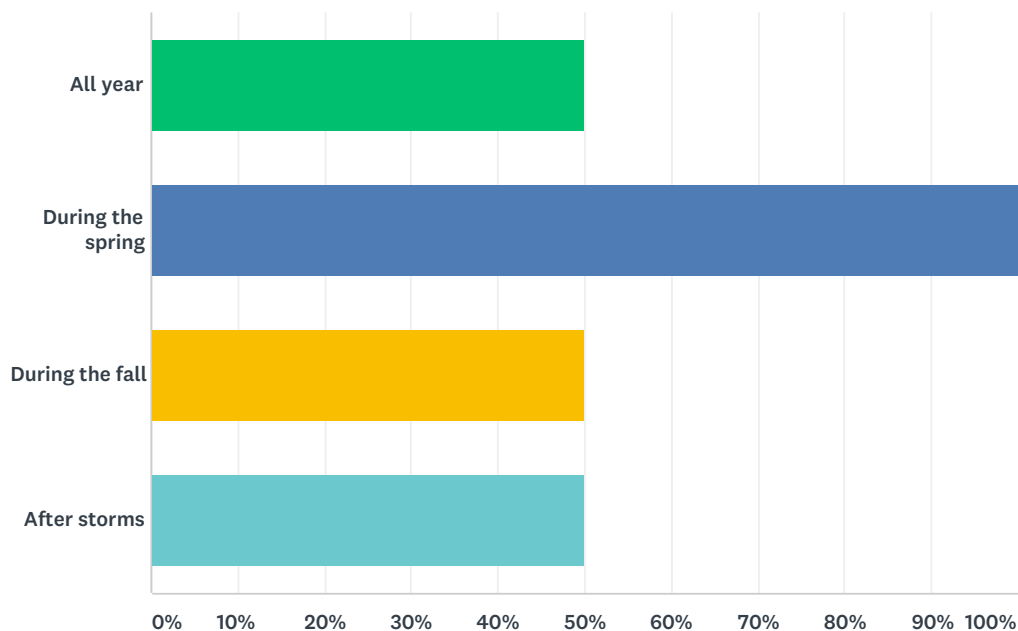


ANSWER CHOICES	RESPONSES
1	80.00% 4
2	0.00% 0
3	0.00% 0
more than 3	20.00% 1
TOTAL	5

#	WHERE ARE THEY LOCATED AND TO WHERE DO THEY DRAIN?	DATE
1	On South-side of building, draining south.	2/25/2019 9:25 PM
2	I don't know	2/12/2019 8:51 PM
3	I believe each building has a drain in our garage. Unknown location of where they drain to	2/9/2019 8:52 AM
4	Garage floor drains.	2/7/2019 10:25 AM
5	drains outside the building	2/6/2019 7:40 PM
6	In the parking garage	2/6/2019 9:52 AM
7	It's a manual one I have to hook up when it floods	2/3/2019 8:10 AM

Q13 How often does the pump run? Select all that apply.

Answered: 2 Skipped: 39

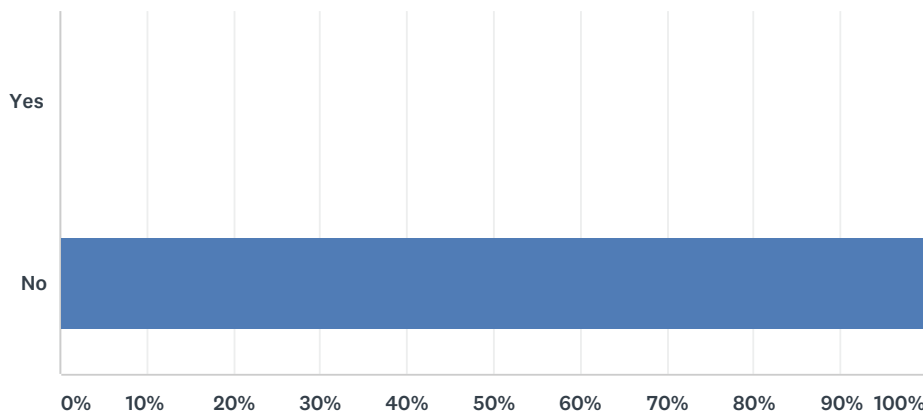


ANSWER CHOICES		RESPONSES	
All year		50.00%	1
During the spring		100.00%	2
During the fall		50.00%	1
After storms		50.00%	1
Total Respondents: 2			

#	OTHER (PLEASE SPECIFY).	DATE
1	No idea	2/12/2019 8:51 PM
2	Never goes on	2/6/2019 7:40 PM
3	It is a drain	2/6/2019 9:52 AM

Q14 Do you have any known issues with your water service? Please check one.

