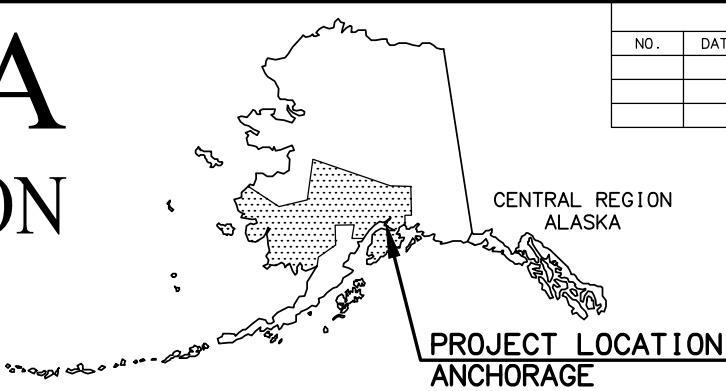


DESIGNED BY: XREFS: SCALE: LAYOUT: DATE: TIME: 9/2/2016 7:10 AM
CHECKED BY: N/A
DRAFTED BY: N/A
DRAWING LOCATION: \\u:\data\p\00000000\10130-30\amts\areawide\trails\rehab - fish creek\00 CAD\01 working set\01 CIVIL\10130-30 Cover Sheet.dwg

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

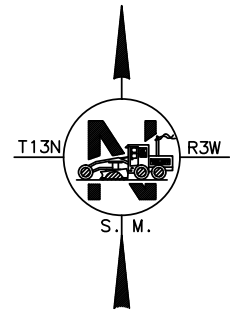
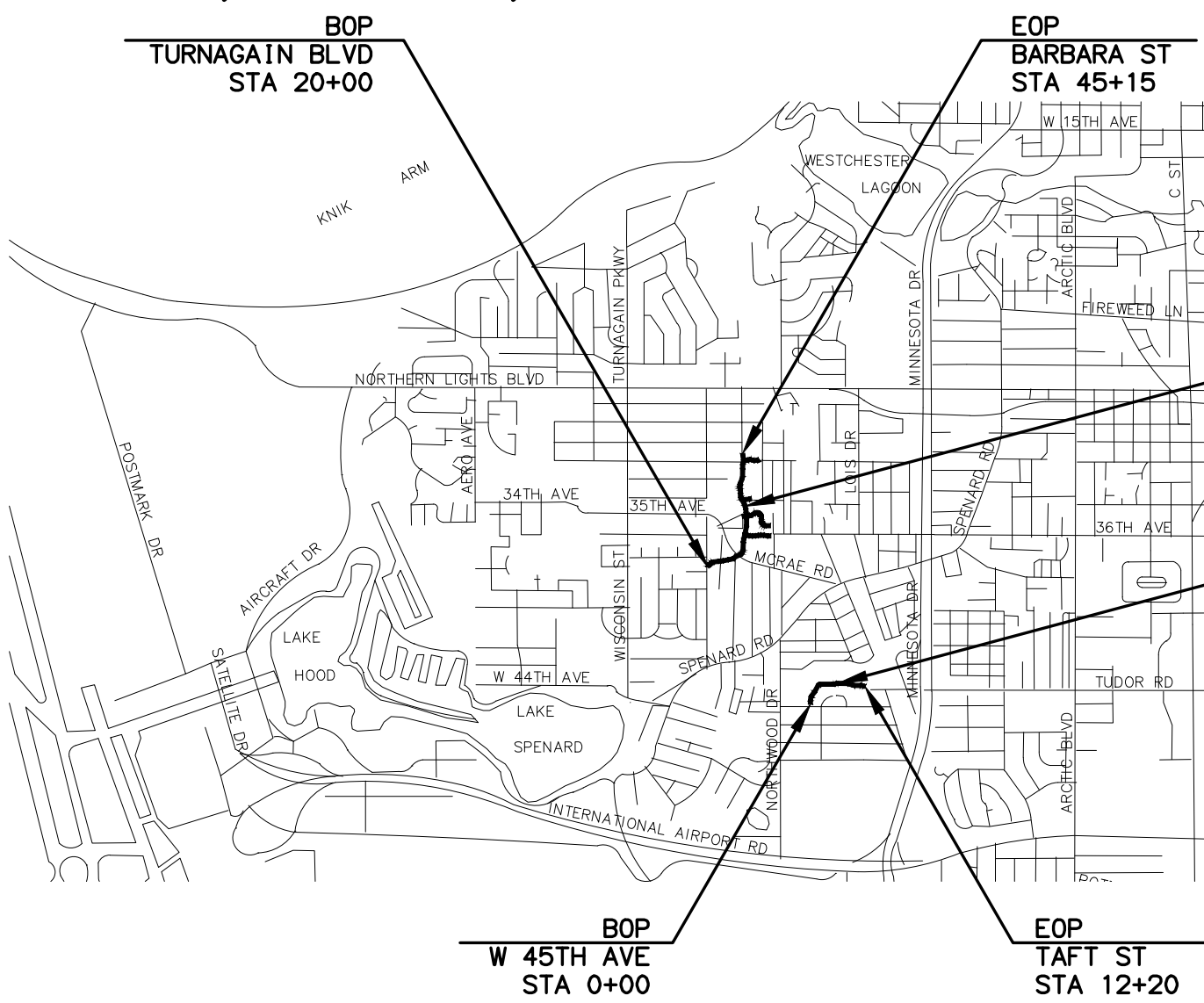


REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL 'A' SHEETS
NO.	DATE	DESCRIPTION				A1	A8
			ALASKA	Z584640000/0001521	2017	PLAN SET TOTAL	87
CDS ROUTE:			MILEPOINT:				
LATITUDE: VARIES			LONGITUDE: VARIES				

PROPOSED HIGHWAY PROJECT
AMATS: ANCHORAGE AREAWIDE TRAILS REHABILITATION
FISH CREEK TRAIL
Z584640000/0001521

TRAIL REHABILITATION, BRIDGE REPAIR, RETAINING WALL REPAIR, SIGNING, AND ILLUMINATION

PIH (9/1/16)



FISH CREEK TRAIL
NORTH

FISH CREEK TRAIL
SOUTH

PROJECT SUMMARY			
ROADWAY	WIDTH	STATION TO STATION	LENGTH
FISH CREEK TRAIL NORTH	8 FT	20+00 TO 45+15	0.48 MILES
WOODLAND PARK SPUR SOUTH	8 FT	100+00 TO 104+75	0.09 MILES
WOODLAND PARK SPUR NORTH	8 FT	200+00 TO 206+75	0.13 MILES
W 34TH AVE SPUR	8 FT	300+00 TO 301+50	0.03 MILES
BARBARA STREET PARK SPUR	8 FT	500+00 TO 503+50	0.07 MILES
FISH CREEK TRAIL SOUTH	8 FT	0+00 TO 12+20	0.23 MILES

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

APPROVED:

REGIONAL PRECONSTRUCTION ENGINEER DATE

CONCUR:

DIRECTOR, DESIGN & CONSTRUCTION DATE
CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

CONSTRUCTION PROJECT MANAGER DATE

DESIGNED BY
CHECKED BY
DRAFTED BY

AREAS

SCALE

LAYOUT
Legend, Not a.dwg

DATE TIME
01/10/2018 10:30:30 am

DRAWING LOCATION
\\jobstuf\jobsdata\10130.30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 CIVIL\108936\2018\0826\01.dwg

UTILITIES

PIPELINES:

STORM DRAIN STRUCTURE AND
PIPE NUMBERS, APPLICABLE IF
SHOWN

STORM DRAIN

MANHOLE STORM DRAIN

CURB INLET CATCH BASIN

FIELD INLET CATCH BASIN

PIPE CULVERT w/ END SECTION

CLEANOUT

SANITARY SEWER

MANHOLE SANITARY SEWER

SEPTIC VENTS

WATER

FIRE HYDRANT

WELL

VALVE OR RISER

NATURAL GAS

OIL OR GASOLINE PIPELINE

ELECTRIC
(OVERHEAD)
(DIRECT BURY)
(OVERHEAD)

UTILITY POLE

UTILITY POLE WITH LUMINAIRE

GUY POLE

GUY WIRE ANCHOR

TRANSMISSION TOWER [WOOD]

TRANSMISSION TOWER [STEEL]

ELECTRICAL PEDESTAL

ELECTRICAL TRANSFORMER

ELECTRIC METER

ELECTRICAL OUTLET

ELECTRIC MANHOLE

TELEPHONE
(OVERHEAD)
(DIRECT BURY)
(DIRECT BURY)

TELEPHONE PEDESTAL

TELEPHONE MANHOLE

FIBER OPTIC

FIBER OPTIC MANHOLE

CABLE TV
(OVERHEAD)
(DIRECT BURY)

CABLE T.V. PEDESTAL

SATELLITE DISH

U.G. DUCT (E, T, FO)

EXISTING

PROPOSED

UTILITIES

ELECTROLIER

HIGHTOWER

SIGNAL POLE WITH MAST

PEDESTRIAN PUSH BUTTON

RURAL BEACON

SCHOOL ZONE BEACON

RIGHT OF WAY

PRIMARY CENTERLINE MONUMENT

SECONDARY CENTERLINE MONUMENT

PROJECT RIGHT-OF-WAY LINES

CONTROLLED ACCESS LINE

TEMPORARY CONSTRUCTION
EASEMENT/PERMIT

PROJECT CENTERLINE

RAILROAD CENTERLINE

EXISTING TOPOGRAPHY

CONIFER TREE OR TREES

DECIDUOUS TREE OR TREES

SHRUB OR SHRUBS

WETLANDS

CREEK

RIVER

LAKE / POND

DRAINAGE FLOW

CONTOURS - MAJOR

CONTOURS - MINOR

EXISTING

PROPOSED

EXISTING

PROPOSED

ROW

C/A

27+00

EXISTING/PROPOSED

515

MISCELLANEOUS

EXISTING

PROPOSED

BUILDING

TANKS
ABOVE GROUND
UNDERGROUND

PRIVATE SIGN

POST/BOLLARDS

MAILBOX

TRAFFIC SIGN

TRAFFIC SIGN POST #

VENT

ROADWAY

EXISTING

PROPOSED

ROADWAY OBLITERATION

LIMIT OF CUT SLOPE

LIMIT OF FILL SLOPE

EDGE OF PAVEMENT

CONCRETE CURB

CONCRETE CURB & GUTTER

CONCRETE CURB CUT

SIDEWALK

CURB RAMPS

PARALLEL CURB RAMP

PERPENDICULAR CURB RAMP

MID-BLOCK CURB RAMP

UNIDIRECTIONAL CURB RAMP

DETECTABLE WARNING TILES

DRIVEWAY APPROACH

GRAVEL EDGE

PATH / TRAIL

BRIDGE

TUNNEL

NOISE BARRIER

FENCE

RETAINING WALL

HEAD & WINGWALLS

GUARDRAIL

END SECTION

PARALLEL GUARDRAIL SECTION

SPECIAL DITCH

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL**

LEGEND

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2017	A3	A8

DESTINED BY
CHECKED BY
DRAFTED BY

AREAS

SCALE

LAYOUT

DATE TIME

DRAWING LOCATION

HORIZONTAL CONTROL STATEMENT

COORDINATE SYSTEM:
THIS DRAWING IS ON THE ANCHORAGE BOWL 2000 ADJUSTMENT, A LOCAL SURFACE GRID COORDINATE SYSTEM EXPRESSED IN U.S. SURVEY FEET UNITS DEVELOPED BY THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES.

BASIS OF COORDINATES:
THE BASIS OF COORDINATES IS NGS STATION O'MALLEY, LOCATED NEAR THE INTERSECTION OF THE NEW SEWARD HIGHWAY AND O'MALLEY ROAD. SAID STATION HAS ANCHORAGE BOWL 2000 COORDINATES OF 303939.2310 N, 353362.5446 E. U.S. SURVEY FEET.

BASIS OF BEARINGS:
THE BASIS OF BEARINGS IS A LOCAL PLANE BEARING BETWEEN NGS STATION O'MALLEY AND NGS STATION LOOP 2 USE RM 3 1964. NGS STATION LOOP 2 USE RM 3 1964 BEARS N 01°43'26.4"E A DISTANCE OF 49488.4476 FEET FROM NGS STATION O'MALLEY. NGS STATION LOOP 2 USE RM 3 1964 HAS ANCHORAGE BOWL 2000 COORDINATES OF 353405.2778 N, 354851.3982 E. U.S. SURVEY FEET.

TRANSLATION PARAMETERS:
TO CONVERT THE LOCAL COORDINATES TO NAD83 (92) STATE PLANE COORDINATES EXPRESSED IN U.S. SURVEY FEET, TRANSLATE USING +2,296,868.6878 N USF, +1,312,517.4904 E USF, AND SCALE USING 0.9998910192.

HORIZONTAL CONTROL TABLE - FISH CREEK TRAIL NORTH ALIGNMENT					
POINT	NORTHING	EASTING	STATION	OFFSET (FT)	DESCRIPTION
727	329078.1668	339517.3876	20+40.66	26.63 LT	IRON PIPE 2 1/2"
657	329149.2359	339456.7181	20+53.30	118.09 LT	BRASS CAP 3 1/4"
738	329159.7595	339516.7552	20+81.92	84.15 LT	IRON PIPE 2"
490	329132.3244	339709.9912	22+31.09	2.21 LT	CRW CONTROL - MAG WITH WASHER
491	329140.9403	339815.7611	23+37.06	3.06 RT	CRW CONTROL - SPIKE
492	329153.9832	339884.6503	24+07.20	3.70 RT	CRW CONTROL - MAG WITH WASHER
212	329183.0486	340024.9466	25+40.73	29.58 RT	ALUM. CAP 2" LS-10684 IN CASE
10	328981.2678	339563.1994	N/A	-	CRW CONTROL - 2" ALUM. CAP
407	329020.5472	339508.5331	N/A	-	CRW CONTROL - MAG WITH WASHER

VERTICAL CONTROL TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
10	328981'	339563'	45.14'	CRW CONTROL - 2" ALUM. CAP
407	329021'	339509'	47.30'	CRW CONTROL - MAG WITH WASHER
490	329132'	339710'	44.84'	CRW CONTROL - MAG WITH WASHER
492	329154'	339885'	54.17'	CRW CONTROL - MAG WITH WASHER

VERTICAL CONTROL STATEMENT

THE VERTICAL CONTROL DATUM IS MSL 1929 NGVD, MOA 1972 ADJUSTMENT. ELEVATIONS SHOWN HAVE BEEN ESTABLISHED BY THE THE FOLLOWING MOA BENCHMARKS:

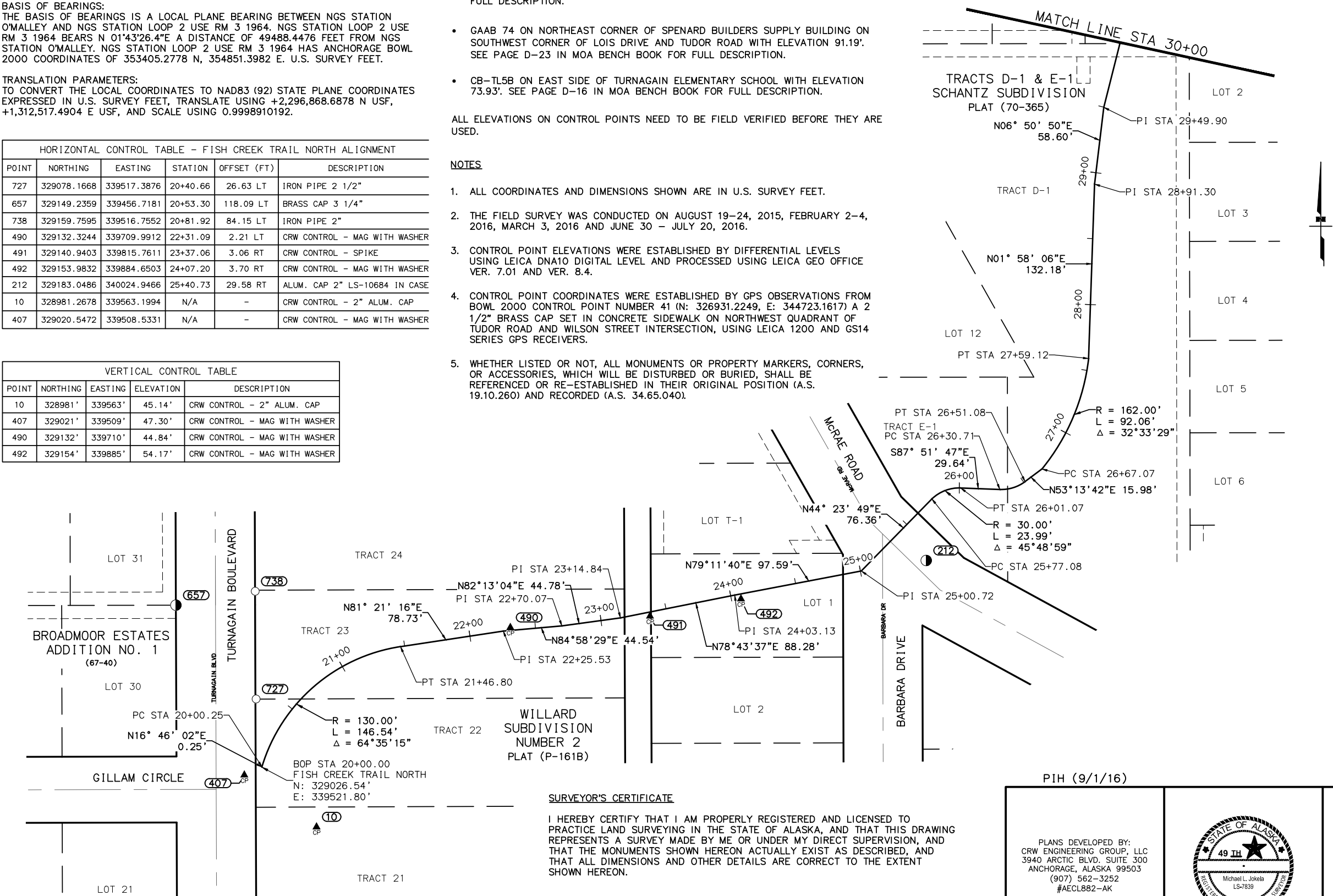
- 2013-1728, SOUTHWEST CORNER OF FIRE STATION AT 2207 MCRAE ROAD WITH ELEVATION 88.20'. SEE MOA WEB MAPPING APPLICATION FOR PUBLISHED INFORMATION.
- TNH-19 ON NORTH SIDE OF WOODLAND PARK BOYS AND GIRLS CLUB AT 2300 W. 36TH AVENUE WITH ELEVATION 88.05' SEE PAGE D-20 IN MOA BENCH BOOK FOR FULL DESCRIPTION.
- GAAB 74 ON NORTHEAST CORNER OF SPENARD BUILDERS SUPPLY BUILDING ON SOUTHWEST CORNER OF LOIS DRIVE AND TUDOR ROAD WITH ELEVATION 91.19'. SEE PAGE D-23 IN MOA BENCH BOOK FOR FULL DESCRIPTION.
- CB-TL5B ON EAST SIDE OF TURNAGAIN ELEMENTARY SCHOOL WITH ELEVATION 73.93'. SEE PAGE D-16 IN MOA BENCH BOOK FOR FULL DESCRIPTION.

ALL ELEVATIONS ON CONTROL POINTS NEED TO BE FIELD VERIFIED BEFORE THEY ARE USED.

NOTES

- ALL COORDINATES AND DIMENSIONS SHOWN ARE IN U.S. SURVEY FEET.
- THE FIELD SURVEY WAS CONDUCTED ON AUGUST 19-24, 2015, FEBRUARY 2-4, 2016, MARCH 3, 2016 AND JUNE 30 - JULY 20, 2016.
- CONTROL POINT ELEVATIONS WERE ESTABLISHED BY DIFFERENTIAL LEVELS USING LEICA DNA10 DIGITAL LEVEL AND PROCESSED USING LEICA GEO OFFICE VER. 7.01 AND VER. 8.4.
- CONTROL POINT COORDINATES WERE ESTABLISHED BY GPS OBSERVATIONS FROM BOWL 2000 CONTROL POINT NUMBER 41 (N: 326931.2249, E: 344723.1617) A 2 1/2" BRASS CAP SET IN CONCRETE SIDEWALK ON NORTHWEST QUADRANT OF TUDOR ROAD AND WILSON STREET INTERSECTION, USING LEICA 1200 AND GS14 SERIES GPS RECEIVERS.
- WHETHER LISTED OR NOT, ALL MONUMENTS OR PROPERTY MARKERS, CORNERS, OR ACCESSORIES, WHICH WILL BE DISTURBED OR BURIED, SHALL BE REFERENCED OR RE-ESTABLISHED IN THEIR ORIGINAL POSITION (A.S. 19.10.260) AND RECORDED (A.S. 34.65.040).

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2017	A4	A8



SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF ALASKA, AND THAT THIS DRAWING REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT THE MONUMENTS SHOWN HEREON ACTUALLY EXIST AS DESCRIBED, AND THAT ALL DIMENSIONS AND OTHER DETAILS ARE CORRECT TO THE EXTENT SHOWN HEREON.

MICHAEL L. JOKELA LS-7839 (DATE)

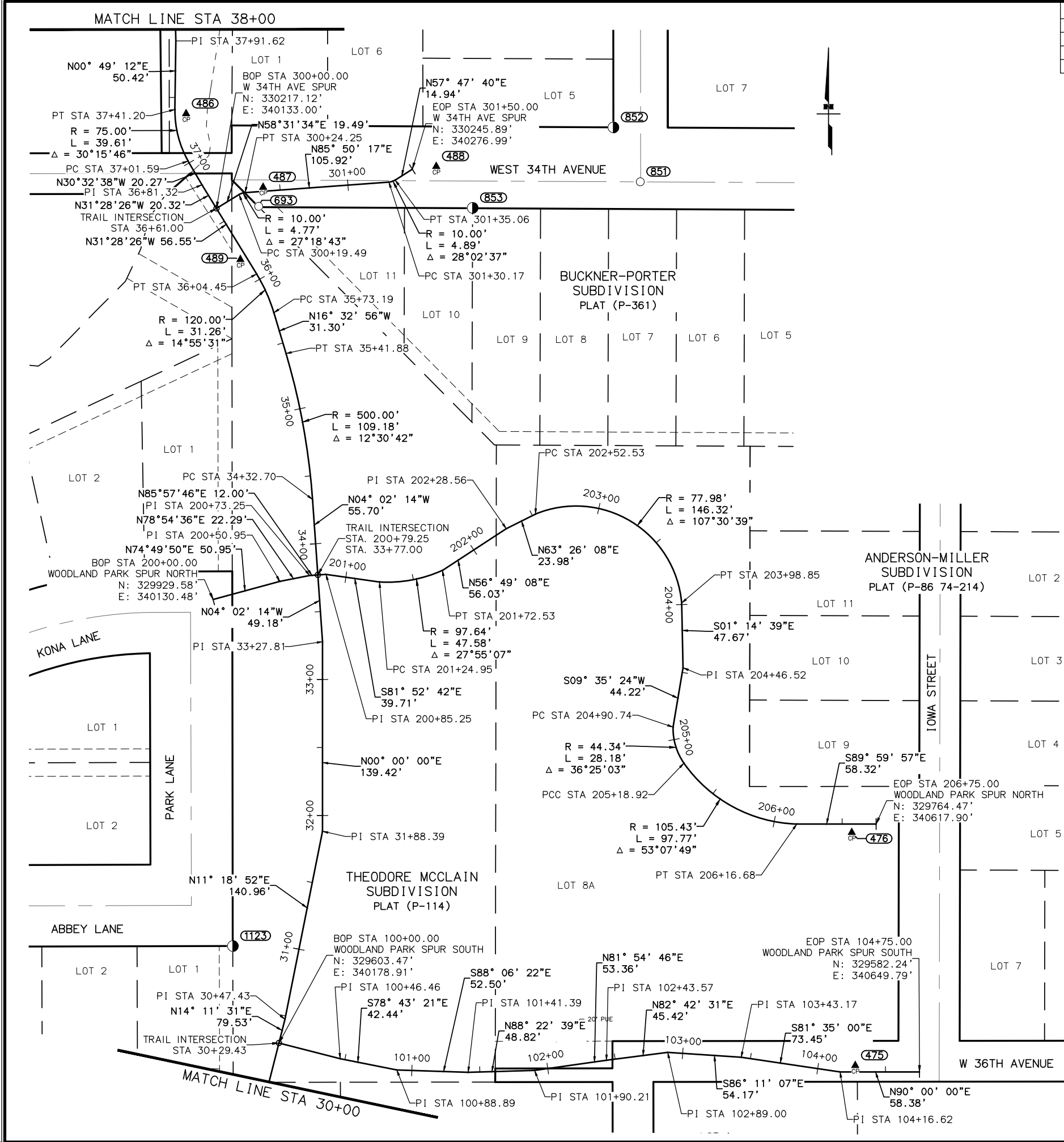
PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD., SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL**
SURVEY CONTROL

DESIGNED BY: [blank]
CHECKED BY: [blank]
DRAFTED BY: [blank]
XREFS: [blank]
SCALE: [blank]
LAYOUT: [blank]
DATE: [blank]
TIME: [blank]
DRAWING LOCATION: [blank]



REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/0001521	2017	A5	A8

HORIZONTAL CONTROL TABLE - W 34TH AVE SPUR					
POINT	NORTHING	EASTING	STATION	OFFSET (FT)	DESCRIPTION
693	330218.5393	340163.9990	300+33.37	10.89 RT	1/2" REBAR
487	330232.6873	340167.2931	300+37.68	2.99 LT	CRW CONTROL - MAG WITH WASHER
488	330247.9972	340294.5505	N/A	-	CRW CONTROL - MAG WITH WASHER
851	330236.6196	340444.4706	N/A	-	5/8" REBAR
852	330276.6463	340424.7786	N/A	-	ALUM. CAP 2 1/2" LS-4538
853	330217.4629	340321.2620	N/A	-	ALUM. CAP 1 1/2"

HORIZONTAL CONTROL TABLE - FISH CREEK TRAIL NORTH ALIGNMENT					
POINT	NORTHING	EASTING	STATION	OFFSET (FT)	DESCRIPTION
1123	329674.7580	340144.9980	30+92.70	48.15 LT	ALUM. CAP 1 1/2"
489	330179.5446	340150.5834	36+19.78	4.62 LT	CRW CONTROL - MAG WITH WASHER
486	330286.7193	340110.6881	37+37.83	8.26 RT	CRW CONTROL - RPC ON 5/8" REBAR

HORIZONTAL CONTROL TABLE - WOODLAND PARK SPUR NORTH ALIGNMENT					
POINT	NORTHING	EASTING	STATION	OFFSET (FT)	DESCRIPTION
476	329758.3210	340599.9959	206+57.10	6.15 RT	CRW CONTROL - MAG WITH WASHER

HORIZONTAL CONTROL TABLE - WOODLAND PARK SPUR SOUTH ALIGNMENT					
POINT	NORTHING	EASTING	STATION	OFFSET (FT)	DESCRIPTION
475	329586.9509	340602.5486	104+27.76	4.72 LT	CRW CONTROL - MAG WITH WASHER

VERTICAL CONTROL TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
475	329587'	340603'	71.35'	CRW CONTROL - MAG WITH WASHER
476	329758'	340600'	71.12'	CRW CONTROL - MAG WITH WASHER
486	330287'	340111'	40.29'	CRW CONTROL - RPC ON 5/8" REBAR
487	330233'	340167'	44.79'	CRW CONTROL - MAG WITH WASHER
488	330248'	340295'	57.06'	CRW CONTROL - MAG WITH WASHER
489	330180'	340151'	44.34'	CRW CONTROL - MAG WITH WASHER

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL**
SURVEY CONTROL

DESIGNED BY
CHECKED BY
DRAFTED BY

AREAS

SCALE

LAYOUT

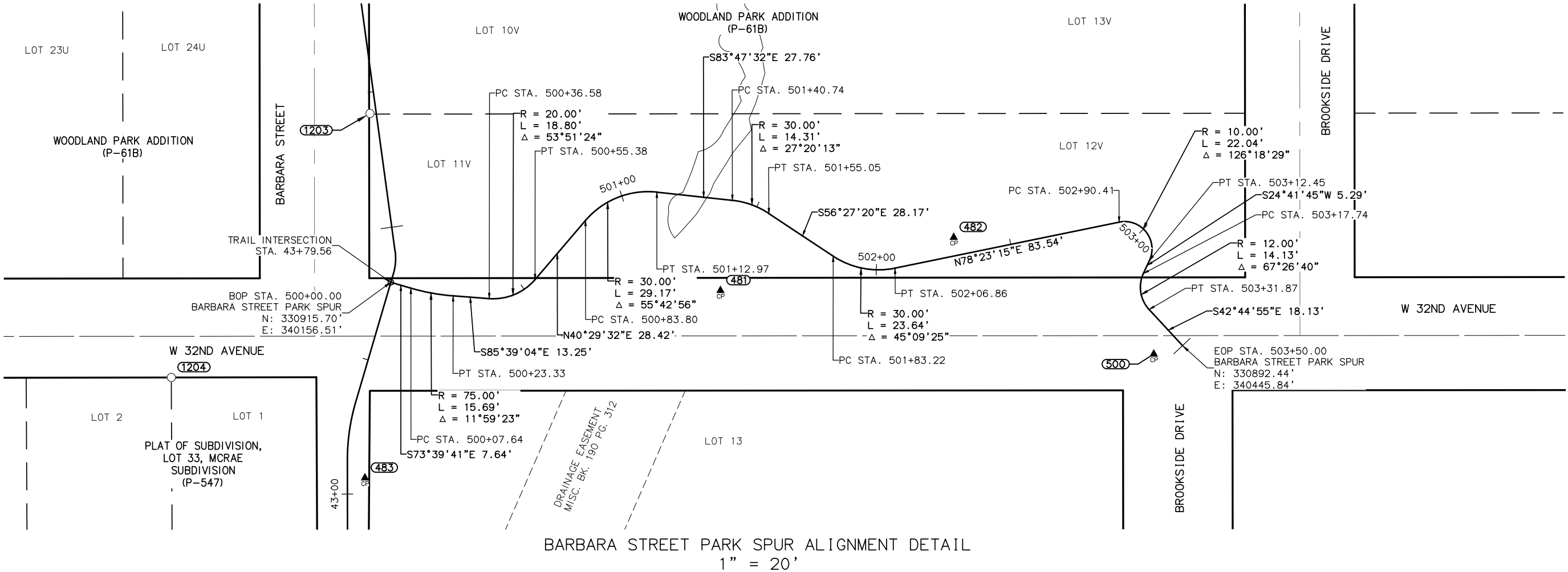
DATE

TIME

DRAWING LOCATION

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2017	A7	A8

HORIZONTAL CONTROL TABLE - BARBARA STREET PARK SPUR ALIGNMENT					
POINT	NORTHING	EASTING	STATION	OFFSET (FT)	DESCRIPTION
481	330912.6821	340276.9368	501+55.85	33.23 RT	CRW CONTROL - RPC ON 5/8" REBAR
482	330932.1429	340362.1606	502+30.13	6.72 LT	CRW CONTROL - RPC ON 5/8" REBAR
500	330889.4642	340435.2441	503+44.99	9.80 RT	CRW CONTROL - MAGNAIL



PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SURVEY CONTROL

DESIGNED BY
CHECKED BY
DRAFTED BY

AREAS

SCALE

LAYOUT

DATE TIME

DRAWING LOCATION

\\jobstuf\jobsdata\10130.30 amats areawide trails rehab - fish creek\00 CADD\01 working set\01 CIVIL\10130.30\01B1.mxd

ESTIMATE OF QUANTITIES					
ITEM NO.	ITEM DESCRIPTION	PAY UNIT	NORTH	SOUTH	TOTAL
201(3B)	CLEARING AND GRUBBING	L.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
202(1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
202(2)	REMOVAL OF PAVEMENT	S.Y.	3329	1,121	4,450
202(4)	REMOVAL OF CULVERT PIPE	L.F.	112	21	133
202(9)	REMOVAL OF CURB AND GUTTER	L.F.	17		17
202(13)	REMOVAL OF FENCE	L.F.		151	151
203(3)	UNCLASSIFIED EXCAVATION	C.Y.	2960	740	3,700
203(6)	BORROW	TON	4360	1850	6,210
301(1)	AGGREGATE BASE COURSE, GRADING D-1	TON	799	251	1,050
401(1A)	HMA, TYPE II; CLASS A	TON	460	110	570
401(15)	ASPHALT MATERIAL PRICE ADJUSTMENT	C.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
501(4)	CLASS A CONCRETE	C.Y.	13		13
504(9)	PREFABRICATED STEEL BRIDGES (35 FEET)	EACH	3	1	4
505(5)	FURNISH STRUCTURAL STEEL PILES (12-INCH)	L.F.	1365	816	2,181
505(6)	DRIVE STRUCTURAL STEEL PILES (12-INCH)	EACH	40	22	62
506(5)	BOARDWALK	L.F.	214	147	361
507(2)	PEDESTRIAN RAILING	L.F.	178	130	308
518(1)	SOLDIER PILE WALL	S.F.		992	992
603(21-18)	18 INCH CORRUGATED POLYETHYLENE PIPE	L.F.	133	21	154
603(20-18)	END SECTION FOR 18 INCH PIPE	EACH	8	1	9
604(4)	ADJUST EXISTING MANHOLE	EACH	2	2	4
606(1)	W-BEAM GUARDRAIL	L.F.	45		45
606(17C)	WOOD BOLLARD-FIXED	EACH	20	10	30
606(17D)	WOOD BOLLARD-REMOVEABLE	EACH	5	2	7
608(6)	CURB RAMP	EACH	1		1
609(2A)	CURB AND GUTTER, TYPE 1, MOA	L.F.	66		66
615(1A)	STANDARD SIGN TYPE IX REFLECTIVE SHEETING	SQ. FT.	0	2	2
615(6)	SALVAGE SIGN	EACH	11	6	17
618(1)	SEEDING	ACRE	1	1	2
619(20)	ROOT BARRIER	L.F.	5205	1323	6,528
620(1)	TOPSOIL	S.Y.	4840	3333	8,173
636(1)	GABION	C.Y.	68		68

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2017	C1	C1

ESTIMATE OF QUANTITIES					
ITEM NO.	ITEM DESCRIPTION	PAY UNIT	NORTH	SOUTH	TOTAL
640(1)	MOBILIZATION AND DEMOBILIZATION	L.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(1)	EROSION SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	L.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(2)	TEMPORARY EROSION SEDIMENT AND POLLUTION CONTROL	C.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(6)	WITHHOLDING	C.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(7)	SWPPP MANAGER	L.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
642(1)	CONSTRUCTION SURVEYING	L.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
642(3)	THREE PERSON SURVEY PARTY	HOURL	20	20	40
643(2)	TRAFFIC MAINTENANCE	L.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(3)	PERMANENT CONSTRUCTION SIGNS	L.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(15A)	FLAGGING	C.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(23)	TRAFFIC PRICE ADJUSTMENT	C.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(25)	TRAFFIC CONTROL	C.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
644(1)	FIELD OFFICE	L.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
644(10)	ENGINEERING COMMUNICATIONS	C.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
646(1)	CPM SCHEDULING	L.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
647(5)	BACKHOE, 4WD, 1 CY BUCKET, 75 HP MIN, 15 FT DEPTH	C.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
660(16)	PEDESTRIAN LIGHTING	L.S.	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
661(2)	LOAD CENTER, TYPE 1A	EACH	2	1	3

ESTIMATING FACTORS		
ITEM NO.	ITEM	ESTIMATING FACTOR
203(6)	BORROW	144 LB./C.F.
301(1)	AGGREGATE BASE COURSE, GRADING D-1	144 LB./C.F.
401(1A)	HMA, TYPE II; CLASS A	151 LB./C.F.
402(1)	STE-1 ASPHALT FOR TACK COAT	0.000334 TON/S.Y.

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

ESTIMATE OF QUANTITIES

DESIGNED BY
CHECKED BY
DRAFTED BY

AREES

SCALE

LAYOUT
D1

DATE
TIME
10/30/2020

DRAWING LOCATION
\\jobstuf\jobsdata\10130_30 amats areawide trails rehab - fish creek\00 CADD\01 working set\01 civil\1030\2020\Bmbl\esl.dwg

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2017	D1	D3

202(1)				
REMOVAL OF STRUCTURES AND OBSTRUCTIONS				
SHEET	STATION TO STATION		OFFSET (FT)	DESCRIPTION
FISH CREEK TRAIL NORTH				
F1	22+05.68	22+25.32	CL	20' BRIDGE & ABUTMENT
F4	36+81.33	37+01.76	CL	20' BRIDGE & ABUTMENT
F6	43+48.32	44+02.28	6.0 LT	EXISTING TIMBER RETAINING WALL & BOLLARDS
F6	44+07.40	44+31.69	5.0 RT	EXISTING TIMBER BOLLARDS
FISH CREEK TRAIL NORTH – BARBARA STREET PARK SPUR				
F11	501+19.50	501+39.65	CL	20' BRIDGE & ABUTMENT
FISH CREEK TRAIL SOUTH				
F12	1+39.50	1+64.25	CL	25' BRIDGE AND ABUTMENT
F12	3+63.90	3+72.00	14.0 LT	EXISTING BOLLARDS
F14	10+36.80	11+87.40	10.0 LT	TIMBER RETAINING WALL
F14	11+79.27	11+86.31	CL	TIMBER BOLLARDS

202(2)				
REMOVAL OF PAVEMENT				
SHEET	STATION TO STATION		AREA (S.Y.)	REMARKS
FISH CREEK TRAIL NORTH				
F1-F6	20+00.00	45+07.18	1919	
FISH CREEK TRAIL NORTH - WOODLAND PARK SPUR SOUTH				
F7	100+00.00	104+55.21	441	
FISH CREEK TRAIL NORTH - WOODLAND PARK SPUR NORTH				
F8-F9	200+18.00	206+38.30	562	
FISH CREEK TRAIL NORTH - W 34TH AVE SPUR				
F10	300+00.00	301+43.39	118	
FISH CREEK TRAIL NORTH - BARBARA STREET PARK SPUR				
F11	500+00.00	503+38.05	289	
FISH CREEK TRAIL NORTH TOTAL			3329	
FISH CREEK TRAIL SOUTH				
F12-14	0+27.00	12+10.94	1121	
FISH CREEK TRAIL SOUTH TOTAL			1121	
TOTAL			4450	

202(9)					
REMOVAL OF CURB AND GUTTER					
SHEET	STATION TO STATION	OFFSET	LENGTH (L.F.)	REMARKS	
FISH CREEK TRAIL NORTH					
F6	44+21.1	44+38.0	LT	17	BARBARA STREET PARK
FISH CREEK TRAIL NORTH TOTAL				17	

202(4)							
REMOVAL OF CULVERT PIPE							
SHEET	FROM		TO		LENGTH (L.F.)	SIZE (IN)	REMARKS
	STATION	OFFSET (FT)	STATION	OFFSET (FT)			
FISH CREEK TRAIL NORTH							
F3	32+81.8	13.3 LT	32+81.0	16.5 RT	30	18	
F7	100+32.1	14.9 LT	100+32.6	12.8 RT	28	18	
F7	104+08.3	27.0 LT	104+37.3	28.1 LT	29	18	
FISH CREEK TRAIL NORTH - BARBARA STREET PARK SPUR							
F11	502+04.8	14.7 LT	502+09.6	10.6 RT	25	12	
FISH CREEK TRAIL NORTH TOTAL					112		
FISH CREEK TRAIL SOUTH							
F14	11+96.9	4.3 LT	11+84.9	20.3 LT	21	18	STORM DRAIN LEAD
FISH CREEK TRAIL SOUTH TOTAL					21		
TOTAL					133		

202(13)						
REMOVAL OF FENCE						
SHEET	FROM		TO		LENGTH (L.F.)	REMARKS
	STATION	OFFSET (FT)	STATION	OFFSET (FT)		
FISH CREEK TRAIL SOUTH						
F14	10+36.7	11.5 LT	11+88.0	10.6 LT	151	WOOD FENCE ON RETAINING WALL
FISH CREEK TRAIL SOUTH TOTAL					151	

501(4)					
CLASS A CONCRETE					
SHEET	STATION TO STATION	OFFSET	VOLUME (CY)	REMARKS	
FISH CREEK TRAIL NORTH					
F6	43+48.0	44+03.0	LT	13	REINFORCED CONCRETE RETAINING WALL
FISH CREEK TRAIL NORTH TOTAL				13	

504(9)					
PREFABRICATED STEEL BRIDGES (35 FEET)					
SHEET	STATION TO STATION		OFFSET	TOTAL (EACH)	REMARKS
FISH CREEK TRAIL NORTH					
F1	21+95.00	22+30.00	CL	1	
F4	36+74.00	37+09.00	CL	1	
FISH CREEK TRAIL NORTH – BARBARA STREET PARK SPUR					
F11	501+10.00	501+45.00	CL	1	
FISH CREEK TRAIL NORTH TOTAL				3	
FISH CREEK TRAIL SOUTH					
F12	1+35.00	1+70.00	CL	1	
FISH CREEK TRAIL SOUTH TOTAL				1	
TOTAL				4	

505(5)					
FURNISH STRUCTURAL STEEL PILES					
SHEET	STATION TO STATION		OFFSET	LENGTH (L.F.)	REMARKS
FISH CREEK TRAIL NORTH					
F1	21+95.00	22+30.00	CL	92	
F4	36+74.00	37+09.00	CL	1016	
FISH CREEK TRAIL NORTH – BARBARA STREET PARK SPUR					
F11	501+10.00	501+45.00	CL	257	
FISH CREEK TRAIL NORTH TOTAL				1365	
FISH CREEK TRAIL SOUTH					
F12	1+35.00	1+70.00	CL	816	
FISH CREEK TRAIL SOUTH TOTAL				816	
TOTAL				2181	

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL**

SUMMARY TABLES

DESIGNED BY
CHECKED BY
DRAFTED BY

CREES

SCALE

LAYOUT
D2

DATE
TIME
10/13/2020 10:30:30 AM

DRAWING LOCATION
\\jobstuf\jobsdata\10130.30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\101307200 Bm\fishcr\fishcr1 es1.dwg

			REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				ALASKA	Z584640000/0001521	2017	D2	D3

505(6)					
DRIVE STRUCTURAL STEEL PILES					
SHEET	STATION TO STATION		OFFSET	TOTAL (EACH)	REMARKS
FISH CREEK TRAIL NORTH					
F1	21+95.00	22+30.00	CL	4	
F4	36+74.00	37+09.00	CL	26	
FISH CREEK TRAIL NORTH - BARBARA STREET PARK SPUR					
F11	501+10.00	501+45.00	CL	10	
FISH CREEK TRAIL NORTH TOTAL				40	
FISH CREEK TRAIL SOUTH					
F12	1+35.00	1+70.00	CL	22	
FISH CREEK TRAIL SOUTH TOTAL				22	
TOTAL				62	

506(5)					
BOARDWALK					
SHEET	STATION TO STATION		OFFSET	LENGTH (L.F.)	REMARKS
FISH CREEK TRAIL NORTH					
F1	21+82.00	21+95.00	CL	13	
F1	22+30.00	22+43.00	CL	13	
F4	36+32.00	36+61.00	CL	29	
F4	37+09.00	38+09.00	CL	100	
FISH CREEK TRAIL NORTH - BARBARA STREET PARK SPUR					
F11	500+92.00	501+10.00	CL	18	
F11	501+45.00	501+86.00	CL	41	
FISH CREEK TRAIL NORTH TOTAL				214	
FISH CREEK TRAIL SOUTH					
F12	0+87.00	1+35.00	CL	48	
F12	1+70.00	2+69.25	CL	99	
FISH CREEK TRAIL SOUTH TOTAL				147	
TOTAL				361	

507(2)					
PEDESTRIAN RAILING					
SHEET	STATION TO STATION		OFFSET	LENGTH (L.F.)	REMARKS
FISH CREEK TRAIL NORTH					
F5	41+35.0	42+40.0	RT	105	
FISH CREEK TRAIL NORTH - W 34TH AVE SPUR					
F10	300+28.5	300+47.0	LT	18	
FISH CREEK TRAIL NORTH - BARBARA STREET PARK SPUR					
F11	500+43.0	500+93.0	RT	55	
FISH CREEK TRAIL NORTH TOTAL				178	
FISH CREEK TRAIL SOUTH					
F14	10+58.0	11+88.0	LT	130	
FISH CREEK TRAIL SOUTH TOTAL				130	
TOTAL				308	

518(1)					
SOLDIER PILE WALL					
SHEET	STATION TO STATION		OFFSET	AREA (S.F.)	REMARKS
FISH CREEK TRAIL SOUTH					
F14	10+58.0	11+88.0	LT	992	
FISH CREEK SOUTH TOTAL				992	

603(21-18)							
18 INCH CORRUGATED POLYETHYLENE PIPE							
SHEET	FROM		TO		LENGTH (L.F.)	SIZE (IN)	REMARKS
	STATION	OFFSET (FT)	STATION	OFFSET (FT)			
FISH CREEK TRAIL NORTH							
F3	32+81.8	13.3 LT	32+81.0	16.5 RT	30	18	CULVERT
FISH CREEK TRAIL NORTH - WOODLAND PARK SPUR SOUTH							
F7	100+32.1	14.9 LT	100+32.6	12.8 RT	28	18	CULVERT
F7	104+08.3	27.0 LT	104+37.3	28.1 LT	29	18	CULVERT
FISH CREEK TRAIL NORTH - BARBARA STREET PARK SPUR							
F11	502+04.8	14.7 LT	502+09.6	10.6 RT	25	18	CULVERT
FISH CREEK TRAIL NORTH TOTAL					112		
FISH CREEK TRAIL SOUTH							
F14	11+96.9	4.3 LT	11+84.9	20.3 LT	21	18	STORM DRAIN LEAD
FISH CREEK TRAIL SOUTH TOTAL					21		
TOTAL					133		

606(1)					
W-BEAM GUARDRAIL					
SHEET	STATION TO STATION		OFFSET	LENGTH (L.F.)	REMARKS
FISH CREEK TRAIL NORTH					
F6	43+53.0	44+00.0	12.0 LT	45	
FISH CREEK TRAIL NORTH TOTAL				45	
TOTAL				45	

606(17C)					
WOOD BOLLARD-FIXED					
SHEET	STATION	OFFSET (FT)	TOTAL (EACH)	REMARKS	
FISH CREEK TRAIL NORTH					
FISH CREEK TRAIL NORTH TOTAL					
FISH CREEK TRAIL SOUTH					
FISH CREEK TRAIL SOUTH TOTAL					
TOTAL					

606(17D)					
WOOD BOLLARD-REMOVEABLE					
SHEET	STATION	OFFSET (FT)	TOTAL (EACH)	REMARKS	
FISH CREEK TRAIL NORTH					
FISH CREEK TRAIL NORTH TOTAL					
FISH CREEK TRAIL SOUTH					
FISH CREEK TRAIL SOUTH TOTAL					
TOTAL					

608(6)					
CURB RAMP					
SHEET	STATION	OFFSET (FT)	TOTAL (EACH)	REMARKS	
FISH CREEK TRAIL NORTH					
F6	44+29.0	7.6 LT	1	PARALLEL	
FISH CREEK TRAIL NORTH TOTAL			1		

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SUMMARY TABLES

PIH (9/1/16)

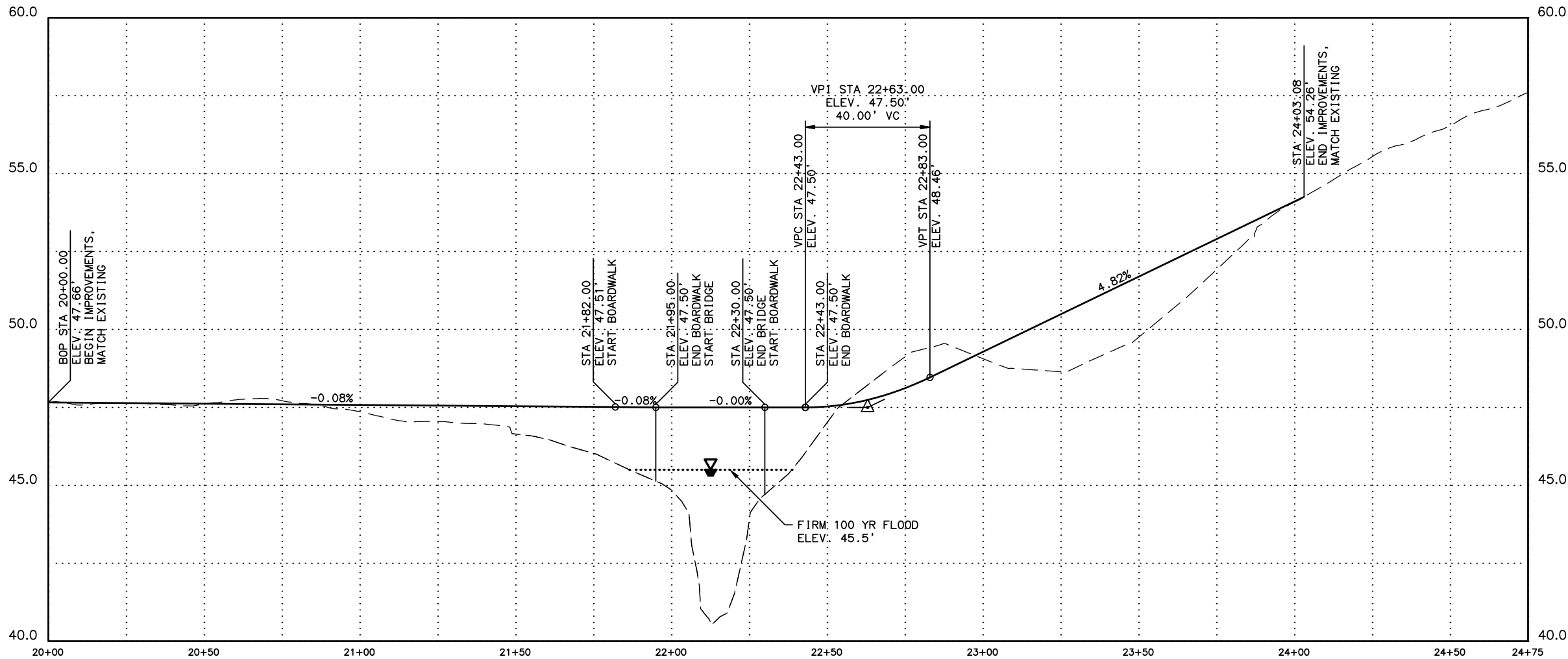
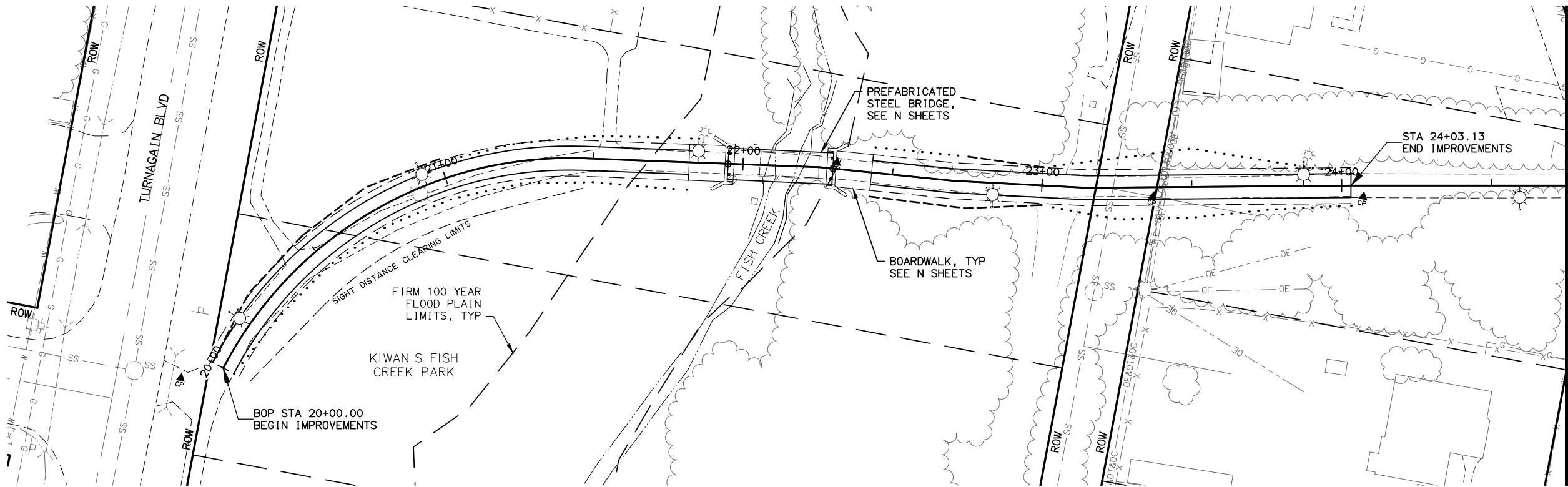
PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SUMMARY TABLES



SHEET NO.	TOTAL SHEETS	
F1	F14	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
FISH CREEK TRAIL NORTH
BOP TO 24+75

DESIGNED BY
CHECKED BY
DRAFTED BY

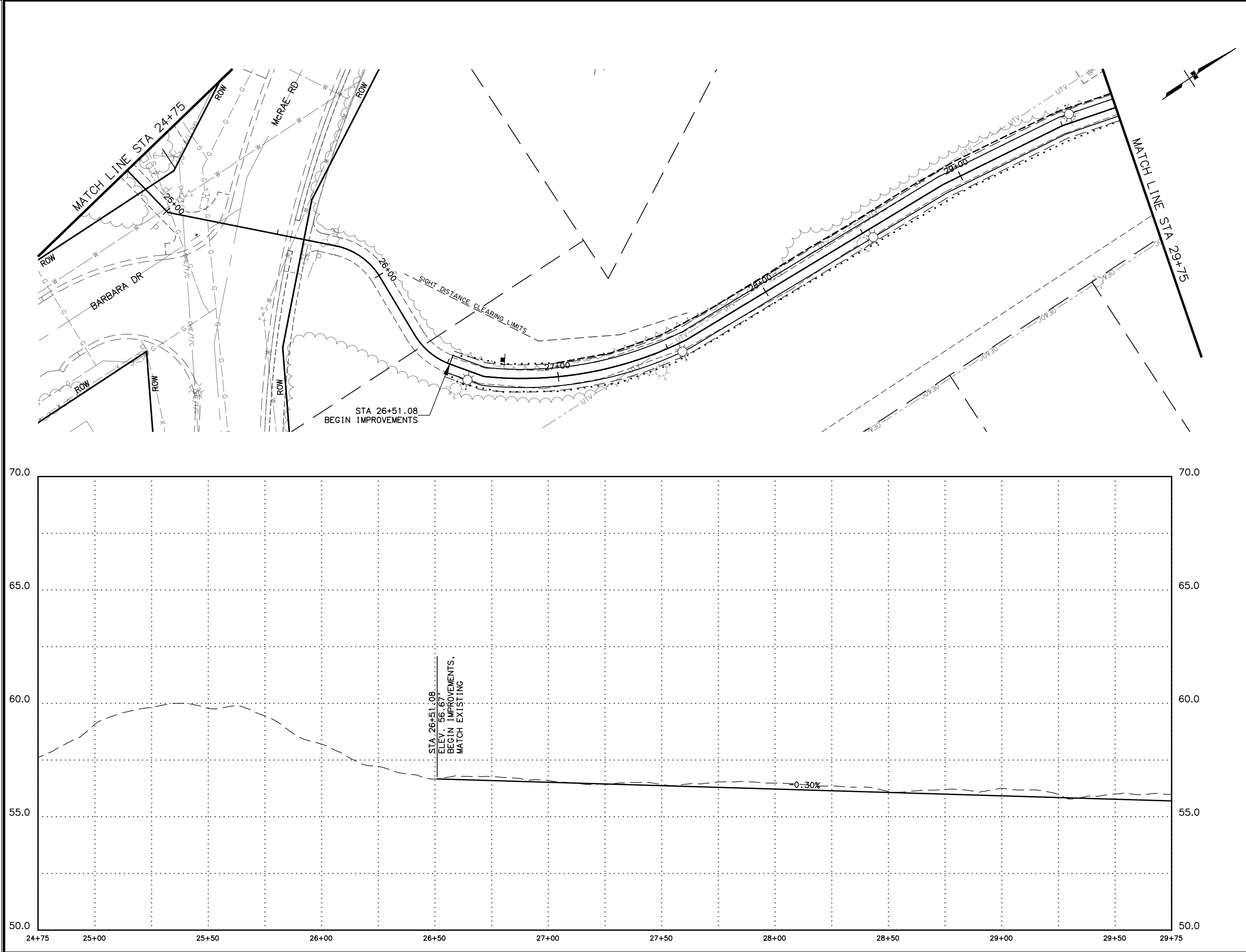
XREFS

SCALE
Fish CreekNorth Trail.dwg

LAYOUT

DATE
TIME
10/9/2018 11:41:38 PM

DRAWING LOCATION
\\jobstuf\off\obsdata\10130_30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10926\2018\01.dwg



SHEET NO.	TOTAL SHEETS	
F2	F14	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
FISH CREEK TRAIL NORTH
24+75 TO 29+75

DESIGNED BY
CHECKED BY
DRAFTED BY

XREFS

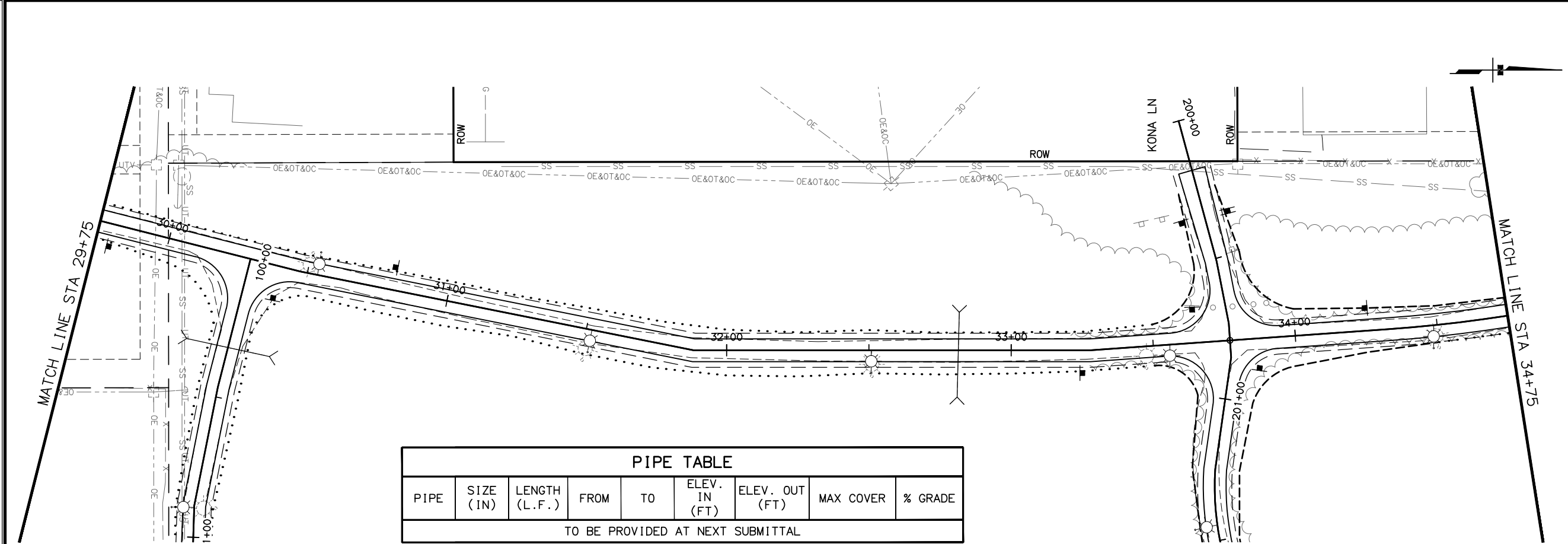
SCALE

LAYOUT

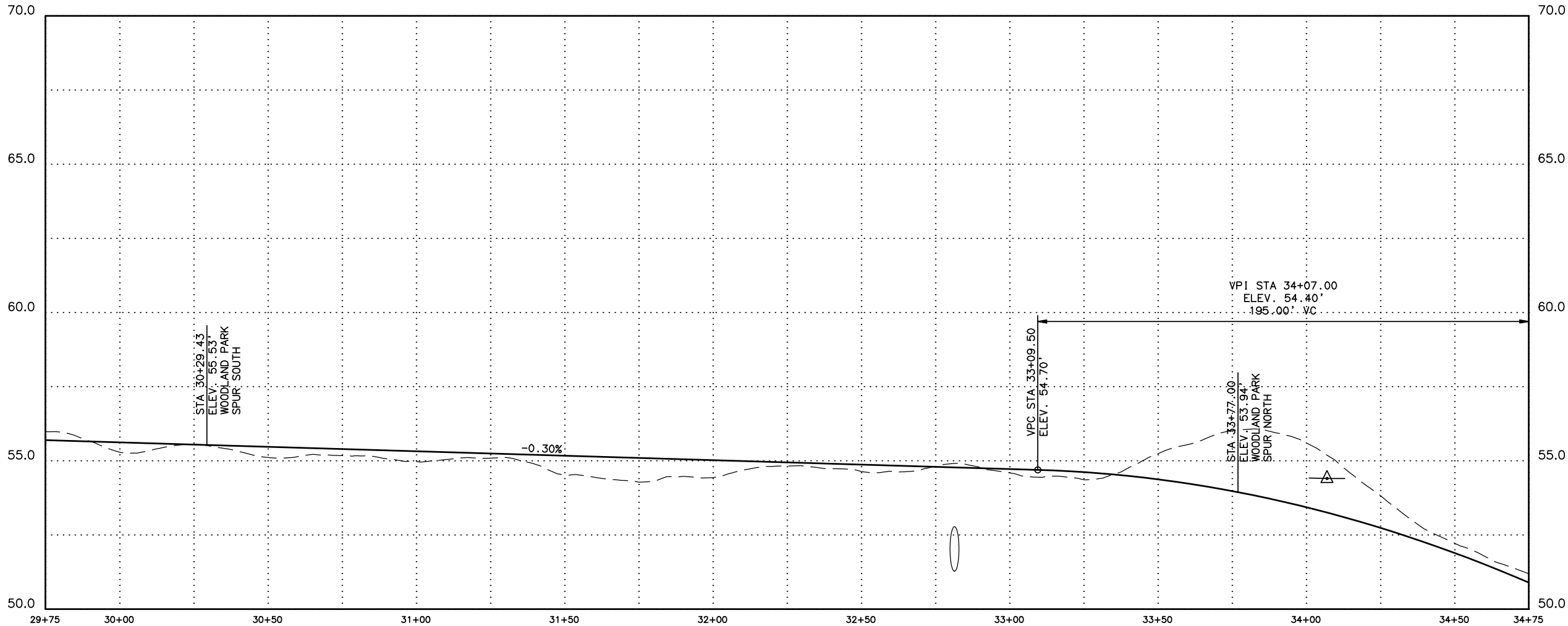
DATE

TIME

DRAWING LOCATION



PIPE TABLE								
PIPE	SIZE (IN)	LENGTH (L.F.)	FROM	TO	ELEV. IN (FT)	ELEV. OUT (FT)	MAX COVER	% GRADE
TO BE PROVIDED AT NEXT SUBMITTAL								



SHEET NO.
F3

TOTAL SHEETS
F14

STATE
ALASKA

YEAR
2017

PROJECT DESIGNATION
Z584640000/0001521

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION

PIH (9/1/16)

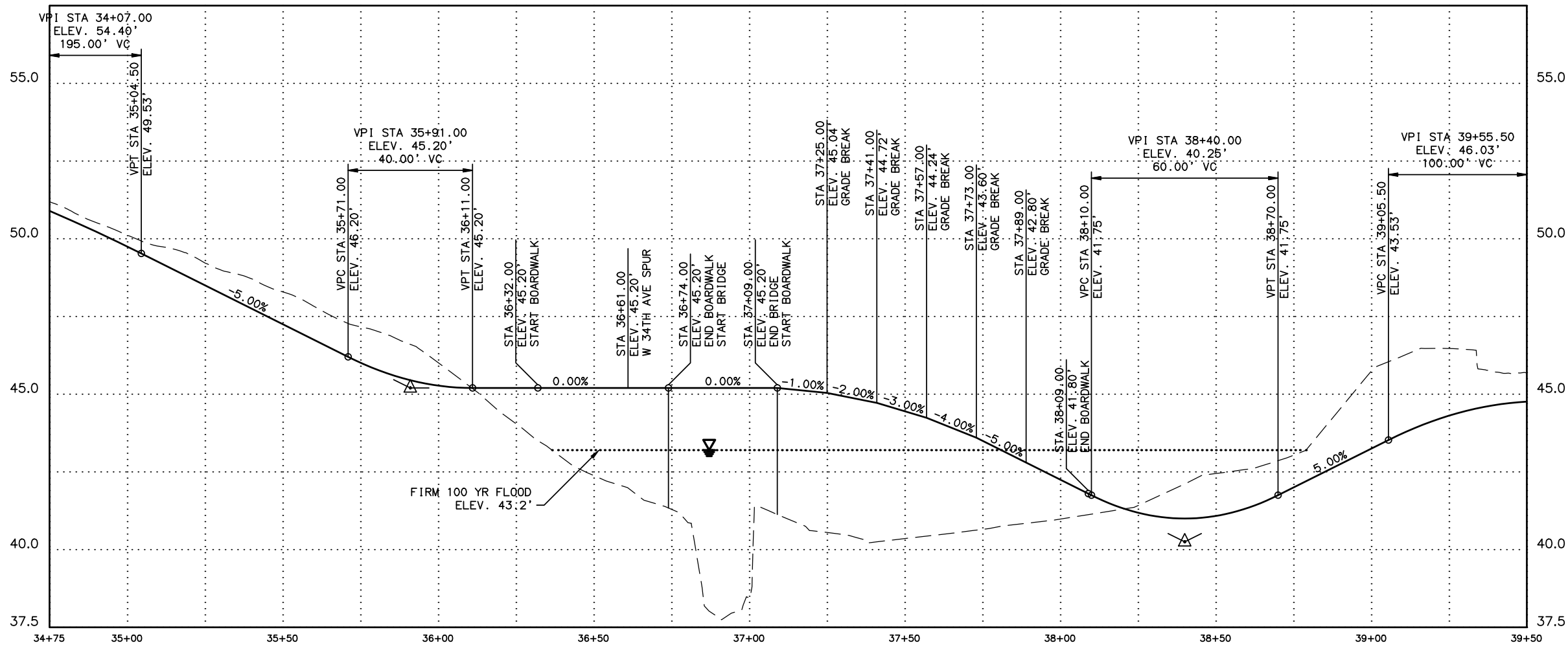
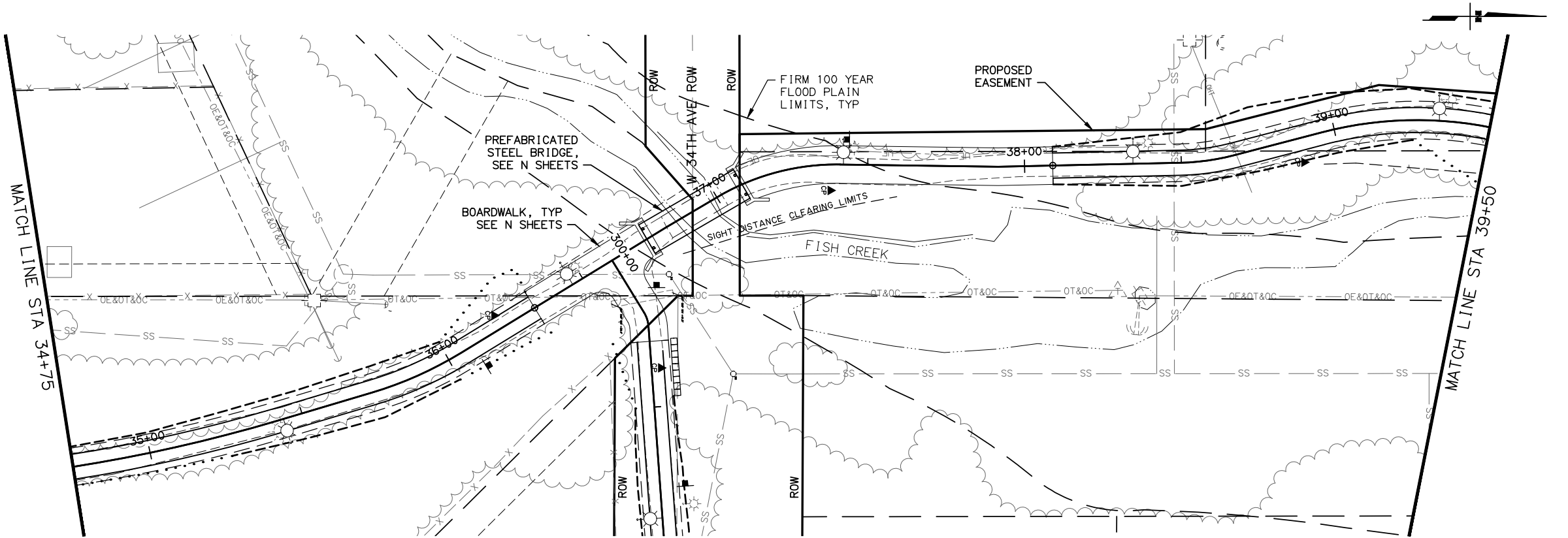
PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
FISH CREEK TRAIL NORTH
29+75 TO 34+75

DRAWING LOCATION: \\jobstuff\jobdata\10130.30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10936\2016\01.85P\01.dwg
DESIGNED BY: XREFS
CHECKED BY:
DRAFTED BY:
SCALE: Fish Creek North Trail.dwg
LAYOUT:
DATE: 10/9/16
TIME: 10:11 AM



SHEET NO.	TOTAL SHEETS	
F4	F14	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
FISH CREEK TRAIL NORTH
34+75 TO 39+50

DESIGNED BY
CHECKED BY
DRAFTED BY

XREFS

SCALE

LAYOUT

DATE

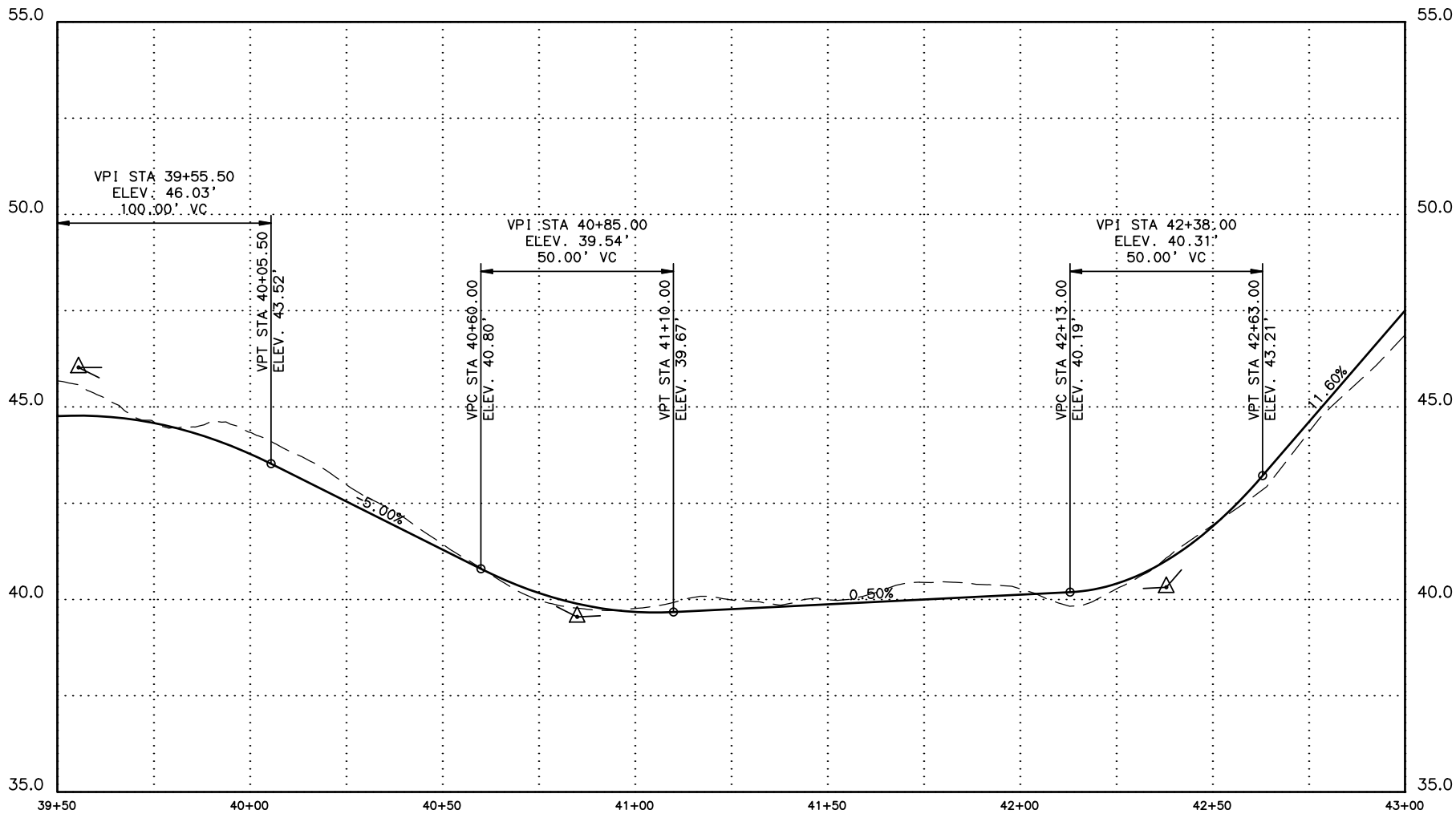
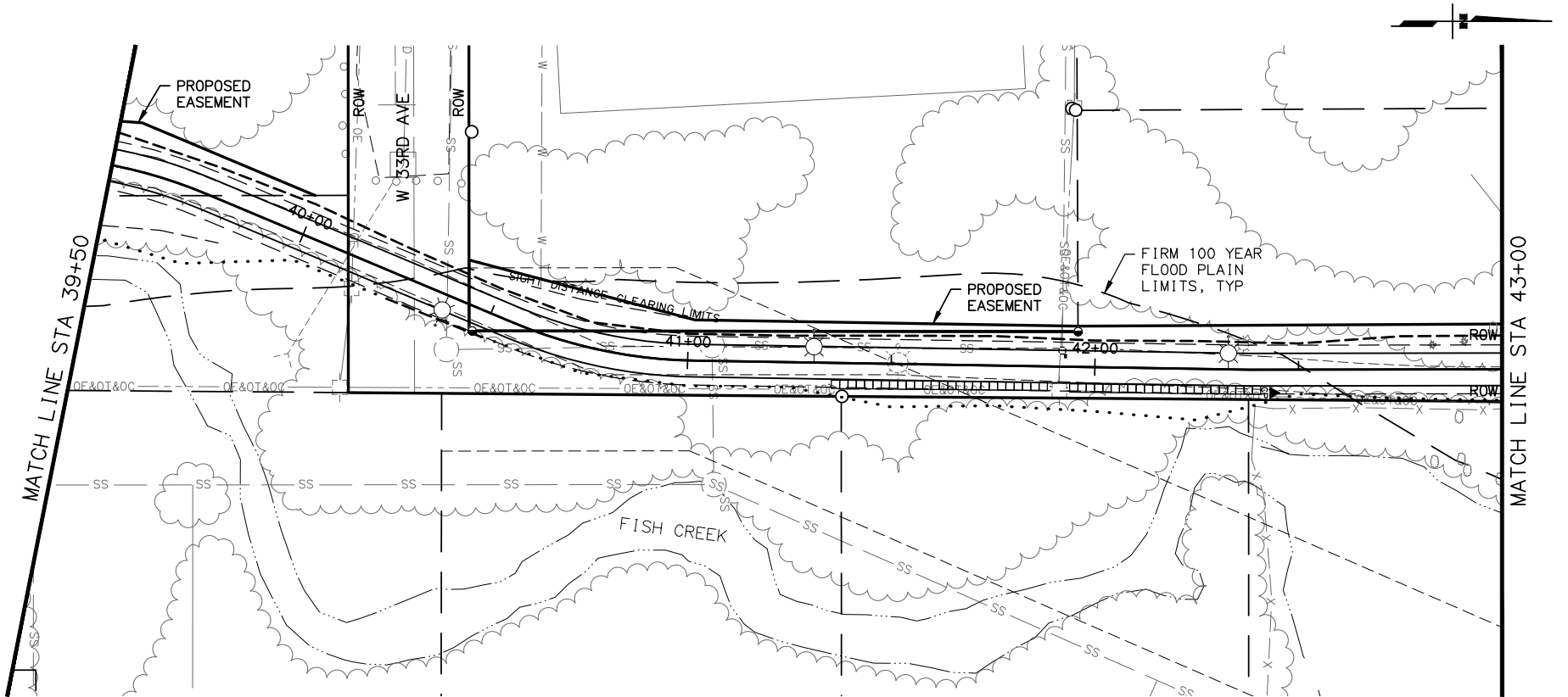
TIME

DRAWING LOCATION

Fish CreekNorth Trail.dwg

10/9/2018 11:41:38 PM

\\jobstuf\jobdata\10130_30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10928\2018\01.85P\01.dwg



SHEET NO.	TOTAL SHEETS	
F5	F14	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PIH (9/1/16)

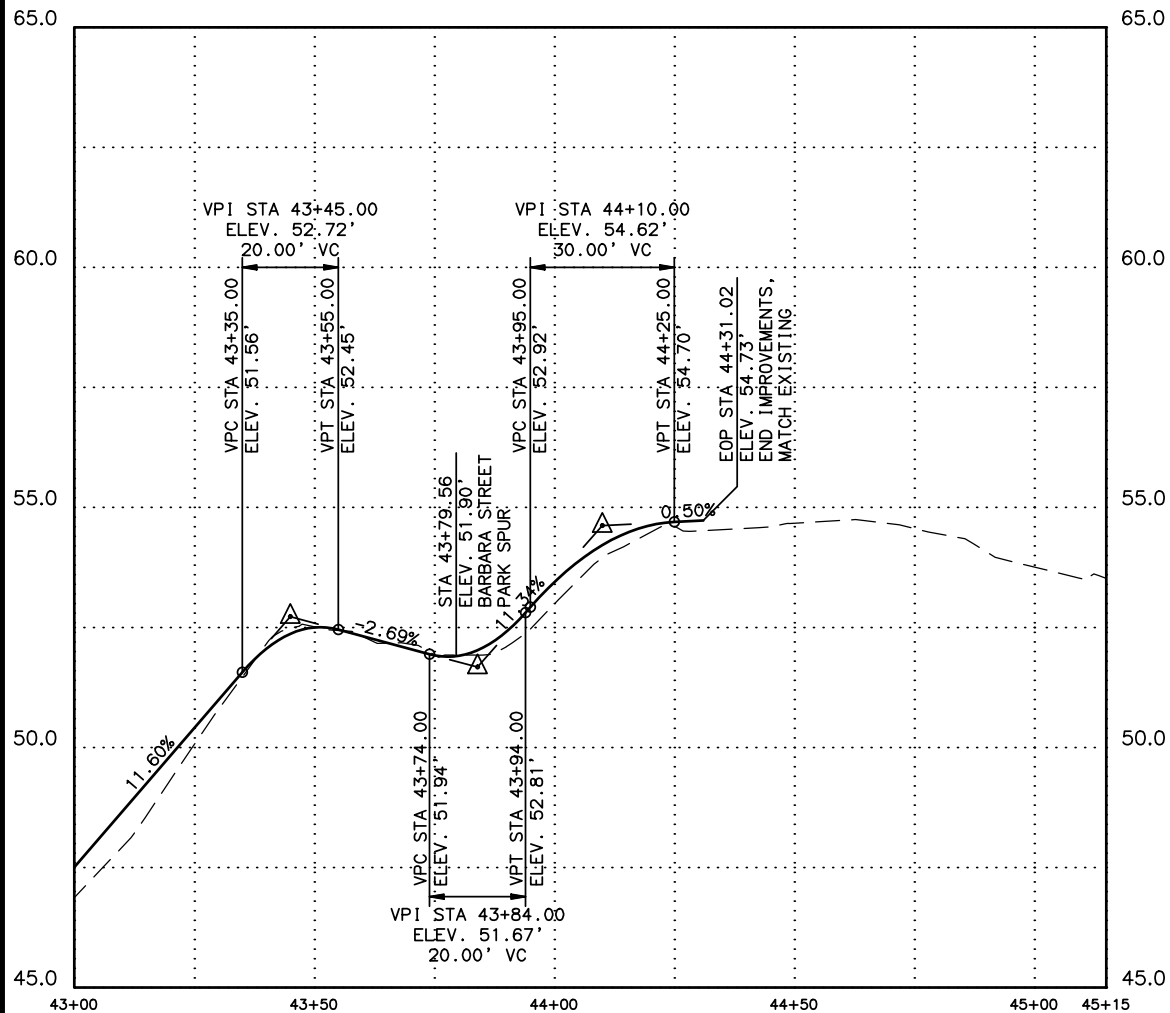
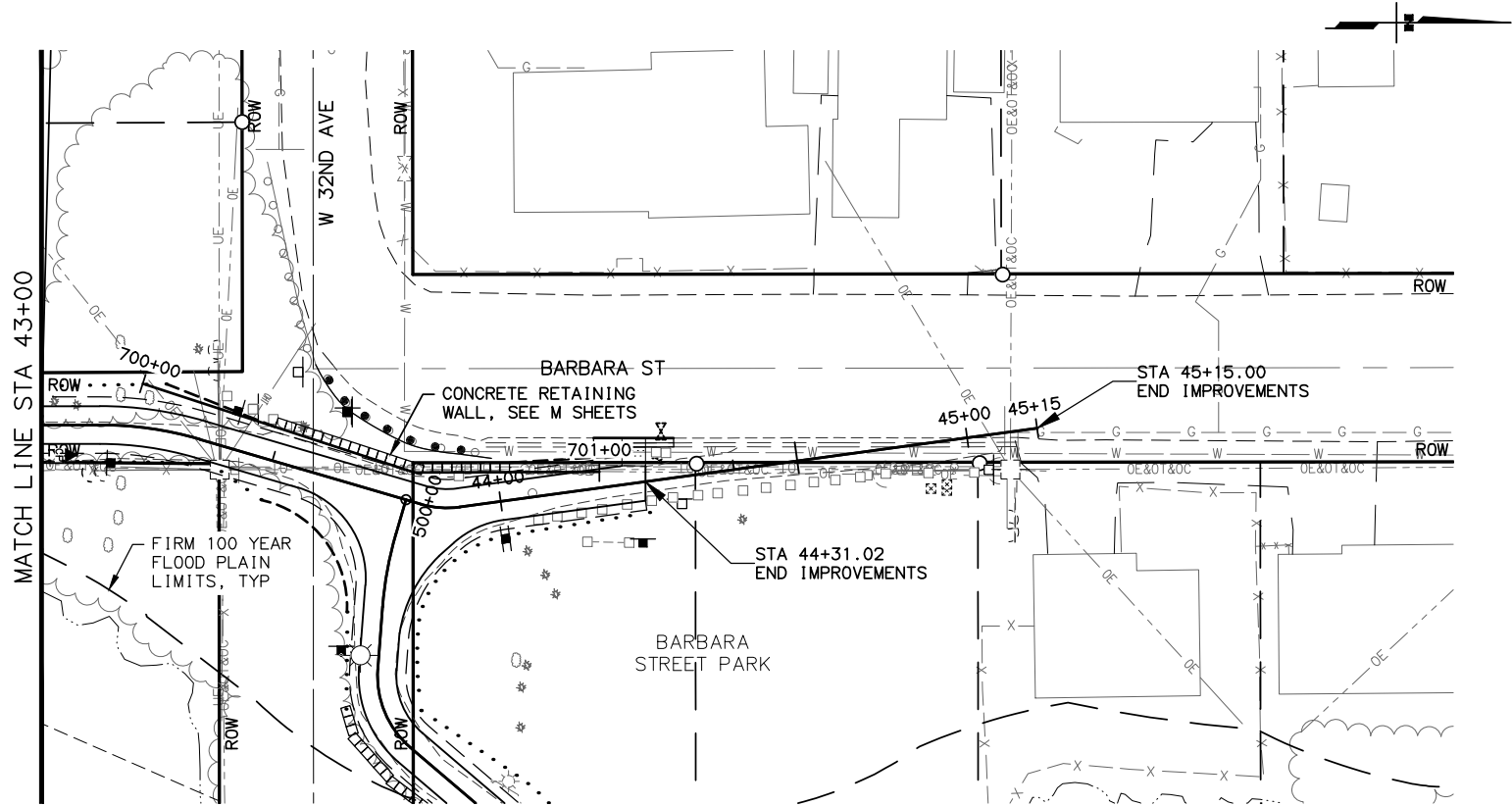
PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
FISH CREEK TRAIL NORTH
39+50 TO 43+00

DRAWING LOCATION: \\jobstuf\jobsdata\10130.30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10936\2016\01.dwg
DATE: 10/9/16
TIME: 11:41
LAYOUT: Fish Creek North Trail.dwg
SCALE: 1"=40'
XREFS: XREFS
DESIGNED BY: [blank]
CHECKED BY: [blank]
DRAFTED BY: [blank]



SHEET NO.	TOTAL SHEETS	
F6	F14	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PIH (9/1/16)

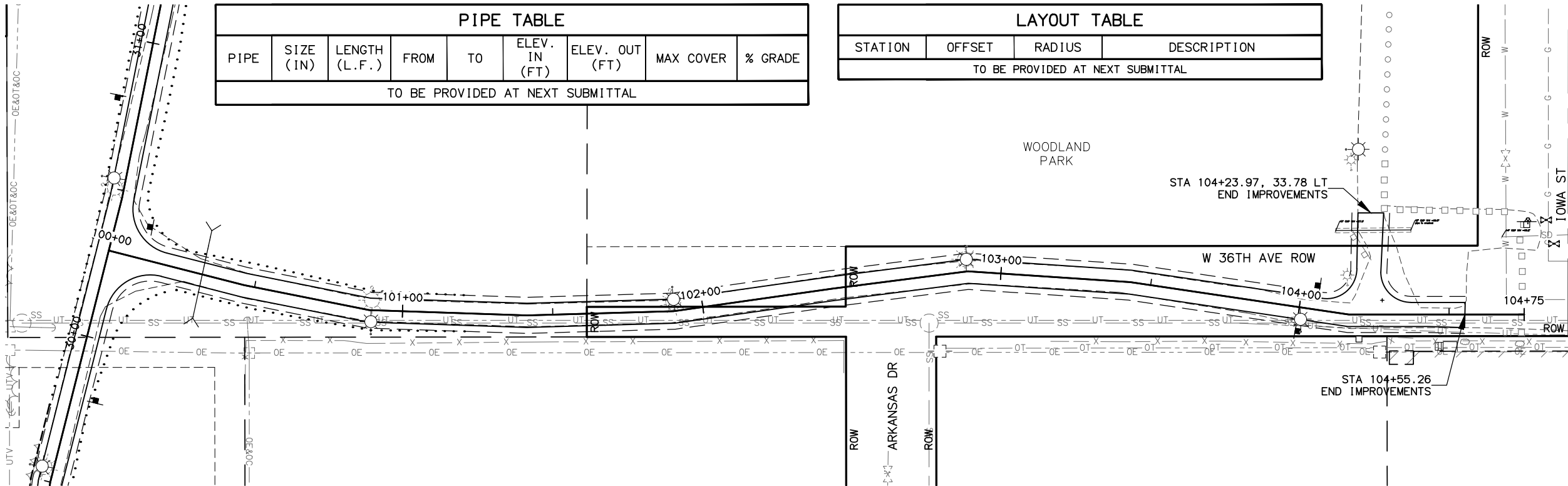
PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

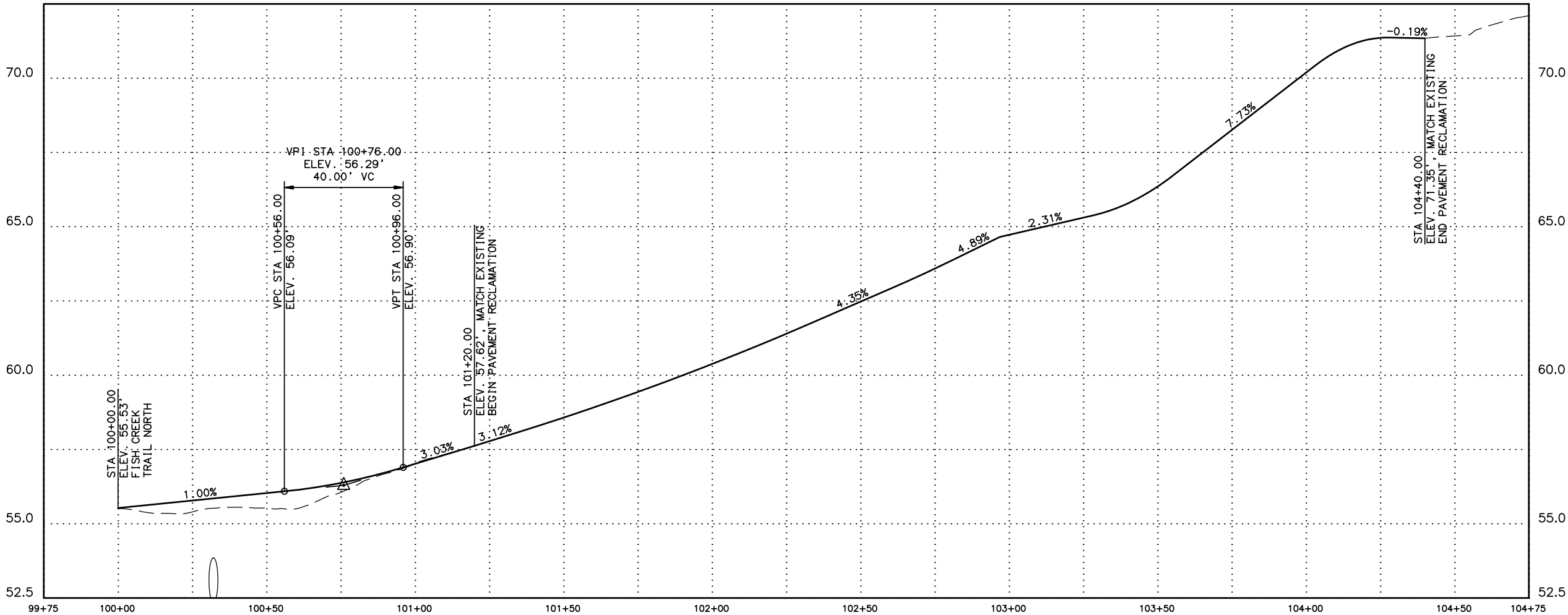
PLAN AND PROFILE
FISH CREEK TRAIL NORTH
43+00 TO EOP

DRAWING LOCATION: \\jobstuff\jobdata\10130.30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10936\2018\01.85P\01.dwg
DATE: 10/9/16
TIME: 10:00
LAYOUT: Fish Creek North Trail
SCALE: 1"=40'
XREFS: XREFS
DESIGNED BY: [blank]
CHECKED BY: [blank]
DRAFTED BY: [blank]

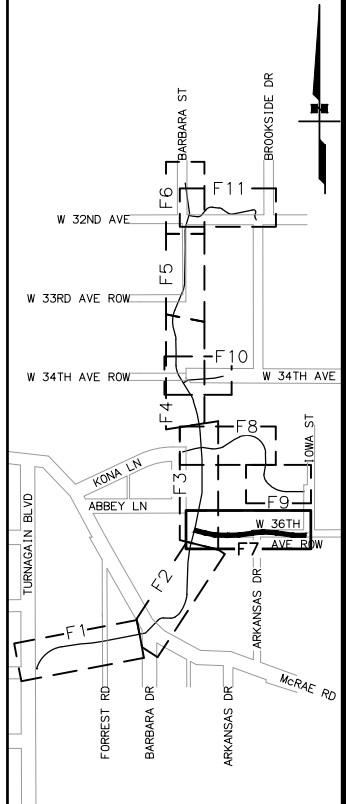


PIPE TABLE							
PIPE	SIZE (IN)	LENGTH (L.F.)	FROM	TO	ELEV. IN (FT)	ELEV. OUT (FT)	% GRADE
TO BE PROVIDED AT NEXT SUBMITTAL							

LAYOUT TABLE			
STATION	OFFSET	RADIUS	DESCRIPTION
TO BE PROVIDED AT NEXT SUBMITTAL			



SHEET NO.	TOTAL SHEETS	
F7	F14	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
49th
KURT A. LAWLER
CE-14457
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
WOODLAND PARK SPUR SOUTH
100+00 TO 104+75

DRAWING LOCATION

\\\\jobstuf\\jobdata\\0130.30 amts areawide trails rehab - fish creek\\00 CADD\\01 working set\\01 Civil\\10936\\2018\\01.85P\\01.dwg

DATE

TIME

LAYOUT

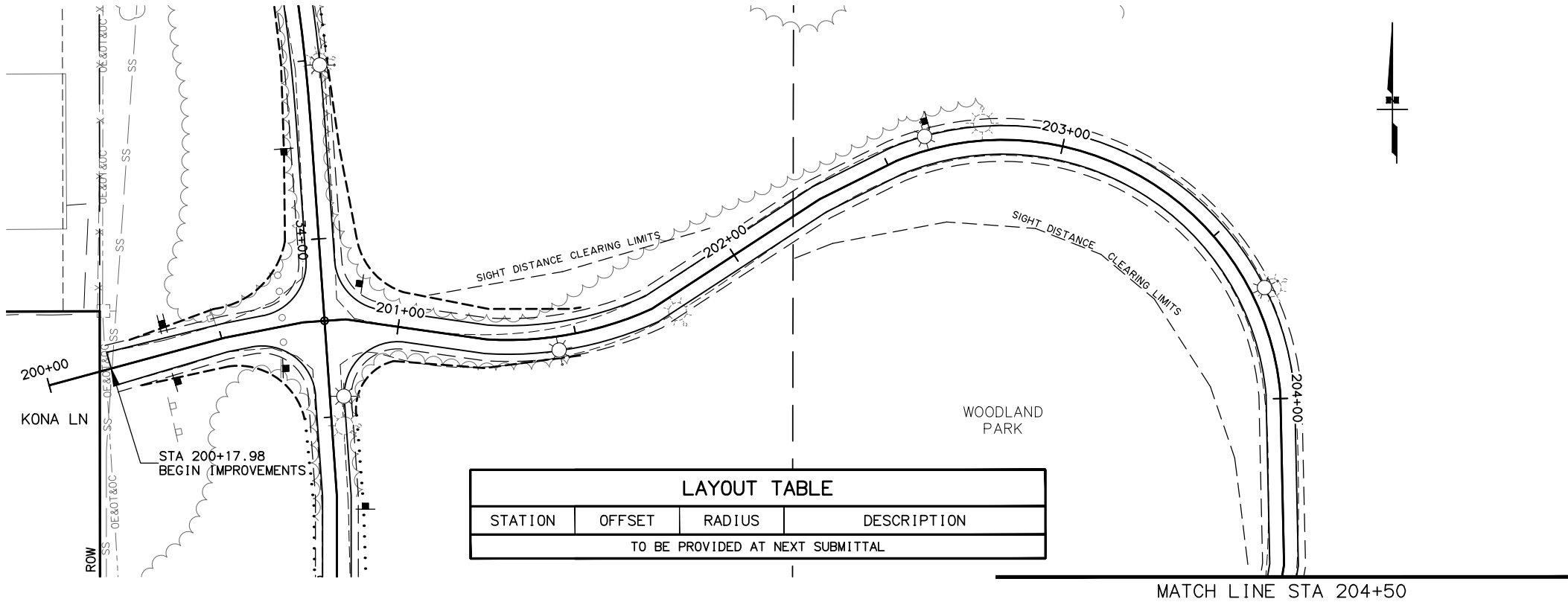
SCALE

XREFS

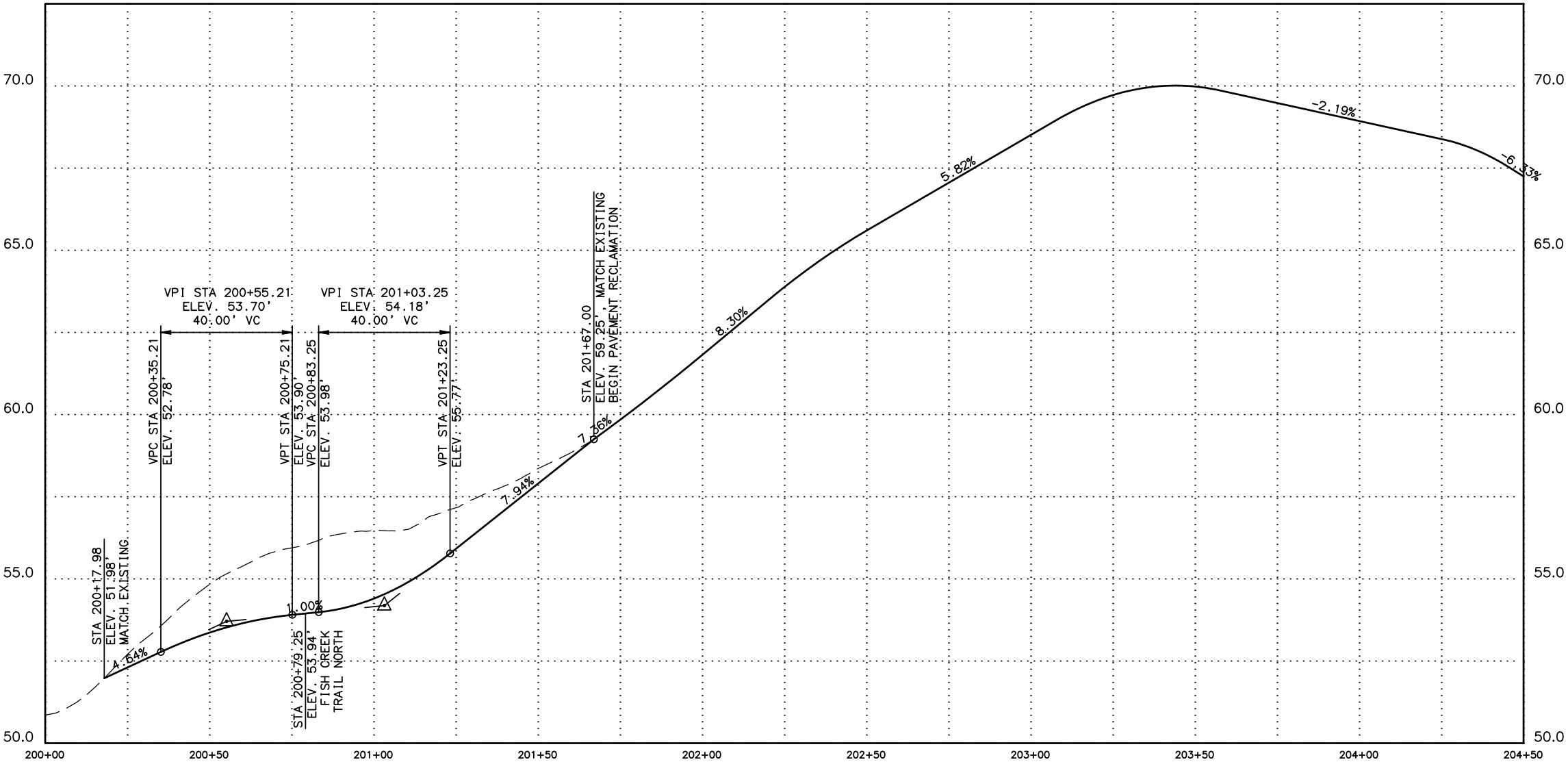
DESIGNED BY

CHECKED BY

DRAFTED BY



LAYOUT TABLE			
STATION	OFFSET	RADIUS	DESCRIPTION
TO BE PROVIDED AT NEXT SUBMITTAL			



SHEET NO.