Answered: 32 Skipped: 9

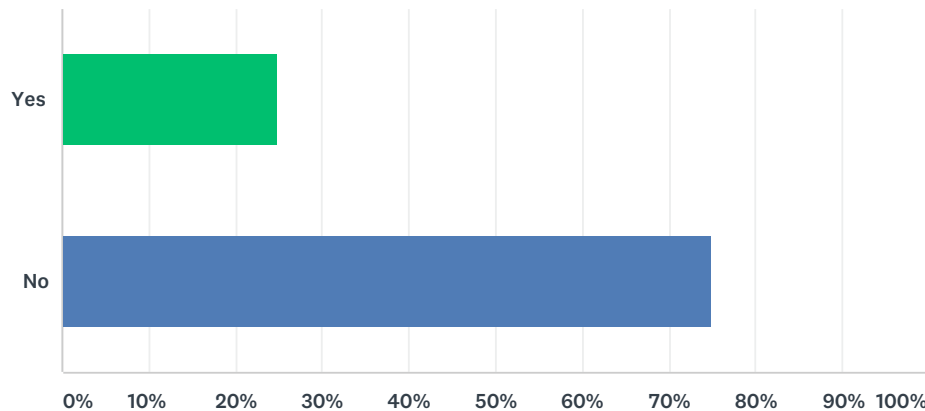


ANSWER CHOICES		RESPONSES	
Yes		0.00%	0
No		100.00%	32
TOTAL			32

#	IF YES, PLEASE EXPLAIN.	DATE
1	unknown live in condo, check with association for College place, property management services 907-562-2929	2/7/2019 11:14 AM
2	I am on a well	2/3/2019 8:11 AM

Q15 Are there any special conditions on your property that you feel the design team should be aware of?

Answered: 32 Skipped: 9



ANSWER CHOICES	RESPONSES
Yes	25.00% 8
No	75.00% 24
TOTAL	32

#	IF YES, PLEASE EXPLAIN.	DATE
1	Sidewalks need to include handicap wheelchair and walker access as required by law.	2/18/2019 10:16 AM
2	Our portable water is provided by a well on our property. Interference/disturbance to groundwater table could impact our potable water supply.	2/17/2019 2:58 PM
3	many of these houses were built in the 1960s and may still have the old buried sewer/water enclosures. Mine caved in about 10 years ago.	2/12/2019 6:24 AM
4	Our property hasn't had No problems with drainage but all around us during break up there are problematic drainage areas . The road at wright and Kimberlie seems to develop pot holes very frequently likely secondary to drainage problems	2/10/2019 10:06 AM
5	Country Square uses our ground level yard area near 42nd to plow snow in a pile to avoid the cost of hauling. We would be appreciative if any upgrades would keep any impact on that ability to a minimum.	2/9/2019 8:54 AM
6	We need to have 24/7 access to our property for our patients. We are a functioning birth center, with patients arriving in labor at any hour of the day or night, potentially. We are also concerned about construction noise during the day, as I'm sure other businesses around us are as well. We hope there's a plan to mitigate the worst of all that... ??	2/8/2019 9:53 PM
7	no public parking in condo complex, sidewalks to/around folker park would be amazing	2/7/2019 11:14 AM
8	Part of our property and our neighbor to the West are below road grade.	2/6/2019 7:41 PM
9	vision triangles and any need to remove vegetation	2/5/2019 5:41 PM
10	I live at Deer Park apartments, and am concerned with the ability to safely pull in to and out of our parking lot when the project is going on. Also, given the location of the project, is something being done to make sure that Eastbound traffic can flow smoothly? Many use Piper to access eastbound Tudor, we have 40th to get to Piper, but will it be enough?	2/3/2019 8:27 PM

11	Maintained woodsy trees/vegetation between house and ROW. There is a Lodgepole Pine with upper 360 vinyl fencing near ROW. Originally 42nd had 66' width. MOA reduced it to 60ft, returning 3ft to adjacent N & S property owners. Required \$3K for each owner to process. College Place condos were built 1983 - the extra 3ft included when they bought their 2 acre property.	2/1/2019 8:00 PM
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Q16 Did we miss anything? Please include any other comments you may have.