F8

TOTAL SHEETS

F14

STATE

ALASKA

YEAR

2017

PROJECT DESIGNATION

Z584640000/0001521

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA

49TH

KURT A. LAWLER

CE-14457

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION

AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE

TRAILS REHABILITATION

FISH CREEK TRAIL

PLAN AND PROFILE

WOODLAND PARK SPUR NORTH

200+00 TO 204+50

DRAWING LOCATION
\\\\jobstuff\\jobdata\\0130.30 amts areawide trails rehab - fish creek\\00 CADD\\01 working set\\01 Civil\\10936\\2016\\01.85P\\01.dwg

DATE
10/9/16

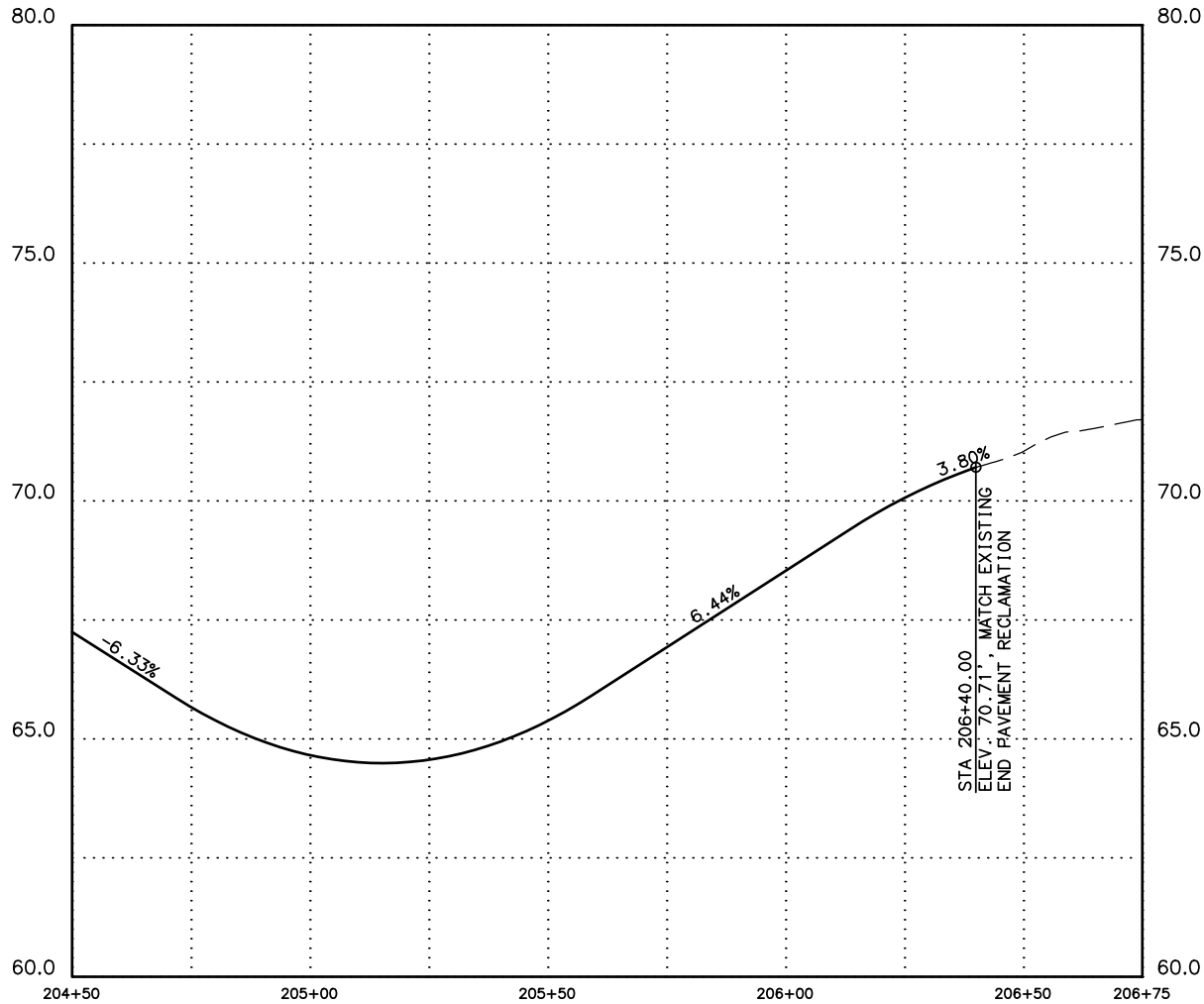
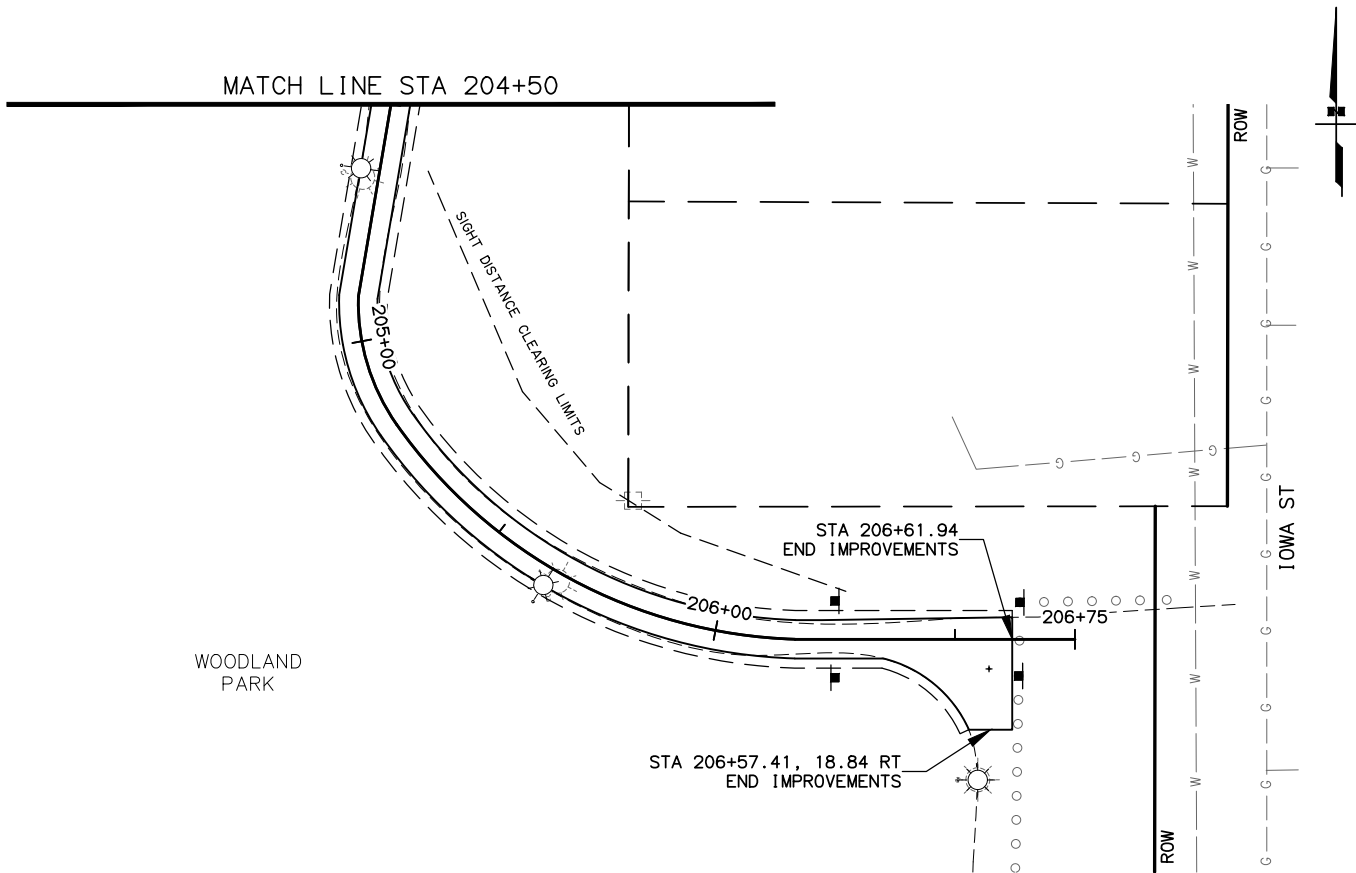
TIME
14:35

LAYOUT
Fish Creek North Trail

SCALE
1"=40'

XREFS

DESIGNED BY
CHECKED BY
DRAFTED BY



LAYOUT TABLE			
STATION	OFFSET	RADIUS	DESCRIPTION
TO BE PROVIDED AT NEXT SUBMITTAL			

SHEET NO.
F9

TOTAL SHEETS
F14

STATE
ALASKA

YEAR
2017

PROJECT DESIGNATION
Z584640000/0001521

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
WOODLAND PARK SPUR NORTH
204+50 TO 206+75

DESIGNED BY
CHECKED BY
DRAFTED BY

XREFS

SCALE

LAYOUT

DATE

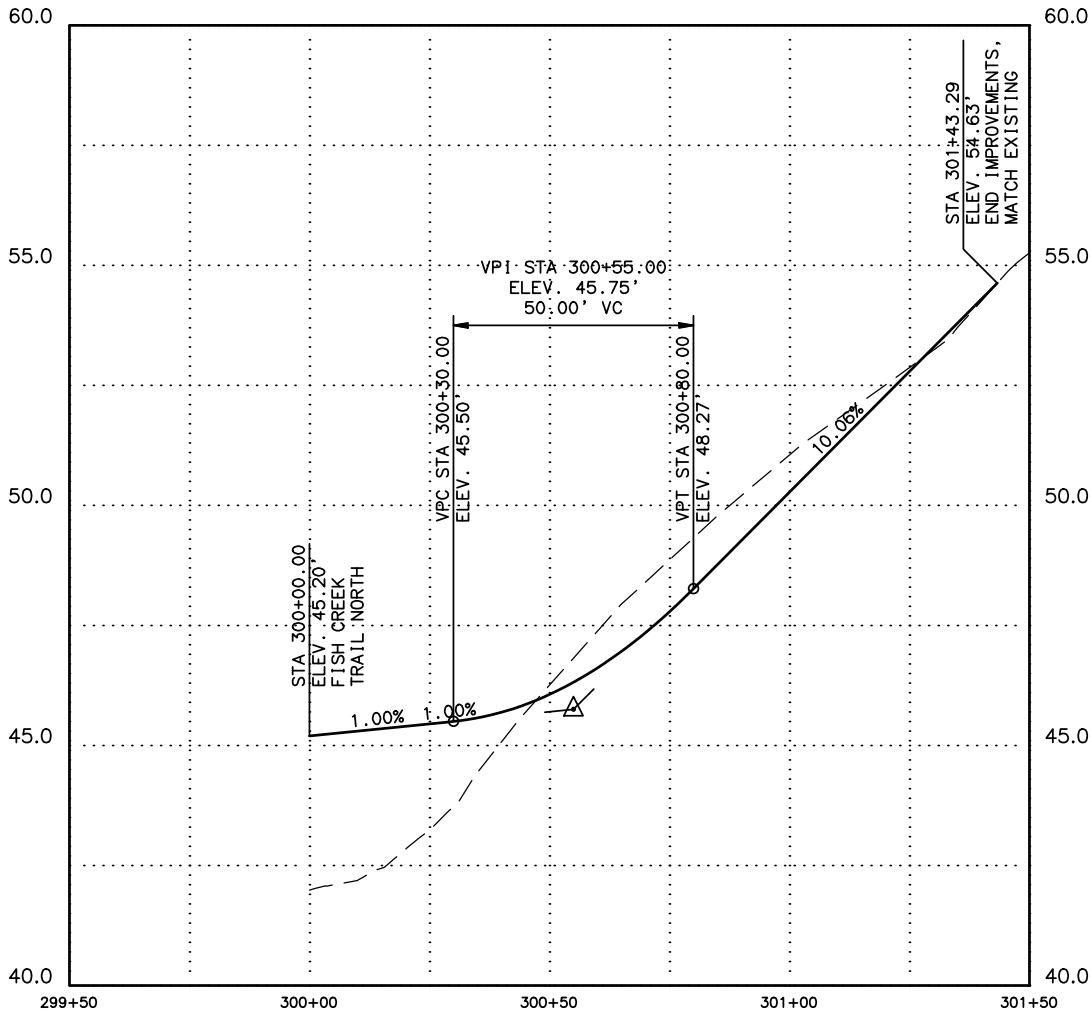
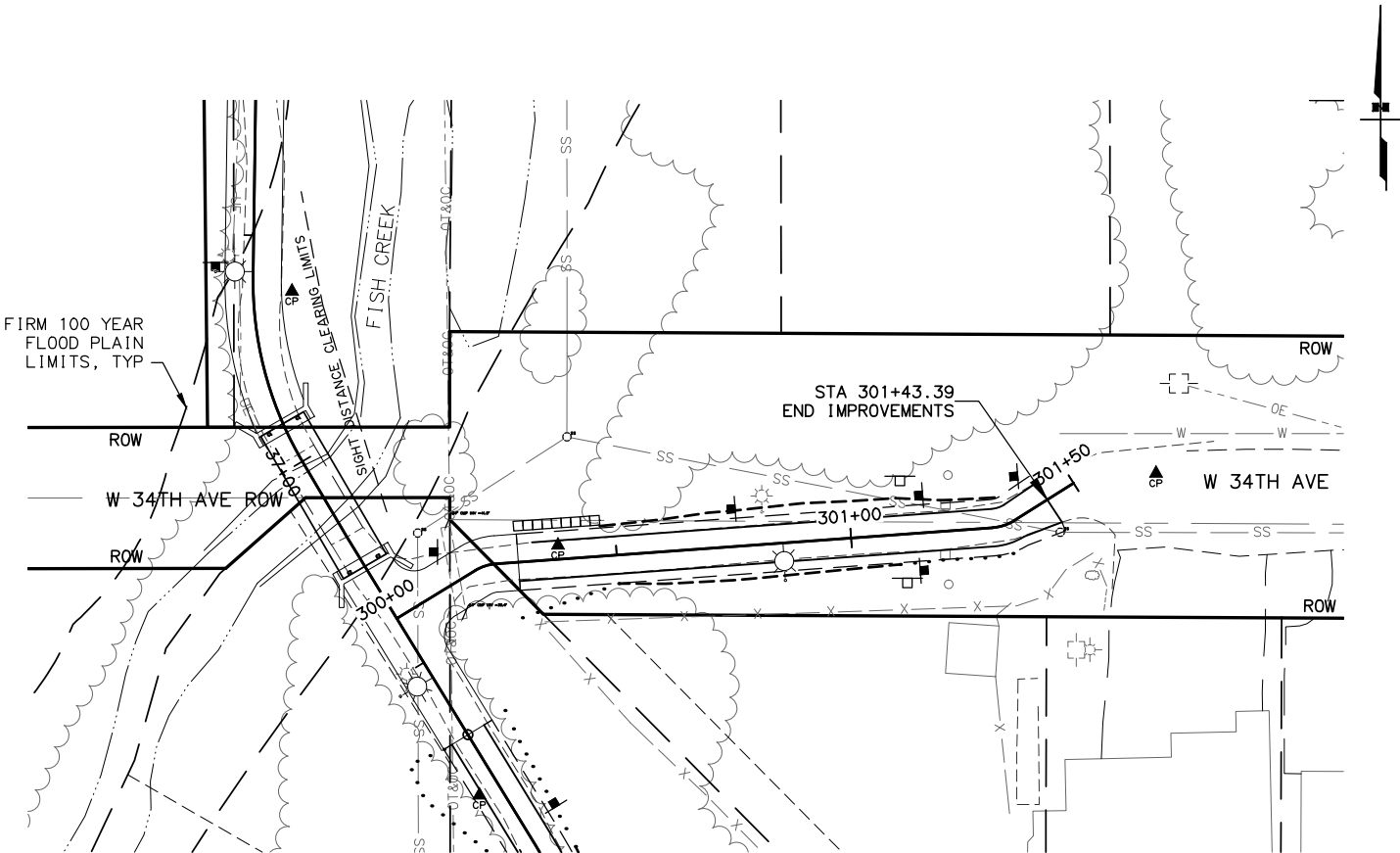
TIME

DRAWING LOCATION

01/30/2017 10:30 AM

01/30/2017 10:30 AM

\\jobstuf\jobsdata\0130_30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10936\2017\01.85P\01.dwg



PIPE TABLE								
PIPE	SIZE (IN)	LENGTH (L.F.)	FROM	TO	ELEV. IN (FT)	ELEV. OUT (FT)	MAX COVER	% GRADE
TO BE PROVIDED AT NEXT SUBMITTAL								

LAYOUT TABLE			
STATION	OFFSET	RADIUS	DESCRIPTION
TO BE PROVIDED AT NEXT SUBMITTAL			

SHEET NO.
F10

TOTAL SHEETS
F14

STATE
ALASKA

YEAR
2017

PROJECT DESIGNATION
Z584640000/0001521

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
W 34TH AVE SPUR
300+00 TO 301+50

DRAWING LOCATION: \\jobstuf\jobsdata\10130.30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10926\2016\01.85P\01.dwg

DATE: 10/9/2016

TIME: 10:04:38

LAYOUT: Fish Creek\North Trail.dwg

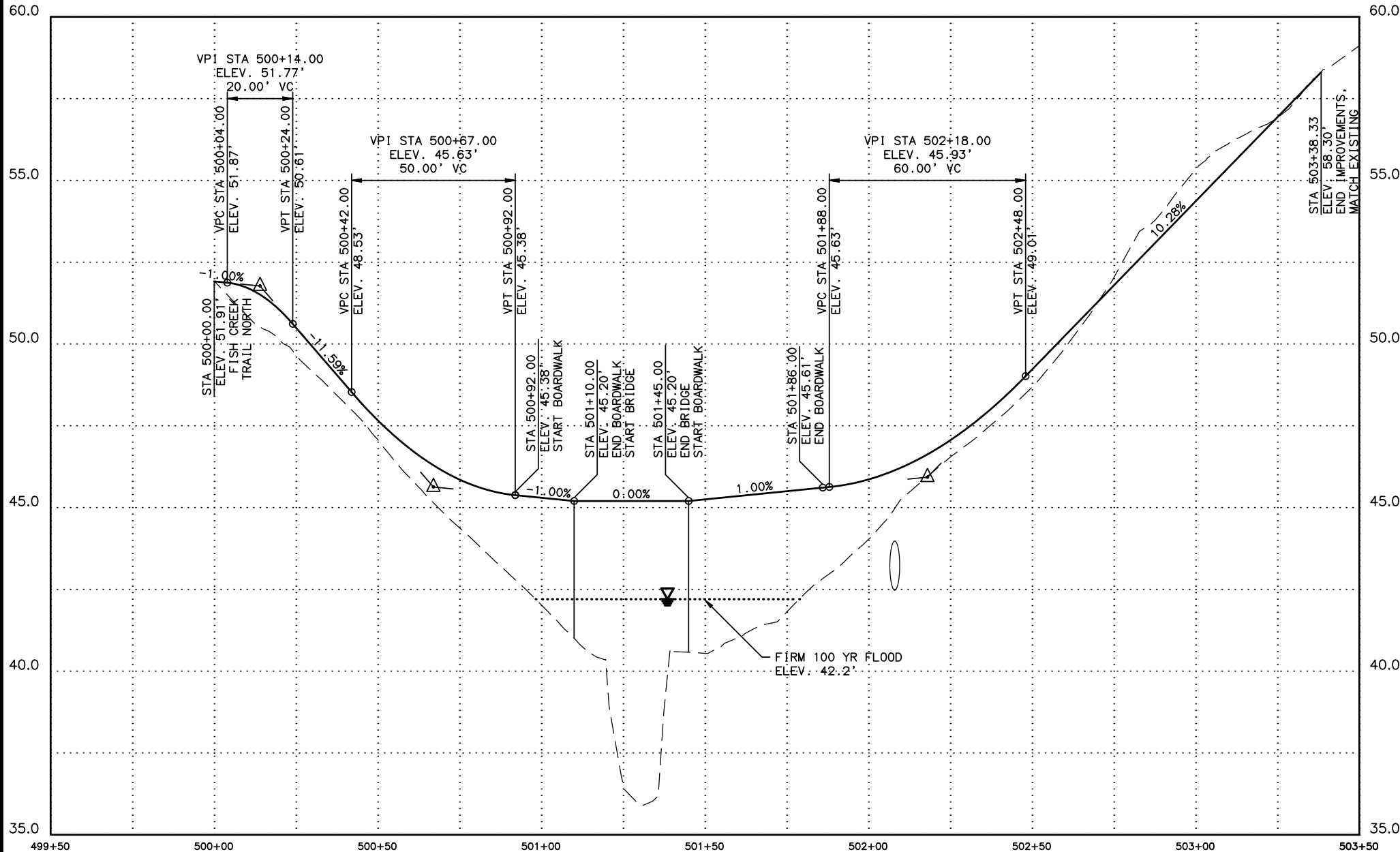
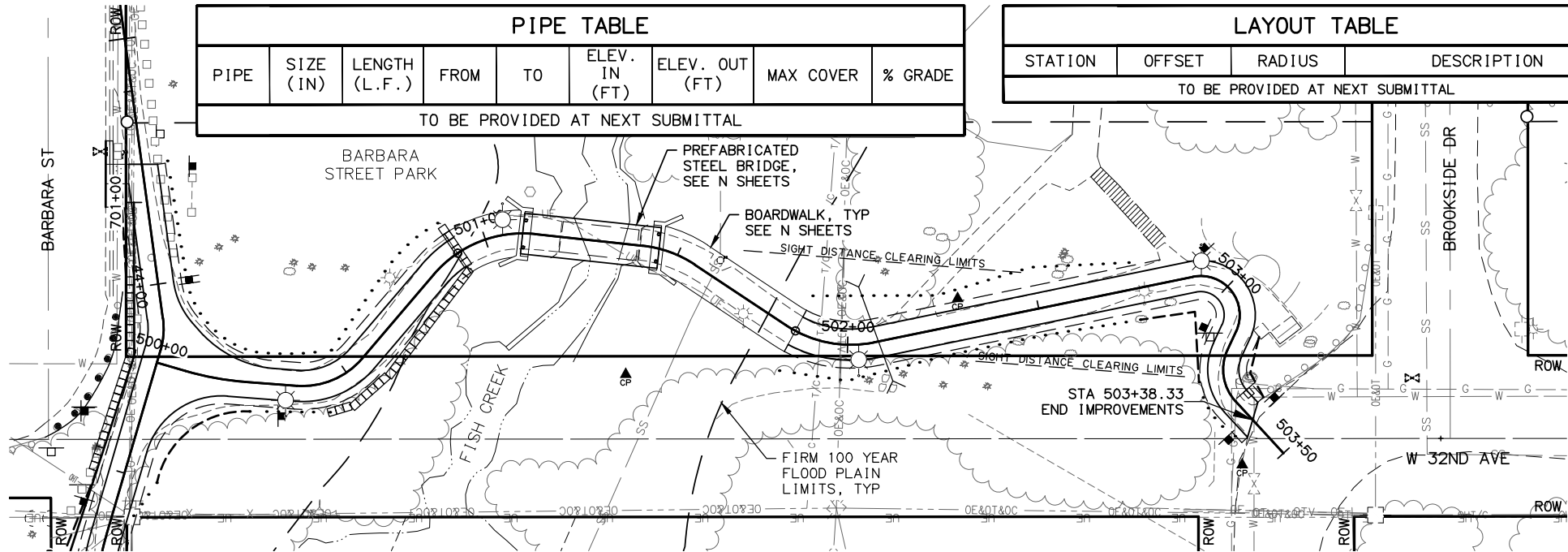
SCALE: 1"=40'

XREFS: XREFS

DESIGNED BY: [blank]

CHECKED BY: [blank]

DRAFTED BY: [blank]



SHEET NO. **F11** TOTAL SHEETS **F14**

STATE **ALASKA** YEAR **2017**

PROJECT DESIGNATION **Z584640000/0001521**

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION
-----	------	-------------

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
49th
KURT A. LAWLER
CE-14457
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
BARBARA STREET PARK SPUR
500+00 TO 503+50

DESIGNED BY
CHECKED BY
DRAFTED BY

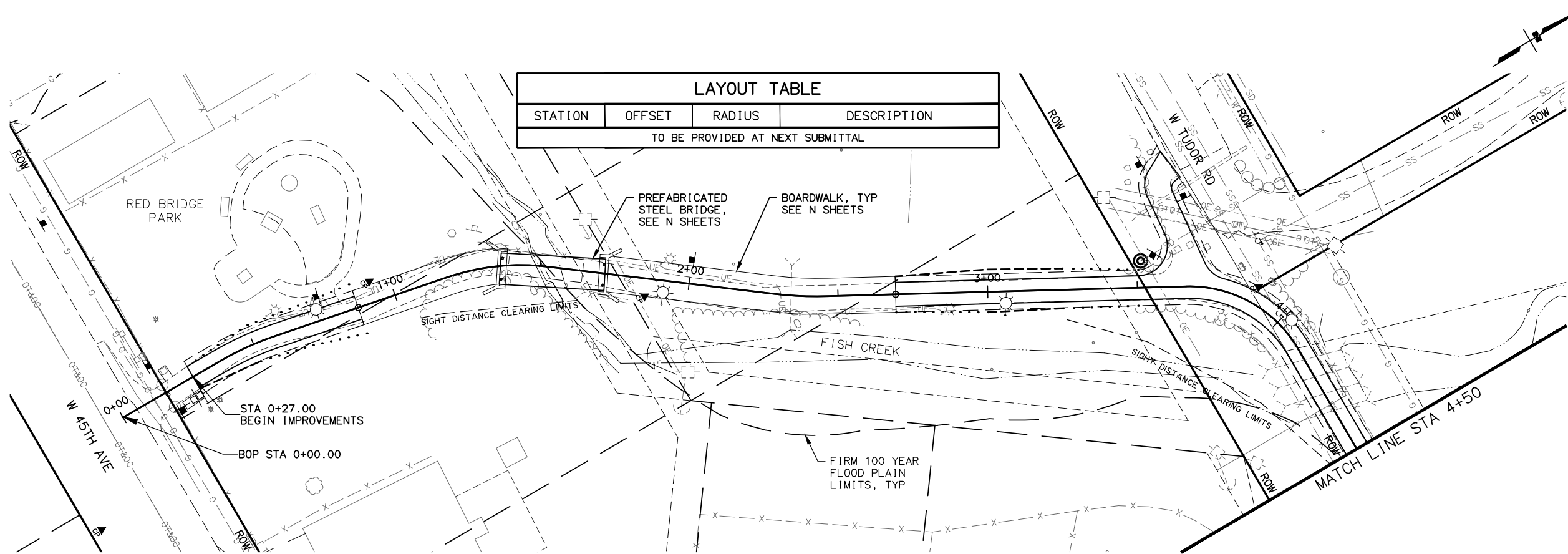
XREFS

SCALE

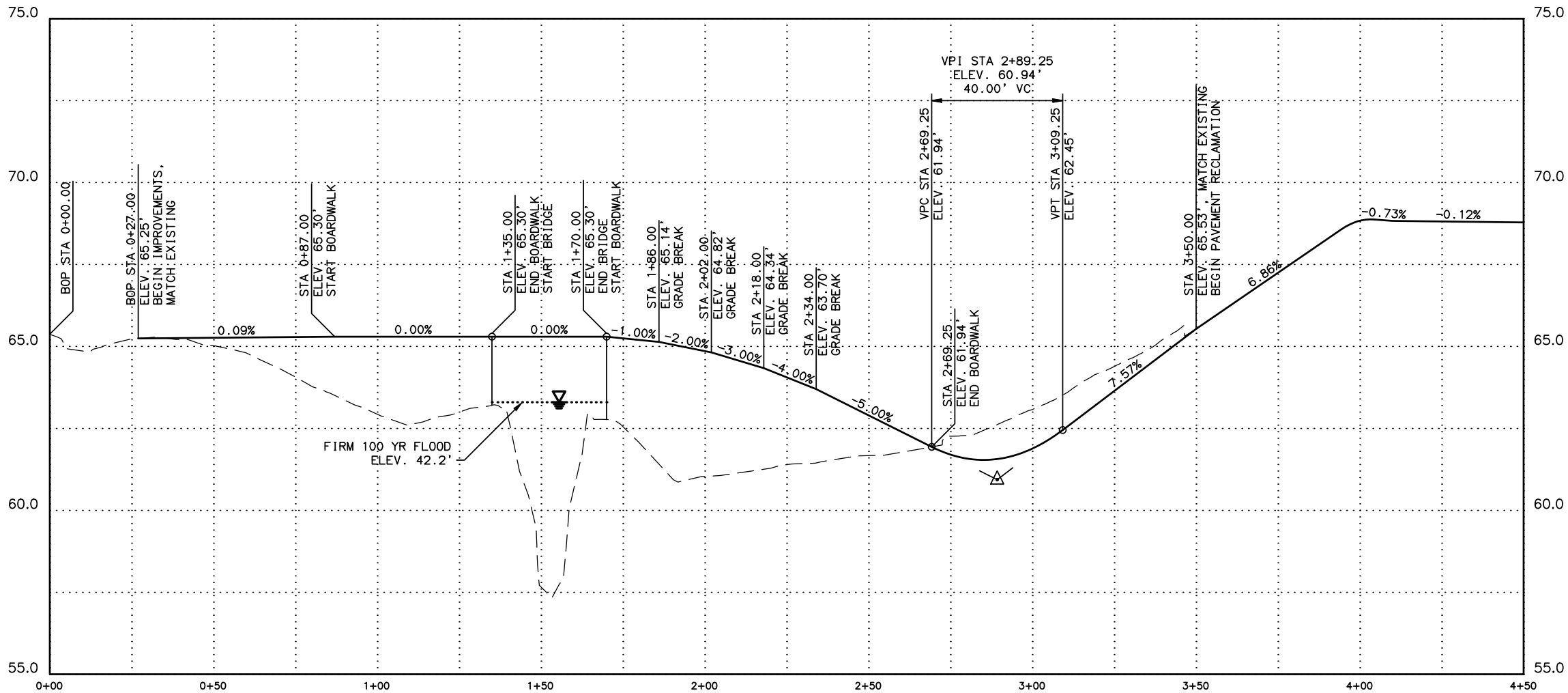
LAYOUT
Fish Creek Trail.dwg

DATE
TIME
10/9/2018 14:35

DRAWING LOCATION
\\jobstuf\jobsdata\10130_30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10926\2018\01.dwg



LAYOUT TABLE			
STATION	OFFSET	RADIUS	DESCRIPTION
TO BE PROVIDED AT NEXT SUBMITTAL			



SHEET NO.	TOTAL SHEETS	
F12	F14	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
49th
KURT A. LAWLER
CE-14457
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
FISH CREEK TRAIL SOUTH
BOP TO 4+50

DESIGNED BY
CHECKED BY
DRAFTED BY

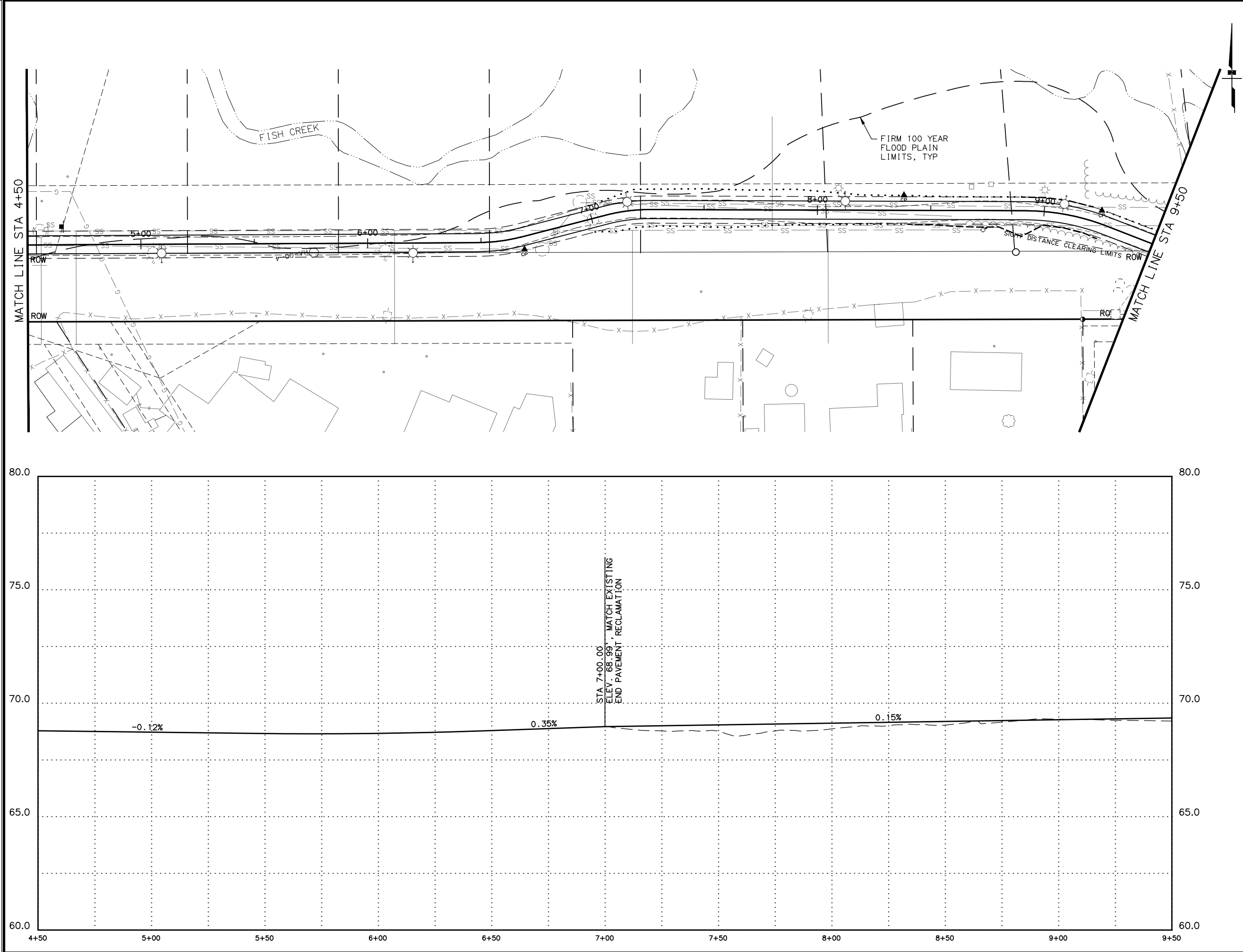
XREFS

SCALE

LAYOUT
Fish Creek Trail.dwg

DATE
TIME
10/9/16

DRAWING LOCATION
\\jobstuff\jobdata\10130_30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 civil\10936\2016\01_85P\01.dwg



SHEET NO.	TOTAL SHEETS	
F13	F14	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
49TH
KURT A. LAWLER
CE-14457
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
FISH CREEK TRAIL SOUTH
4+50 TO 9+50

DESIGNED BY
CHECKED BY
DRAFTED BY

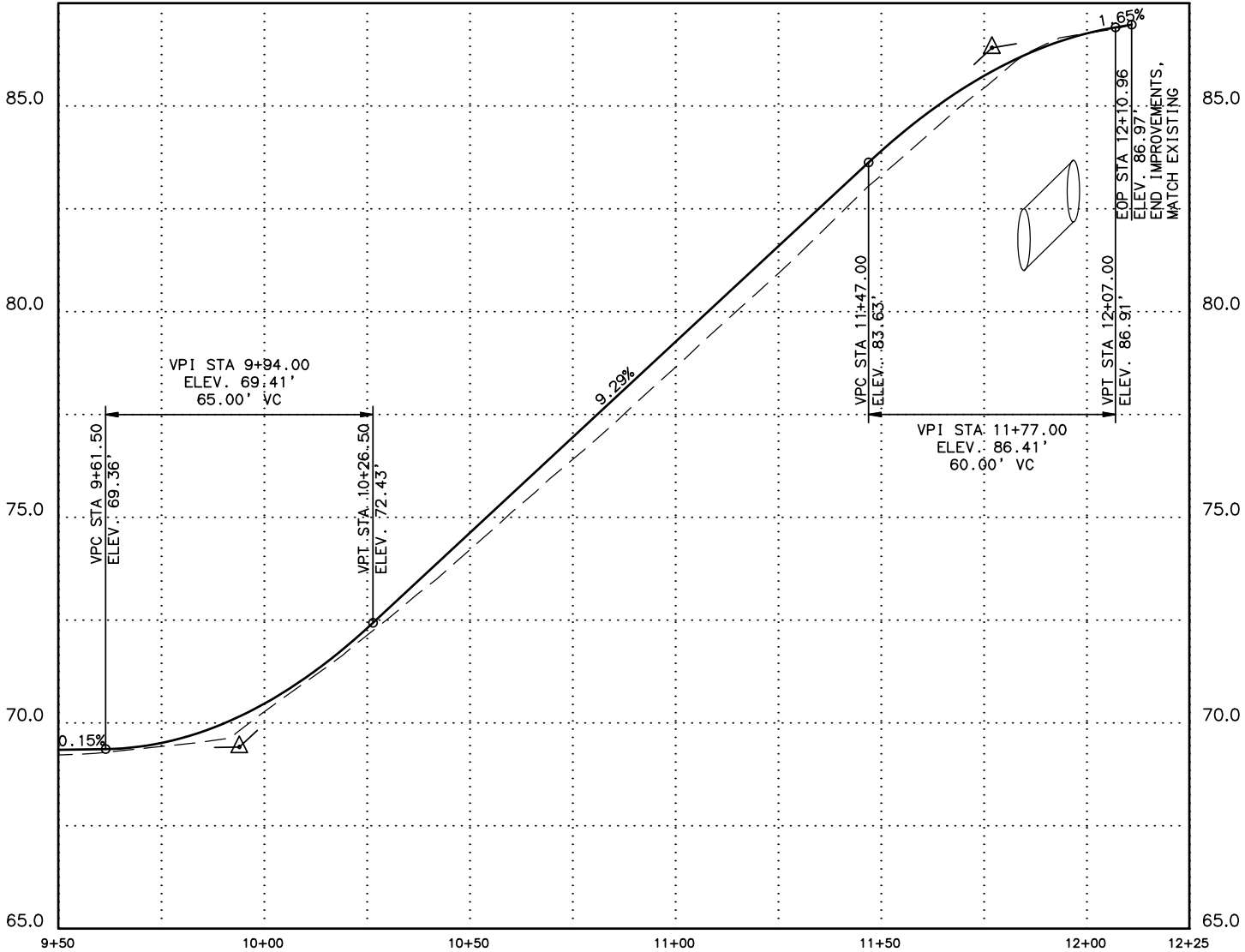
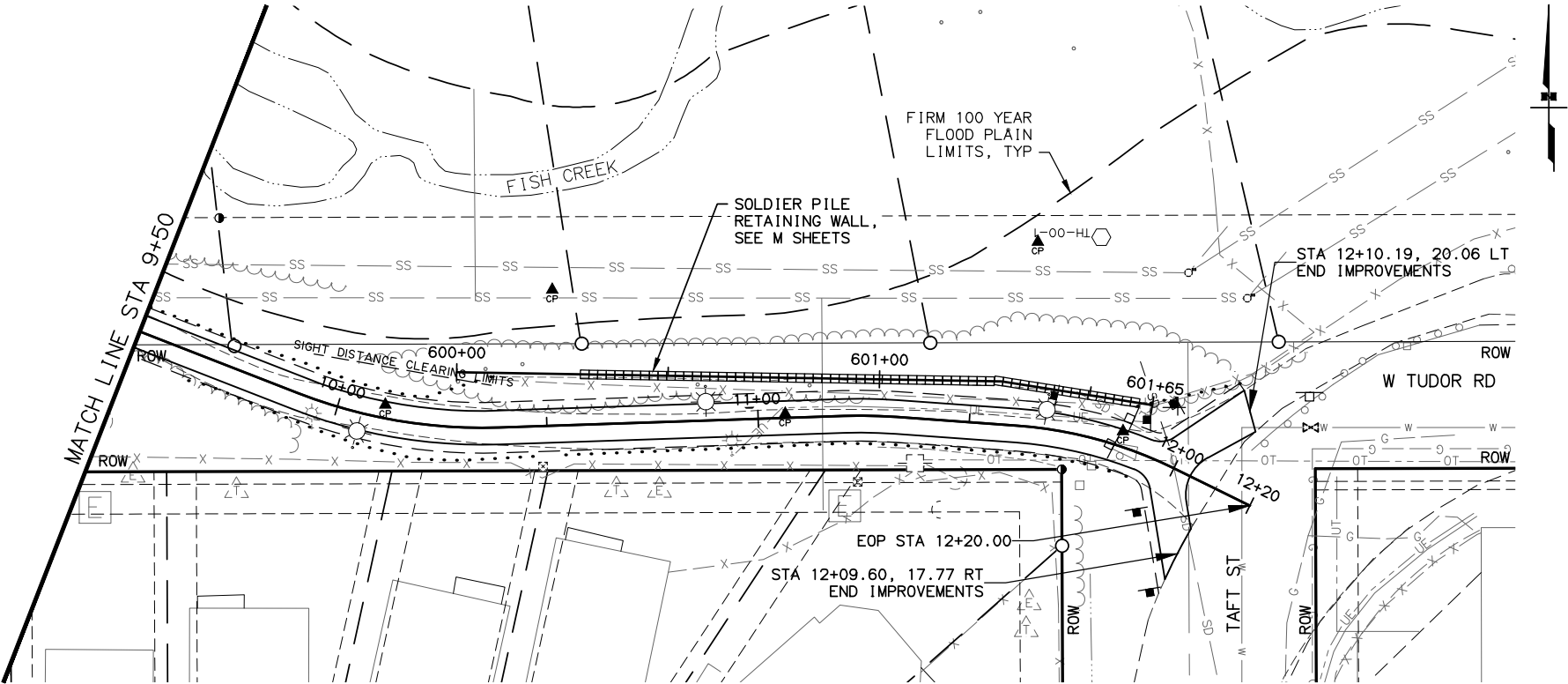
XREFS

SCALE

LAYOUT
Fish Creek Trail.dwg

DATE
TIME
10/30/2018 14:35

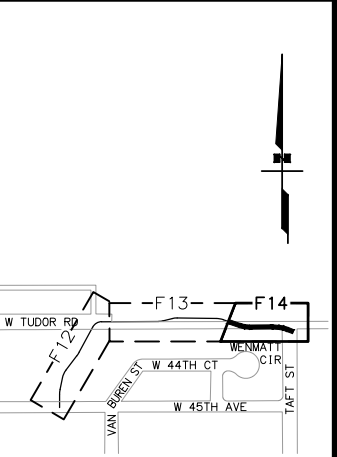
DRAWING LOCATION
\\jobstuff\jobdata\10130_30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10926\2018\01.dwg



PIPE TABLE								
PIPE	SIZE (IN)	LENGTH (L.F.)	FROM	TO	ELEV. IN (FT)	ELEV. OUT (FT)	MAX COVER	% GRADE
TO BE PROVIDED AT NEXT SUBMITTAL								

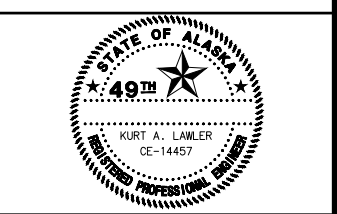
LAYOUT TABLE			
STATION	OFFSET	RADIUS	DESCRIPTION
TO BE PROVIDED AT NEXT SUBMITTAL			

SHEET NO.	TOTAL SHEETS	
F14	F14	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
FISH CREEK TRAIL SOUTH
9+50 TO EOP

SYMBOL LEGEND

EXISTING	PROPOSED	
		LOAD CENTER
		TRAFFIC CONTROLLER
		BEACON CONTROLLER
		TYPE 1A JUNCTION BOX
		TYPE 1I JUNCTION BOX
		TYPE 1II JUNCTION BOX
		TYPE IV JUNCTION BOX
		ELECTROLIER
		HIGHTOWER
		SIGNAL POLE WITH MASTARM
		PEDESTRIAN PUSH BUTTON
		PEDESTRIAN SIGNAL
		VEHICULAR SIGNAL
		VEHICULAR SIGNAL LEFT
		VEHICULAR SIGNAL RIGHT
		OPTICAL DETECTOR
		GPS DETECTOR
		CAMARA DETECTOR
		RADAR DETECTOR
		LOOP DETECTOR
		ANTENNA, YAGI OR OMNI
		MASTARM BEACON
		RURAL BEACON
		SCHOOL ZONE BEACON
		LOOP DETECTOR CONDUIT
		SIGNAL CONDUIT
		LIGHTING CONDUIT
		SIGNAL & LIGHTING CONDUIT
		CONDUIT BORING
		CONDUIT SIZE IN INCHES
		FIBER OPTIC VAULT
		INTERCONNECT
		SIGN POST & NUMBER
		PRIVATE SIGN

PAVEMENT MARKING LEGEND

PROPOSED	
	PROJECT CENTERLINE
	8" WHITE SOLID STRIPE
	4" WHITE SOLID STRIPE
	4" WHITE SKIP STRIPE 10' STRIPES AND 30' SPACES
	8" WHITE LANE GUIDE SKIP LANE CONTINUATION OR TURN SKIP 1' STRIPES AND 3' SPACES
	8" YELLOW SOLID STRIPE
	4" YELLOW SOLID STRIPE
	4" YELLOW SKIP STRIPE 10' STRIPES AND 30' SPACES
	STRIPING CHANGE STATION INTERVAL
	2' CROSSWALK OR STOPBAR
	LADDER CROSSWALK LAYOUT 2" WIDE RUNGS WITH 2" SPACES ALIGNED TO AVOID TIRE PATHS
	TYPICAL PAINTED MEDIAN
	CONDUIT SIZE
	NUMBER OF CABLES REQUIRED
	NUMBER OF INSULATED CONDUCTORS(C) OR PAIRS(PR), IF OTHER THEN SINGLE CONDUCTOR
	CONDUCTOR SIZE IN AWG
	END OF CIRCUIT SYMBOL (ROTATE TO POINT IN DIRECTION OF CIRCUIT)
	CIRCUIT NUMBER
	CKT = CIRCUIT LDG = LOOP DETECTOR CABLE GROUP

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
		MODIFIED FOR PROJECT Z584640000/0001521	ALASKA	Z584640000/0001521	2016	H1	H33

SIGNING & STRIPING NOTES:

- ALL STATION LOCATIONS FOR SIGN INSTALLATION ARE APPROXIMATE. INSTALL SIGNS AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- USE THE FOLLOWING DEFINITIONS TO DECIPHER THE ABBREVIATED SIGN POST TYPES IN THE SIGN SUMMARY SHEETS.
 - PT MEANS A PERFORATED STEEL TUBE.
 - T MEANS A SQUARE STEEL TUBE.
 - P MEANS A ROUND STEEL PIPE.
 - W MEANS A WIDE FLANGE BEAM.
 - POPL MEANS A POLE PLATE INSTALLED PER ITS STANDARD DRAWING S-23
- FABRICATE ALL SIGNS FROM 0.125" THICK ALUMINUM SHEETING, UNLESS STATED ELSEWHERE.
- FOR SIGNS SUPPORTED BY MULTIPLE POSTS, FABRICATE THE POSTS WITH THEIR TOPS LEVEL WITH ONE ANOTHER.
- FOR PERFORATED STEEL TUBE SIGNPOSTS, INSTALL THE CONCRETE FOUNDATION OPTION SHOWN ON STANDARD DRAWING S-30.03. TRIM EACH PT POST TO LIMIT THE LENGTH INSERTED INTO THE FOUNDATION TO 12 INCHES.
- FABRICATE GUIDE SIGNS ACCORDING TO THE SHOP DRAWINGS INCLUDED IN THE APPENDICES OF PART 4, CONTRACT PROVISIONS AND SPECIAL PROVISIONS. TRIM THE CORNERS OF ALL SIGNS TO THE RADIUS SHOWN ON EACH SHOP DRAWING.
- ERECT NEW SIGNS BEFORE REMOVAL OF EXISTING SIGNS WITH SIMILAR MESSAGE. NOTIFY THE ENGINEER A MINIMUM OF 14 DAYS PRIOR TO BEGINNING SIGN REMOVAL AND SALVAGE OR DISPOSAL ACTIVITIES.
- FOR SIGNS SUPPORTED BY MULTIPLE TUBES OR PIPES, LOCATE THE OUTER POSTS ON MAXIMUM SIX FEET CENTERS. INSTALL ADJACENT WIDE FLANGE POSTS ON MINIMUM EIGHT FEET CENTERS.
- SELECTIVE AND HAND CLEARING SHALL BE PERFORMED AT THE DISCRETION OF THE ENGINEER, IN ACCORDANCE WITH SECTION 201, UPSTREAM OF ALL SIGN INSTALLATION LOCATIONS TO ACHIEVE MINIMUM SIGN VISIBILITY REQUIREMENTS. IF NOT INCLUDED AS A SEPARATE ITEM, THIS WORK SHALL BE SUBSIDIARY TO THE SIGN INSTALLATION ITEMS AND WORK.
- FOR ALL FINAL PAVEMENT MARKINGS USE METHYLMETHACRYLATE MATERIALS. LONGITUDINAL MARKINGS SHALL BE INLAID AT 250 MILS, TRANSVERSE AND SYMBOL MARKINGS TO BE INLAID AT 250 MILS, GORE STRIPES SHALL BE SURFACE APPLIED AT 60 MILS.
- DIMENSIONS REFER TO THE CENTER OF STRIPE AND THE EDGE OF PAVEMENT OR FACE OF CURB WHEN PRESENT.
- IF THE NEW AND EXISTING PAVEMENT MARKINGS ARE NOT ALIGNED AT MATCH LINE, TRANSITION BETWEEN THE TWO USING A 100:1 TAPER ON THE NEW PAVEMENT.
- WHERE NEW STRIPING IS TO EXTEND BEYOND PAVING LIMITS, REMOVE EXISTING STRIPING IN ACCORDANCE WITH SUBSECTION 670-3.04 TO THE EXTENT OF STRIPING LIMITS.