Answered: 16 Skipped: 25

#	RESPONSES	DATE
1	I just want to be able to pull in and out of my residence	2/28/2019 5:20 PM
2	There are kids and seniors in this neighborhood, what will you do to provide safer pedestrian facilities?	2/28/2019 2:32 PM
3	Don't make the road and pedestrian surfaces any wider than necessary. Most roads are unnecessarily wide and this encourages speeding and decreases green and permeable spaces.	2/27/2019 10:57 AM
4	Can't think of anything that was missed.	2/21/2019 2:38 PM
5	Try to keep away from any designs that need additional upkeep after they are made. An example is the roundabouts that have bushes planted and then it is left to let weeds grow. Waste of money. Another is decorative concrete barriers and 42nd and Piper. All scratched up by snow removal equipment.	2/20/2019 7:06 AM
6	How is the actual project going to be paid for?	2/18/2019 10:18 AM
7	Please design the project work schedule to be respectful of the surrounding neighborhood and the impact of noise and construction on the lives of local residents.	2/17/2019 3:01 PM
8	Thanks so much for taking my input!	2/12/2019 6:43 AM
9	I sometimes drive 42nd toward lake otis wish there were provisions to turn left.	2/11/2019 4:45 PM
10	This area is one of the few adjoining residential areas near the Providence and UAA campus. Residents who live here can walk, bike to these campus for class or services once the road is fixed and lighted, ensuring greater safety.	2/11/2019 2:27 PM
11	The intersection of laurel st and 42nd is extremely slick in the winter and is hard to stop at when icy. Integration of pedestrian facilities with/through Folker park may increase its usage and help decrease crime in the area. The park as is gets little use.	2/7/2019 11:15 AM
12	There are lots of pedestrians on this street.	2/6/2019 7:41 PM
13	no. I think it's wonderful.	2/6/2019 2:09 PM
14	Consider roundabouts in place of 4-Way stops in some locations. I feel it could be more efficient, or just change them to 2-Way stops for better traffic flow along 42nd.	2/5/2019 10:21 PM
15	Can think of anything right now. Thanks !	2/3/2019 11:27 AM
16	Will there be any changes to Folker park along 42nd avenue?	2/1/2019 3:11 PM

APPENDIX C

Review Comments and Responses

42nd Avenue Upgrade: Lake Otis Parkway to Florina Street MOA / PM&E Project No. 18-06 Review Comments Summary Draft Technical Memorandum						
No.	Reviewer	Date	Com. No.	Sheet No. / Page No.	Comment	Response
1	Tim Mayland, MOA Traffic (Traffic Calming)	9/20/2019	1	General	A 2014 study of 42nd Avenue from Piper to Wright street indicated westbound traffic travelling at 36mph and eastbound traffic travelling at 29 mph; the project was ranked 10th highest priority in the traffic calming program. However, the high ranking is likely due to 42nd Avenue's high traffic volumes for a classified "local" road and its lack of sidewalks.	A note about the 2014 study was added to the Tech Memo. We will investigate traffic calming more in the DSR phase.
2	Kris Langley, MOA Traffic (Safety)	9/20/2019	1	Pg 4, Section B.3	<p>a) An evaluation should be made in the DDSR of the all-way STOP controlled intersections at Laurel, Folker, and Dale to determine whether the all-way STOP control warrants from the MUTCD are currently met. They may have been appropriate prior to the improvements to East 40th. They may have been installed to address speeding issues rather than on a 'volumes, delay and crash history' basis.</p> <p>This project is an opportune time to re-evaluate whether reinstallation is appropriate. If currently unwarranted, and there are concerns about the resultant increases in travel speeds, a more desirable response might be to install approved traffic calming devices (horizontal and/or vertical, including the neck-downs at intersections referenced on Page 7 under "Proposed Traffic Calming")</p> <p>b) Suggested revisions to text for inclusion in the DDSR</p> <p>a. "Of the eleven intersections, six require 42nd Avenue traffic to stop including the west termination of 42nd at Lake Otis Parkway, and at the Piper Street and Florina Street intersections."</p> <p>b. "Of these six, the remaining three intersections are all-way..."</p>	<p>a) an evaluation of the all-way stop controlled intersections and (any) traffic calming measures will be included in the DSR phase. Have added this information to the Tech Memo.</p> <p>b) wording has been updated</p>
3	Kris Langley, MOA Traffic (Safety)	9/20/2019	2	Pg 6, Section B.7	Question...Was "Existing Conditions" (Section B) the best place for Table 6 and a discussion of "Survey Questionnaire"?	Survey Questionnaire was moved to a stand-alone Section C.
4	Kris Langley, MOA Traffic (Safety)	9/20/2019	3	Pg 7, Section E.	<p>a) It is possible that the all-way STOP controlled intersections noted in Section B.3 do not currently meet the criteria in the Manual on Uniform Traffic Control Devices. They also may have been installed in the past by the MOA as 'speed breakers' to address real/perceived speeding issues along 42nd Avenue.</p> <p>See comment #1 above. Regardless, a discussion will need to be held with MOA Traffic to evaluate the appropriate combination of traffic control at intersections and traffic calming devices along this corridor, and the results of the discussion incorporated into the DDSR.</p> <p>b) Please note emailed comment from Tim Myland, Traffic Calming Program Engineer, about speeding identified between Piper Street and Wright Street</p>	<p>a) an evaluation of the all-way stop controlled intersections and (any) traffic calming measures will be included in the DSR phase. A meeting will be held with MOA Traffic to discuss the most appropriate solution.</p> <p>b) Thank you. Tim's comments have been received and noted.</p>
5	Kris Langley, MOA Traffic (Safety)	9/20/2019	4	Pg 10, Section J.	Please incorporate our comments into the DDSR.	Comments have been incorporated and addressed.
6	Joe Sanks, AWWU	9/20/2019	1	General	Parcel 117 (Wentworth Blk 2, lot 20) does not have water service.	Thank you. We indicate in the plans that this parcel is on a well.

<p align="center">42nd Avenue Upgrade: Lake Otis Parkway to Florina Street MOA / PM&E Project No. 18-06 Review Comments Summary Draft Technical Memorandum</p>						
No.	Reviewer	Date	Com. No.	Sheet No. / Page No.	Comment	Response
7	Kathy Borque-Parker MOA Street Lighting	9/20/2019	1	Pg 5	6. Illumination - there is one segment of E. 42nd Ave. that currently has illumination. This segment is from Dale to Florina and continuing on E. 42nd Circle. Unsure of the current condition but there is a load center behind 3400 E. 42nd Ave.	The Tech Memo has been updated to reflect this section of continuous roadway lighting.
8	Kathy Borque-Parker MOA Street Lighting	9/20/2019	2	Pgs 8 - 9	Conceptual Typical Sections - where are street lights anticipated to be installed?	Lighting is anticipated to be installed behind the sidewalk/pathway. A full lighting analysis (with light poles shown in the typical sections) will be conducted with the DSR Phase.
9	Russ Oswald PM&E	9/20/2019	1	Pg 3	Should a statement be made on why the AADT dropped so significantly (construction of 40 th Avenue)?	Statement was added to clarify why the traffic volumes dropped so much between 2006 and 2019.
10	Russ Oswald PM&E	9/20/2019	2	Pg 5	Subsection 5. <u>Utilities</u> – Need a map that shows parcel numbers here or remove reference to “(Parcels 107, 117, and 156)”.	Reference to parcel numbers removed.
11	Russ Oswald PM&E	9/20/2019	3	Pg 6	Please change Table 6 header to “Table 6. Roadway Related Questionnaire Responses”	Done.
12	Russ Oswald PM&E	9/20/2019	4	Pg 7	Subsection 2. <u>Typical Section Alternatives</u> – Isn’t this 3 alternatives with the No Build option?	Added that the "Do Nothing" alternative will be included in the DSR, bringing the alternatives (per segment) up to three.
13	Russ Oswald PM&E	9/20/2019	5	Pg 7	Section E. Proposed Traffic Calming, 1 st Paragraph – Note the posted speed limit is 25 MPH.	Done.
14	Russ Oswald PM&E	9/20/2019	6	Pg 10	Section F. Recommended Design – Typical Section, 1 st Paragraph, Last Sentence – Delete last half of sentence starting at “but it is anticipated...” Don’t want to have or appear to have a preconceived result.	Done.
15	Russ Oswald PM&E	9/20/2019	7	Pg 10	Section F. Recommended Design – Typical Section, 2 nd Paragraph, First Sentence – Delete “the “Option 1””	Done.