ABBREVIATIONS

CL - CENTERLINE
SIG - SERVICE TO CONTROLLER
INTX - INTERSECTION
INTX L - INTERSECTION LIGHTING
LTG - LIGHTING
PRE 2 - PREEMPTION #
PRE CON 2 - PREEMPTION CONTROLLER #
LC - LOAD CENTER
TC - TRAFFIC CONTROLLER
P1 - TRAFFIC SIGNAL POLE #
PEC - PHOTOELECTRIC CELL
YAGI - DIRECTIONAL ANTENNA
OMNI - OMNI DIRECTIONAL ANTENNA
HEAD - VEHICULAR SIGNAL HEAD
PED B 28 - PEDESTRIAN PUSH BUTTON #
PEDI - PEDESTRIAN SIGNAL HEAD
RMC - RIGID METAL CONDUIT
PE - POLYETHYLENE CONDUIT
LFNC - LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT
AWG - AMERICAN WIRE GAUGE
NB - NORTH BOUND
EB - EAST BOUND
SB - SOUTH BOUND
WB - WEST BOUND

NOTES:

FOUNDATIONS NOTES:

- STATION & C.L. REFERENCE ARE TO THE CENTER OF THE STRUCTURE, EXCEPT ON LOOPS WHICH ARE TO THE CENTER OF THE TRAILING EDGE OF THE LOOP (EDGE NEAREST INTERSECTION).
- JUNCTION BOX LOCATIONS APPROXIMATE. LOCATE J-BOXES SO THAT THEY ARE LOCATED OUT OF THE PATHWAY, SIDEWALK, CURB RAMPS, AND DRAINAGE COLLECTION AREAS.
- SOD ALL DISTURBED AREAS.

SIGNAL SYSTEM NOTES:

- REMOVE ABANDONED OR UNUSED TRAFFIC JUNCTION BOXES UNLESS OTHERWISE NOTED.
- EXISTING CIRCUITS LISTED ON THE LOAD CENTER SUMMARY AND PLAN SHEETS WERE OBTAINED FROM AS-BUILT INFORMATION AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO WORK INVOLVING THOSE CIRCUITS.
- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, INCLUDING ARROW BOARD DEVICE(S), FOR OVERHEAD INSPECTION AND LOCATE WORK PERFORMED BY MOA SIGNAL ELECTRONICS. CONTRACTOR SHALL BE ON-SITE AT COMPLETION OF LOCATES TO REVIEW LAYOUT AND MAKE STATIONING MEASUREMENTS FOR CONDUIT LOCATIONS.

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION FISH
CREEK TRAIL**
**ILLUMINATION LEGEND AND
NOTES**

CALL BEFORE YOU DIG!

CONTRACTOR SHALL CALL A MINIMUM OF
3 DAYS IN ADVANCE OF CONSTRUCTION

ALASKA DIGLINE...907-278-3121 OR 800-478-3121

CALL OR GO TO WWW.AKONECALL.COM/STATEWIDE.HTM
FOR MEMBER LIST OF WHO WILL BE NOTIFIED

DESIGNED BY
CHECKED BY
DRAFTED BY

AREAS

SCALE

LAYOUT H2

DATE TIME

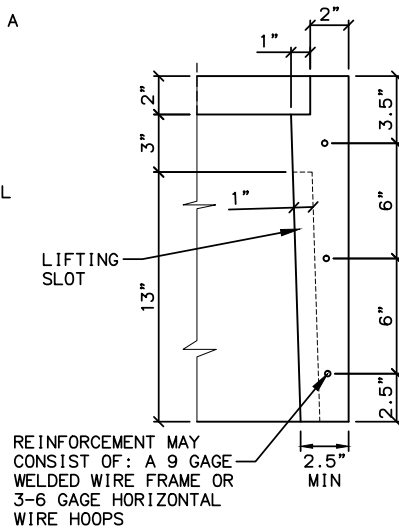
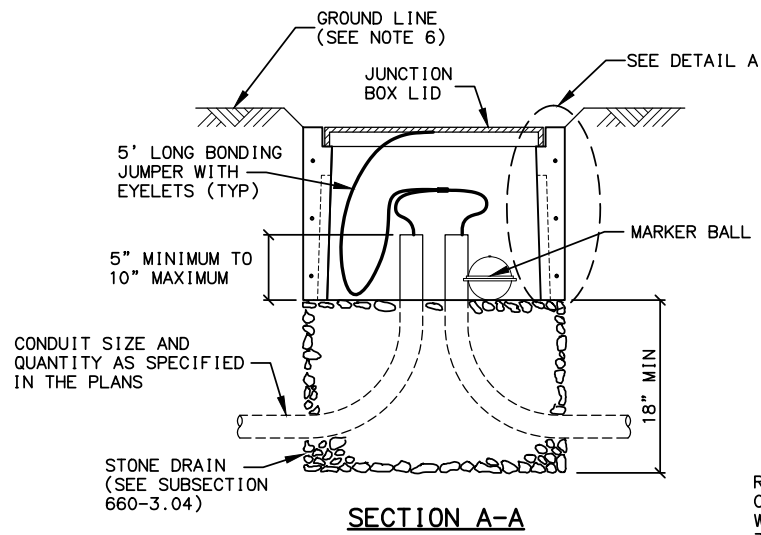
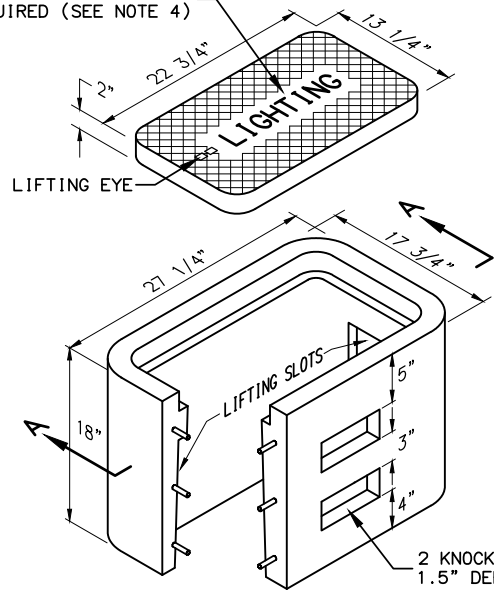
10/13/2016 12:07:41 PM

Box.dwg

DRAWING LOCATION

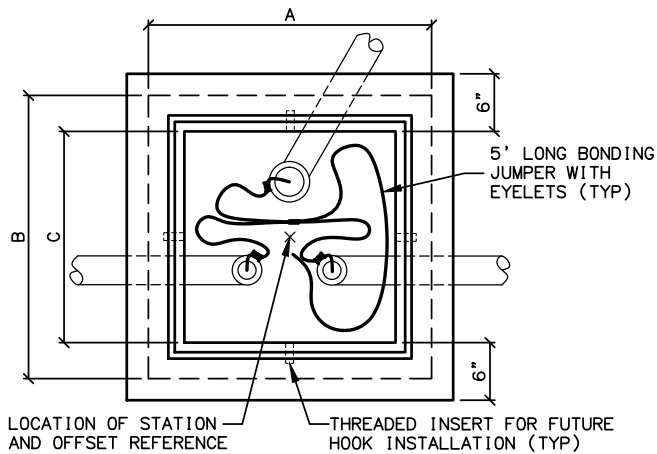
J:\obsdata\10130.30 AMATS Areawide Trails Rehab - Fish Creek\00 CADD\01 Working Set\03 Electrical\10130.30\2016\2016.dwg

"LIGHTING" OR "TRAFFIC"
AS REQUIRED (SEE NOTE 4)

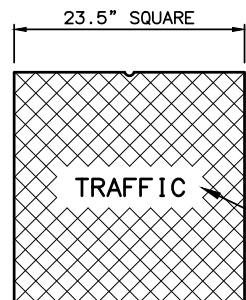


DETAIL A

TYPE IA JUNCTION BOX

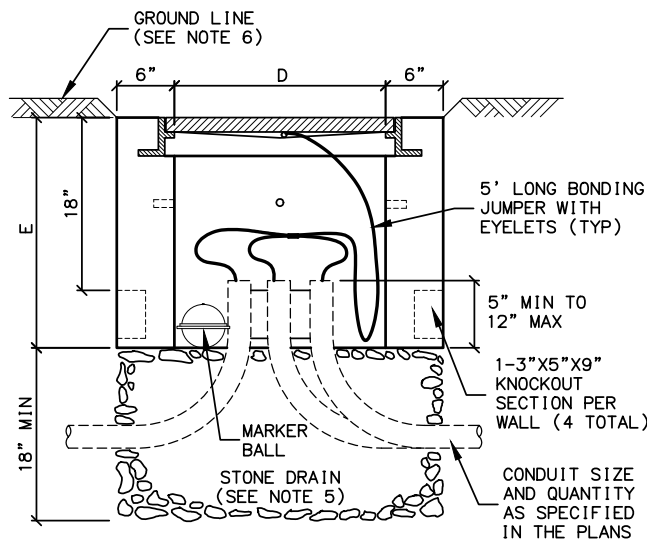


PLAN



LID FOR TYPE II
J-BOXES

"LIGHTING" OR "TRAFFIC"
AS REQUIRED (SEE NOTE 4)



TYPE II JUNCTION BOX
ELEVATION

REVISIONS		
NO.	DATE	DESCRIPTION
		MODIFIED FOR PROJECT Z584640000/0001521

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/0001521	2016	H2	H33

NOTES:

1. AVOID INSTALLING TYPE IA JUNCTION BOXES IN DRIVEWAYS OR IN LOCATIONS SUBJECT TO USE BY HEAVY TRUCKS. INSTALL JUNCTION BOXES ONLY AT THE LATERAL LOCATIONS ALLOWED IN SUBSECTION 660-3.04.
2. FURNISH TYPE IA JUNCTION BOXES WITH CAST IRON LIDS THAT WEIGH A MINIMUM OF 50 POUNDS.
3. CONSTRUCT JUNCTION BOXES ACCORDING TO SECTION 501 USING CLASS A CONCRETE. REINFORCE TYPE IA JUNCTION BOXES AS SHOWN. SYNTHETIC STRUCTURAL FIBER-REINFORCED CONCRETE THAT MEETS ASTM C 1116 AND CONTAINS FIBER IN PROPORTIONS AS RECOMMENDED BY THE FIBER MANUFACTURER MAY BE ADDED FOR STRENGTH.
4. FOR JUNCTION BOXES THAT CONTAIN ILLUMINATION CONDUCTORS EXCLUSIVELY, FURNISH LIDS WITH THE WORD "LIGHTING" INSCRIBED INTO THEM. FOR OTHER JUNCTION BOXES, FURNISH LIDS WITH THE WORD "TRAFFIC" INSCRIBED INTO THEM.
5. SET THE TOPS OF JUNCTION BOXES WITH THE FOLLOWING DIMENSIONS BELOW THE FINISHED SURROUNDING SURFACE:
 - 1" IN PAVED MEDIANS AND ADJACENT TO PEDESTRIAN FACILITIES
 - 1/4" IN PEDESTRIAN FACILITIES
 - 2" IN ALL OTHER AREAS
6. BOND JUNCTION BOX LIDS TO THE SYSTEM OF EQUIPMENT GROUNDING CONDUCTORS ACCORDING TO SUBSECTION 660-3.06. ATTACH BONDING JUMPERS TO THE JUNCTION BOX LIDS WITH BRASS OR STAINLESS STEEL HARDWARE.
7. INSTALL AN ELECTRONIC MARKER BALL IN ALL JUNCTION BOXES PER SUBSECTION 660-3.04.
8. PRIOR TO INSTALLATION MARK ALL JUNCTION BOX LOCATIONS WITH A WIRE STAFF VINYL FLAG. THE FLAG SHALL BE RED IN COLOR AND MINIMUM 4-INCHES TALL BY 5-INCHES WIDE. THE WIRE STAFF SHALL BE 21-INCHES IN LENGTH AND CONSTRUCTED OF MINIMUM 15.5 GAUGE STEEL.

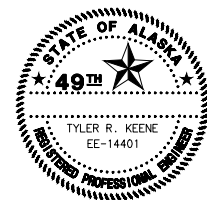
J-BOX DIMENSIONS

J-BOX TYPE	DIMENSIONS				
	A (MAX.)	B (MAX.)	C (MIN.)	D (MIN.)	E (MIN.)
II	29 1/2"	29 1/2"	22"	22"	24"

PS&E (8/9/16)

THIS SHEET REPLACES STD. DWG. L-23.01, T-34.01

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION FISH
CREEK TRAIL

JUNCTION BOX DETAILS

DESIGNED BY
CHECKED BY
DRAFTED BY

AREFS

SCALE

LAYOUT
H3

DATE
TIME
10/13/2016 10:58 AM

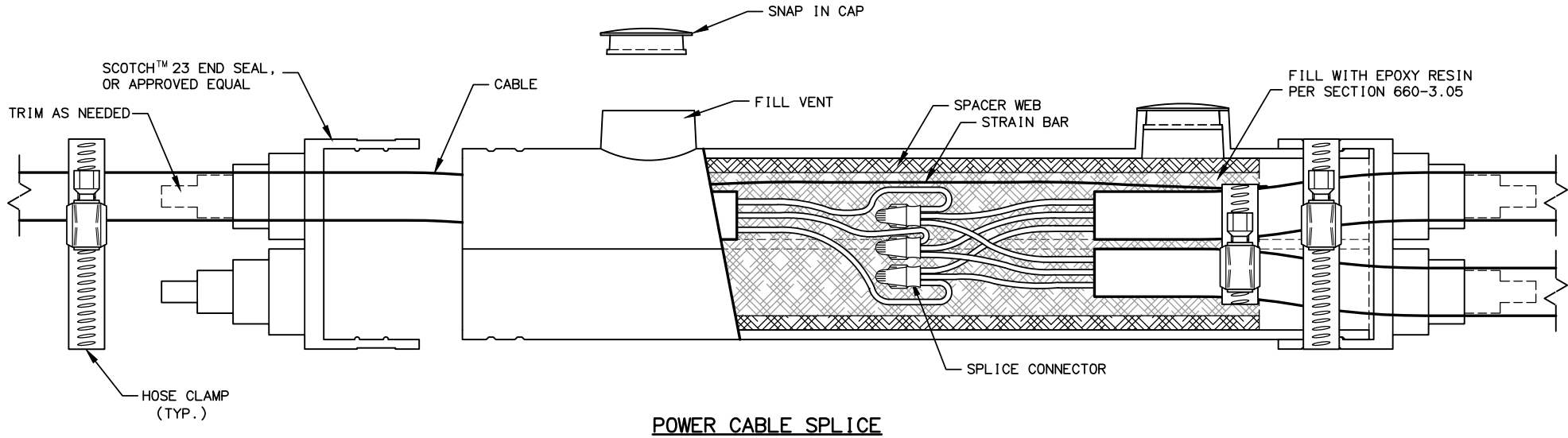
DRAWING LOCATION
J:\obsdata\10130.30 AMATS Areawide Trails Rehab - Fish Creek\00 CADD\01 Working Set\03 Electrical\10130.30\2016\01.dwg

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2016	H3	H33

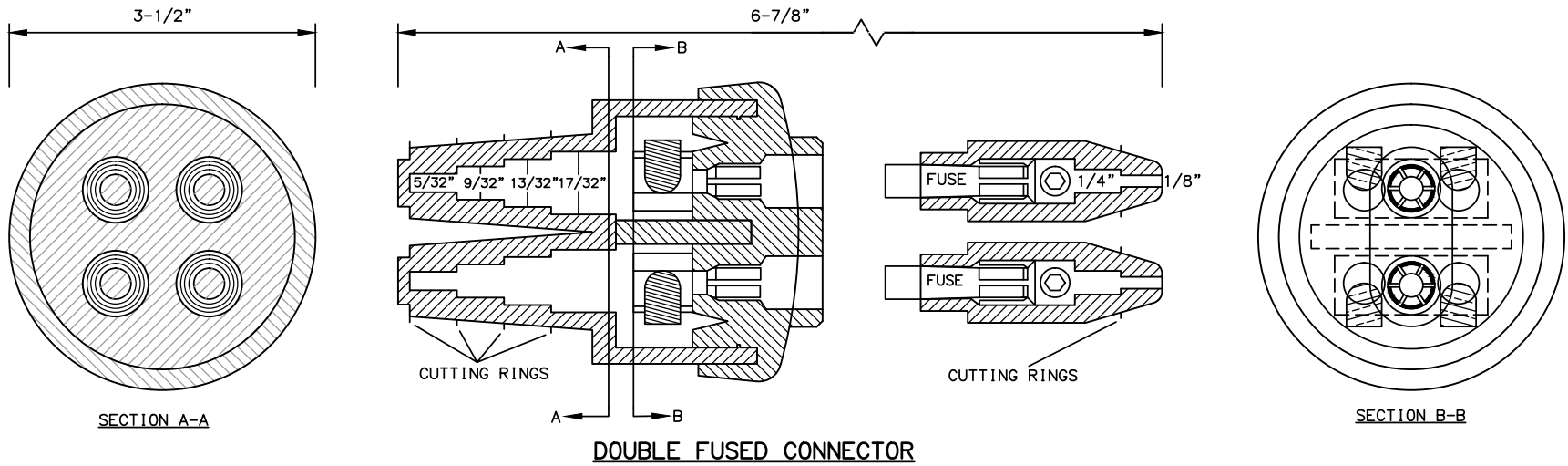
NOTES:

POWER CABLE SPLICE

1. SECURE CABLE/CONNECTOR BUNDLE WITH HOSE CLAMPS AS SHOWN.



MATERIAL PROPERTIES	
POWER CABLE SPLICE	
SPLICE KIT	3M MODEL 78R, OR APPROVED EQUAL
SPLICE CONNECTOR	SCOTCHLOCK G, R, OR Y SPRING CONNECTOR, OR APPROVED EQUAL
HOSE CLAMP	(4)- STAINLESS STEEL
EPOXY RESIN	PER SECTION 660-3.05
DOUBLE FUSED CONNECTOR	
DOUBLE FUSED CONNECTOR	SEC-1791-DF-1, OR APPROVED EQUAL
FUSES	(2) - COMPATIBLE 10-AMP



PS&E (8/9/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION FISH
CREEK TRAIL

SPLICE DETAILS

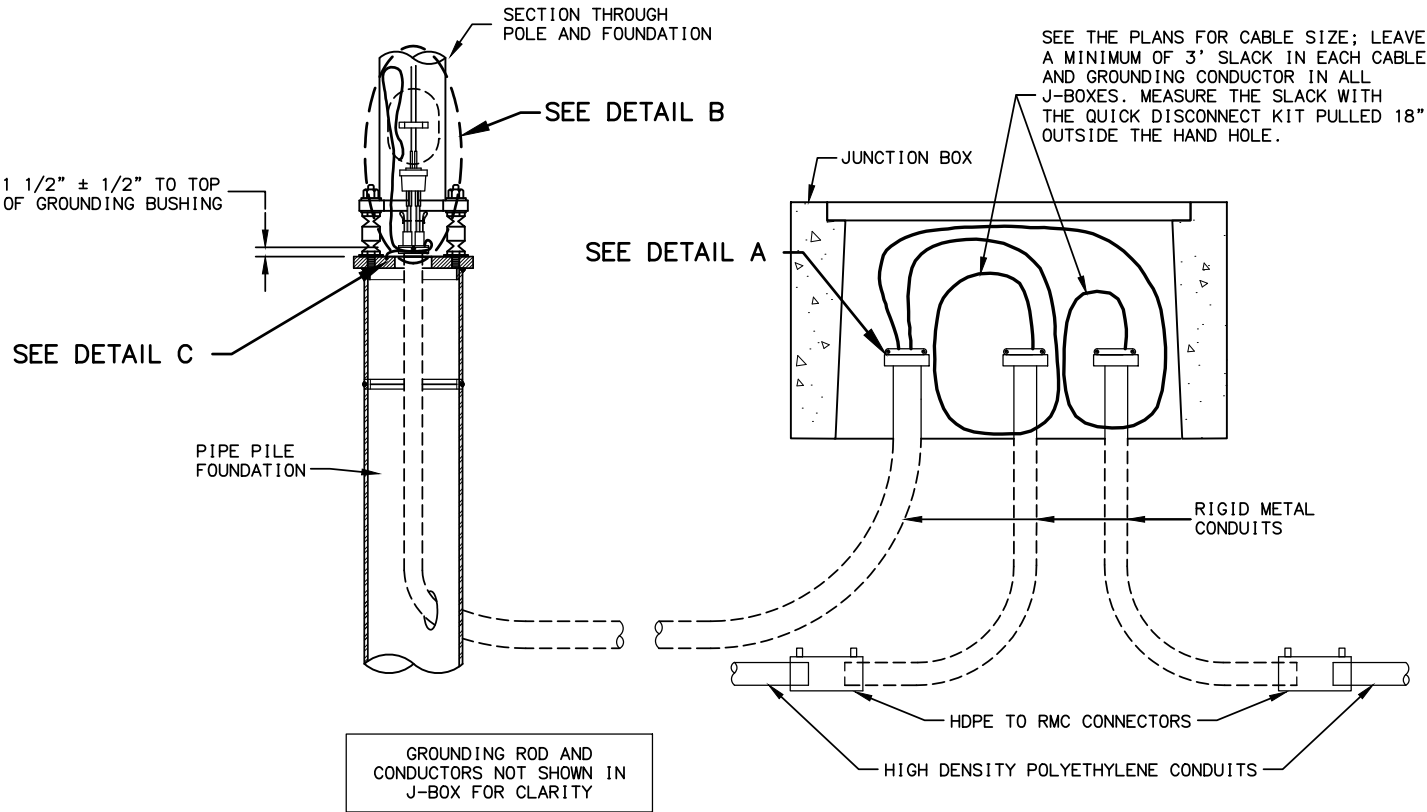
DESIGNED BY: [] CHECKED BY: [] DRAFTED BY: []
XREFS: [] SCALE: [] LAYOUT: []
DATE: [] TIME: []
DRAWING LOCATION: []
Jobstuf\Jobsdata\10130.30 amts areawide trails rehab - fish creek\00 CADD\01 working set\03 Electrical\92200639-20-ELMIRING & GROUNDING.dwg

REVISIONS		
NO.	DATE	DESCRIPTION

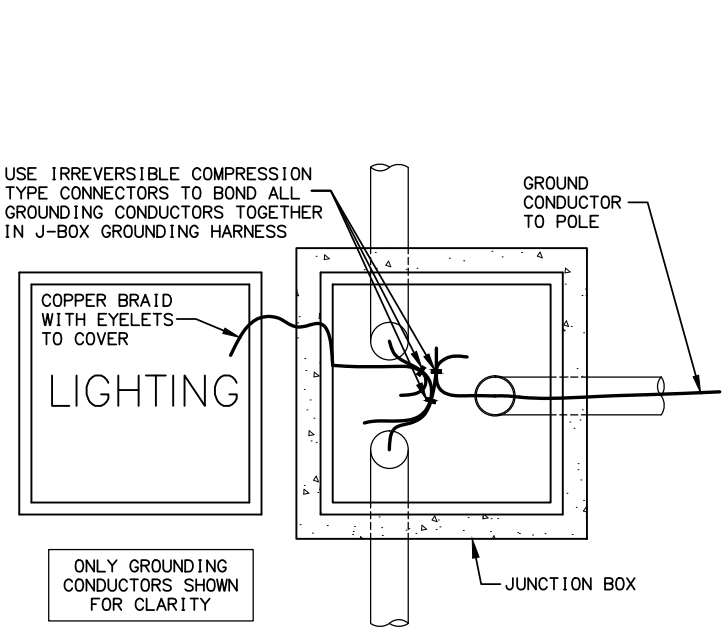
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/0001521	2016	H4	H33

NOTES:

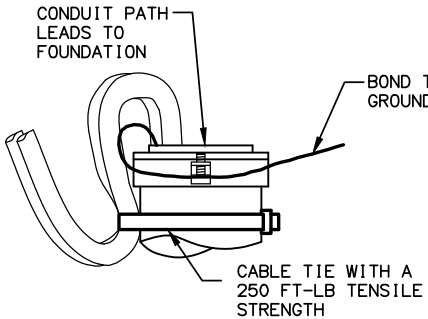
- APPLICATION FOR SLIP BASE IS THE SAME EXCEPT FOR BONDING. SEE SUBSECTION 660-3.06 FOR BONDING.
- LABEL ALL CABLES AND CONDUCTORS IN POLE BASE AND J-BOX. SEE SUBSECTION 660-3.05.
- MAKE ALL GROUNDING AND BONDING WIRE #8 AWG, EXCEPT IN THOSE CONDUITS THAT CONTAIN CIRCUIT CONDUCTORS LARGER THAN #8 AWG. IN THIS CASE USE WIRE EQUAL IN SIZE TO THE LARGEST CONDUCTOR. THE GROUNDING CONDUCTOR TO THE FOUNDATION SHALL BE #4 AWG.
- USE LISTED IRREVERSIBLE COMPRESSION TYPE CONNECTORS SIZED FOR EACH APPLICATION AND INSTALLED PER MANUFACTURERS SPECIFICATIONS.



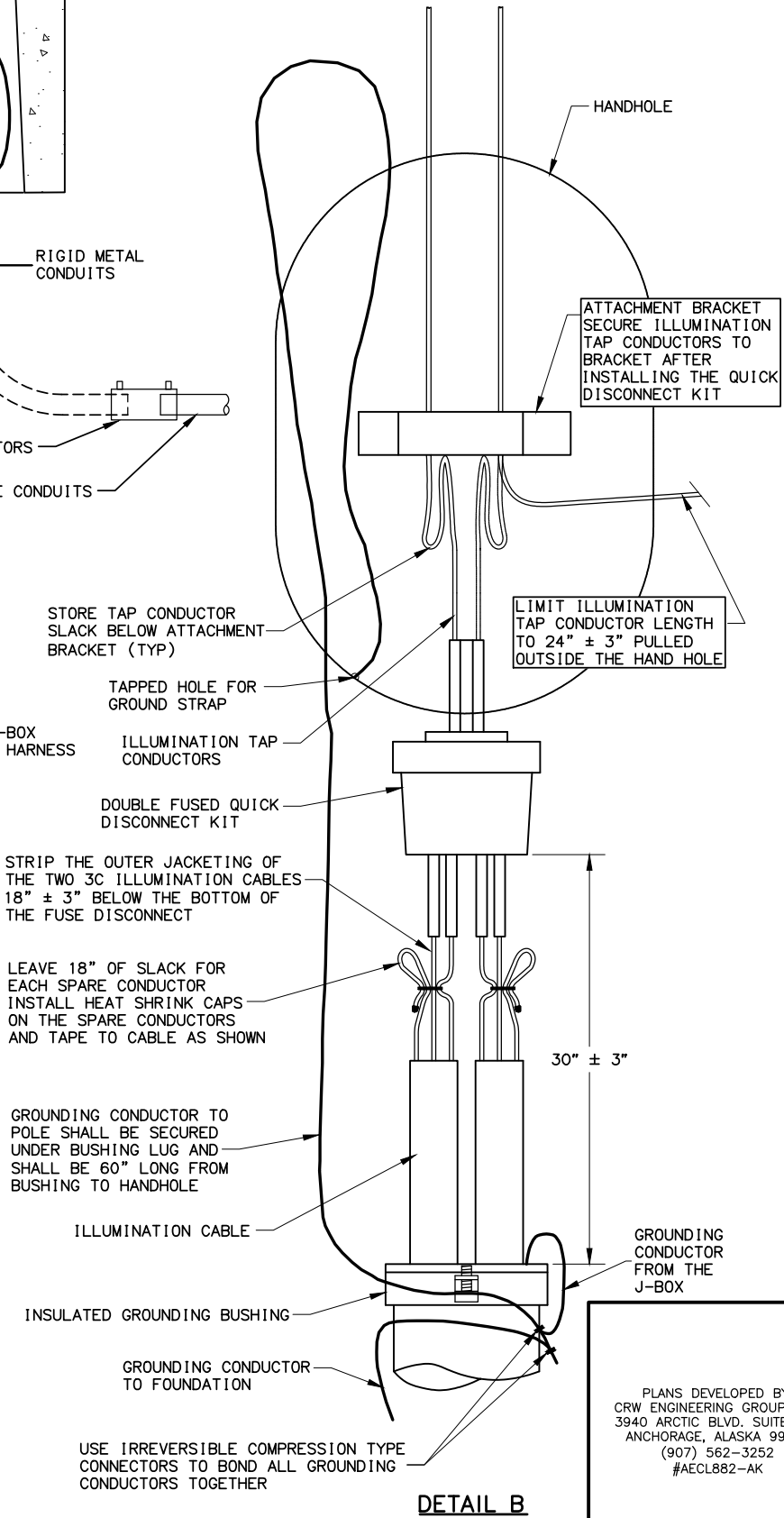
LIGHTING SYSTEM POLE AND J-BOX WIRING DETAILS



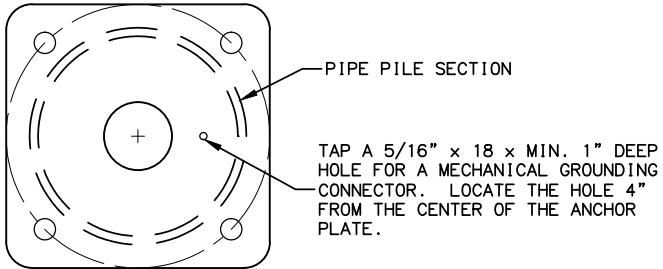
GROUNDING CONDUCTOR BONDING CONNECTIONS



DETAIL A



DETAIL B



DETAIL C

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION FISH
CREEK TRAIL**
**PIPE PILE FOUNDATION POLE
WIRING AND GROUNDING DETAILS**

DESIGNED BY
CHECKED BY
DRAFTED BY
XREFS
SCALE
LAYOUT
DATE
TIME
DRAWING LOCATION
fish creek\00 CADD\01 working set\03 Electric\01\92200639-13PBM2 AND 3 LOAD CENTER.dwg

EQUIPMENT LEGEND/DESCRIPTION

1. METERING SECTION
2. LOAD SECTION
3. UTILITY CONNECTION SECTION
4. METER READING WINDOW (8"x8")
5. METER SOCKET W/ TEST-BYPASS/DISCONNECT BLOCK AND SAFETY SOCKET FACILITIES
6. HINGED METER SECTION COVER
7. DEADFRONT
8. STAINLESS STEEL PIN HINGE
9. PADLOCKING PROVISIONS
10. DISTRIBUTION PANEL
11. ACCESSORY EQUIPMENT MOUNTING AREA FOR CONTACTOR, SELECTOR SWITCHES, TERMINAL STRIPS, ETC.
12. SERVICE PULL SECTION
13. SELECTOR SWITCH

GALVANIZED METAL FRAMING FOR MAST SUPPORT W/ PIPE CLAMPS, SPACED 36" MIN AS REQUIRED

TYPE LB CONDUIT BODY

#6 BARE COPPER BONDING CONDUCTOR

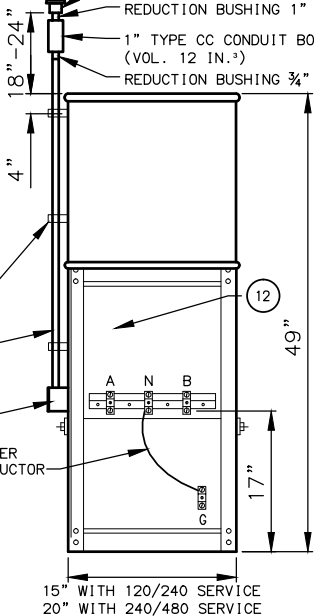
PHOTO CELL TYPICAL (INSTALL TO AVOID HINGED COVER IN ALL POSITIONS)

TWIST LOCK RECEPTACLE

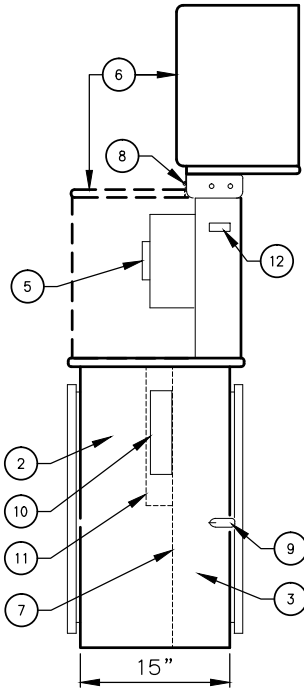
REDUCTION BUSHING 1" TO 1/2"

1" TYPE CC CONDUIT BODY (VOL. 12 IN.)

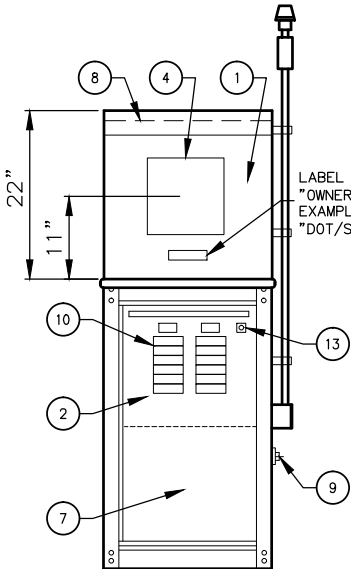
REDUCTION BUSHING 3/4" TO 1"



REAR VIEW
(W/ DOOR REMOVED)



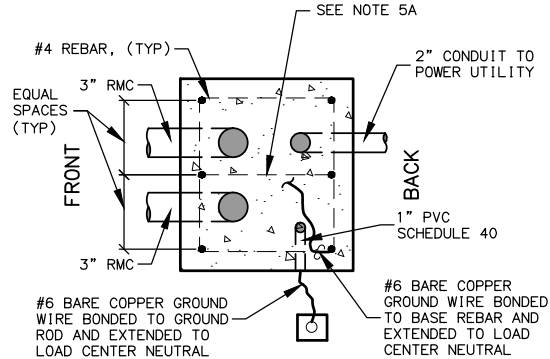
RIGHT SIDE VIEW
(W/ METER SECTION OPEN)



FRONT VIEW
(W/ DOOR REMOVED)

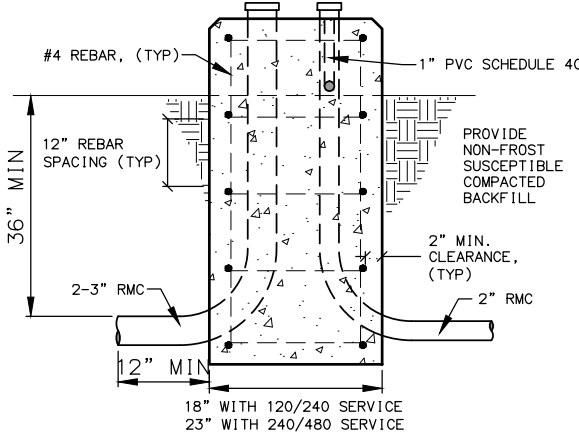
TYPE 1A CABINET DETAILS

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2016	H5	H33

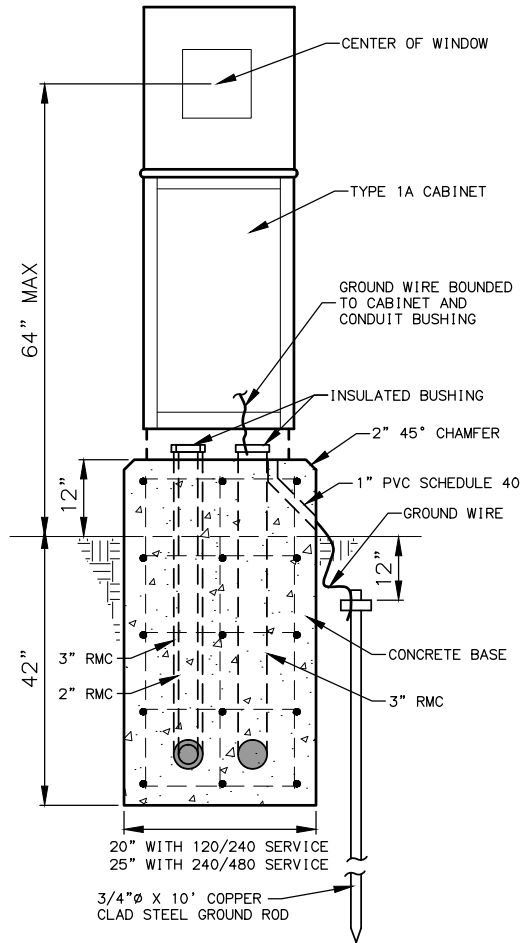


TOP VIEW

PROVIDE "J" ANCHOR BOLTS AS REQUIRED TO MOUNT LOAD CENTER CABINET IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS



RIGHT SIDE VIEW



FRONT VIEW

FOUNDATION DETAILS

WIRING NOTES:

1. FURNISH ALL EQUIPMENT NOTED IN THE LOAD CENTER SUMMARY, PLUS TWO 20-AMP 2-POLE SPARE CIRCUIT BREAKERS, AND SPACE FOR A MINIMUM OF TWO ADDITIONAL 2-POLE CIRCUIT BREAKERS IN EACH LOAD PANEL. SEE THE LOAD CENTER SUMMARIES FOR LOAD PANEL VOLTAGES, CURRENT RATINGS, AND THE NAME OF THE SERVING UTILITY.
2. INSTALL GROUNDING HUBS THIRD PARTY CERTIFIED FOR WET LOCATIONS (MYERS TYPE), WHEN ATTACHING CONDUITS TO THE LOAD CENTER ENCLOSURE.
3. LABEL ALL CIRCUIT BREAKERS AS TO FUNCTION AND POSITION. LABEL THE SELECTOR SWITCH "LIGHTING" AND ITS POSITIONS "ON-OFF-AUTO".
4. METER BASES SHALL NOT BE MOUNTED ON MOVABLE PANELS OR DOORS.
5. THE LENGTH AND TYPE OF SERVICE ENTRANCE CONDUIT INSTALLED BY THE CONTRACTOR VARIES BY UTILITY. REGARDLESS OF ITS LENGTH, INSTALL A PULL ROPE IN THE SERVICE CONDUIT AND A CAP ON THE BURIED END: MARK THE BURIED END WITH A 2"x 6" STAKE. SEE THE LOAD CENTER SUMMARIES FOR THE FOLLOWING INFORMATION.
 - A. STATION AND OFFSET OF THE LOAD CENTER AND POWER SOURCE.
 - B. WHERE THE CONTRACTOR TERMINATES THE SERVICE ENTRANCE CONDUIT.
 - C. THE TYPE OF SERVICE ENTRANCE CONDUIT (SUCH AS RIGID METAL CONDUIT OR LIQUID-TIGHT FLEXIBLE METAL CONDUIT).
6. STORE A SCHEMATIC DIAGRAM, A CIRCUIT DIRECTORY, AND A MATERIALS LIST THAT INCLUDES THE MANUFACTURER'S NAME AND PART/CATALOG NUMBERS, ALL LAMINATED IN PLASTIC, IN A METAL POCKET ATTACHED TO THE INSIDE OF THE LOAD CENTER. INSTALL THE POCKET ON THE LOAD CENTER DOOR, PROVIDING DRAIN HOLES TO PREVENT WATER ACCUMULATION.
7. SIZE THE DISTRIBUTION PANEL TO ACCOMMODATE THE CIRCUITS SHOWN ON THE LOAD CENTER SUMMARIES AND SPARE CIRCUITS AS DEFINED IN NOTE 1.
8. SEPARATE THE MAIN CIRCUIT BREAKER FROM THE DISTRIBUTION PANEL.
9. MOUNT PHOTOCELL RECEPTACLE TO 1/2" CONDUIT WITH SILICONE SEALANT. INSTALL A 3C#14 CABLE FROM THE LOAD CENTER TO THE TYPE CC CONDUIT BODY WHERE THE SPLICE TO THE PHOTOCELL RECEPTACLE CABLE SHALL BE MADE. IF PLANS CALL TO MOUNT PHOTOCELL AWAY FROM LOAD CENTER USE A 5C#14 CABLE FROM LOAD CENTER TO RECEPTACLE.

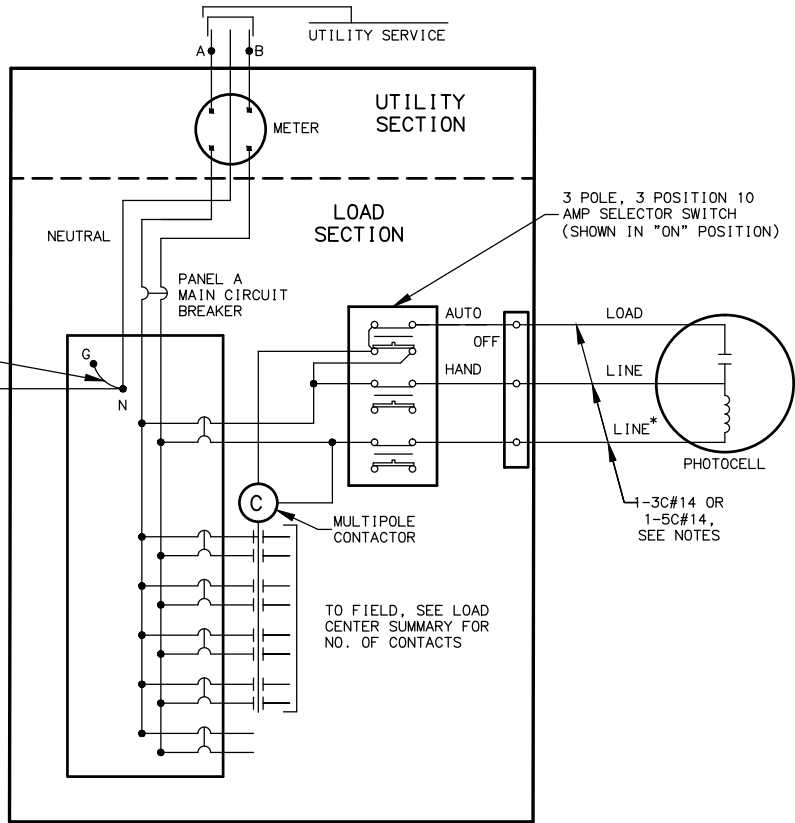
FOUNDATION NOTES:

1. GRADE AWAY FROM THE BASE WITH A MINIMUM SLOPE OF 3%. USE A PRE-MOULDED BITUMINOUS JOINT BETWEEN THE BASE AND CONCRETE SIDEWALK OR PAVING, WHEN ADJACENT TO A SIDEWALK OR PATHWAY.
2. PROVIDE ANCHOR BOLTS OR EXPANSION ANCHORS IN THE BASE FOR MOUNTING THE CABINET PER THE MANUFACTURER'S SHOP DRAWINGS. ANCHOR BOLTS, NUTS, AND WASHERS SHALL CONFORM TO EITHER ASTM A307 OR A449 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153.
3. USE GRADE 60 REINFORCING STEEL CONFORMING TO ASTM 615 AND CLASS "A" CONCRETE CONFORMING TO SECTION 501 OF THE SPECIFICATIONS WHEN CASTING THE BASE.
4. IF THE BASE IS PRECAST, INSTALL TWO 3/4" FERRULE LOOP INSERTS IN TWO SIDES OPPOSITE ONE ANOTHER FOR LIFTING.

THIS SHEET REPLACES STD. DWG. L-25.00

LOAD CENTER ONE LINE DIAGRAM AND SELECTOR SWITCH WIRING

* GROUND NEUTRAL, IF SERVICE IS 240/480 VOLT SINGLE PHASE OR 277/480 VOLT THREE-PHASE; AND UNDERGROUND LINE, IF SERVICE IS 120/240 VOLT SINGLE PHASE.



DESIGNED BY
CHECKED BY
DRAFTED BY

AREAS

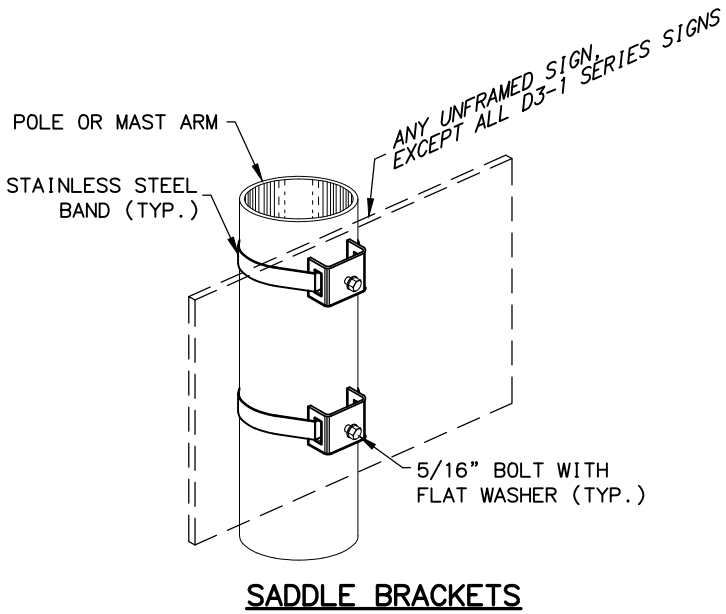
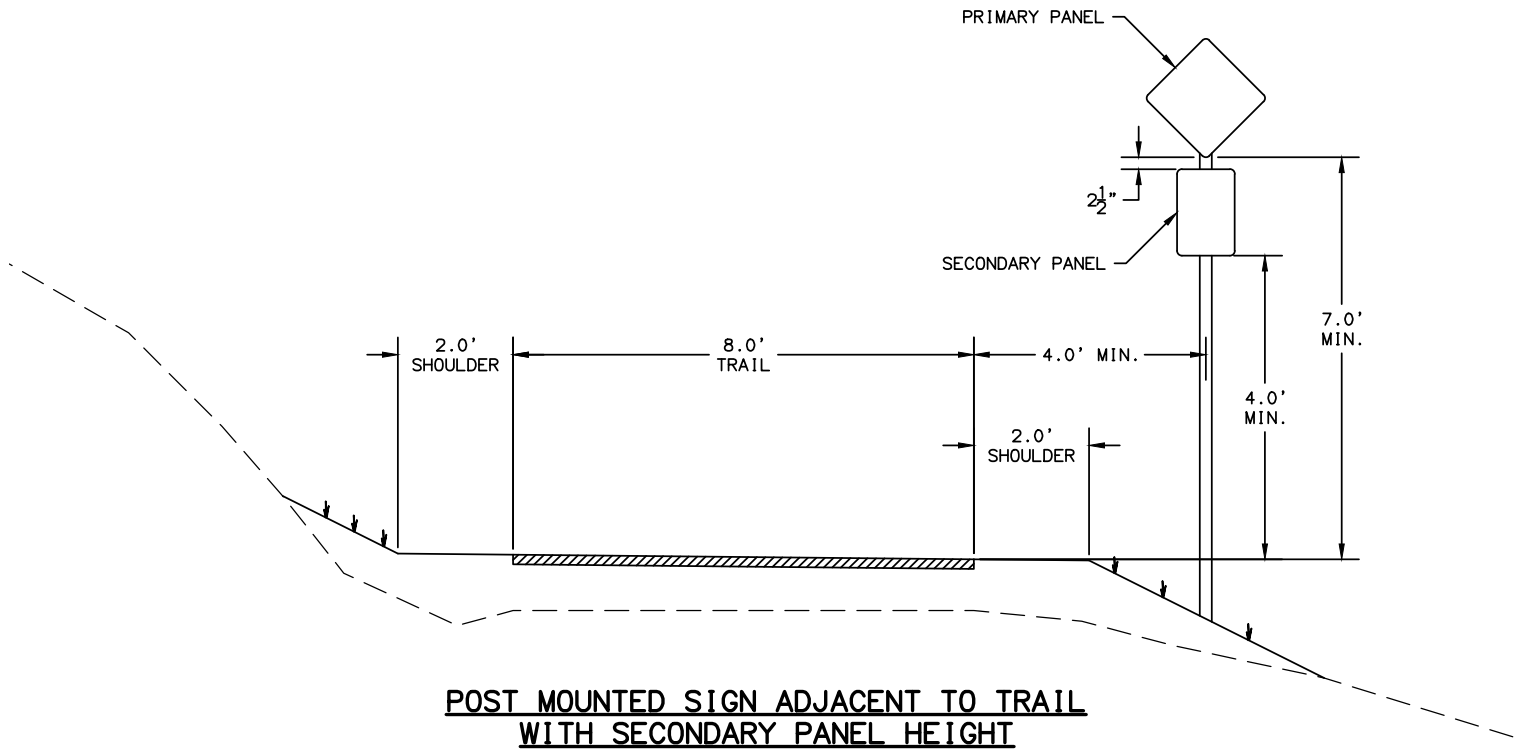
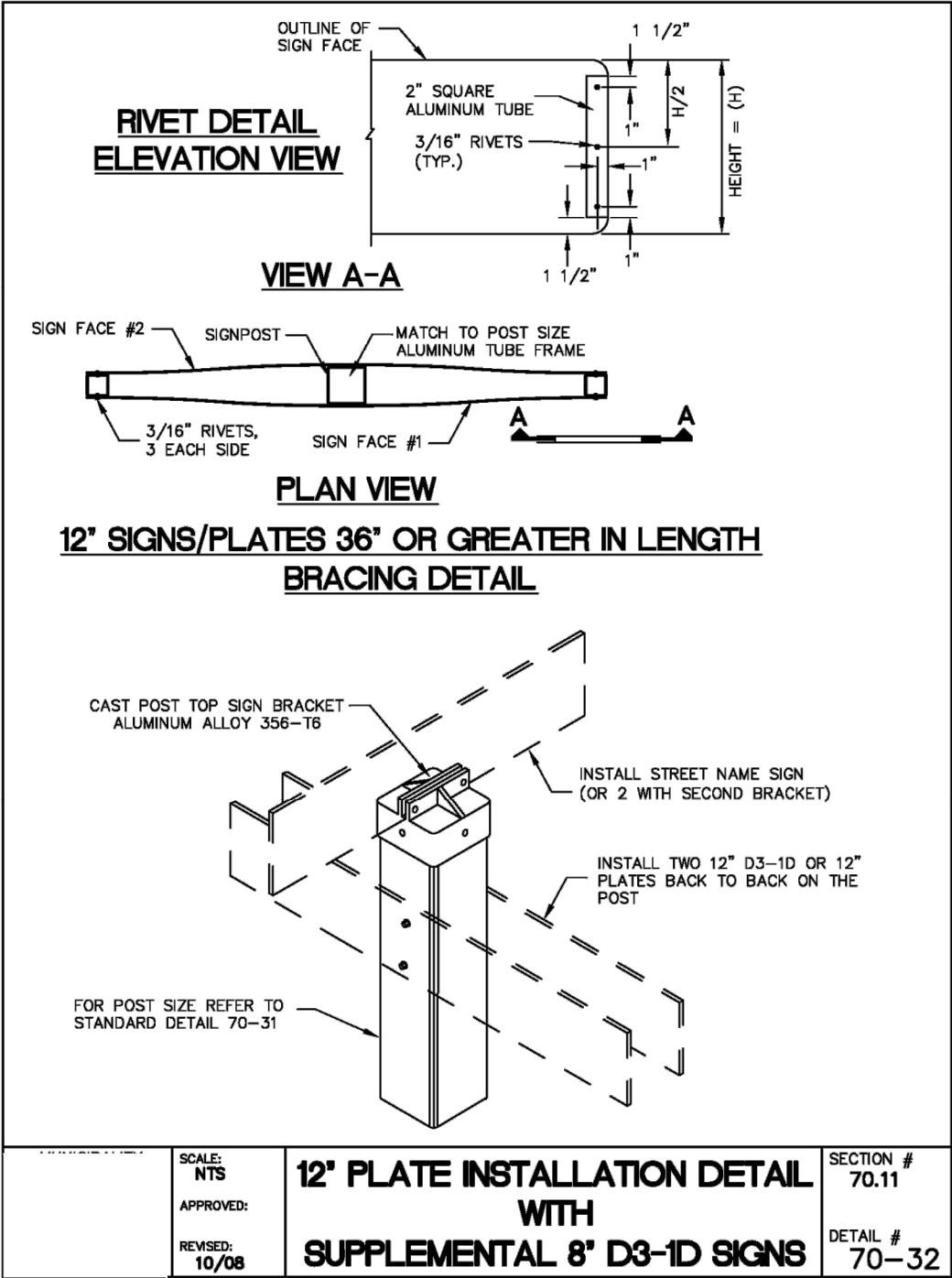
SCALE

LAYOUT
HB

DATE
TIME
03/03/2014 14:48

DRAWING LOCATION
\\jobstuf\jobsdata\10130.30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 CIVIL\10830320036g2148 PMcoll.dwg

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2017	H8	H33



- NOTES:**
- EXCEPT FOR POLES AND MAST ARMS, ONLY USE SQUARE STEEL TUBES TO SUPPORT SIGNS MOUNTED ON SINGLE POSTS.
 - USE ONE 2.5" P.T. FOR ALL STOP SIGNS WITHIN THE MOA, AND ALL POSTS WITH A SINGLE SIGN PANEL THAT ARE 30" WIDE OR LESS. ALL OTHER STOP SIGN POSTS OUTSIDE THE MOA SHALL BE ON A 3" TUBE.
 - IF SIGNS EXTEND OVER SIDEWALKS, THE MINIMUM VERTICAL CLEARANCE IS 7'-0".
 - IF SIGNS EXTEND OVER BIKE PATHS, THE MINIMUM VERTICAL CLEARANCE IS 8'-0".
 - PAINT ALL SIGN MOUNTING FASTENERS ON SIGN FACE A COLOR MATCHING THE SIGN FACE.
 - ATTACH ALL SIGNS ZEES AND BRACES MOUNTED TO THE POST WITH 5/16" BOLTS WITH SELF LOCKING NUTS.

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL**

SIGN MOUNTING DETAILS

SHEET NO.		TOTAL SHEETS	
H9		H33	
STATE		YEAR	
ALASKA		2017	
PROJECT DESIGNATION			
Z584640000/0001521			
ADDENDUM NO.			
ATTACHMENT NO.			
REVISIONS			
NO.		DATE	

PIH (9/1/16)

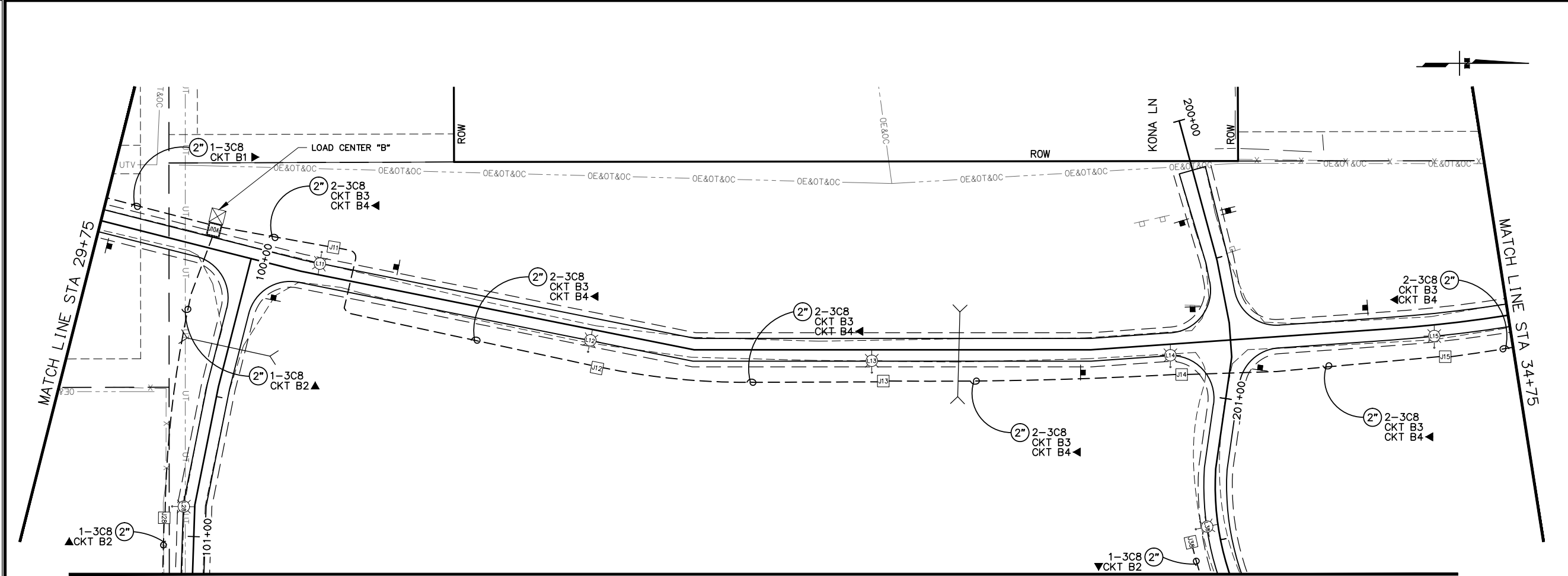
PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AEC1882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

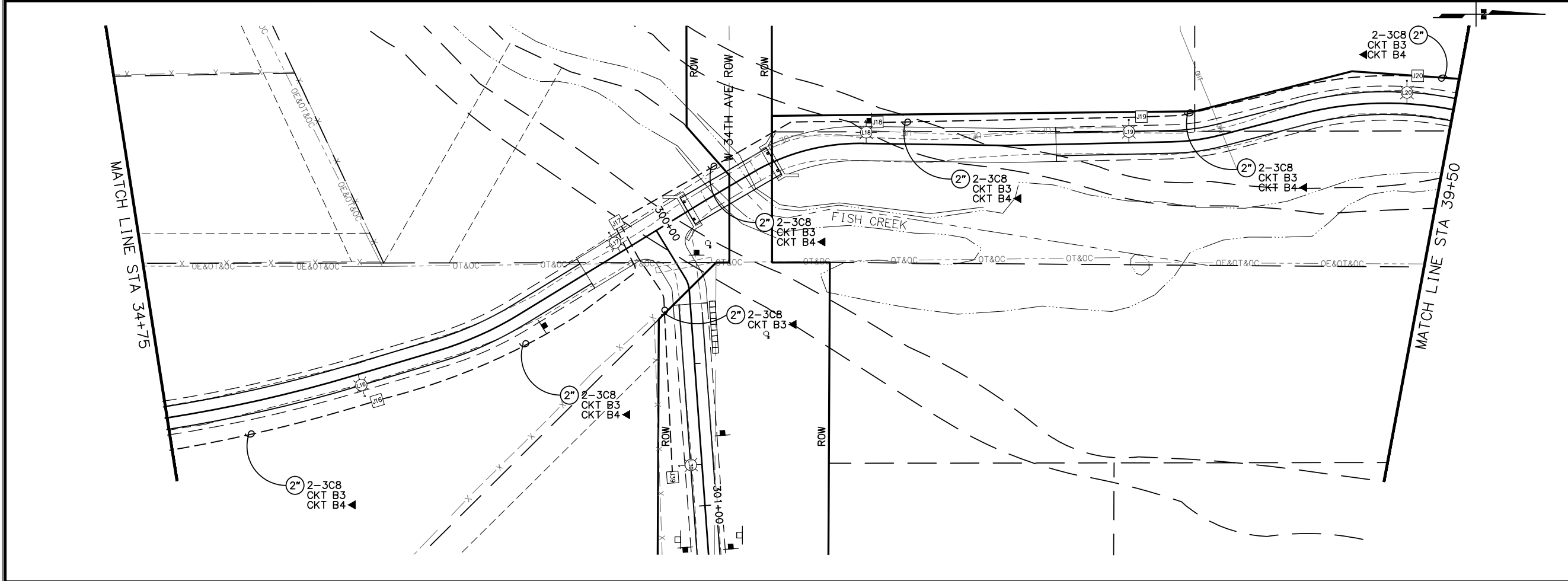
AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

ILLUMINATION PLAN
FISH CREEK TRAIL NORTH
20+00 TO 29+75

DRAWING LOCATION
J:\subdata\10130.30 AMATS Areawide Trails Rehab - Fish Creek\00 CADD\01 Working Set\03 Electrical\10130.30\B\B\2016 R6\61.dwg
DESIGNED BY
CHECKED BY
DRAFTED BY
XREFS
SCALE
LAYOUT
DATE
TIME
Creek North 111 Illumination Plan.dwg



DETAILS ON SHEET H12



SHEET NO.	TOTAL SHEETS	
H10	H33	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

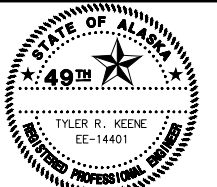
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

ILLUMINATION PLAN
FISH CREEK TRAIL NORTH
29+75 TO 39+50

SHEET NO.		TOTAL SHEETS	
H11		H33	
STATE		YEAR	
ALASKA		2017	
PROJECT DESIGNATION			
Z584640000/0001521			
ADDENDUM NO.			
ATTACHMENT NO.			
REVISIONS			
NO.		DATE	
		DESCRIPTION	
PIH (9/1/16)			
PLANS DEVELOPED BY: CRW ENGINEERING GROUP, LLC 3940 ARCTIC BLVD, SUITE 300 ANCHORAGE, ALASKA 99503 (907) 562-3252 #AECL882-AK			
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES			
AMATS: ANCHORAGE AREAWIDE TRAILS REHABILITATION FISH CREEK TRAIL			
ILLUMINATION PLAN FISH CREEK TRAIL NORTH 39+50 TO 45+15			

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



DRAWING LOCATION	DATE	TIME	LAYOUT	SCALE	DESIGNED BY
J:\subdata\10130.30 AMATS Areswide Trails Rehab - Fish Creek\00 CADD\01 Working Set\03 Electrical\10130.30\B\2016 R06f61.dwg			Creek North	1"=100'	CHECKED BY
					DRAFTED BY

DESIGNED BY
CHECKED BY
DRAFTED BY

XREFS

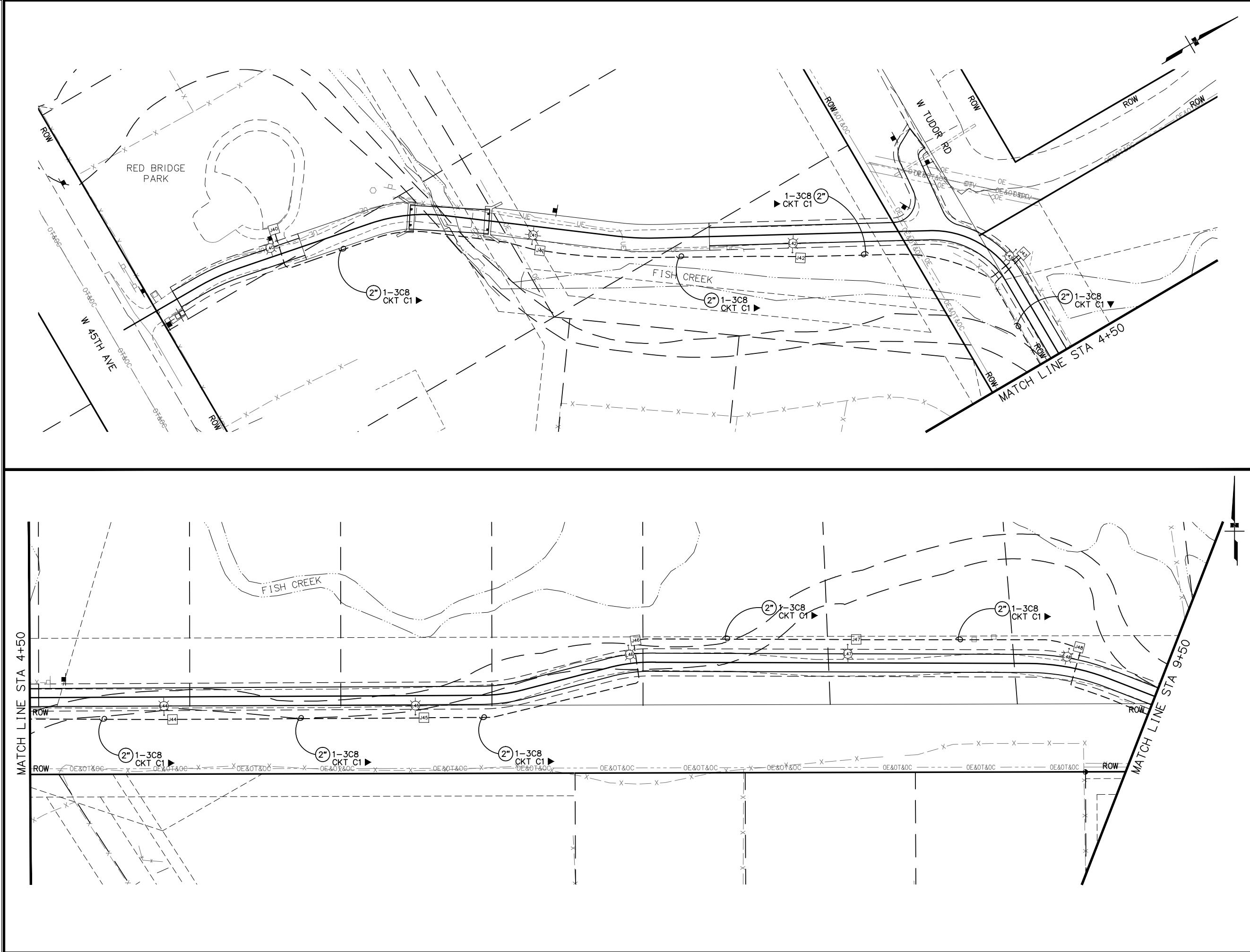
SCALE
1" = 100'

LAYOUT
South Fish Creek

DATE
10/13/2016

TIME
10:30 AM

DRAWING LOCATION
J:\obsdata\10130.30 AMATS Areawide Trails Rehab - Fish Creek\00 CADD\01 Working Set\03 Electrical\10130.30\B\2016 R60151.dwg



SHEET NO.		TOTAL SHEETS	
H13		H33	
STATE		YEAR	
ALASKA		2017	
PROJECT DESIGNATION			
Z584640000/0001521			
ADDENDUM NO.			
ATTACHMENT NO.			
REVISIONS			
NO.	DATE	DESCRIPTION	

PIH (9/1/16)

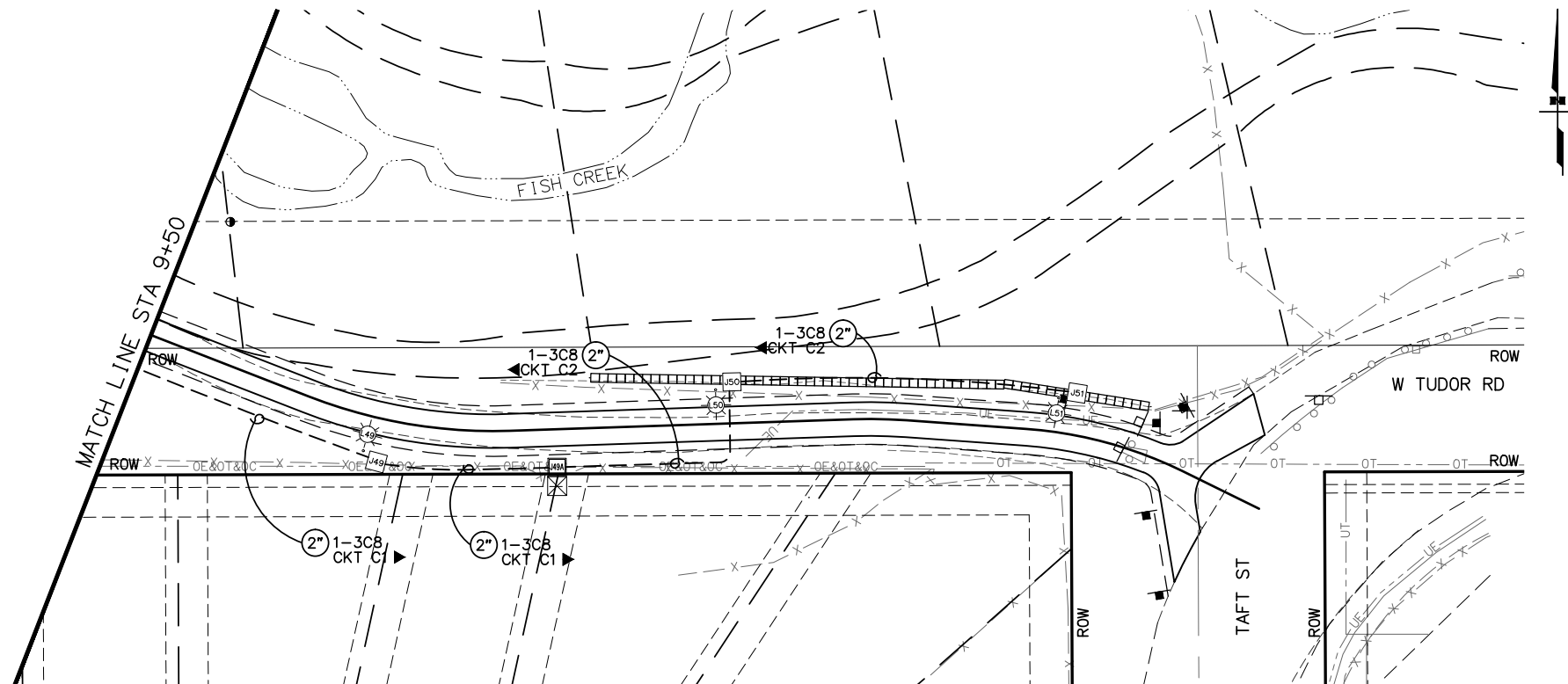
PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGNING PLAN
FISH CREEK TRAIL SOUTH
BOP TO 9+50

DRAWING LOCATION		DATE	TIME	LAYOUT	SCALE	XREF'S	DESIGNED BY
J:\Jobsdata\10130.30 AMATS Arawide Trails Rehab - Fish Creek\00 CAD\01 Working Set\03 Electrical\10130.30\78\8616 Roof51.dwg		10/13/2016	09:51	Creek South	1:1	1	AMF
							CHECKED BY
							DRAFTED BY



SHEET NO.		TOTAL SHEETS	
H14		H33	
STATE		YEAR	
ALASKA		2017	
PROJECT DESIGNATION			
Z584640000/0001521			
ADDENDUM NO.			
ATTACHMENT NO.			
REVISIONS			
NO.	DATE	DESCRIPTION	
PLANS DEVELOPED BY: CRW ENGINEERING GROUP, LLC 3940 ARCTIC BLVD, SUITE 300 ANCHORAGE, ALASKA 99503 (907) 562-3252 #AECL882-AK			
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES AMATS: ANCHORAGE AREA WIDE TRAILS REHABILITATION FISH CREEK TRAIL SIGNING PLAN FISH CREEK TRAIL SOUTH 9+50 TO EOP			

DESIGNED BY
CHECKED BY
DRAFTED BY

CREES

SCALE

LAYOUT

DATE TIME

DRAWING LOCATION

Drop and Shift
t Summary Table
g

03 Electric
312230630.110
PIH

00 CADD
01 working set
03 Electric

00 amts areawide trails rehab - fish creek

10130.30

SUMMARY OF LOAD CENTER: A				
LOAD CENTER TYPE: 1A (PAD MOUNT)				
SERVING UTILITY: CHUGACH ELECTRIC ASSOC.				
SERVICE CONDUIT TYPE: RIGID METAL CONDUIT				
LOCATION DATA				
LOCATION DATA: PATHWAY, STA 24+80.6, 5.55' LT				
CONTROL: NEW PHOTOELECTRIC CONTROL ON CABINET				
SERVICE VOLTAGE: 1 PHASE, 3 WIRE, 120/240V AC WITH GROUNDED NEUTRAL				
PROVIDE METER SOCKET: YES				
A.I.C. RATING: 10,000 AMPS				
MAIN BREAKER: 240 VOLT, 2 POLE, 100 AMP				
CONTACTOR: 600 V, 8 POLE, 30 AMP				
LOAD SCHEDULE				
CIRCUIT NUMBER	DESCRIPTION	KVA LOAD	BREAKER	
			AMPS	POLES
A-1	LUMINAIRES L1-L6	0.4	20	2
A-2	CONTROLS	0.1	15	2
A-3	SPARE	0.0	20	2
A-4	SPARE	0.0	20	2
A-5	SPARE	0.0	20	2
A-6	SPARE	0.0	20	2
TOTAL KVA = 0.5				
TOTAL AMPS = 2.2				

VOLTAGE DROP CALCULATION – LCA								
1-PH, 2W CONFIGURATION, 1 COPPER CONDUCTOR PER PHASE IN RMC. TEMPERATURE RATING 75°C.								
CKT #	SEGMENT SIZE (AWG)	SEGMENT LENGTH (FT)	VOLTAGE	POWER FACTOR	LOAD (KVA)	TOTAL (AMPS)	SEG. VD (VOLTS)	SEG. (%VD)
A-1	8	515	240	0.8	0.4	1.67	1.20	0.49%

VOLTAGE DROP CALCULATION – LCB								
1-PH, 2W CONFIGURATION, 1 COPPER CONDUCTOR PER PHASE IN RMC. TEMPERATURE RATING 75°C.								
CKT #	SEGMENT SIZE (AWG)	SEGMENT LENGTH (FT)	VOLTAGE	POWER FACTOR	LOAD (KVA)	TOTAL (AMPS)	SEG. VD (VOLTS)	SEG. (%VD)
B-1	8	365	240	0.8	0.3	1.25	0.56	0.23%
B-2	8	1152	240	0.8	0.8	3.33	4.87	2.03%
B-3	8	1740	240	0.8	0.7	2.92	6.67	2.78%
B-4	8	1740	240	0.8	0.6	2.33	5.34	2.22%

VOLTAGE DROP CALCULATION – LCC								
1-PH, 2W CONFIGURATION, 1 COPPER CONDUCTOR PER PHASE IN RMC. TEMPERATURE RATING 75°C.								
CKT #	SEGMENT SIZE (AWG)	SEGMENT LENGTH (FT)	VOLTAGE	POWER FACTOR	LOAD (KVA)	TOTAL (AMPS)	SEG. VD (VOLTS)	SEG. (%VD)
C-1	8	1035	240	0.8	0.7	2.92	3.97	1.65%
C-2	8	135	240	0.8	0.1	0.58	0.10	0.04%

SUMMARY OF LOAD CENTER: B				
LOAD CENTER TYPE: 1A (PAD MOUNT)				
SERVING UTILITY: CHUGACH ELECTRIC ASSOC.				
SERVICE CONDUIT TYPE: RIGID METAL CONDUIT				
LOCATION DATA				
LOCATION DATA: PATHWAY, STA 30+14.0 , 6.65' LT				
CONTROL: NEW PHOTOELECTRIC CONTROL ON CABINET				
SERVICE VOLTAGE: 1 PHASE, 3 WIRE, 120/240V AC WITH GROUNDED NEUTRAL				
PROVIDE METER SOCKET: YES				
A.I.C. RATING: 10,000 AMPS				
MAIN BREAKER: 240 VOLT, 2 POLE, 100 AMP				
CONTACTOR: 600 V, 8 POLE, 30 AMP				
LOAD SCHEDULE				
CIRCUIT NUMBER	DESCRIPTION	KVA LOAD	BREAKER	
			AMPS	POLES
B-1	LUMINAIRES L7-L10	0.3	20	2
B-2	LUMINAIRES L28-L38	0.8	20	2
B-3	LUMINAIRES L11-L27 (ODD), L39	0.7	20	2
B-4	LUMINAIRES L12-L26 (EVEN)	0.6	20	2
B-5	CONTROLS	0.1	15	2
TOTAL KVA = 2.4				
TOTAL AMPS = 10.0				

SHORT CIRCUIT CALCULATION – LCA	
240V AC IN A 1-PH, 2W CONFIGURATION WITH A POWER-FACTOR OF 1.00, 1 COPPER WIRE PER PHASE IN A CONDUIT. TEMPERATURE RATING 75°C.	
TRANSFORMER RATING	25KVA*
VOLTAGE	240V
TRANSFORMER IMPEDANCE	1.6%*
SHORT CIRCUIT CURRENT	6510A
*CONFIRM TRANSFORMER KVA AND IMPEDANCE BEFORE SUPPLYING PLACARD FOR LOAD CENTER.	

- LOAD CENTER NOTES:
- PLACE PLACARD ON FRONT OF LOAD CENTER INSCRIBED WITH THE MAXIMUM FAULT CURRENT AND THE DATE CALCULATED. PLACARDS FOR LOAD CENTERS SHALL HAVE SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. CONTACT ENGINEER PRIOR TO ORDER OF PLACARD TO VERIFY MAXIMUM FAULT CURRENT.
 - PROVIDE SCOTCH CAL 220 DECALS ON EXTERIOR OF NEW LOAD CENTER NOTING OWNER (MOA) AND PURPOSE (LU)
 - PROVIDE ARC FLASH WARNING LABELS WITH INCIDENT ENERGY VALUES AND PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIREMENTS ON EACH PIECE OF EQUIPMENT IN ACCORDANCE WITH NEC ARTICLE 110.16 AND NFPA 70E.

SHORT CIRCUIT CALCULATION – LCB	
240V AC IN A 1-PH, 2W CONFIGURATION WITH A POWER-FACTOR OF 1.00, 1 COPPER WIRE PER PHASE IN A CONDUIT. TEMPERATURE RATING 75°C.	
TRANSFORMER RATING	25KVA*
VOLTAGE	240V
TRANSFORMER IMPEDANCE	1.6%*
SHORT CIRCUIT CURRENT	6510A
*CONFIRM TRANSFORMER KVA AND IMPEDANCE BEFORE SUPPLYING PLACARD FOR LOAD CENTER.	

SHORT CIRCUIT CALCULATION – LCC	
240V AC IN A 1-PH, 2W CONFIGURATION WITH A POWER-FACTOR OF 1.00, 1 COPPER WIRE PER PHASE IN A CONDUIT. TEMPERATURE RATING 75°C.	
TRANSFORMER RATING	25KVA*
VOLTAGE	240V
TRANSFORMER IMPEDANCE	1.6%*
SHORT CIRCUIT CURRENT	6510A
*CONFIRM TRANSFORMER KVA AND IMPEDANCE BEFORE SUPPLYING PLACARD FOR LOAD CENTER.	

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL**

**LOAD CENTER AND CIRCUIT
SUMMARY TABLES**

DRAWING LOCATION
\\jobstuff\jobsdata\10130.30 amds areawide trails rehab - fish creek\00 CAD\01 working set\03 Electrical.dwg

Pole No.	Circuit No	Distribution Type	Lamp Watts	Lamp Type	Ballast Voltage	Mounting Height	ALIGNMENT	Station	Offset
L1	A1	M-C-2	70	LED	480V	20'	FISH CREEK	20+16.5	8.0 LT
L2	A1	M-C-2	70	LED	480V	20'	FISH CREEK	20+92.7	8.0 LT
L3	A1	M-C-2	70	LED	480V	20'	FISH CREEK	21+85.9	8.0 LT
L4	A1	M-C-2	70	LED	480V	20'	FISH CREEK	22+83.8	8.0 RT
L5	A1	M-C-2	70	LED	480V	20'	FISH CREEK	23+87.4	8.0 LT
L6	A1	M-C-2	70	LED	480V	20'	FISH CREEK	24+59.3	8.0 RT
L7	B1	M-C-2	70	LED	480V	20'	FISH CREEK	26+61.5	8.0 RT
L8	B1	M-C-2	70	LED	480V	20'	FISH CREEK	27+55.4	8.0 RT
L9	B1	M-C-2	70	LED	480V	20'	FISH CREEK	28+53.2	8.0 RT
L10	B1	M-C-2	70	LED	480V	20'	FISH CREEK	29+54.1	8.0 LT
L11	B3	M-C-2	70	LED	480V	20'	FISH CREEK	30+53.3	8.0 LT
L12	B4	M-C-2	70	LED	480V	20'	FISH CREEK	31+51.9	8.0 RT
L13	B3	M-C-2	70	LED	480V	20'	FISH CREEK	32+50.9	8.0 RT
L14	B4	M-C-2	70	LED	480V	20'	FISH CREEK	33+55.3	8.0 RT
L15	B3	M-C-2	70	LED	480V	20'	FISH CREEK	34+48.0	8.0 RT
L16	B4	M-C-2	70	LED	480V	20'	FISH CREEK	35+43.9	8.0 RT
L17	B3	M-C-2	70	LED	480V	20'	FISH CREEK	36+46.5	8.0 LT
L18	B4	M-C-2	70	LED	480V	20'	FISH CREEK	37+42.2	8.0 LT
L19	B3	M-C-2	70	LED	480V	20'	FISH CREEK	38+35.3	8.0 LT
L20	B4	M-C-2	70	LED	480V	20'	FISH CREEK	39 +33.3	8.0 LT
L21	B3	M-C-2	70	LED	480V	20'	FISH CREEK	40+38.5	8.0 RT
L22	B4	M-C-2	70	LED	480V	20'	FISH CREEK	41+30.9	8.0 LT
L23	B3	M-C-2	70	LED	480V	20'	FISH CREEK	42+32.7	8.0 LT
L24	B4	M-C-2	70	LED	480V	20'	BARBARA ST	500+34.3	8.0 RT
L25	B3	M-C-2	70	LED	480V	20'	BARBARA ST	501+05.6	8.0 LT
L26	B4	M-C-2	70	LED	480V	20'	BARBARA ST	502+02.4	8.0 RT
L27	B3	M-C-2	70	LED	480V	20'	BARBARA ST	502+92.5	8.0 LT
L28	B2	M-C-2	70	LED	480V	20'	WOODLAND PARK	100+89.7	8.0 RT
L29	B2	M-C-2	70	LED	480V	20'	WOODLAND PARK	101+90.9	8.0 LT
L30	B2	M-C-2	70	LED	480V	20'	WOODLAND PARK	102+89.0	8.0 LT
L31	B2	M-C-2	70	LED	480V	20'	WOODLAND PARK	104+01.7	8.0 RT
L32	B2	M-C-2	70	LED	480V	20'	WOODLAND PARK	104+07.7	54.14 LT
L33	B2	M-C-2	70	LED	480V	20'	WOODLAND PARK	206+50.6	29.27 RT
L34	B2	M-C-2	70	LED	480V	20'	KONA LANE	205+63.5	8.0 RT
L35	B2	M-C-2	70	LED	480V	20'	KONA LANE	204+64.3	8.0 RT
L36	B2	M-C-2	70	LED	480V	20'	KONA LANE	203+69.5	8.0 LT
L37	B2	M-C-2	70	LED	480V	20'	KONA LANE	202+62.0	8.0 LT
L38	B2	M-C-2	70	LED	480V	20'	KONA LANE	201+45.2	8.0 RT
L39	B3	M-C-2	70	LED	480V	20'	34TH AVE	300+85.4	8.0 RT
L40	C1	M-C-2	70	LED	480V	20'	FISH CREEK SOUTH	0+73.5	8.0 LT
L41	C1	M-C-2	70	LED	480V	20'	FISH CREEK SOUTH	1+91.6	8.0 RT
L42	C1	M-C-2	70	LED	480V	20'	FISH CREEK SOUTH	3+05.8	8.0 RT
L43	C1	M-C-2	70	LED	480V	20'	FISH CREEK SOUTH	4+02.6	8.0 LT
L44	C1	M-C-2	70	LED	480V	20'	FISH CREEK SOUTH	5+09.1	8.0 RT
L45	C1	M-C-2	70	LED	480V	20'	FISH CREEK SOUTH	6+20.0	8.0 RT
L46	C1	M-C-2	70	LED	480V	20'	FISH CREEK SOUTH	7+16.5	8.0 LT
L47	C1	M-C-2	70	LED	480V	20'	FISH CREEK SOUTH	8+12.3	8.0 LT
L48	C1	M-C-2	70	LED	480V	20'	FISH CREEK SOUTH	9+08.4	8.0 LT
L49	C1	M-C-2	70	LED	480V	20'	FISH CREEK SOUTH	10+05.8	8.0 RT
L50	C2	M-C-2	70	LED	480V	20'	FISH CREEK SOUTH	10+87.8	8.0 LT
L51	C2	M-C-2	70	LED	480V	20'	FISH CREEK SOUTH	11+67.8	8.0 LT

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	ALASKA	Z584640000/0001521	2017	H16	H33

JUNCTION BOX SCHEDULE (1 OF 2)					JUNCTION BOX SCHEDULE (2 OF 2)				
JBOX	TYPE	ALIGNMENT	STATION	OFFSET	JBOX	TYPE	ALIGNMENT	STATION	OFFSET
J1	1A	FISH CREEK	20+20.2	10.71 LT	J26	1A	BARBARA ST	502+05.2	10.85 RT
J2	1A	FISH CREEK	20+96.5	9.45 LT	J27	1A	BARBARA ST	502+94.3	10.40 LT
J3	1A	FISH CREEK	21+89.8	10.75 LT	J28	1A	WOODLAND PARK	100+93.7	10.54 RT
J4	1A	FISH CREEK	22+87.9	10.57 RT	J29	1A	WOODLAND PARK	101+95.0	9.62 LT
J5	1A	FISH CREEK	23+90.8	10.73 LT	J30	1A	WOODLAND PARK	102+91.9	10.23 LT
J6	1A	FISH CREEK	24+64.1	10.31 RT	J31	1A	WOODLAND PARK	104+05.7	9.52 RT
J6A	2	FISH CREEK	24+84.5	7.25 LT	J32	1A	WOODLAND PARK	104+06.6	49.81 LT
J7	1A	FISH CREEK	26+65.8	10.52 RT	J33	1A	WOODLAND PARK	206+49.1	25.20 RT
J8	1A	FISH CREEK	27+59.1	10.68 RT	J34	1A	KONA LANE	205+67.1	10.40 RT
J9	1A	FISH CREEK	28+57.2	10.66 RT	J35	1A	KONA LANE	204+68.0	9.64 RT
J10	1A	FISH CREEK	29+57.9	9.94 LT	J36	1A	KONA LANE	203+72.9	11.05 LT
J10A	2	FISH CREEK	30+14.4	6.61 LT	J37	1A	KONA LANE	202+65.7	9.93 LT
J11	1A	FISH CREEK	30+57.1	10.43 LT	J38	1A	KONA LANE	201+49.0	10.30 RT
J12	1A	FISH CREEK	31+56.2	12.95 RT	J39	1A	34TH AVE	300+89.3	10.60 RT
J13	1A	FISH CREEK	32+54.9	10.88 RT	J40	1A	FISH CREEK SOUTH	0+77.4	11.22LT
J14	1A	FISH CREEK	33+59.0	10.83 RT	J41	1A	FISH CREEK SOUTH	1+94.6	10.29RT
J15	1A	FISH CREEK	34+51.4	11.42 RT	J42	1A	FISH CREEK SOUTH	3+08.2	10.47RT
J16	1A	FISH CREEK	35+47.7	10.68 RT	J43	1A	FISH CREEK SOUTH	4+05.3	9.45LT
J17	1A	FISH CREEK	36+50.7	9.78 LT	J44	1A	FISH CREEK SOUTH	5+12.4	9.94RT
J18	1A	FISH CREEK	37+46.1	7.56 LT	J45	1A	FISH CREEK SOUTH	6+23.0	9.71RT
J19	1A	FISH CREEK	38+39.2	9.09 LT	J46	1A	FISH CREEK SOUTH	7+19.2	9.93LT
J20	1A	FISH CREEK	39+36.8	10.12 LT	J47	1A	FISH CREEK SOUTH	8+15.2	10.35LT
J21	1A	FISH CREEK	40+42.7	11.32 RT	J48	1A	FISH CREEK SOUTH	9+11.4	9.52LT
J22	1A	FISH CREEK	41+35.1	9.98 LT	J49	1A	FISH CREEK SOUTH	10+08.7	10.26RT
J23	1A	FISH CREEK	42+37	10.22 LT	J49A	2	FISH CREEK SOUTH	10+49.9	5.64RT
J24	1A	BARBARA ST	500+37.7	10.17 RT	J50	1A	FISH CREEK SOUTH	10+90.6	9.82LT
J25	1A	BARBARA ST	501+03.3	11.74 LT	J51	1A	FISH CREEK SOUTH	11+70.6	10.35LT

PIH (9/1/16)

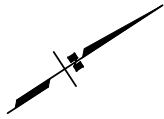
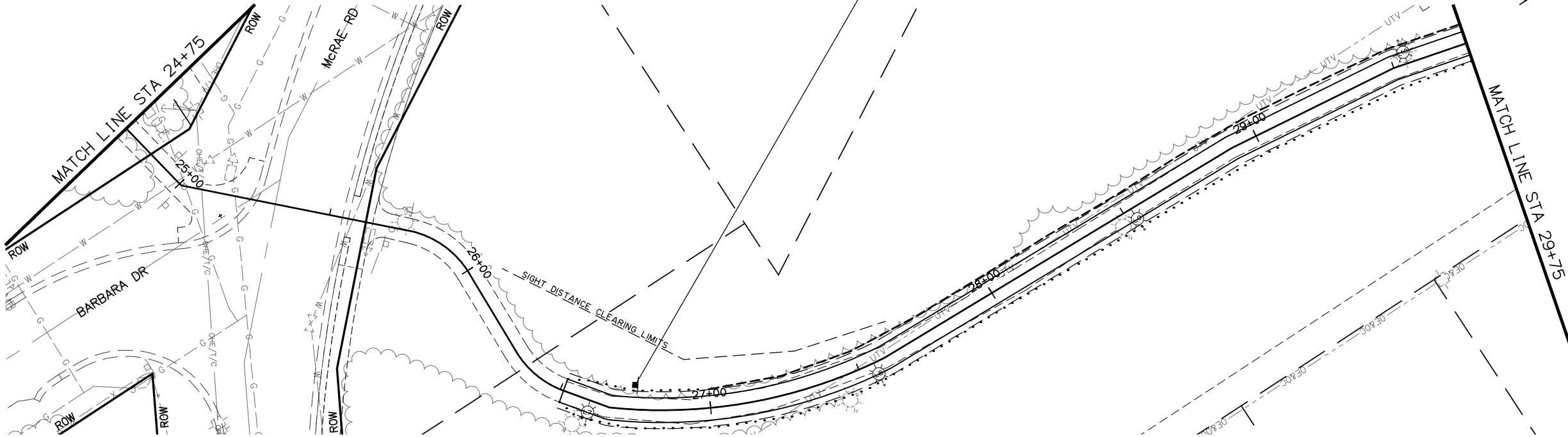
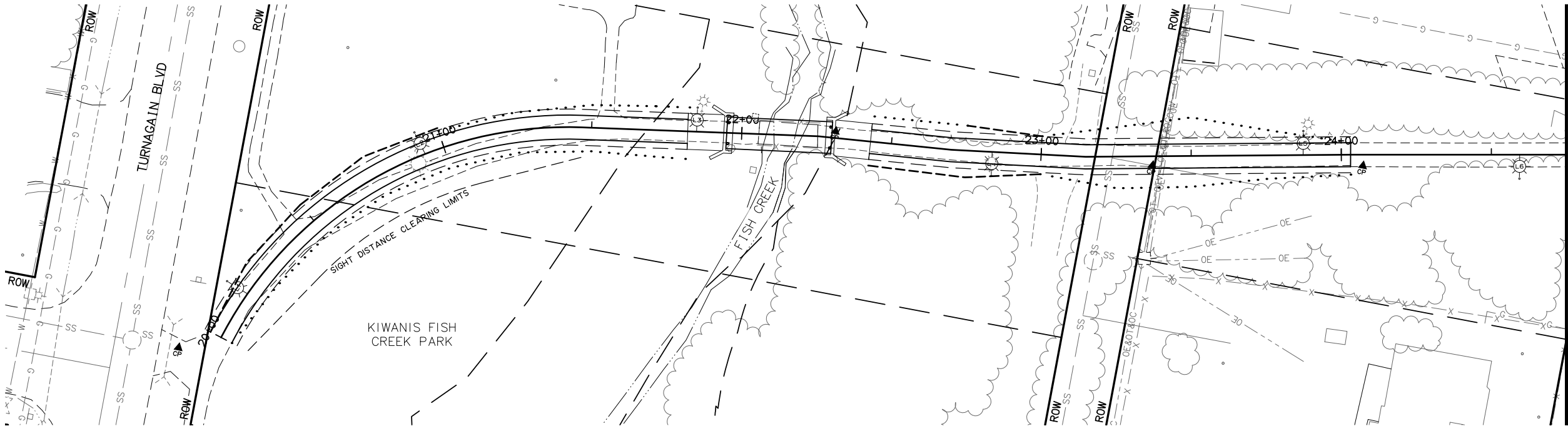
PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL**

ILLUMINATION SCHEDULES



SHEET NO.		TOTAL SHEETS	
H17		H33	
STATE		YEAR	
ALASKA		2017	
PROJECT DESIGNATION			
Z584640000/0001521			
ADDENDUM NO.			
ATTACHMENT NO.			
REVISIONS			
NO.	DATE	DESCRIPTION	

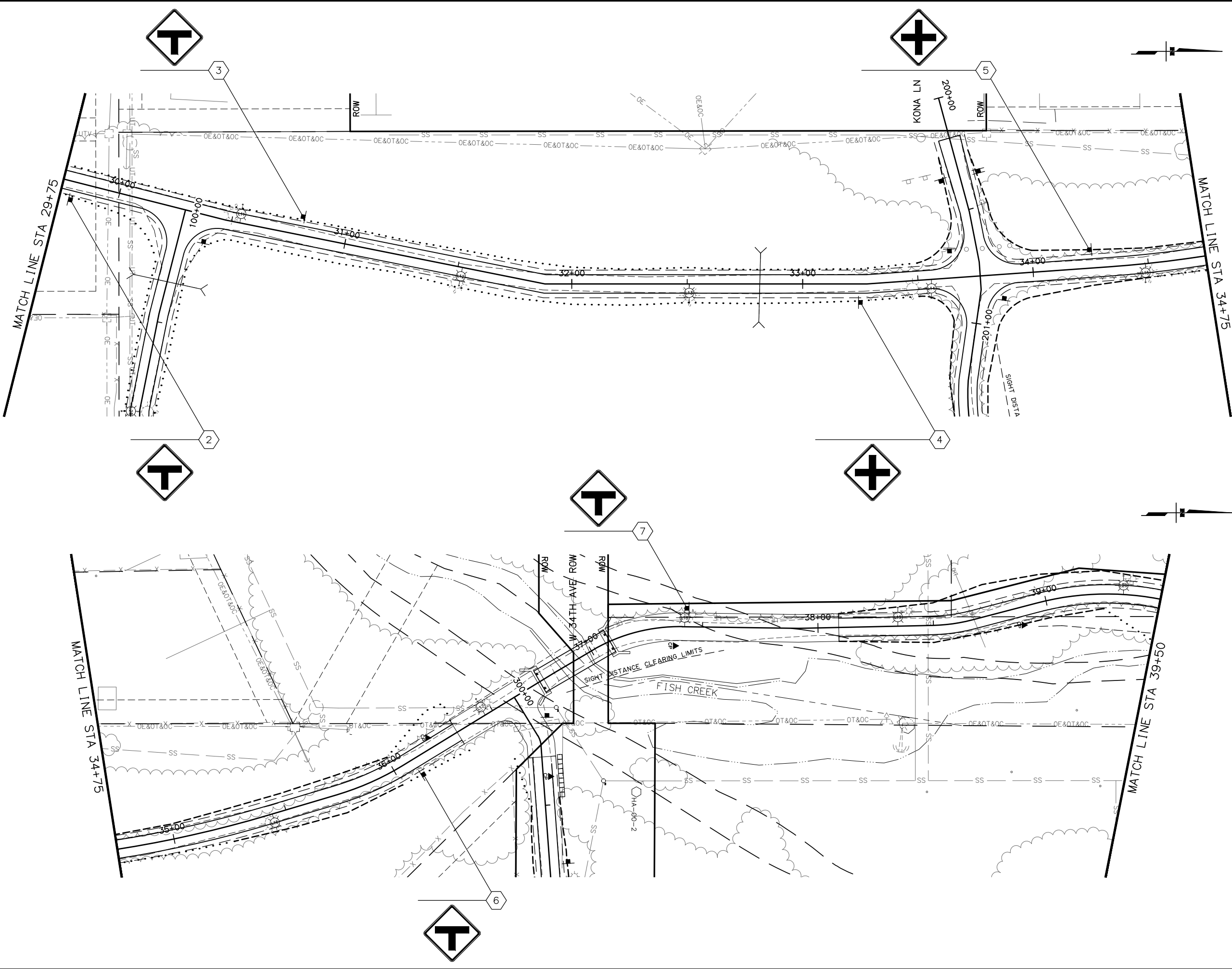
PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGNING PLAN
FISH CREEK TRAIL NORTH
20+00 TO 29+75



SHEET NO.	TOTAL SHEETS	
H18	H33	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

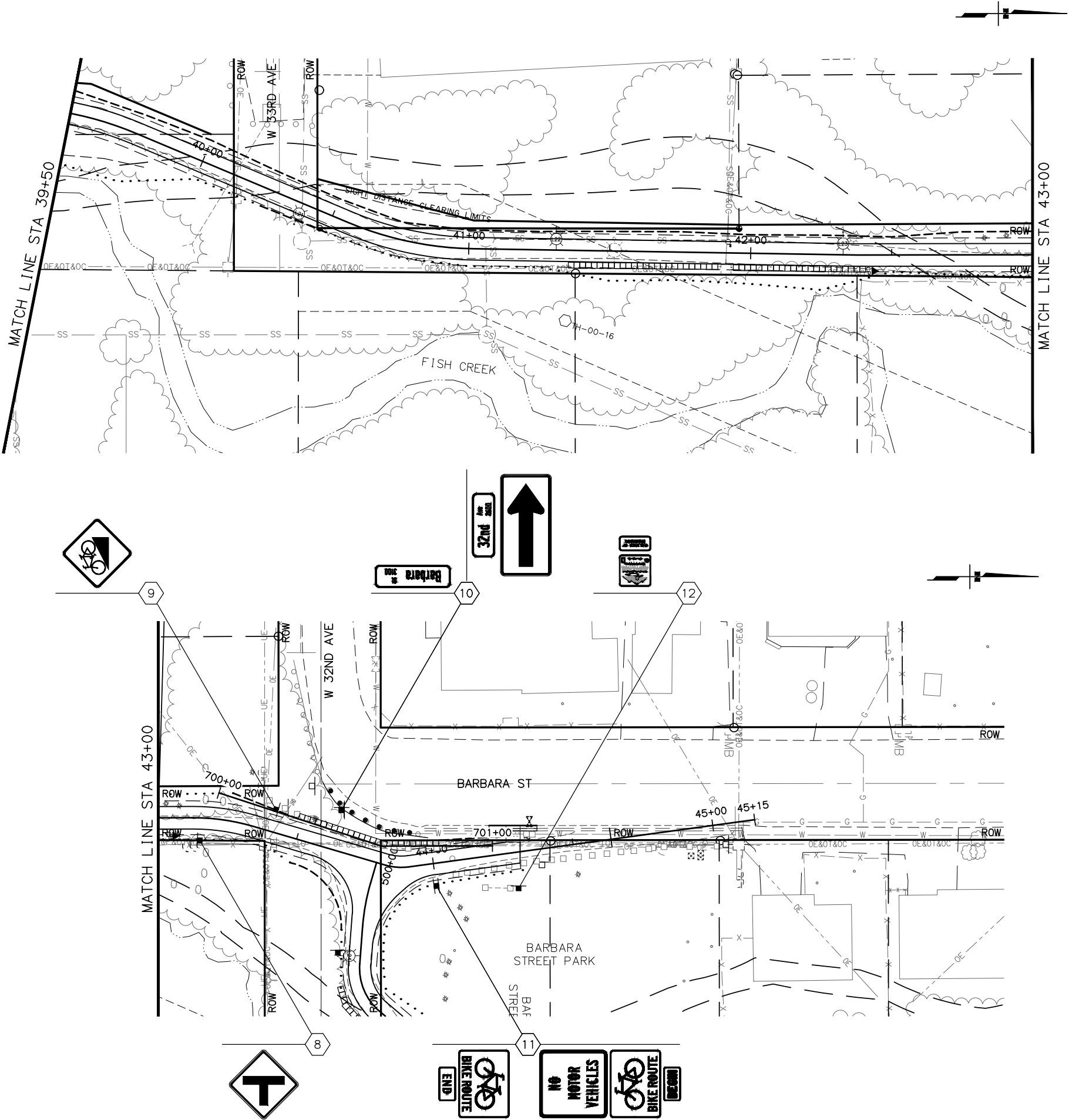
PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGNING PLAN
FISH CREEK TRAIL NORTH
29+75 TO 39+50



SHEET NO.	TOTAL SHEETS	
H19	H33	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PIH (9/1/16)

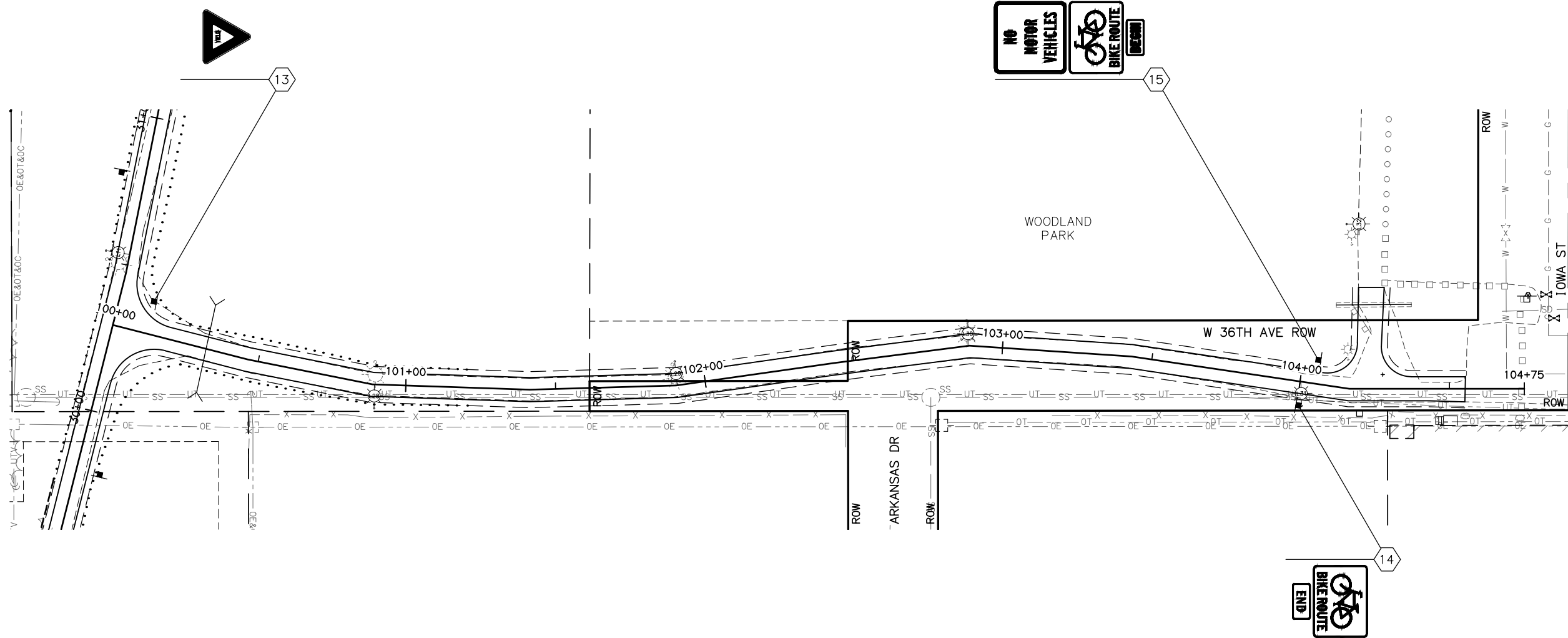
PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

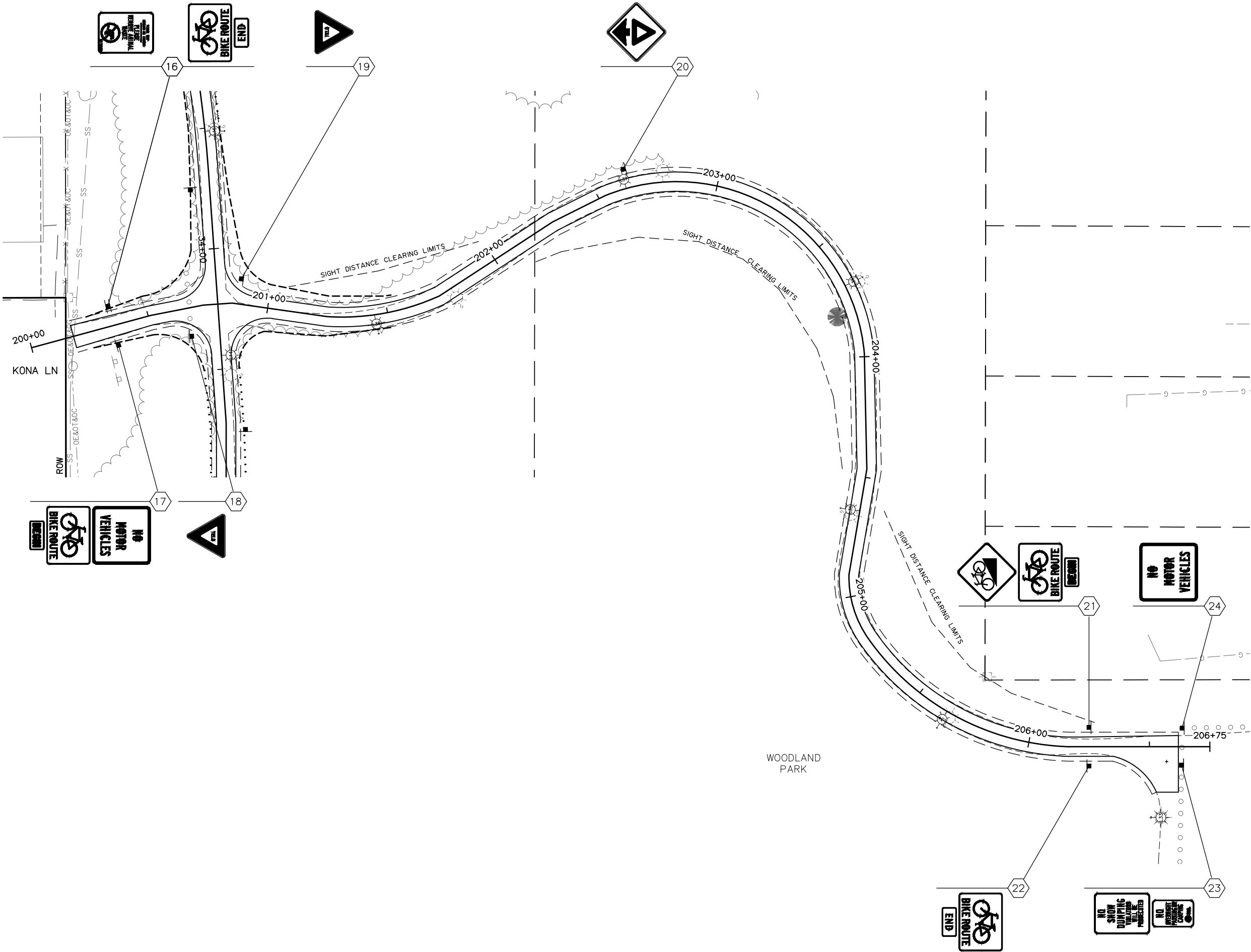
AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGNING PLAN
FISH CREEK TRAIL NORTH
39+50 TO 45+15

DRAWING LOCATION		DATE	TIME	LAYOUT	SCALE	XREF'S	DESIGNED BY
J:\Jobsdata\10130.30 AMATS Areowide Trails Rehab - Fish Creek\00 CAD\01 Working Set\01 Civil\10130.30 Plan\8/2/20d6 \$t6g45ngMdwg				H20			CHECKED BY
							DRAFTED BY



SHEET NO.		TOTAL SHEETS	
H20		H33	
STATE		YEAR	
ALASKA		2017	
PROJECT DESIGNATION			
Z584640000/0001521			
ADDENDUM NO.			
ATTACHMENT NO.			
REVISIONS			
NO.	DATE	DESCRIPTION	
PIH (9/1/16) PLANS DEVELOPED BY: CRW ENGINEERING GROUP, LLC 3940 ARCTIC BLVD, SUITE 300 ANCHORAGE, ALASKA 99503 (907) 562-3252 #AECL882-AK			
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES AMATS: ANCHORAGE AREA-WIDE TRAILS REHABILITATION FISH CREEK TRAIL SIGNING PLAN WOODLAND PARK SPUR SOUTH 100+00 TO 104+75			



SHEET NO.

H21

TOTAL SHEETS

H33

STATE

ALASKA

YEAR

2017

PROJECT DESIGNATION

Z584640000/0001521

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA

49TH

Matthew C. Edge

CE 11035

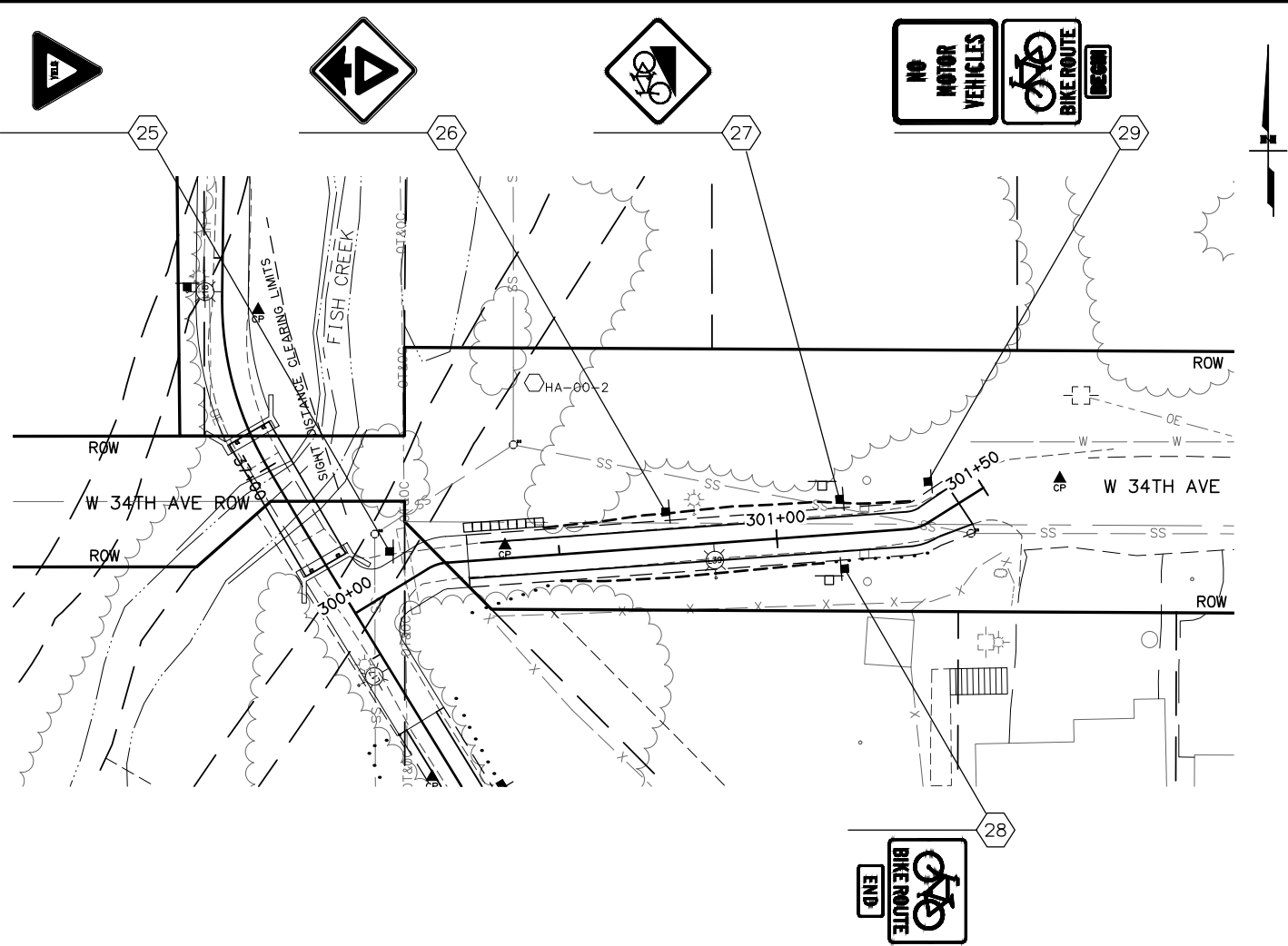
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE TRAILS REHABILITATION FISH CREEK TRAIL

SIGNING PLAN
WOODLAND PARK SPUR NORTH
200+00 TO 206+75



SHEET NO.	TOTAL SHEETS	
H22	H33	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

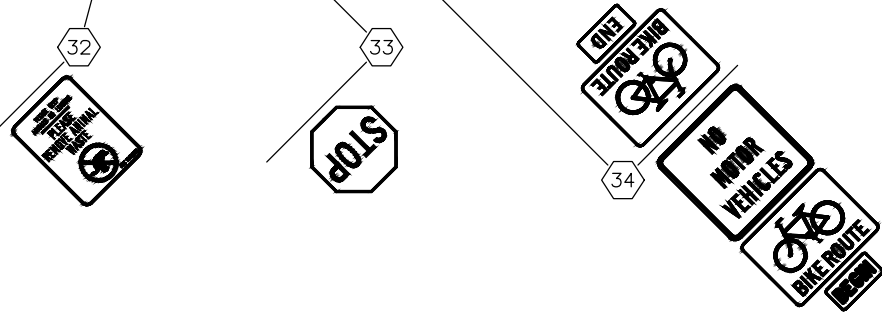
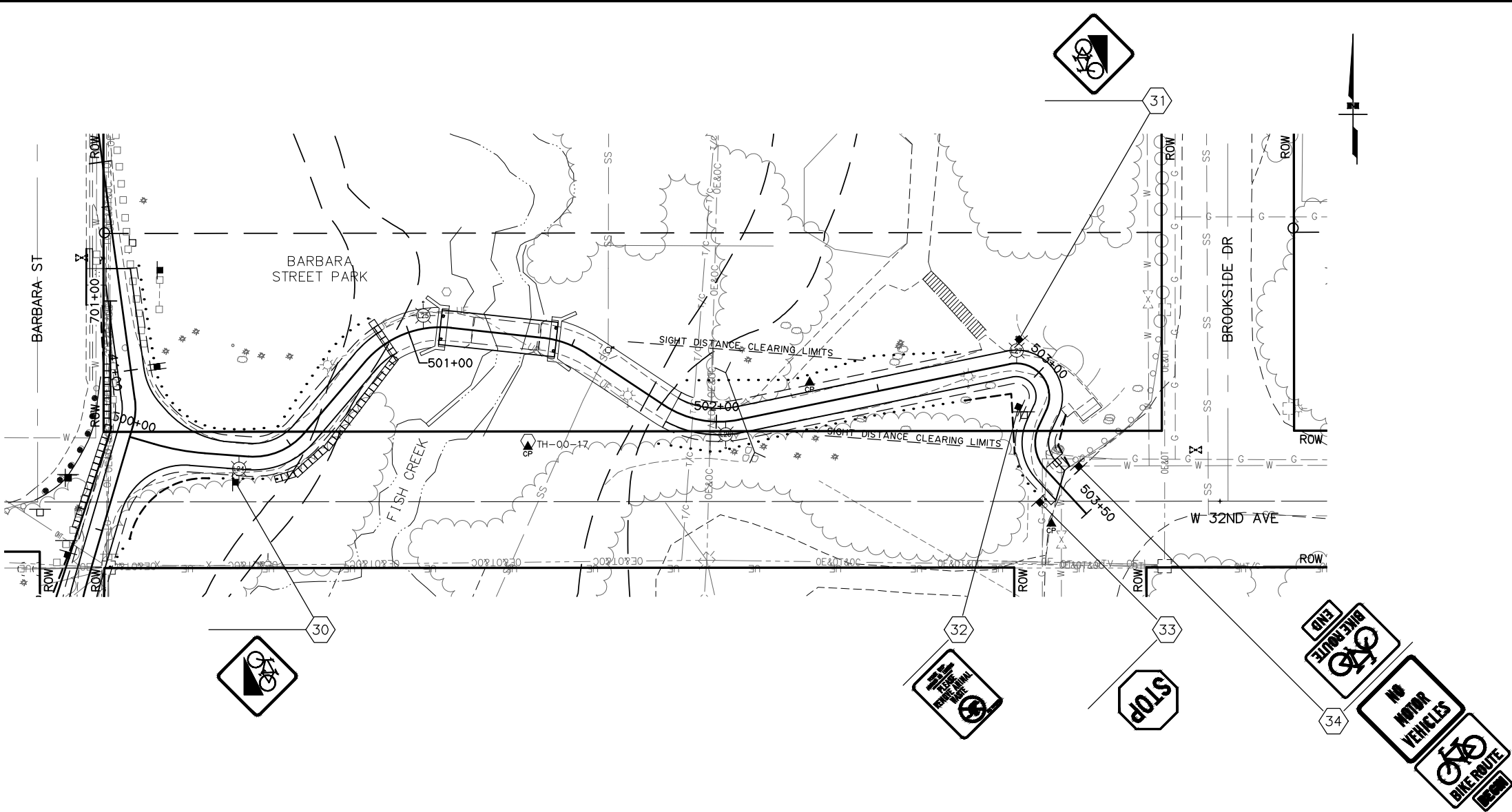
PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGNING PLAN
W 34TH AVE SPUR
300+00 TO 301+50



SHEET NO.	TOTAL SHEETS	
H23	H33	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

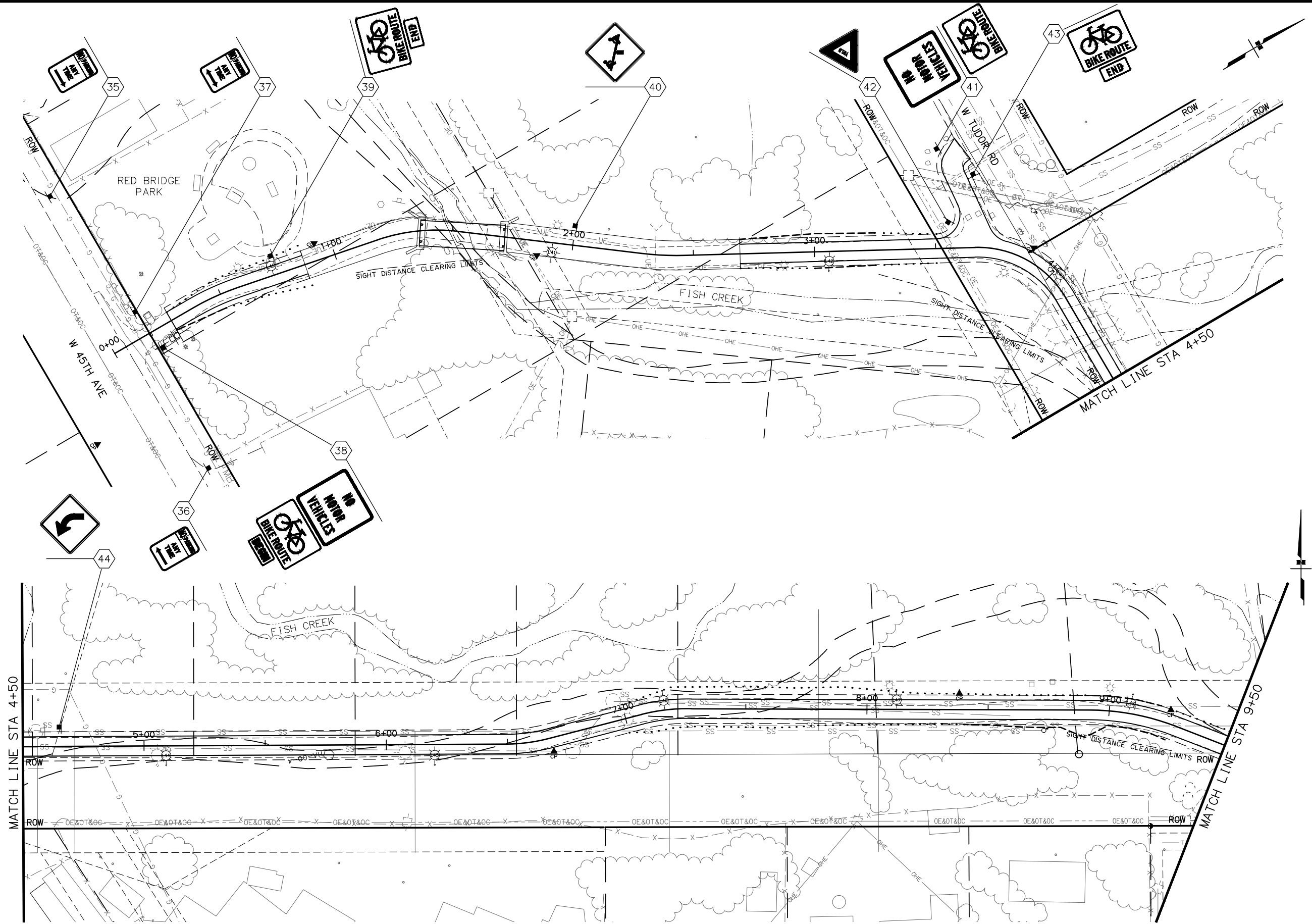
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGNING PLAN
BARBARA STREET PARK SPUR
500+00 TO 503+50

DRAWING LOCATION J:\obsdata\10130.30 AMATS Areawide Trails Rehab - Fish Creek\00 CADD\01 Working Set\01 Civil\10130.30 Plan\8/2016 30g45.mxdg

DESIGNED BY	CREES	SCALE	LAYOUT	DATE	TIME
CHECKED BY			H24		
DRAFTED BY					



SHEET NO.	TOTAL SHEETS	
H24	H33	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

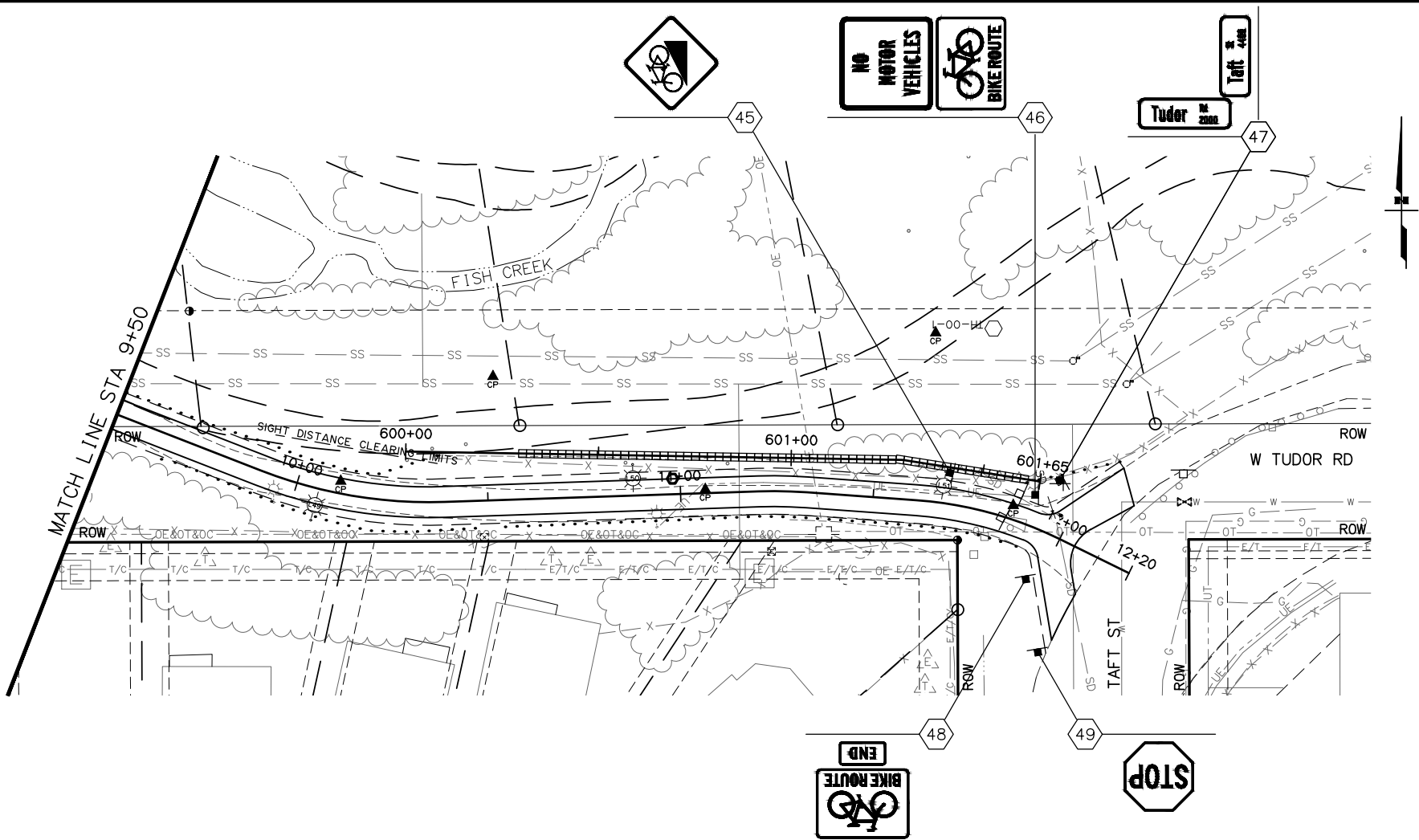
PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGNING PLAN
FISH CREEK TRAIL SOUTH
BOP TO 9+50



SHEET NO.	TOTAL SHEETS	
H25	H33	
STATE	YEAR	
ALASKA	2017	
PROJECT DESIGNATION		
Z584640000/0001521		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGNING PLAN
FISH CREEK TRAIL SOUTH
9+50 TO EOP

DESIGNED BY

CHECKED BY

DRAFTED BY

AREES

SCALE

LAYOUT

DATE

TIME

DRAWING LOCATION

fish creek\00 CADD\01 working set\01 Civil\10\06\06\200\01.dwg

Summary Tables.dwg

H26

REVISIONS

NO.

DATE

DESCRIPTION

STATE

PROJECT DESIGNATION

YEAR

SHEET NO.

TOTAL SHEETS

ALASKA

Z584640000/0001521

2017

H26

H33

615(1A)

SIGN SUMMARY

SHEET NO.	POST NO.	STATION	OFFSET (FT)	TYPE	LEGEND	SIZE (IN)		AREA (S.F.)	DIRECTION SIGN FACES	POST: NO., SIZE & TYPE	THICKNESS	FRAMED ?		REMARKS
						WIDTH	HEIGHT					YES	NO	
FISH CREEK TRAIL NORTH														
H17	1	26+75.0	8.0 LT	W3-1		18	18	2.25	NE	1 - 2.5" PST	0.125"		X	
H18	2	29+80.0	8.0 RT	W2-2		18	18	2.25	S	1 - 2.5" PST	0.125"		X	
	3	30+80.0	8.0 LT	W2-2		18	18	2.25	N	1 - 2.5" PST	0.125"		X	
	4	33+25.0	8.0 RT	W2-1		18	18	2.25	S	1 - 2.5" PST	0.125"		X	
	5	34+25.0	8.0 LT	W2-1		18	18	2.25	N	1 - 2.5" PST	0.125"		X	
	6	36+10.0	8.0 RT	W2-2		18	18	2.25	SE	1 - 2.5" PST	0.125"		X	
	7	37+42.2	8.0 LT	W2-2		18	18	2.25	N	1 - 2.5" PST	0.125"		X	MOUNT ON PROPOSED LUMINAIRE
H19	8	43+15.0	8.0 RT	W2-2		18	18	2.25	S	1 - 2.5" PST	0.125"		X	
SUBTOTAL								18						

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA

49th

Matthew C. Edge

CE 11035

REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGN SUMMARY TABLES

DESIGNED BY
CHECKED BY
DRAFTED BY

AREES

SCALE

LAYOUT
Tables.dwg H27

DATE TIME
10/30/2016 10:30 AM

DRAWING LOCATION
\\jobstuf\jobsdata\10130.30 amets areawide trails rehab - fish creek\00 cadd\01 working set\01 civil\10130.30 AREES.dwg Summary Tables.dwg H27

REVISIONS
NO. DATE DESCRIPTION

STATE
ALASKA

PROJECT DESIGNATION
Z584640000/0001521

YEAR
2017

SHEET NO.
H27

TOTAL SHEETS
H33

615(1A)

SIGN SUMMARY

SHEET NO.	POST NO.	STATION	OFFSET (FT)	TYPE	LEGEND	SIZE (IN)		AREA (S.F.)	DIRECTION SIGN FACES	POST: NO., SIZE & TYPE	THICKNESS	FRAMED ?		REMARKS
						WIDTH	HEIGHT					YES	NO	
FISH CREEK TRAIL NORTH (CONTINUED)														
H19	9	43+40.0	8.0 LT	W7-6		18	18	2.25	NE	1 - 2.5" PST	0.125"		X	
	10	43+62.4	14.4 LT	D3-1		23	8	1.278	N/S	1 - 2.5" PST	0.125"		X	
				D3-1		27	8	1.5	E/W				X	
				W1-6R		36	18	4.5	N			X		
	11	44+00.0	8.0 RT	D11-1		24	18	3	S	1 - 2.5" PST	0.125"		X	
				M4-6		12	6	0.5	S				X	
				R5-3		24	24	4	N				X	
				D11-1		24	18	3	N				X	
				M4-14		12	6	0.5	N				X	
	12	44+28.8	12.8 RT	CUSTOM		12	12	1	W	1 - 2.5" PST	0.125"		X	
				CUSTOM		12	6	0.5	W				X	
	SUBTOTAL								22					

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGN SUMMARY TABLES

DESIGNED BY
CHECKED BY
DRAFTED BY

AREES

SCALE

LAYOUT
Tables.dwg H28

DATE TIME

DRAWING LOCATION
\\Jobstuf\Jobsdata\10130.30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10130.30 Bt gtr Summary Tables.dwg

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2017	H28	H33

615(1A)															
SIGN SUMMARY															
SHEET NO.	POST NO.	STATION	OFFSET (FT)	TYPE	LEGEND	SIZE (IN)		AREA (S.F.)	DIRECTION SIGN FACES	POST: NO., SIZE & TYPE	THICKNESS	FRAMED ?		REMARKS	
						WIDTH	HEIGHT					YES	NO		
FISH CREEK TRAIL NORTH - WOODLAND PARK SPUR SOUTH															
H20	13	100+11.4	11.0 LT	R1-2		18	18	2.25	E	2 - 3" PST	0.125"		X		
	14	104+01.7	8.0 RT	D11-1		24	18	3	W	1 - 2.5" PST	0.125"		X	MOUNT ON PROPOSED LUMINAIRE	
				M4-6		12	6	0.5	W				X		
	15	104+05.0	8.0 LT	R5-3		24	24	4	E	1 - 2.5" PST	0.125"		X		
				D11-1		24	18	3	E				X		
				M4-14		12	6	0.5	E				X		
	FISH CREEK TRAIL NORTH - WOODLAND PARK SPUR NORTH														
	H21	16	200+35.0	8.3 LT	CUSTOM		18	24	3	W	1 - 2.5" PST	0.125"		X	RESET EXISTING SIGN POST
D11-1						24	18	3	E	1 - 2.5" PST	0.125"		X		
M4-6						12	6	0.5	E				X		
17		200+35.0	8.4 RT	R5-3		24	24	4	W	1 - 2.5" PST	0.125"		X		
				D11-1		24	18	3	W				X		
				M4-14		12	6	0.5	W				X		
SUBTOTAL								27							

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGN SUMMARY TABLES

DESIGNED BY
CHECKED BY
DRAFTED BY

AREAS

SCALE

LAYOUT
Tables.dwg H29

DATE TIME
10/30/2016 10:30 AM

DRAWING LOCATION
\\jobstuf\jobsdata\10130_30 amats areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10130_30.dwg Summary Tables.dwg H29

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2017	H29	H33

615(1A)														
SIGN SUMMARY														
SHEET NO.	POST NO.	STATION	OFFSET (FT)	TYPE	LEGEND	SIZE (IN)		AREA (S.F.)	DIRECTION SIGN FACES	POST: NO., SIZE & TYPE	THICKNESS	FRAMED ?		REMARKS
						WIDTH	HEIGHT					YES	NO	
FISH CREEK TRAIL NORTH - WOODLAND PARK SPUR NORTH (CONTINUED)														
H21	18	200+66.0	11.7 RT	R1-2		18	18	2.25	W	2 - 3" PST	0.125"		X	
	19	200+87.5	10.4 RT	R1-2		18	18	2.25	E	2 - 3" PST	0.125"		X	
	20	202+62.0	8.0 LT	W7-6		18	18	2.25	E	1 - 2.5" PST	0.125"		X	MOUNT ON PROPOSED LUMINAIRE
	21	206+25.0	8.0 LT	W3-2		18	18	2.25	E	1 - 2.5" PST	0.125"		X	
				D11-1		24	18	3	E				X	
				M4-14		12	6	0.5	E				X	
	22	206+25.0	8.0 RT	D11-1		24	18	3	W	1 - 2.5" PST	0.125"		X	
				M4-6		12	6	0.5	W				X	
	23	206+63.3	7.6 RT	CUSTOM		18	24	3	E	1 - 2.5" PST	0.125"		X	
				CUSTOM		12	18	1.5	E				X	
	24	206+63.5	7.7 LT	R5-3		24	24	4	E	1 - 2.5" PST	0.125"		X	
SUBTOTAL								25						

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGN SUMMARY TABLES

DESIGNED BY
CHECKED BY
DRAFTED BY

AREES

SCALE

LAYOUT
Tables.dwg H30

DATE TIME
10/13/2016 10:30 AM

DRAWING LOCATION
\\jobstuf\jobsdata\10130_30 amets areowide trails rehab - fish creek\00 CADD\01 working set\01 CIVIL\10130_30 AREES.dwg

615(1A)

SIGN SUMMARY

SHEET NO.	POST NO.	STATION	OFFSET (FT)	TYPE	LEGEND	SIZE (IN)		AREA (S.F.)	DIRECTION SIGN FACES	POST: NO., SIZE & TYPE	THICKNESS	FRAMED ?		REMARKS
						WIDTH	HEIGHT					YES	NO	
FISH CREEK TRAIL NORTH - W 34TH AVE SPUR														
H22	25	300+14.1	8.0 LT	R1-2		18	18	2.25	E	2 - 3" PST	0.125"		X	
	26	300+75.0	8.0 LT	W3-2		18	18	2.25	E	1 - 2.5" PST	0.125"		X	
	27	301+15.0	8.0 LT	W7-6		18	18	2.25	E	1 - 2.5" PST	0.125"		X	
	28	301+15.0	8.0 RT	D11-1		24	18	3	W	1 - 2.5" PST	0.125"		X	
				M4-6		12	6	0.5	W				X	
	29	301+40.0	8.0 LT	R5-3		24	24	4	E	1 - 2.5" PST	0.125"		X	
				D11-1		24	18	3	E				X	
				M4-14		12	6	0.5	E				X	
	SUBTOTAL								18					

REVISIONS

NO.	DATE	DESCRIPTION

STATE: ALASKA
PROJECT DESIGNATION: Z584640000/0001521
YEAR: 2017
SHEET NO.: H30
TOTAL SHEETS: H33

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGN SUMMARY TABLES

DESIGNED BY
CHECKED BY
DRAFTED BY

AREES

SCALE

LAYOUT
Tables.dwg H31

DATE TIME
10/30/2016 10:30 AM

DRAWING LOCATION
\\jobstuf\jobsdata\10130.30 amets areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10130.30 AREES.dwg Summary Tables.dwg H31

												REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
												NO.	DATE	DESCRIPTION	ALASKA	Z584640000/0001521	2017	H31	H33

615(1A)														
SIGN SUMMARY														
SHEET NO.	POST NO.	STATION	OFFSET (FT)	TYPE	LEGEND	SIZE (IN)		AREA (S.F.)	DIRECTION SIGN FACES	POST: NO., SIZE & TYPE	THICKNESS	FRAMED ?		REMARKS
						WIDTH	HEIGHT					YES	NO	
FISH CREEK TRAIL NORTH - BARBARA STREET PARK SPUR														
H23	30	500+34.3	8.0 RT	W7-6		18	18	2.25	W	1 - 2.5" PST	0.125"		X	MOUNT ON PROPOSED LUMINAIRE
	31	502+92.5	8.0 LT	W7-6		18	18	2.25	SE	1 - 2.5" PST	0.125"		X	MOUNT ON PROPOSED LUMINAIRE
	32	503+15.0	8.0 RT	CUSTOM		18	24	3	SE	1 - 2.5" PST	0.125"		X	RESET EXISTING SIGN POST
	33	503+37.9	8.0 RT	R1-1		18	18	2.25	NW	1 - 2.5" PST	0.125"		X	
	34	503+37.9	8.0 LT	D11-1		24	18	3	NW	1 - 2.5" PST	0.125"		X	
				M4-6		12	6	0.5	NW				X	
				R5-3		24	24	4	SE				X	
				D11-1		24	18	3	SE				X	
				M4-14		12	6	0.5	SE				X	
	SUBTOTAL								21					
FISH CREEK TRAIL NORTH TOTAL								131						

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGN SUMMARY TABLES

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGN SUMMARY TABLES

DESIGNED BY
CHECKED BY
DRAFTED BY

AREAS

SCALE

LAYOUT
Tables.dwg H32

DATE TIME
10/30/2016 10:30 AM

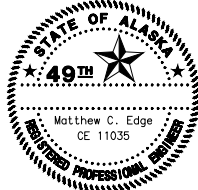
DRAWING LOCATION
\\jobstuf\jobsdata\10130_30 amats areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10130_30.dwg Summary Tables.dwg H32

												REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
												NO.	DATE	DESCRIPTION	ALASKA	Z584640000/0001521	2017	H32	H33

615(1A)														
SIGN SUMMARY														
SHEET NO.	POST NO.	STATION	OFFSET (FT)	TYPE	LEGEND	SIZE (IN)		AREA (S.F.)	DIRECTION SIGN FACES	POST: NO., SIZE & TYPE	THICKNESS	FRAMED ?		REMARKS
						WIDTH	HEIGHT					YES	NO	
FISH CREEK TRAIL SOUTH														
H24	35	0+09.4	69.5 LT	R7P-101R		12	18	1.5	S	1 - 2.5" PST	0.125"		X	
	36	0+09.7	60.3 RT	R7P-101L		12	18	1.5	S	1 - 2.5" PST	0.125"		X	
	37	0+15.9	10.6 LT	R7P-101LR		12	18	1.5	S	1 - 2.5" PST	0.125"		X	
	38	0+18.4	8.0 RT	R5-3		24	24	4	S	1 - 2.5" PST	0.125"		X	
				D11-1		24	18	3	S				X	
				M4-14		12	6	0.5	S				X	
	39	0+73.6	8.0 LT	D11-1		24	18	3	N	1 - 2.5" PST	0.125"		X	MOUNT ON PROPOSED LUMINAIRE
				M4-6		12	6	0.5	N				X	
	40	2+00.0	8.0 LT	W15-1		18	18	2.25	SE	1 - 2.5" PST	0.125"		X	
	41	3+51.5	41.1 LT	R5-3		24	24	4	N	1 - 2.5" PST	0.125"		X	
				D11-1		24	18	3	N				X	
	SUBTOTAL								25					

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGN SUMMARY TABLES

DESIGNED BY
CHECKED BY
DRAFTED BY

CREES

SCALE

LAYOUT
Tables.dwg H33

DATE TIME

DRAWING LOCATION
\\Jobstuf\Jobsdata\10130.30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 CIVIL\10130.300 BE.gn Summary Tables.dwg

615(1A)														
SIGN SUMMARY														
SHEET NO.	POST NO.	STATION	OFFSET (FT)	TYPE	LEGEND	SIZE (IN)		AREA (S.F.)	DIRECTION SIGN FACES	POST: NO., SIZE & TYPE	THICKNESS	FRAMED ?		REMARKS
						WIDTH	HEIGHT					YES	NO	
FISH CREEK TRAIL SOUTH (CONTINUED)														
H24	42	3+55.4	10.7 LT	R1-2		18	18	2.25	NW	1 - 2.5" PST	0.125"		X	
	43	3+66.2	30.2 LT	D11-1		24	18	3	E	1 - 2.5" PST	0.125"		X	
				M4-6		12	6	0.5	E				X	
	44	4+65.0	8.0 LT	W1-2L		18	18	2.25	E	1 - 2.5" PST	0.125"		X	
H25	45	11+67.8	8.0 LT	W7-6		18	18	2.25	E	1 - 2.5" PST	0.125"		X	MOUNT ON PROPOSED LUMINAIRE
	46	11+90.0	8.0 LT	R5-3		24	24	4	E	1 - 2.5" PST	0.125"		X	
				D11-1		24	18	3	E				X	
	47	11+94.2	13.9 LT	D3-1		21	8	1.167	E/W	1 - 2.5" PST	0.125"		X	
				D3-1		24	8	1.333	N/S				X	
	48	11+96.2	13.2 RT	D11-1		24	18	3	N	1 - 2.5" PST	0.125"		X	
				M4-6		12	6	0.5	N				X	
	49	12+07.8	28.8 RT	R1-1		18	18	2.25	N	1 - 2.5" PST	0.125"		X	
SUBTOTAL								26						
FISH CREEK TRAIL SOUTH								51						

REVISONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2017	H33	H33

615(6)				
SALVAGE SIGN				
SHEET NO.	STATION	OFFSET (FT)	QUANTITY (EACH)	DESCRIPTION
FISH CREEK TRAIL NORTH				
H19	43+43.1	9.4 LT	1	"BIKE ROUTE" AND "UNAUTHORIZED MOTOR VEHICLES PROHIBITED"
H19	43+62.4	14.4 LT	1	STREET SIGNS AND TURN ARROW
H19	44+38.1	5.7 RT	1	"BIKE ROUTE", DIRECTIONAL ARROW, ADOPT-A-PARK AND SPONSOR PLAQUE
FISH CREEK TRAIL NORTH - WOODLAND PARK SPUR SOUTH				
H20	104+20.0	8.2 RT	1	"UNAUTHORIZED MOTOR VEHICLES PROHIBITED", "BEGIN", "END", AND "BIKE ROUTE"
FISH CREEK TRAIL NORTH - WOODLAND PARK SPUR NORTH				
H21	200+48.4	6.3 LT	1	"BIKE ROUTE" AND "END"
H21	200+65.5	11.7 RT	1	"UNAUTHORIZED MOTOR VEHICLES PROHIBITED", "BEGIN", AND "BIKE ROUTE"
H21	206+63.3	7.6 RT	1	"NO OVERNIGHT PARKING OR CAMPING" AND "NO SNOW DUMPING VIOLATIONS WILL BE PROSECUTED"
FISH CREEK TRAIL NORTH - W 34TH AVE SPUR				
H22	301+11.2	11.4 LT	1	"UNAUTHORIZED MOTOR VEHICLES PROHIBITED", "BEGIN", AND "BIKE ROUTE"
H22	301+11.3	10.4 RT	1	"BIKE ROUTE" AND "END"
FISH CREEK TRAIL NORTH - BARBARA STREET PARK SPUR				
H23	503+16.6	5.5 RT	1	MUTT MITT DISPENSOR SIGN
H23	503+32.6	3.9 LT	1	"BIKE ROUTE" AND "PLEASE REMOVE ANIMAL WASTE"
FISH CREEK TRAIL NORTH TOTAL			11	
FISH CREEK TRAIL SOUTH				
H24	0+16.7	57.5 RT	1	"NO PARKING"
H24	0+18.4	8.0 RT	1	"NO PARKING", "BIKE ROUTE", "BEGIN", AND "END"
H24	4+58.2	6.8 LT	1	LEFT TURN
H25	11+83.8	0.3 RT	1	"NO MOTORIZED VEHICLES"
H25	11+86.3	6.9 LT	1	"BIKE ROUTE" AND DIRECTIONAL ARROW
H25	11+94.2	13.9 LT	1	STREET SIGNS
FISH CREEK TRAIL SOUTH TOTAL			6	
TOTAL			17	

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

SIGN SUMMARY TABLES

DESIGNED BY
CHECKED BY
DRAFTED BY

AREAS

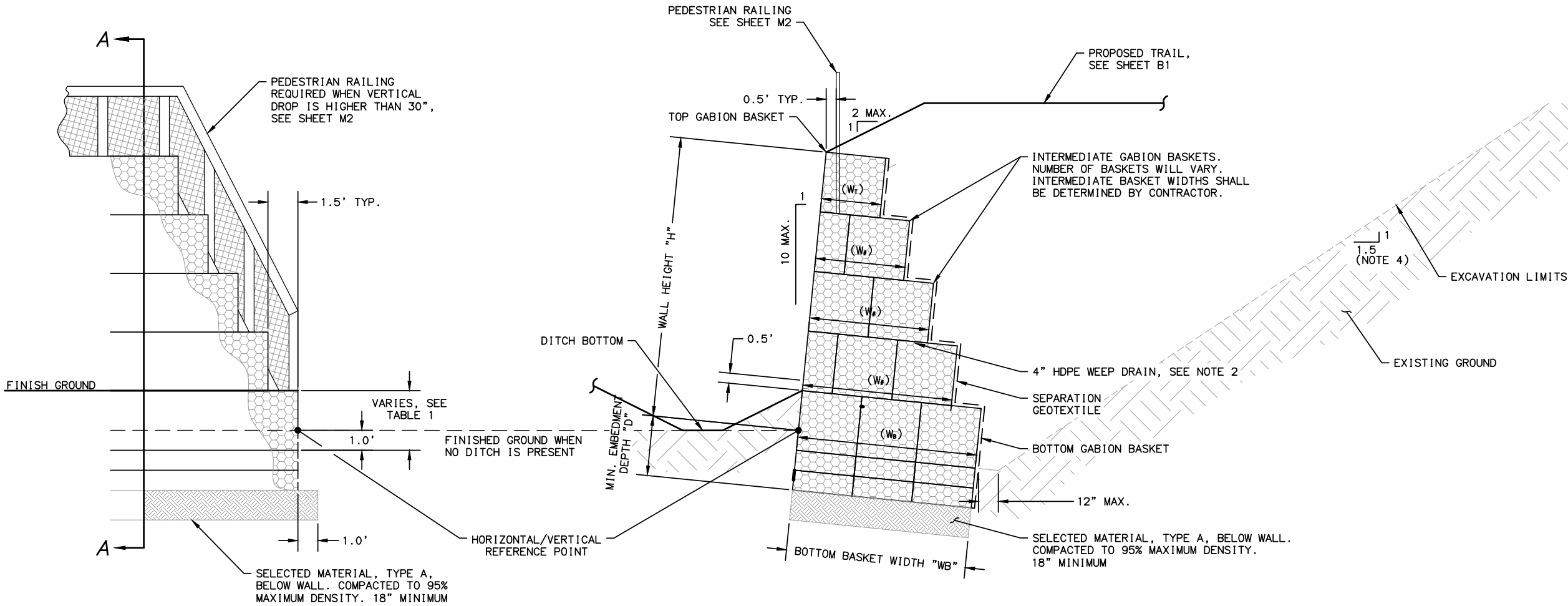
SCALE

LAYOUT
Details.dwg

DATE TIME

DRAWING LOCATION

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2017	M1	M4



ELEVATION

SECTION A-A

PEDESTRIAN RAILING NOTES:

1. INSTALL PEDESTRIAN RAILING WHERE WALL HEIGHT EXCEEDS 30". COORDINATE WITH THE ENGINEER FOR EXACT LIMITS OF FENCE.
2. INSTALL FENCE POSTS 2' FROM EXPOSED FACE OF WALL.
3. ALL LUMBER TO BE PRESSURE TREATED.
4. ALL STEEL HARDWARE TO BE GALVANIZED.
5. PEDESTRIAN RAILING CONSTRUCTION SHALL BE IN ACCORDANCE WITH MASS SECTION 75.06 CHAIN LINK FENCE AND SPECIAL PROVISIONS SECTION 75.09 LANDSCAPE.
6. THREE BOLTS PER POST FASCIA BOARD, TYP. CENTER BOLT GROUP VERTICALLY ON BOARD.

RETAINING WALL DIMENSIONS			
WALL HEIGHT "H"	TOP BASKET WIDTH "WT"	BOTTOM BASKET WIDTH "WB"	EMBEDMENT DEPTH "D"
3'	3'	3'	1'
6'	3'	4.5'	1'
9'	3'	7.5'	2'
12'	3'	7.5'	2'
15'	3'	9'	3'
18'	3'	12'	3'
21'	3'	12'	3'

RETAINING WALL NOTES:

1. "WB": BOTTOM BASKET WIDTH USED TO DETERMINE ANTICIPATED CONSTRUCTION IMPACTS & SLOPE EASEMENT REQUIREMENTS DURING DESIGN. ACTUAL WIDTH SHALL BE DETERMINED BY CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING NECESSARY FOR CONSTRUCTION OF RETAINING WALL SHOULD ACTUAL WB EXCEED THE WIDTH SPECIFIED IN TABLE.
2. EXTEND WEEP DRAIN PIPE THROUGH WALL EVERY 100 FT OF WALL LENGTH AND 20 FT FROM BOTH ENDS OF WALL, TYPICAL. PROVIDE MINIMUM OF 2 WEEP DRAIN PIPES PER WALL.
3. "D": EMBEDMENT DEPTH USED FOR DESIGN IS SHOWN IN TABLE RW3-1. ACTUAL EMBEDMENT DEPTH FOR CONSTRUCTED WALL SHALL BE DETERMINED BY CONTRACTOR.
4. FOR SHORT-TERM CUT SLOPE CONDITIONS (LESS THAN ONE WEEK IN DURATION), MAXIMUM TEMPORARY CUT SLOPE GRADES OF 1.5H:1V ARE ALLOWABLE WHEN DEWATERED CONDITION ARE PRESENT. THE CONTRACTOR IS RESPONSIBLE FOR THE EVALUATION, DEWATERING, AND SAFETY OF THE TEMPORARY SLOPES AND SHALL ADJUST THE SLOPES TO OBTAIN THE NEEDED STABILITY.
5. FOR LONGER-TERM CONDITIONS, CUT SLOPE GRADES SHALL BE A MAXIMUM OF 3H:1V FOR SLOPES CONSISTING OF GRANULAR SOILS.

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD, SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

RETAINING WALL DETAILS

DRAWING LOCATION
\\jobstuf\jobsdata\10130.30 amets areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10936\2018\ref1215en@Wall

DATE TIME
10/9/2018 12:56 PM

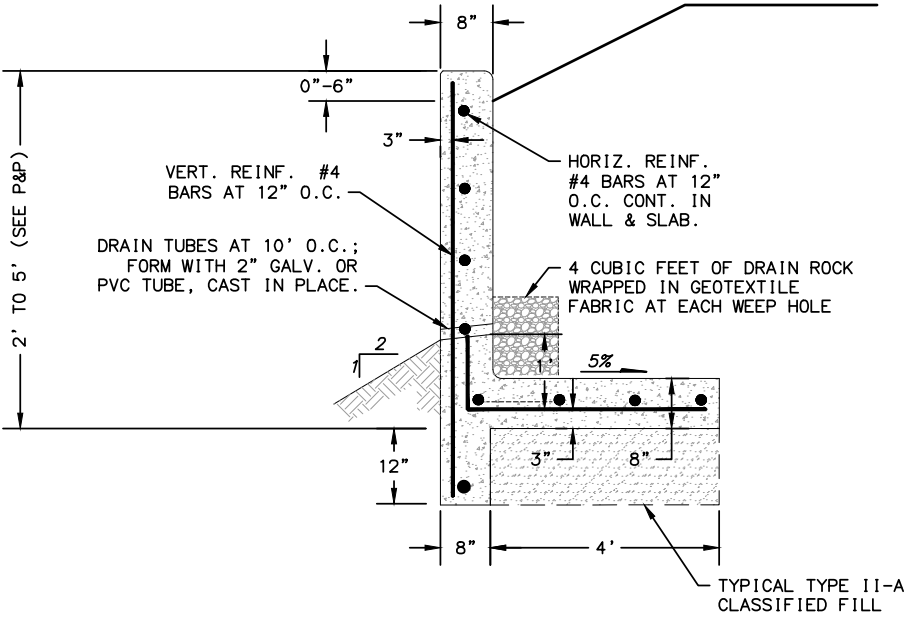
LAYOUT
Details.dwg

SCALE

XREFS

DESIGNED BY
CHECKED BY
DRAFTED BY

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	Z584640000/0001521	2017	M2	M4



CONCRETE FILL
RETAINING WALL DETAIL

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

RETAINING WALL DETAILS

DESIGNED BY
CHECKED BY
DRAFTED BY

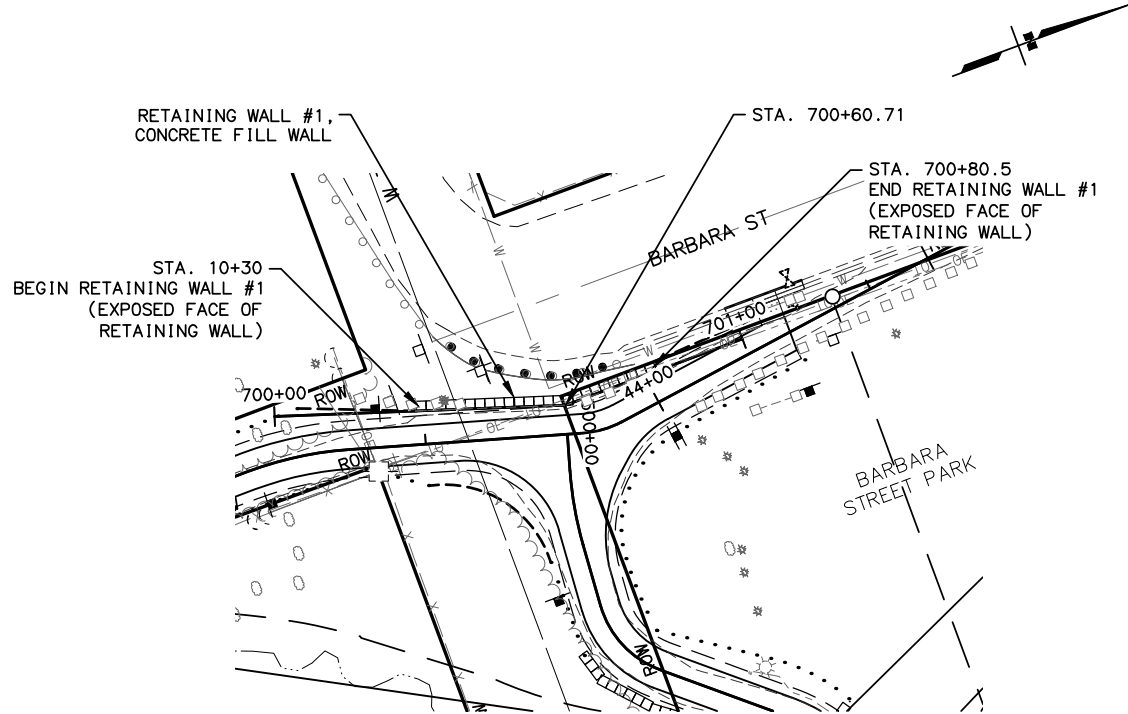
XREFS

SCALE

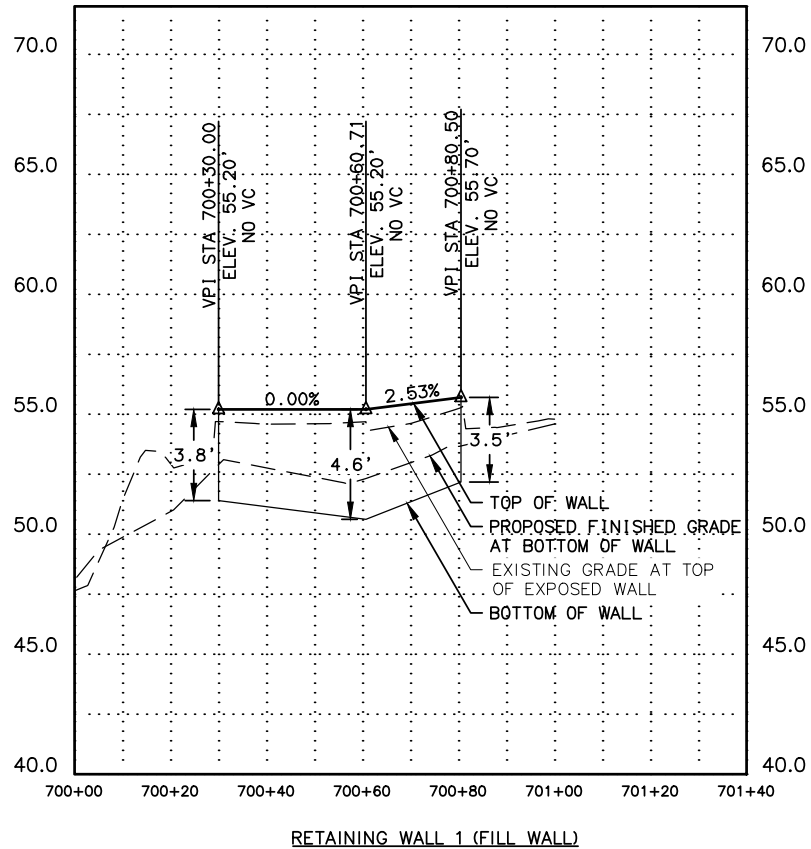
LAYOUT
RetainingWall.dwg

DATE
TIME
10/9/2016 11:41:14 AM

DRAWING LOCATION
\\jobstuf\jobdata\10130_30 amts areawide trails rehab - fish creek\00 CADD\01 working set\01 Civil\10926\2016\01.dwg



STATION EQUATION TABLE			
FACE OF RETAINING WALL 1		FISH CREEK TRAIL NORTH	
STATION	OFFSET (FT)	STATION	OFFSET (FT)
70+30.00	0.00	43+48.96	7.02 RT
700+60.71	0.00	43+79.66	6.07 RT
700+80.50	0.00	44+02.27	5.96 RT



SHEET NO.
M3

TOTAL SHEETS
M4

STATE
ALASKA

YEAR
2017

PROJECT DESIGNATION
Z584640000/0001521

ADDENDUM NO.

ATTACHMENT NO.

REVISIONS

NO.	DATE	DESCRIPTION

PIH (9/1/16)

PLANS DEVELOPED BY:
CRW ENGINEERING GROUP, LLC
3940 ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
49TH

Matthew C. Edge
CE 11035

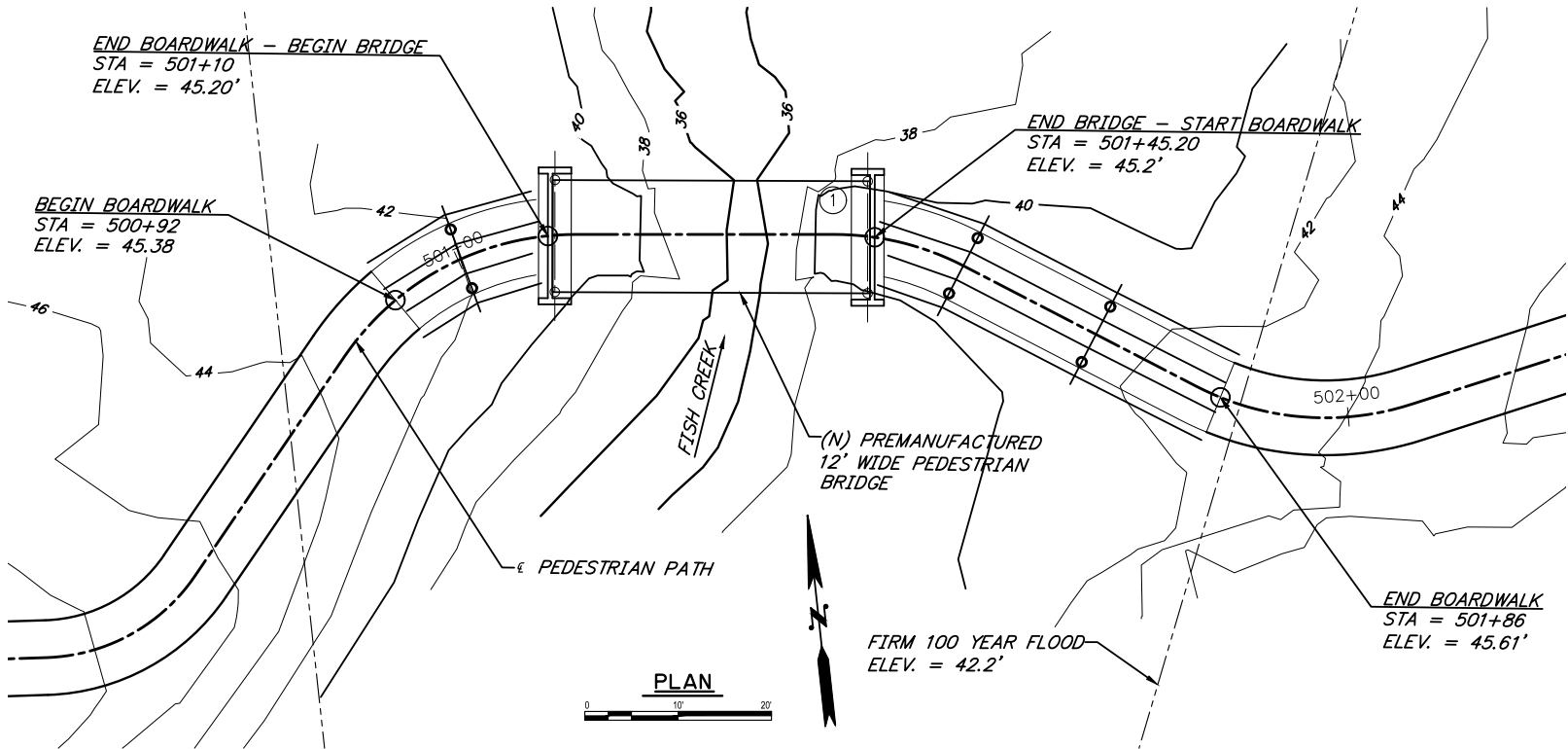
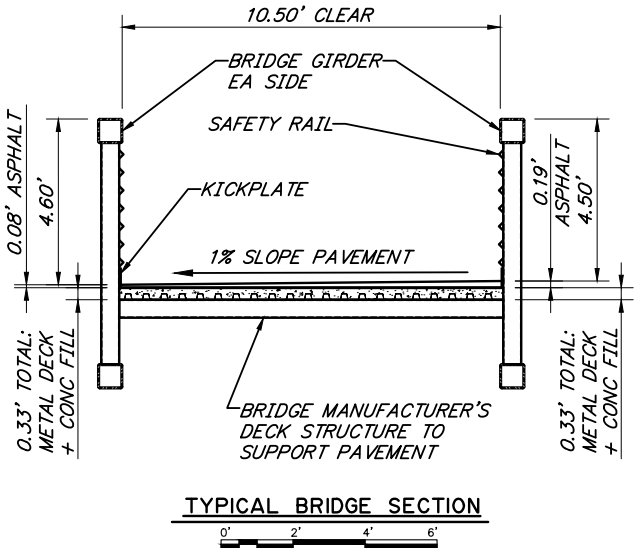
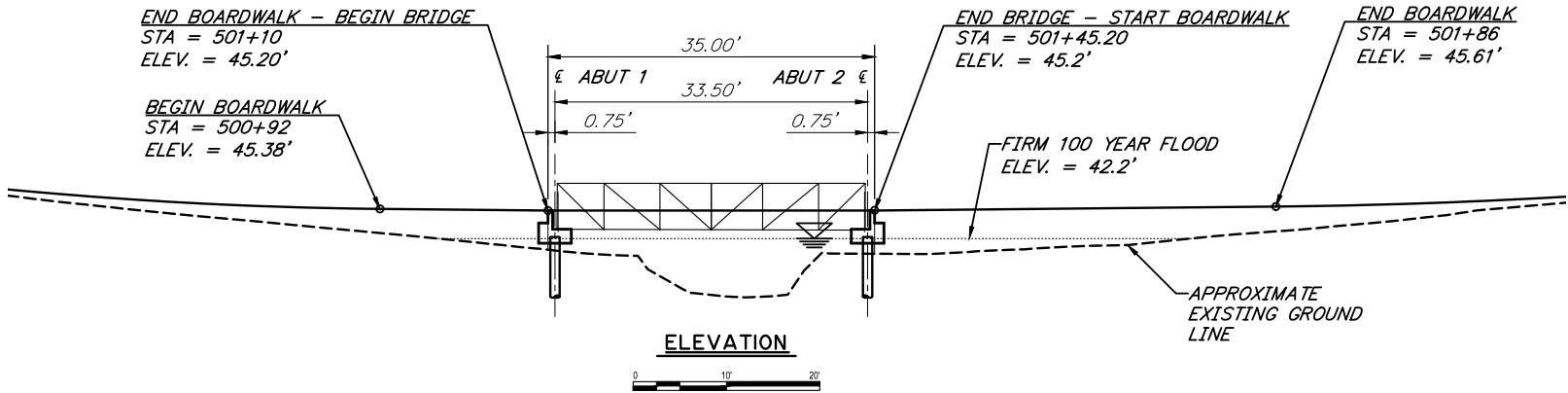
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: ANCHORAGE AREAWIDE
TRAILS REHABILITATION
FISH CREEK TRAIL

PLAN AND PROFILE
RETAINING WALL

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N1	N20



BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	N1
SITE PLAN	N2
ABUTMENTS	N3
ABUTMENT REINFORCING	N4
BOARDWALK DETAILS	N5
LOG OF TEST BORINGS	N-

NOTES:

- ① APPROXIMATE LOCATION OF BRIDGE NUMBER PLATE

PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AEOCS98

DESIGNED BY:	DDS	CHECKED:	DDS	LAYOUT BY:		CHECKED BY:	
DRAWN BY:	DAVID PARK	CHECKED:	DDS	SPECIFICATIONS BY:	DDS	P S & E COMPARED:	
QUANTITIES BY:	DDS	CHECKED:	DDS	APPROVAL RECOMMENDED BY:			

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL
GENERAL LAYOUT

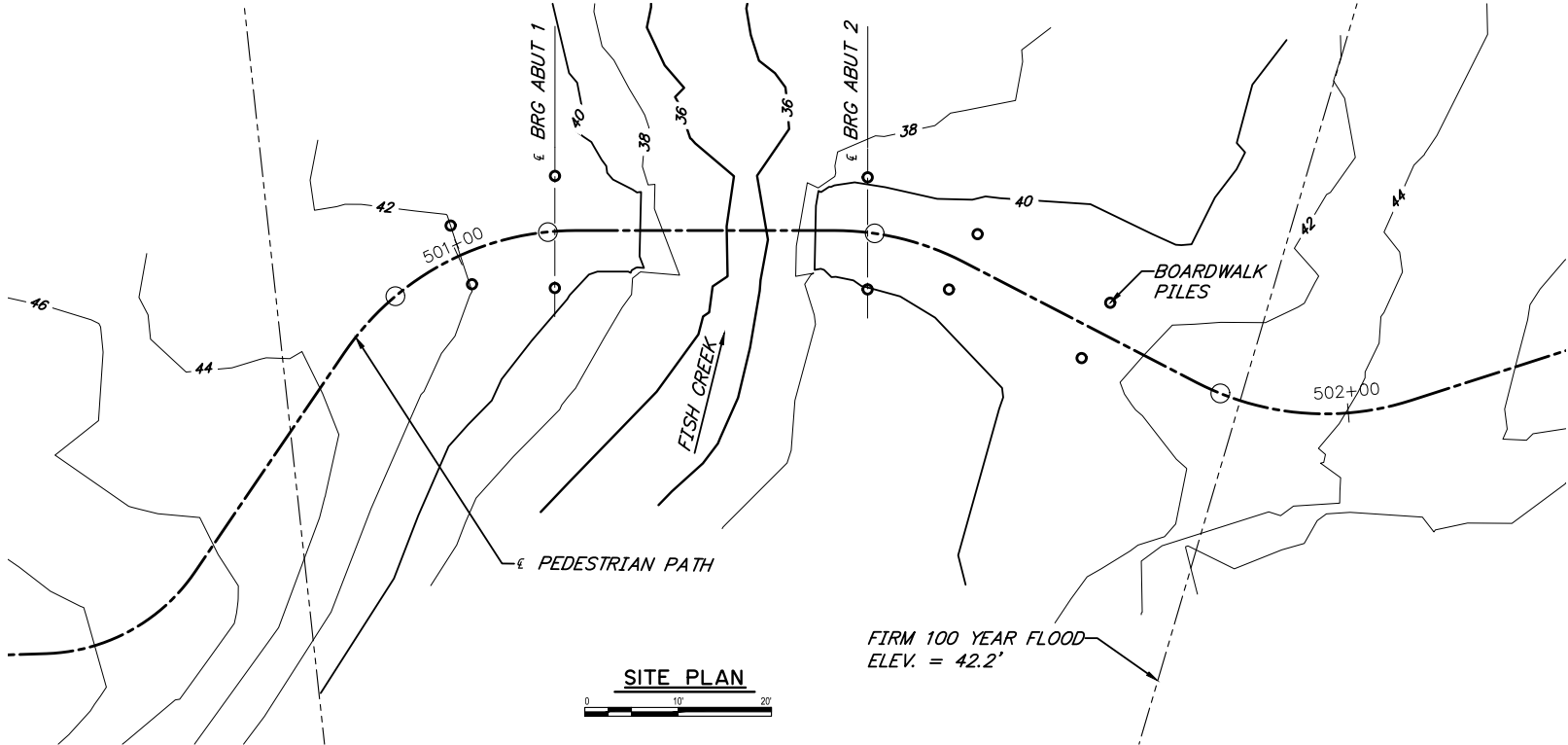


BRIDGE NO. 1
DWG. NO. 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N2	N20

GENERAL NOTES

DESIGN:	AASHTO GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES (LGSDPB), AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION, 2010, WITH LATEST INTERIM SPECIFICATIONS (AASHTO).
LIVE LOAD:	90 PSF PEDESTRIAN LOAD HIO VEHICLE LOAD
DEAD LOAD:	ASSUMED BRIDGE WEIGHT OF 42 KIPS INCLUDES STEEL SELF-WEIGHT AND 40 PSF FOR CONCRETE DECK AND ASPHALT WEARING SURFACING.
SNOW LOAD:	50 PSF GROUND, Is=1.0, Ce=1.0
SEISMIC DESIGN:	PGA = 0.61 Ss = 1.50 S1 = 0.676 SITE CLASS = D LIQUEFACTION DURING AN EARTHQUAKE IS POSSIBLE AT ALL FOUR BRIDGE SITES AND IS CONSIDERED IN ALL PILE CAPACITY CALCULATIONS. 2% PROBABILITY OF EXCEEDANCE IN 50 YEARS
WIND DESIGN:	BASIC WIND SPEED (3-SECOND GUST, Vasd)=100 MPH, Kz=1.21, Cd=1.3, UTILIZING FULL BRIDGE PROFILE AREA, Ir=1.15
REINFORCING STEEL:	ASTM A706, Fy = 60,000 PSI
C.I.P. CONCRETE:	CONCRETE DECK: CLASS A, f'c = 4,000 PSI CONCRETE ABUTMENTS: CLASS A-A, f'c = 4,000 PSI
STRUCTURAL STEEL:	ASTM A709 GR36T3, Fy = 36,000 PSI GALVANIZE ALL STRUCTURAL STEEL IN ACCORDANCE WITH AASHTO MIII.
STRUCTURAL STEEL PILE:	API 5L X52 PSL2, Fy = 52,000 PSI



PILE DATA TABLE							
		DRIVING CRITERIA			DESIGN DATA		
LOCATION	PILE TYPE	MINIMUM PENETRATION (FT)	ESTIMATED PILE TIP ELEVATION	DRIVING RESISTANCE (K)	STRENGTH I FACTORED LOAD (K)	NOMINAL RESISTANCE (K)	RESISTACE FACTOR, ϕ
ABUTMENT 1	PIPE 12"Ø X-STRONG	30.5	10.35	TBD	104.1	240	0.45
ABUTMENT 2	PIPE 12"Ø X-STRONG	30.5	10.08	TBD	104.1	240	0.45
BOARDWALK	PIPE 12"Ø X-STRONG	22.5	VARIES	TBD	39.3	90	0.45

PILE DATA IS BASED UPON STRUCTURAL FOUNDATION ENGINEERING REPORT, FISH CREEK BIKE TRAIL REHABILITATION, SHANNON AND WILSON, INC. AUGUST 2016

BRIDGE BASIS OF ESTIMATE			
ITEM	PAY UNIT	ESTIMATING UNIT	TOTAL
501(1) CLASS A CONCRETE	LS	CY	##
503(1) REINFORCING STEEL	LS	LBS.	##
505(1) FURNISH STRUCTURAL STEEL PILES	LF	LF	##
505(2) DRIVE STRUCTURAL STEEL PILES	EA	EA	##
514(1) PREMANUFACTURED BRIDGE	EA	EA	1

ITEM NUMBERS ARE FOR REFERENCE ONLY. QUANTITIES SHOWN ARE NOT NECESSARILY THE PAY QUANTITIES NOR THE TOTAL QUANTITY OF THE PARTICULAR ITEM.

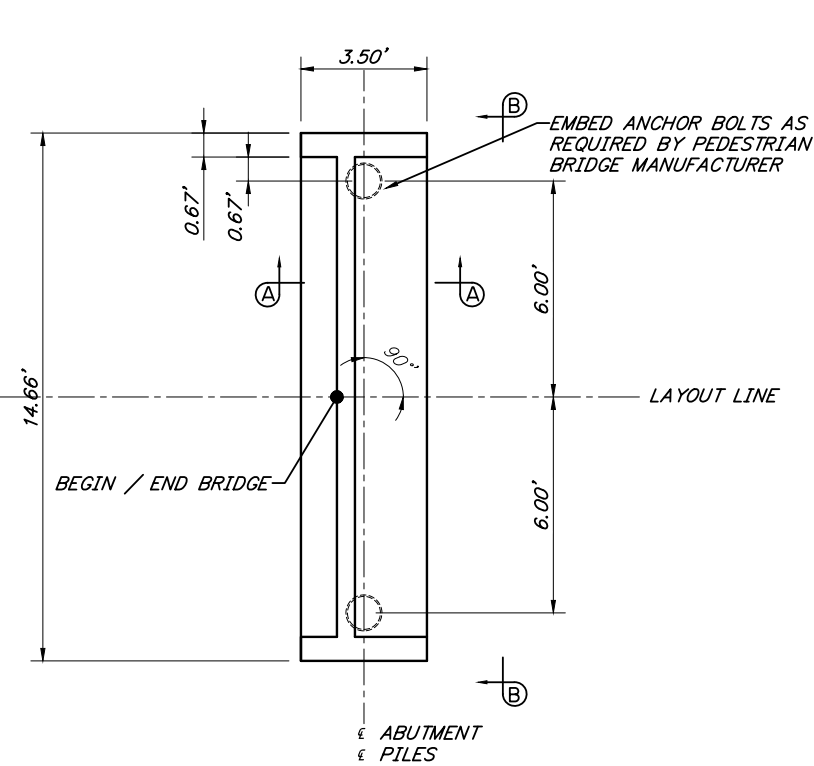
ABBREVIATIONS:

CL = CENTERLINE	JT. = JOINT
PL = PLATE	KIPS = 1000 POUND FORCE
& = AND	KSF = KIPS PER SQUARE FOOT
@ = AT	LT. = LEFT
Ø = DIAMETER	LOC. = LOCATION
A/C = ASPHALT CONCRETE	MAX. = MAXIMUM
API = AMERICAN PETROLEUM INSTITUTE	MFR = MANUFACTURER
APPROX. = APPROXIMATE	MIN. = MINIMUM
ABUT. = ABUTMENT	N.A. = NOT APPLICABLE
BOT. = BOTTOM	N.F. = NEAR FACE
BR. = BRIDGE	NO. = NUMBER
BTWN. = BETWEEN	N/C = NOT CALCULATED
BRG. = BEARINGS	OFF. = OFFSET
C.I.P. = CAST IN PLACE	O.H.W. = ORDINARY HIGH WATER
CJP = COMPLETE JOINT PENETRATION	PSF = POUNDS PER SQUARE FOOT
CLR. = CLEAR, CLEARANCE	PSI = POUNDS PER SQUARE INCH
D.S. = DOWNSTREAM	REC = RECOMMENDATIONS
DIA. = DIAMETER	R.O.W. = RIGHT OF WAY
DWG. = DRAWING	RT. = RIGHT
ELEV. = ELEVATION	SPC. = SPACE, SPACES
E.F. = EACH FACE	STA. = STATION
E = EXPANSION BEARING	SYMM. = SYMMETRIC
F = FIXED BEARING	TYP. = TYPICAL
F.F. = FAR FACE	U.S. = UPSTREAM
H.S. = HIGH STRENGTH (A449) BOLTS	UT = ULTRASONIC TESTING
	YR. = YEAR
	W/ = WITH

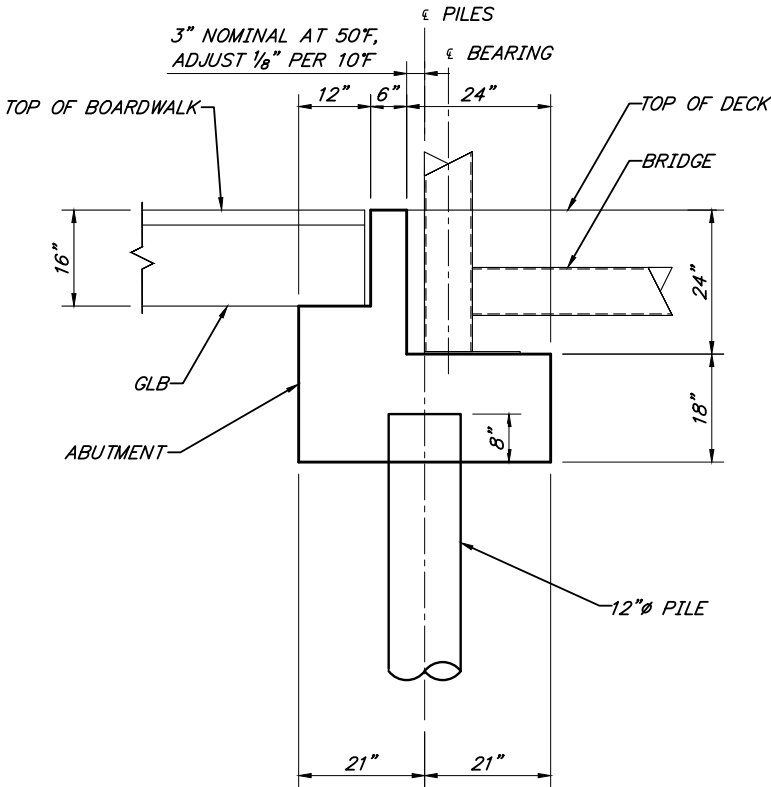
PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AECC598

DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	AMATS: ANCHORAGE AREA WIDE TRAILS REHABILITATION FISH CREEK TRAIL SITE PLAN	 BRIDGE NO. 1 DWG. NO. 2
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:			
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:				

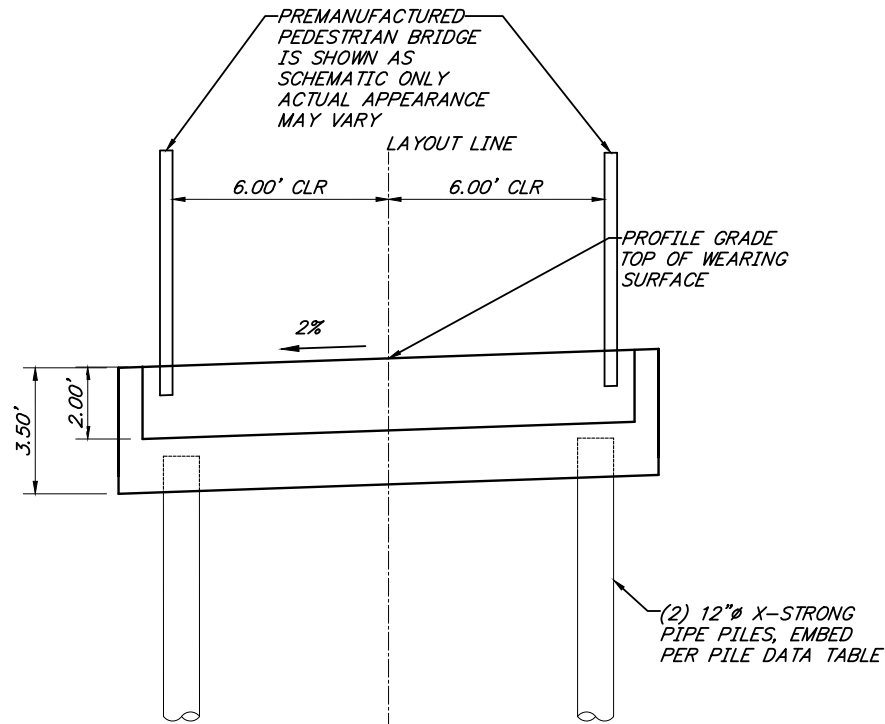
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N3	N20



TYPICAL ABUTMENT PLAN



TYPICAL ABUTMENT SECTION A-A



TYPICAL ABUTMENT SECTION B-B



DESIGNED BY:	DDS	CHECKED:	DDS	LAYOUT BY:	CHECKED BY:
DRAWN BY:	DAVID PARK	CHECKED:	DDS	SPECIFICATIONS BY:	DDS
QUANTITIES BY:	DDS	CHECKED:	DDS	APPROVAL RECOMMENDED BY:	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

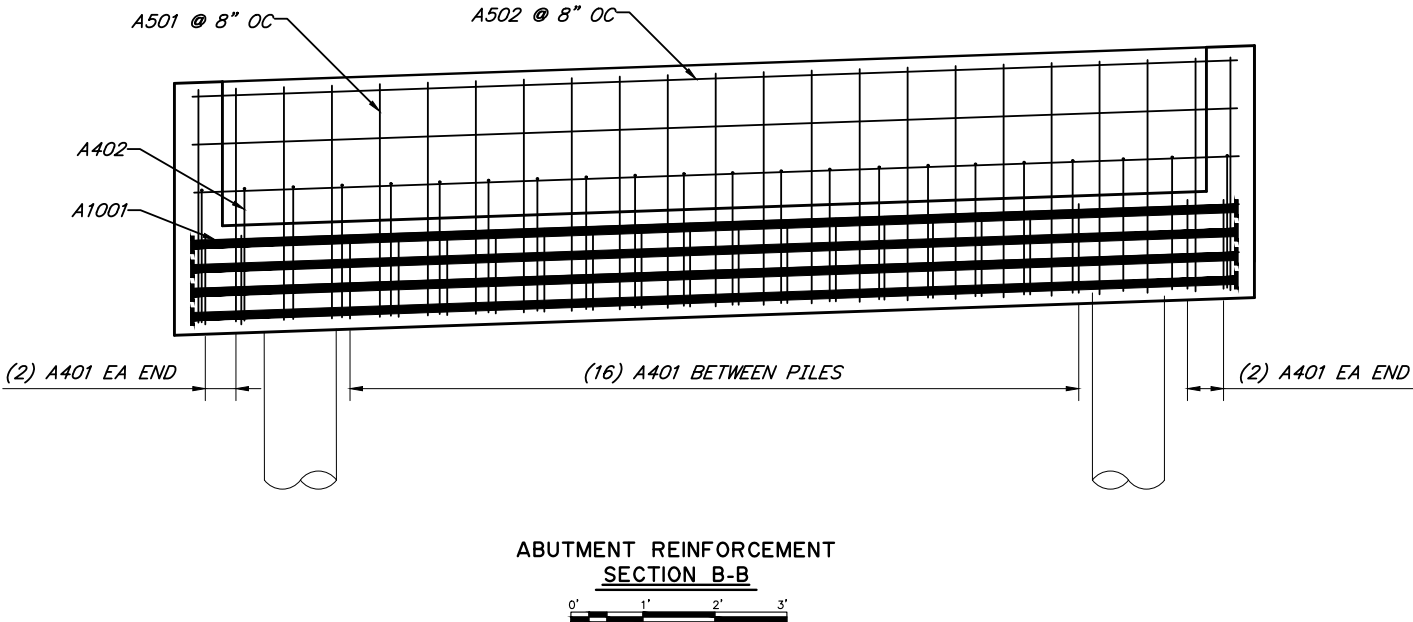
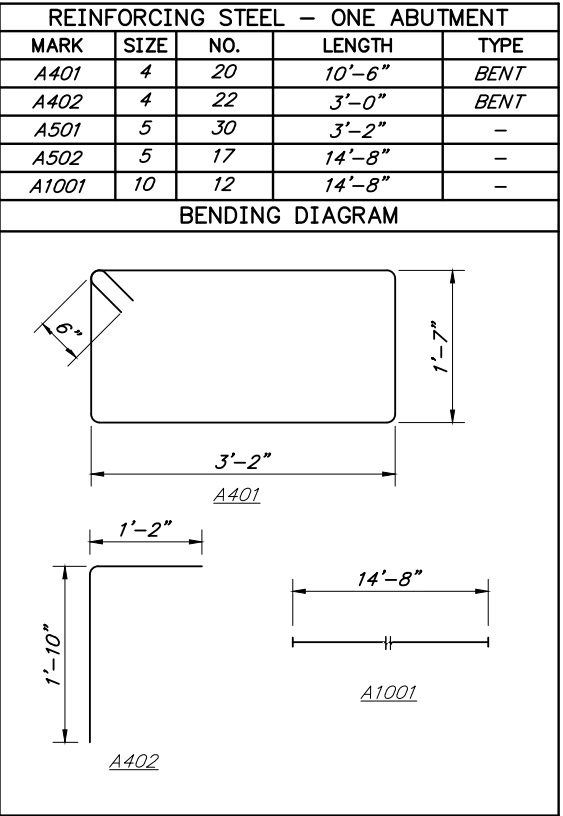
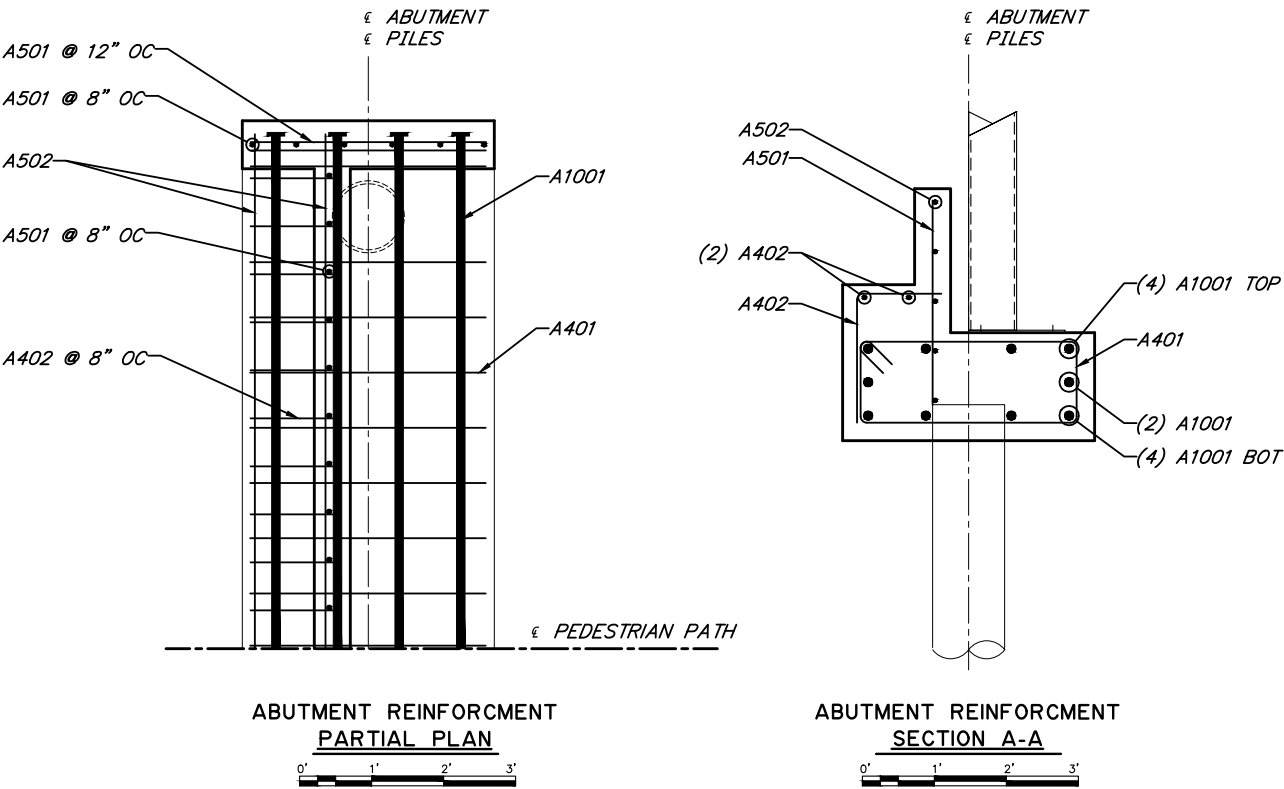
AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL
ABUTMENTS

PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AEC0398



BRIDGE NO. 1
DWG. NO. 3

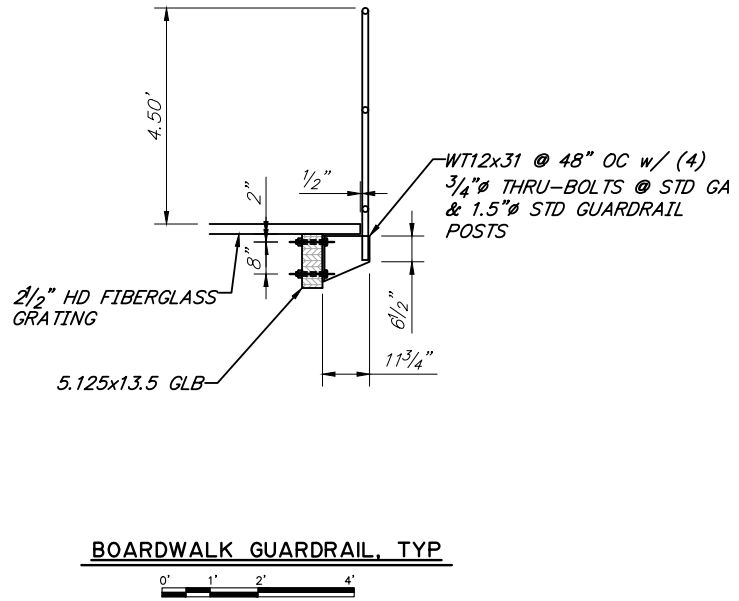
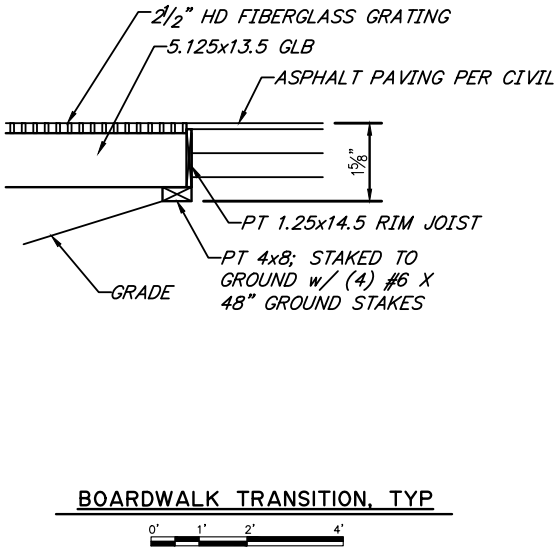
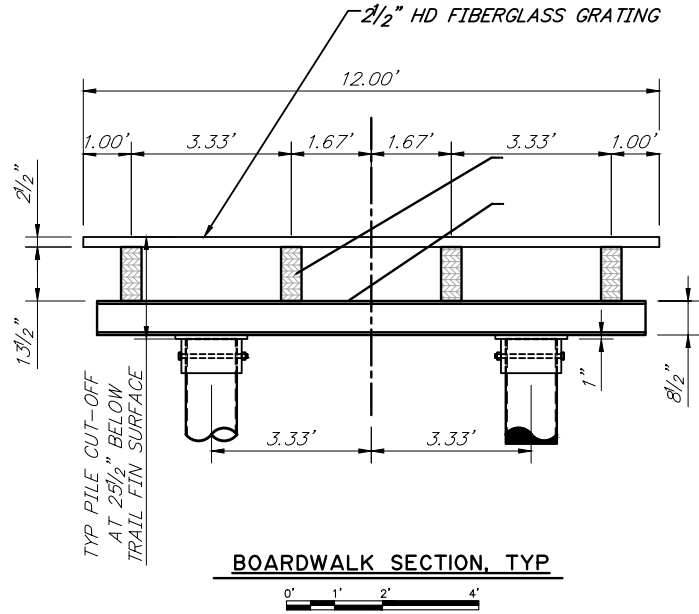
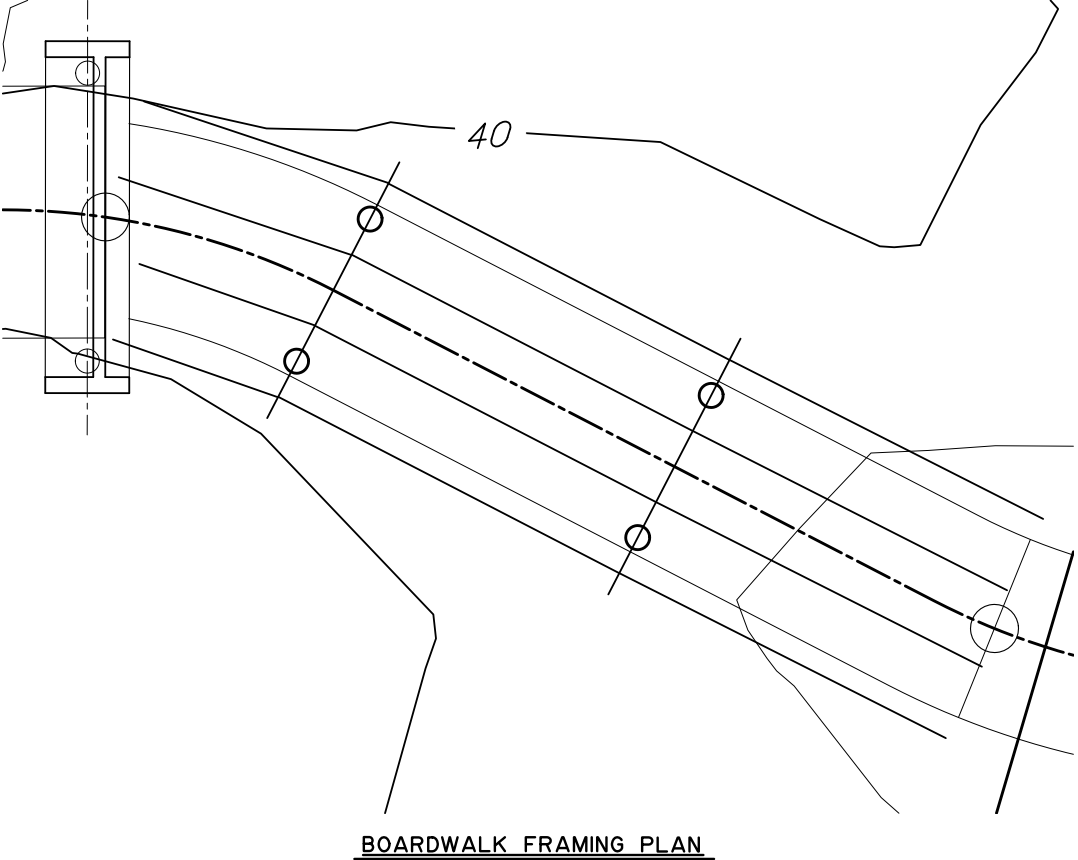
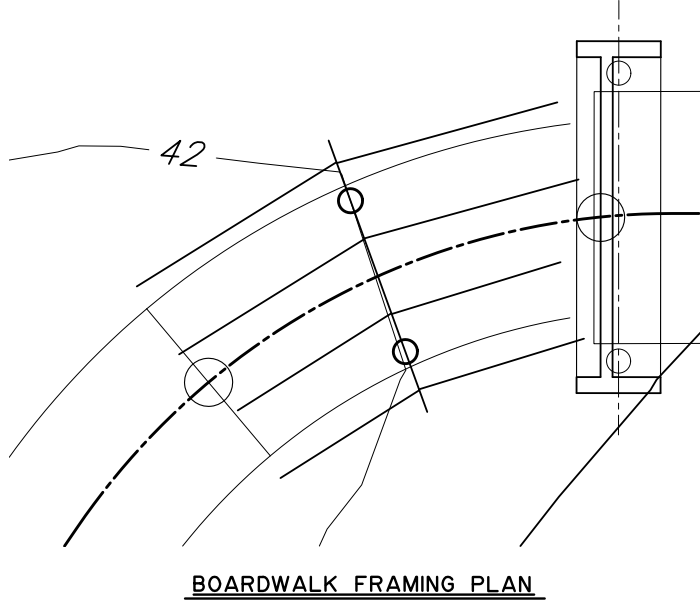
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N4	N20



PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AEC0398

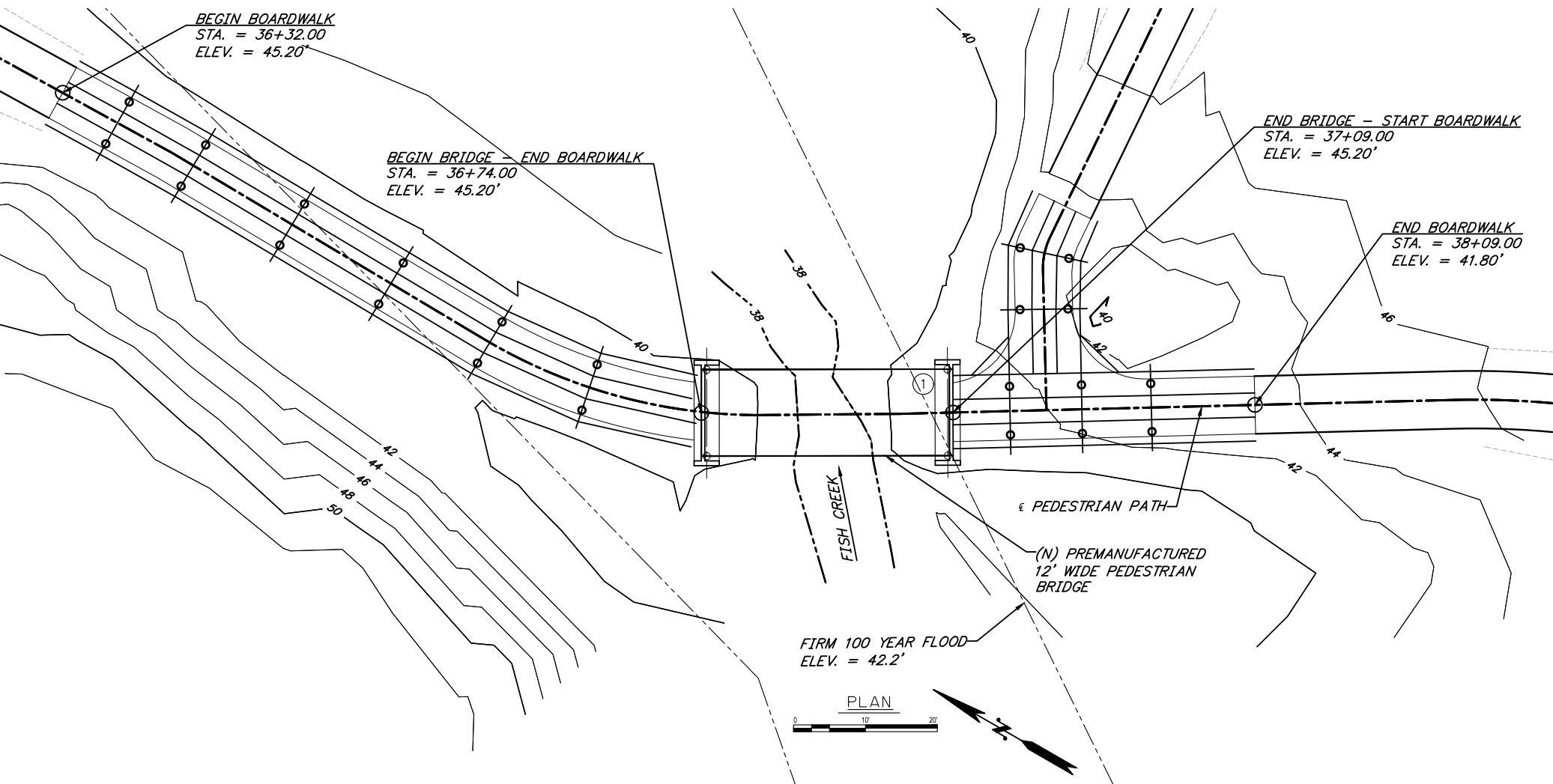
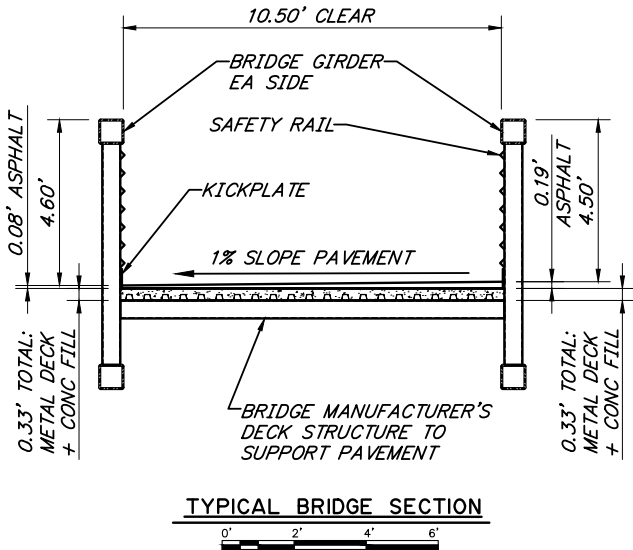
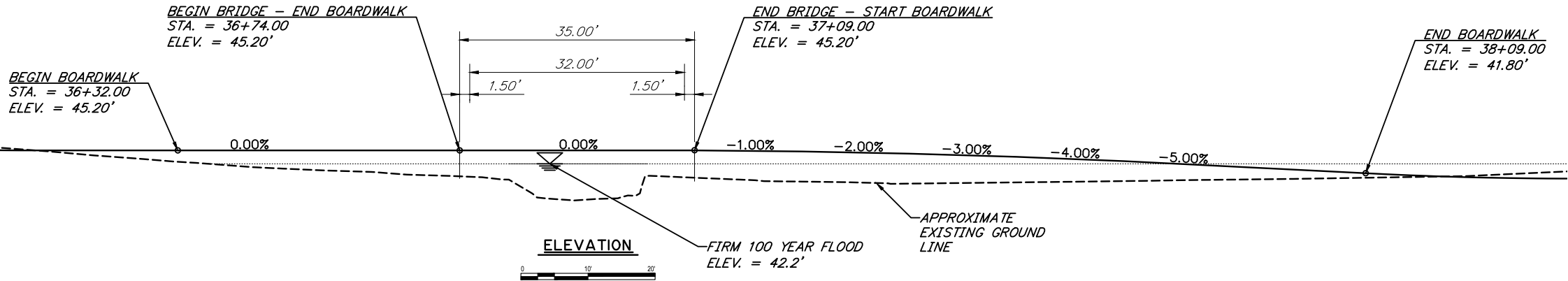
DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	AMATS: ANCHORAGE AREA WIDE TRAILS REHABILITATION FISH CREEK TRAIL ABUTMENT REINFORCING	 BRIDGE NO. 1 DWG. NO. 4
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:			
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:				

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N5	N20



DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	AMATS: ANCHORAGE AREA WIDE TRAILS REHABILITATION FISH CREEK TRAIL BOARDWALK DETAILS	 BRIDGE NO. 1 DWG. NO. 5
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:			
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:				

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N6	N20



BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	N6
SITE PLAN	N7
ABUTMENTS	N8
ABUTMENT REINFORCING	N9
BOARDWALK DETAILS	N10
LOG OF TEST BORINGS	N-

NOTES:
① APPROXIMATE LOCATION OF BRIDGE NUMBER PLATE

PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AEC598

DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY:
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

**AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION**
FISH CREEK TRAIL
GENERAL LAYOUT



BRIDGE NO. 2
DWG. NO. 1

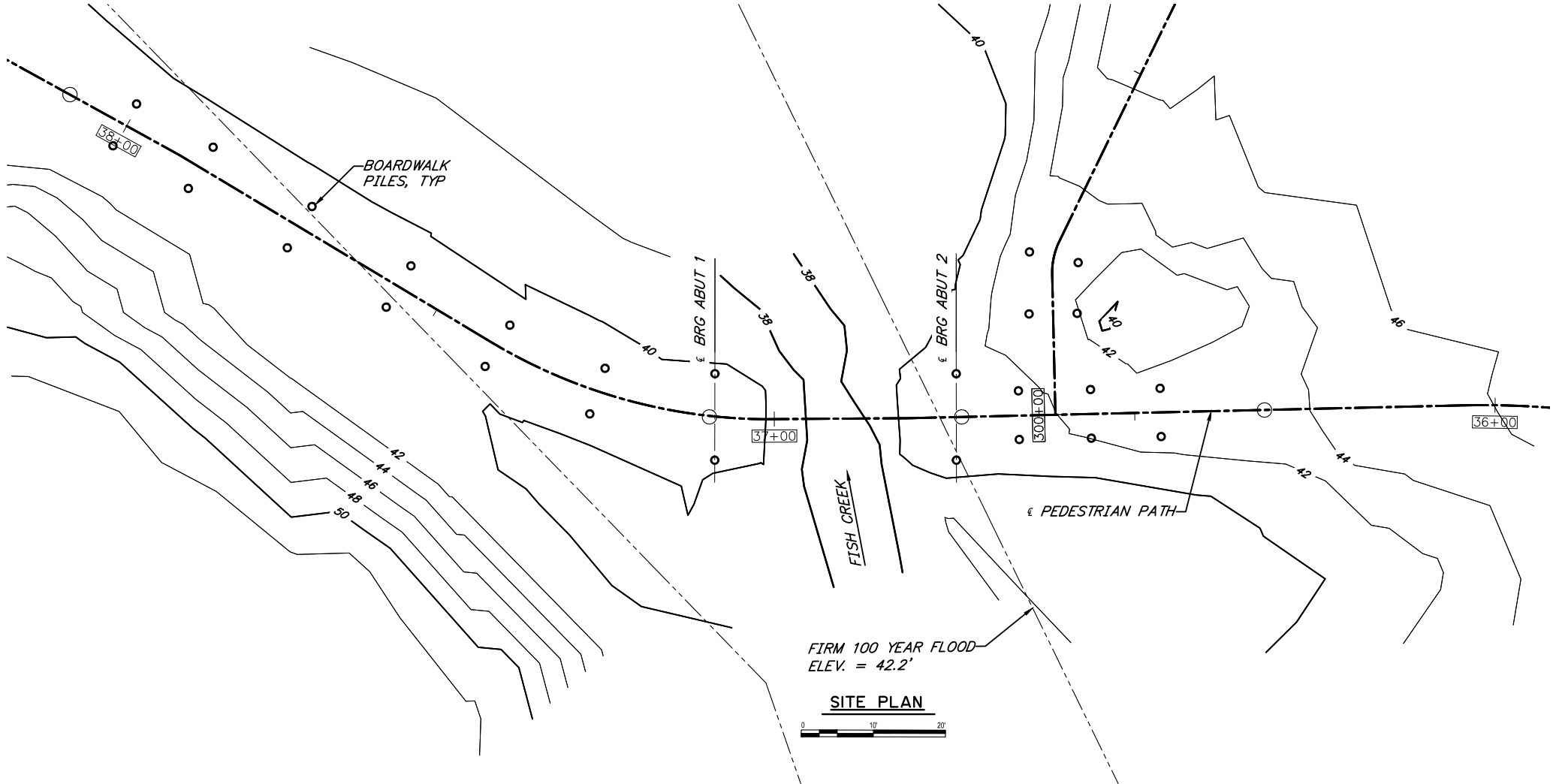
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N7	N20

GENERAL NOTES

DESIGN:	AASHTO GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES (LGSDPB), AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION, 2010, WITH LATEST INTERIM SPECIFICATIONS (AASHTO).
LIVE LOAD:	90 PSF PEDESTRIAN LOAD HIO VEHICLE LOAD
DEAD LOAD:	ASSUMED BRIDGE WEIGHT OF 42 KIPS INCLUDES STEEL SELF-WEIGHT AND 40 PSF FOR CONCRETE DECK AND ASPHALT WEARING SURFACING.
SNOW LOAD:	50 PSF GROUND, Is=1.0, Ce=1.0
SEISMIC DESIGN:	PGA = 0.61 Ss = 1.50 S1 = 0.676 SITE CLASS = D LIQUEFACTION DURING AN EARTHQUAKE IS POSSIBLE AT ALL FOUR BRIDGE SITES AND IS CONSIDERED IN ALL PILE CAPACITY CALCULATIONS. 2% PROBABILITY OF EXCEEDANCE IN 50 YEARS
WIND DESIGN:	BASIC WIND SPEED (3-SECOND GUST, Vasd)=100 MPH, Kz=1.21, Cd=1.3, UTILIZING FULL BRIDGE PROFILE AREA, Ir=1.15
REINFORCING STEEL:	ASTM A706, Fy = 60,000 PSI
C.I.P. CONCRETE:	CONCRETE DECK: CLASS A, f'c = 4,000 PSI CONCRETE ABUTMENTS: CLASS A-A, f'c = 4,000 PSI
STRUCTURAL STEEL:	ASTM A709 GR36T3, Fy = 36,000 PSI GALVANIZE ALL STRUCTURAL STEEL IN ACCORDANCE WITH AASHTO MIII.
STRUCTURAL STEEL PILE:	API 5L X52 PSL2, Fy = 52,000 PSI

ABBREVIATIONS:

CL = CENTERLINE	JT. = JOINT
PL = PLATE	KIPS = 1000 POUND FORCE
& = AND	KSF = KIPS PER SQUARE FOOT
@ = AT	LT. = LEFT
Ø = DIAMETER	LOC. = LOCATION
A/C = ASPHALT CONCRETE	MAX. = MAXIMUM
API = AMERICAN PETROLEUM INSTITUTE	MFR = MANUFACTURER
APPROX. = APPROXIMATE	MIN. = MINIMUM
ABUT. = ABUTMENT	N.A. = NOT APPLICABLE
BOT. = BOTTOM	N.F. = NEAR FACE
BR. = BRIDGE	NO. = NUMBER
BTWN. = BETWEEN	N/C = NOT CALCULATED
BRG. = BEARINGS	OFF. = OFFSET
C.I.P. = CAST IN PLACE	O.H.W. = ORDINARY HIGH WATER
CJP = COMPLETE JOINT PENETRATION	PSF = POUNDS PER SQUARE FOOT
CLR. = CLEAR, CLEARANCE	PSI = POUNDS PER SQUARE INCH
D.S. = DOWNSTREAM	REC = RECOMMENDATIONS
DIA. = DIAMETER	R.O.W. = RIGHT OF WAY
DWG. = DRAWING	RT. = RIGHT
ELEV. = ELEVATION	SPC. = SPACE, SPACES
E.F. = EACH FACE	STA. = STATION
E = EXPANSION BEARING	SYMM. = SYMMETRIC
F = FIXED BEARING	TYP. = TYPICAL
F.F. = FAR FACE	U.S. = UPSTREAM
H.S. = HIGH STRENGTH (A449) BOLTS	UT = ULTRASONIC TESTING
	YR. = YEAR
	W/ = WITH



PILE DATA							
DRIVING CRITERIA				DESIGN DATA			
LOCATION	PILE TYPE	MINIMUM PENETRATION (FT)	ESTIMATED PILE TIP ELEVATION	DRIVING RESISTANCE (K)	STRENGTH I FACTORED LOAD (K)	NOMINAL RESISTANCE (K)	RESISTACE FACTOR, Φ
ABUTMENT 1	PIPE 12"Ø X-STRONG	45	-3.7	TBD	104.1	240	0.45
ABUTMENT 2	PIPE 12"Ø X-STRONG	45	-3.8	TBD	104.1	240	0.45
BOARDWALK	PIPE 12"Ø X-STRONG	38	VARIES	TBD	39.3	90	0.45

PILE DATA IS BASED UPON STRUCTURAL FOUNDATION ENGINEERING REPORT, FISH CREEK BIKE TRAIL REHABILITATION, SHANNON AND WILSON, INC. AUGUST 2016

BRIDGE BASIS OF ESTIMATE

ITEM	PAY UNIT	ESTIMATING UNIT	TOTAL
501(1) CLASS A CONCRETE	LS	CY	##
503(1) REINFORCING STEEL	LS	LBS.	##
505(1) FURNISH STRUCTURAL STEEL PILES	LF	LF	##
505(2) DRIVE STRUCTURAL STEEL PILES	EA	EA	##
514(1) PREMANUFACTURED BRIDGE	EA	EA	1

ITEM NUMBERS ARE FOR REFERENCE ONLY. QUANTITIES SHOWN ARE NOT NECESSARILY THE PAY QUANTITIES NOR THE TOTAL QUANTITY OF THE PARTICULAR ITEM.

DESIGNED BY:	DDS	CHECKED:	DDS	LAYOUT BY:		CHECKED BY:	
DRAWN BY:	DAVID PARK	CHECKED:	DDS	SPECIFICATIONS BY:	DDS	P S & E COMPARED:	
QUANTITIES BY:	DDS	CHECKED:	DDS	APPROVAL RECOMMENDED BY:			

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

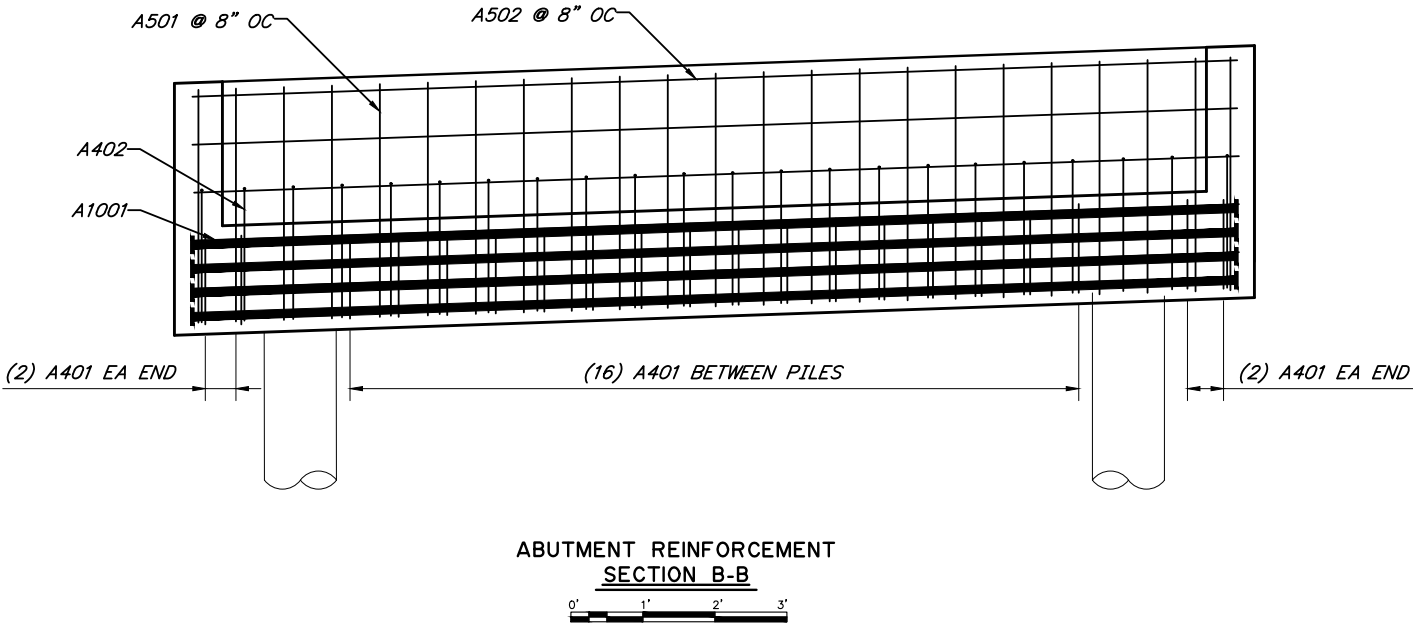
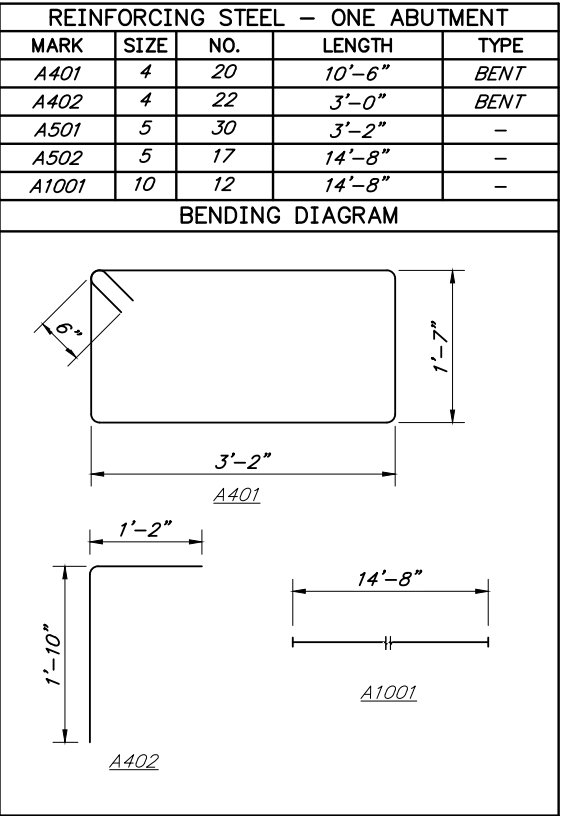
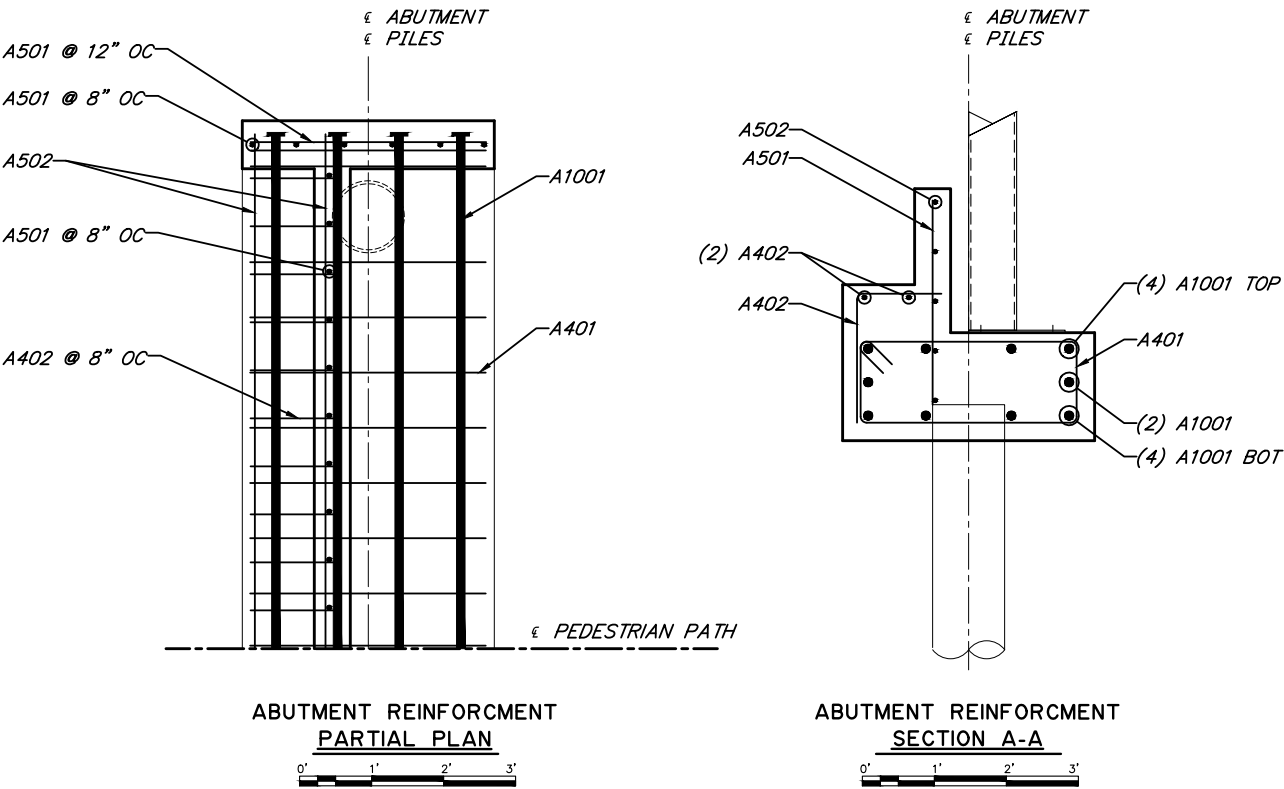
AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL
SITE PLAN

PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AECC598



BRIDGE NO. 2
DWG. NO. 2

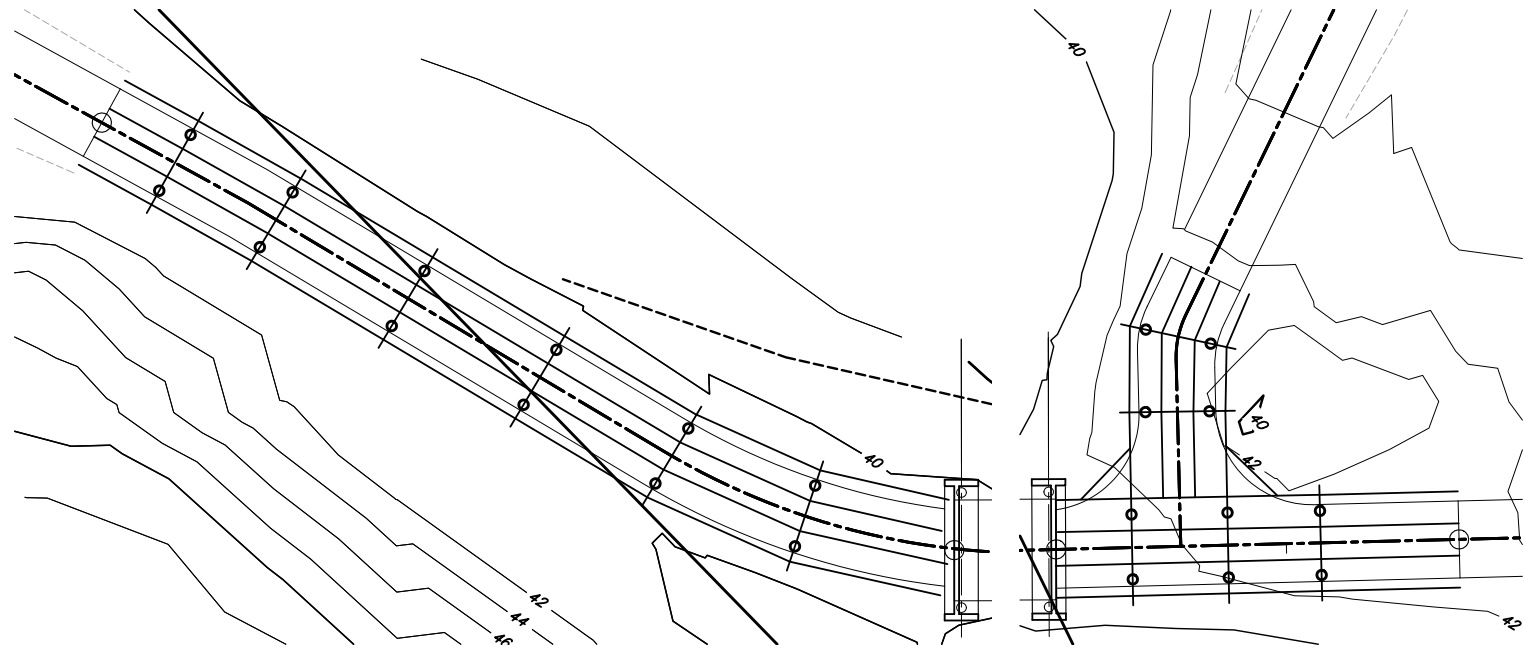
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N9	N20



PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AECC398

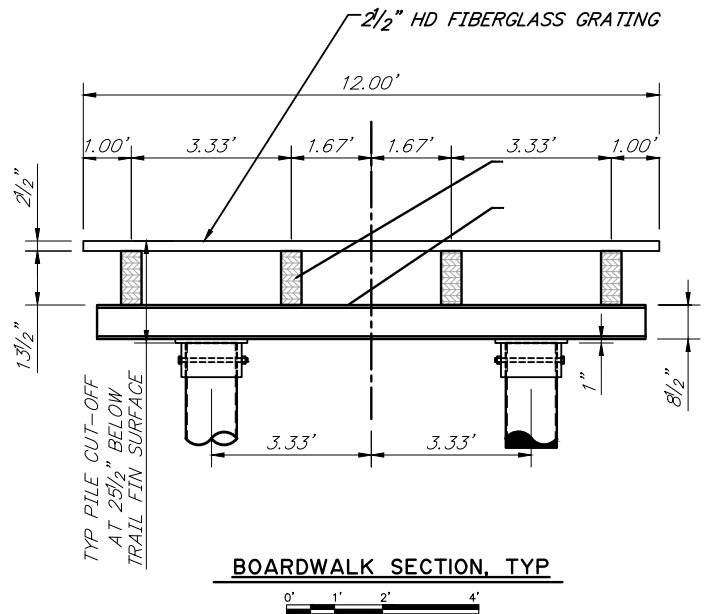
DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	AMATS: ANCHORAGE AREA WIDE TRAILS REHABILITATION FISH CREEK TRAIL ABUTMENT REINFORCEMENT	 BRIDGE NO. 2 DWG. NO. 4
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:			
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:				

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N10	N20

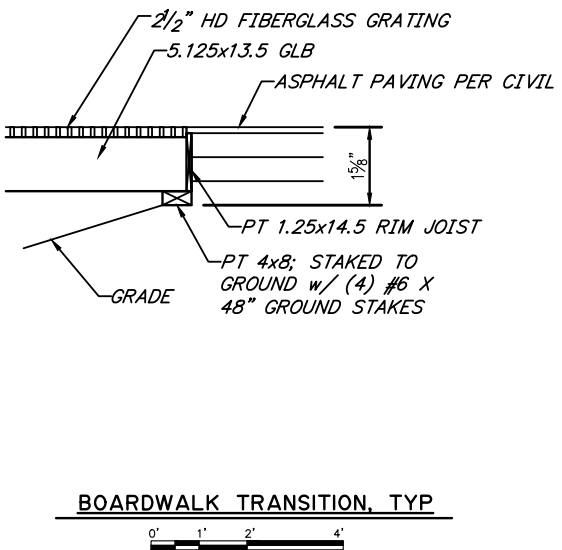


BOARDWALK FRAMING PLAN

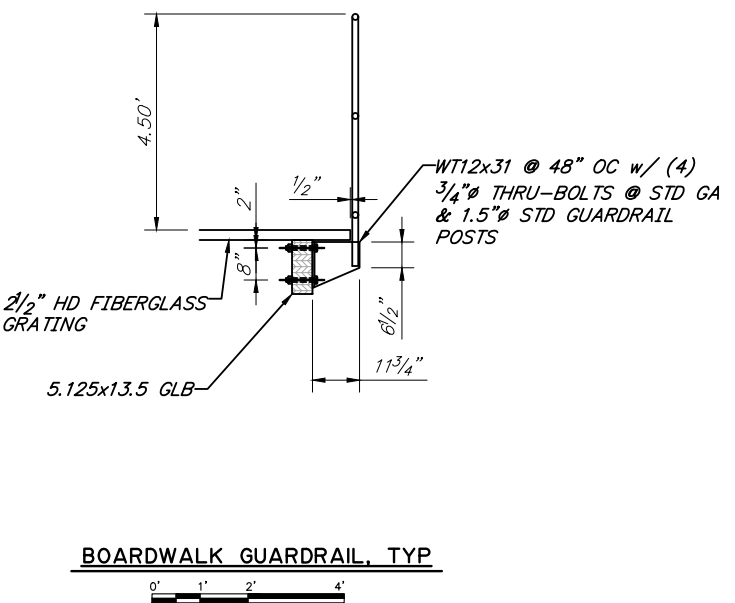
BOARDWALK FRAMING PLAN



BOARDWALK SECTION, TYP



BOARDWALK TRANSITION, TYP

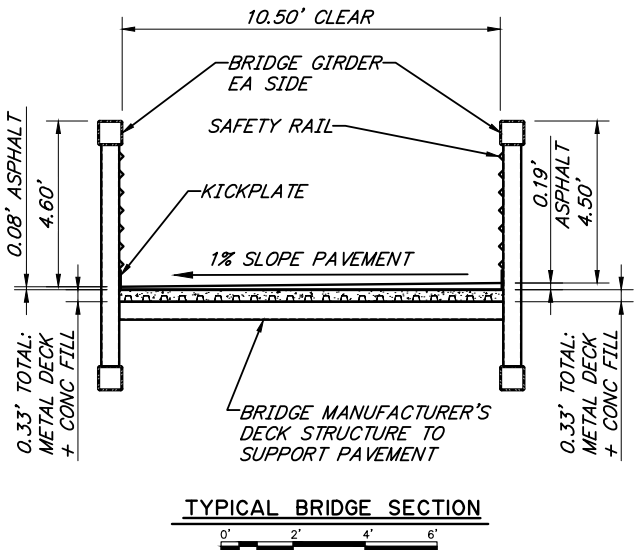
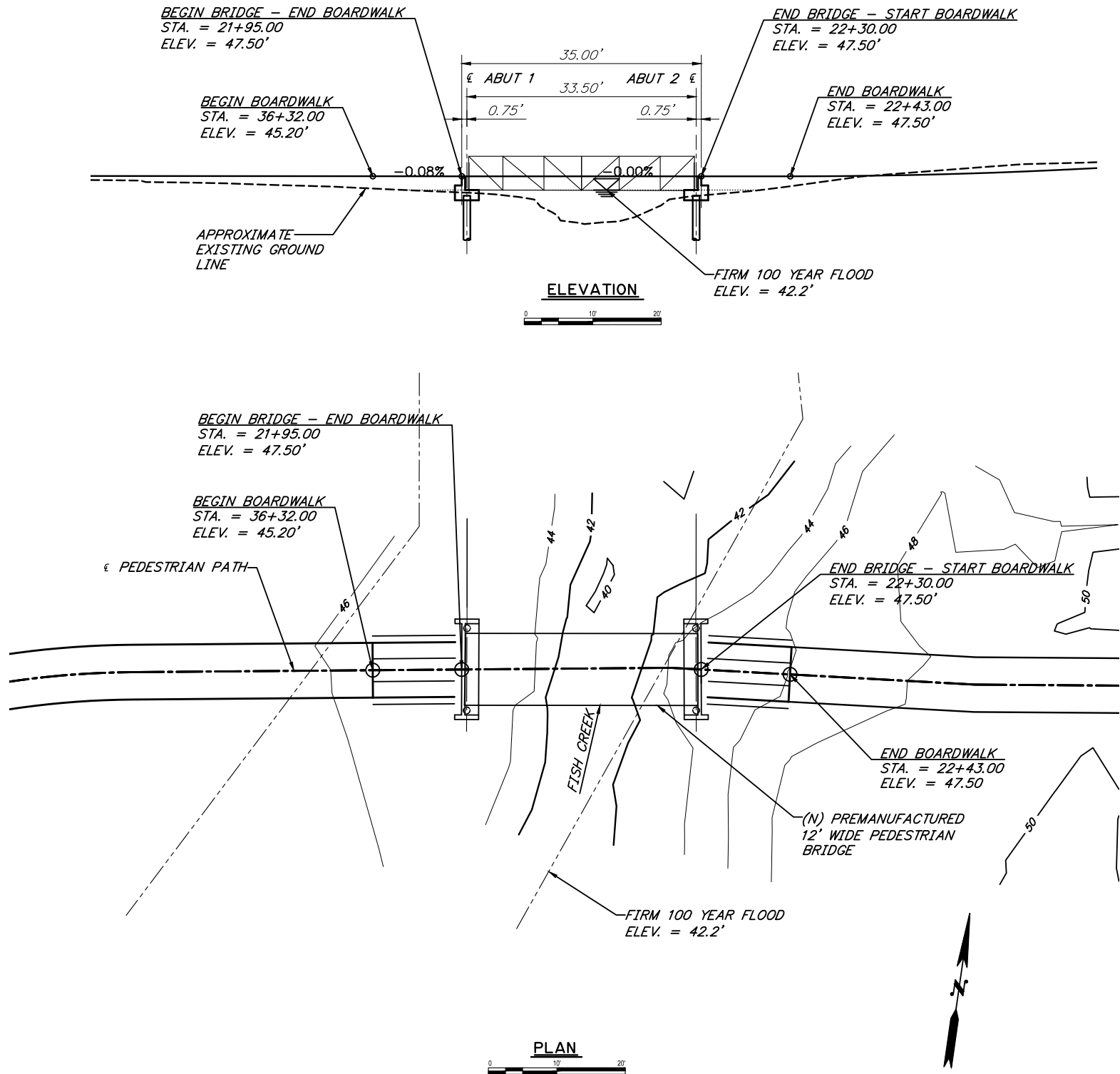


BOARDWALK GUARDRAIL, TYP

PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AECC598

DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	AMATS: ANCHORAGE AREA WIDE TRAILS REHABILITATION FISH CREEK TRAIL BOARDWALK DETAILS	 BRIDGE NO. 2 DWG. NO. 5
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:			
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:				

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N11	N20



BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	N11
SITE PLAN	N12
ABUTMENTS	N13
ABUTMENT REINFORCING	N14
BOARDWALK DETAILS	N15
LOG OF TEST BORINGS	N-

NOTES:

- ① APPROXIMATE LOCATION OF BRIDGE NUMBER PLATE

PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AECC398

DESIGNED BY:	DDS	CHECKED:	DDS	LAYOUT BY:		CHECKED BY:	
DRAWN BY:	DAVID PARK	CHECKED:	DDS	SPECIFICATIONS BY:	DDS	P S & E COMPARED:	
QUANTITIES BY:	DDS	CHECKED:	DDS	APPROVAL RECOMMENDED BY:		Engineer	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

**AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION**
FISH CREEK TRAIL
GENERAL LAYOUT



BRIDGE NO. 3
DWG. NO. 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N12	N20

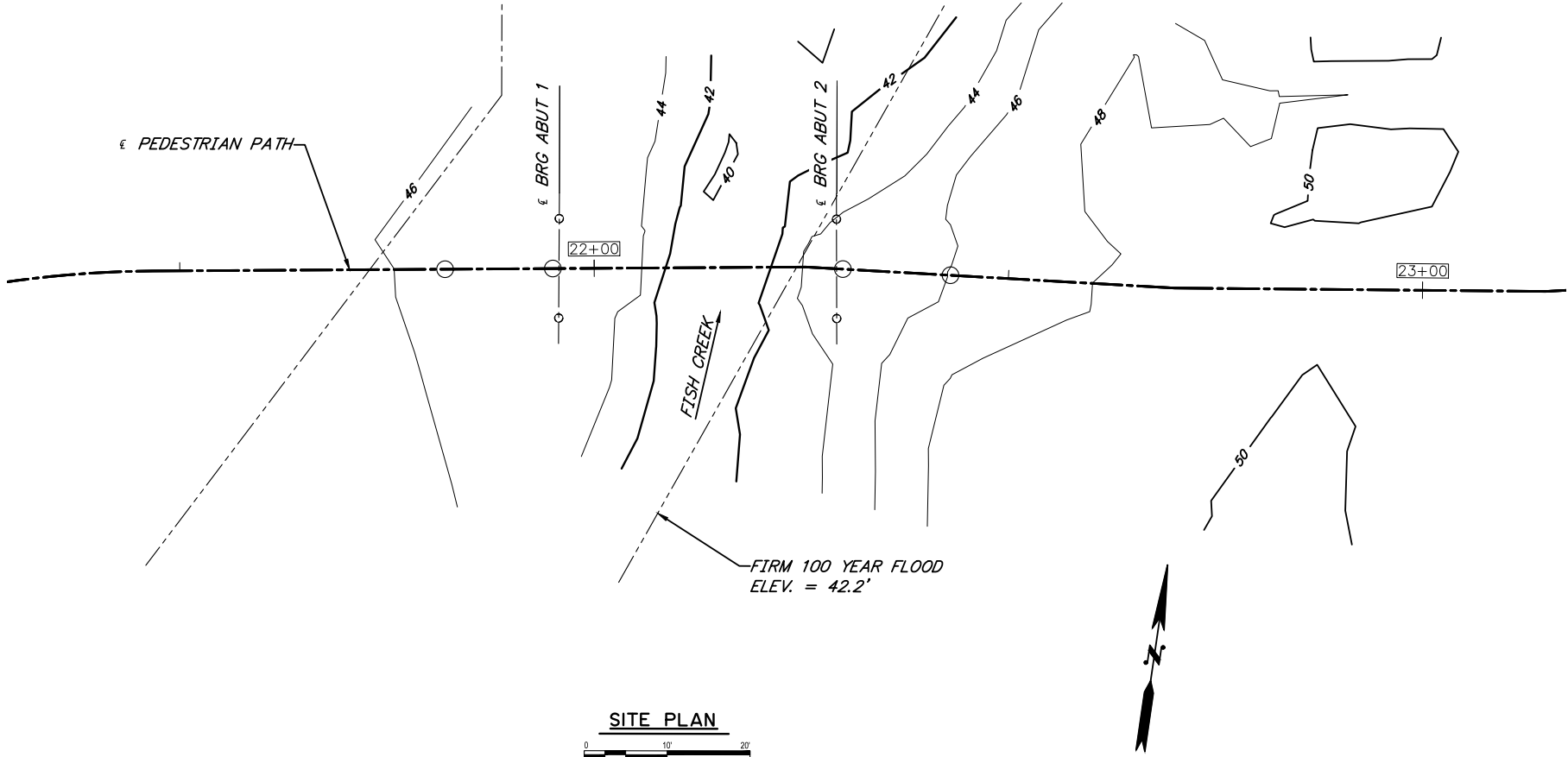
GENERAL NOTES

DESIGN:	AASHTO GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES (LGSDPB), AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION, 2010, WITH LATEST INTERIM SPECIFICATIONS (AASHTO).
LIVE LOAD:	90 PSF PEDESTRIAN LOAD HIO VEHICLE LOAD
DEAD LOAD:	ASSUMED BRIDGE WEIGHT OF 42 KIPS INCLUDES STEEL SELF-WEIGHT AND 40 PSF FOR CONCRETE DECK AND ASPHALT WEARING SURFACING.
SNOW LOAD:	50 PSF GROUND, Is=1.0, Ce=1.0
SEISMIC DESIGN:	PGA = 0.61 Ss = 1.50 S1 = 0.676 SITE CLASS = D LIQUEFACTION DURING AN EARTHQUAKE IS POSSIBLE AT ALL FOUR BRIDGE SITES AND IS CONSIDERED IN ALL PILE CAPACITY CALCULATIONS. 2% PROBABILITY OF EXCEEDANCE IN 50 YEARS
WIND DESIGN:	BASIC WIND SPEED (3-SECOND GUST, V _{asd})=100 MPH, Kz=1.21, Cd=1.3, UTILIZING FULL BRIDGE PROFILE AREA, Ir=1.15
REINFORCING STEEL:	ASTM A706, Fy = 60,000 PSI
C.I.P. CONCRETE:	CONCRETE DECK: CLASS A, f'c = 4,000 PSI CONCRETE ABUTMENTS: CLASS A-A, f'c = 4,000 PSI
STRUCTURAL STEEL:	ASTM A709 GR36T3, Fy = 36,000 PSI GALVANIZE ALL STRUCTURAL STEEL IN ACCORDANCE WITH AASHTO MIII.
STRUCTURAL STEEL PILE:	API 5L X52 PSL2, Fy = 52,000 PSI

ABBREVIATIONS:

CL = CENTERLINE	JT. = JOINT
PL = PLATE	KIPS = 1000 POUND FORCE
& = AND	KSF = KIPS PER SQUARE FOOT
@ = AT	LT. = LEFT
Ø = DIAMETER	LOC. = LOCATION
A/C = ASPHALT CONCRETE	MAX. = MAXIMUM
API = AMERICAN PETROLEUM INSTITUTE	MFR = MANUFACTURER
APPROX. = APPROXIMATE	MIN. = MINIMUM
ABUT. = ABUTMENT	N.A. = NOT APPLICABLE
BOT. = BOTTOM	N.F. = NEAR FACE
BR. = BRIDGE	NO. = NUMBER
BTWN. = BETWEEN	N/C = NOT CALCULATED
BRG. = BEARINGS	OFF. = OFFSET
C.I.P. = CAST IN PLACE	O.H.W. = ORDINARY HIGH WATER
CJP = COMPLETE JOINT PENETRATION	PSF = POUNDS PER SQUARE FOOT
CLR. = CLEAR, CLEARANCE	PSI = POUNDS PER SQUARE INCH
D.S. = DOWNSTREAM	REC = RECOMMENDATIONS
DIA. = DIAMETER	R.O.W. = RIGHT OF WAY
DWG. = DRAWING	RT. = RIGHT
ELEV. = ELEVATION	SPC. = SPACE, SPACES
E.F. = EACH FACE	STA. = STATION
E = EXPANSION BEARING	SYMM. = SYMMETRIC
F = FIXED BEARING	TYP. = TYPICAL
F.F. = FAR FACE	U.S. = UPSTREAM
H.S. = HIGH STRENGTH (A449) BOLTS	UT = ULTRASONIC TESTING
	YR. = YEAR
	W/ = WITH

PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AEC598



SITE PLAN

PILE DATA TABLE							
		DRIVING CRITERIA			DESIGN DATA		
LOCATION	PILE TYPE	MINIMUM PENETRATION (FT)	ESTIMATED PILE TIP ELEVATION	DRIVING RESISTANCE (K)	STRENGTH I FACTORED LOAD (K)	NOMINAL RESISTANCE (K)	RESISTACE FACTOR, Φ
ABUTMENT 1	PIPE 12"Ø X-STRONG	23	22.1	TBD	104.1	240	0.45
ABUTMENT 2	PIPE 12"Ø X-STRONG	23	21.56	TBD	104.1	240	0.45
BOARDWALK	PIPE 12"Ø X-STRONG	17	VARIES	TBD	39.3	100	0.45

PILE DATA IS BASED UPON STRUCTURAL FOUNDATION ENGINEERING REPORT, FISH CREEK BIKE TRAIL REHABILITATION, SHANNON AND WILSON, INC. AUGUST 2016

BRIDGE BASIS OF ESTIMATE

ITEM	PAY UNIT	ESTIMATING UNIT	TOTAL
501(1) CLASS A CONCRETE	LS	CY	##
503(1) REINFORCING STEEL	LS	LBS.	##
505(1) FURNISH STRUCTURAL STEEL PILES	LF	LF	##
505(2) DRIVE STRUCTURAL STEEL PILES	EA	EA	##
514(1) PREMANUFACTURED BRIDGE	EA	EA	1

ITEM NUMBERS ARE FOR REFERENCE ONLY. QUANTITIES SHOWN ARE NOT NECESSARILY THE PAY QUANTITIES NOR THE TOTAL QUANTITY OF THE PARTICULAR ITEM.

DESIGNED BY:	DDS	CHECKED:	DDS	LAYOUT BY:		CHECKED BY:	
DRAWN BY:	DAVID PARK	CHECKED:	DDS	SPECIFICATIONS BY:	DDS	P S & E COMPARED:	
QUANTITIES BY:	DDS	CHECKED:	DDS	APPROVAL RECOMMENDED BY:			

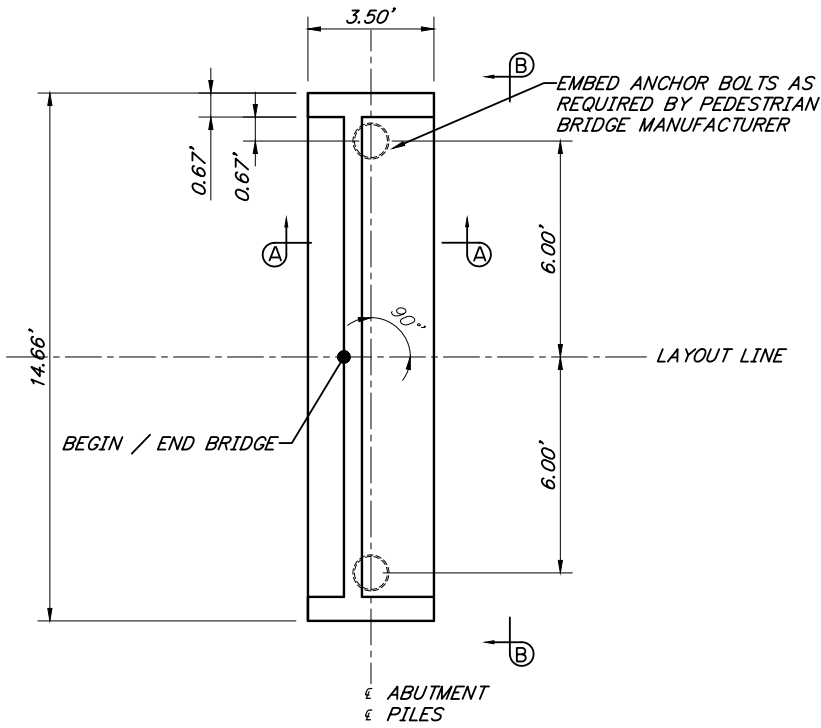
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL
SITE PLAN

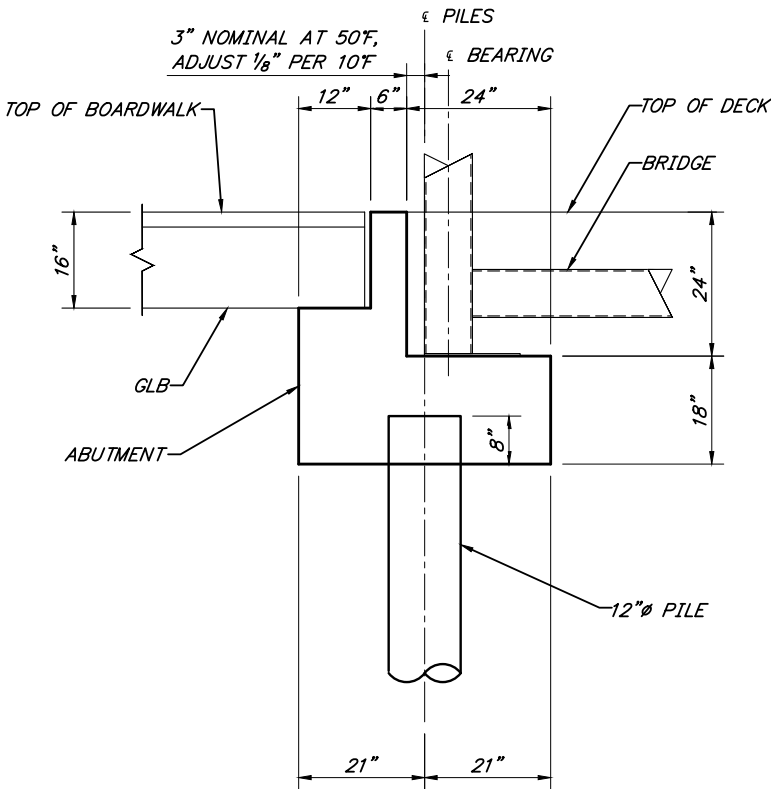


BRIDGE NO. 3
DWG. NO. 2

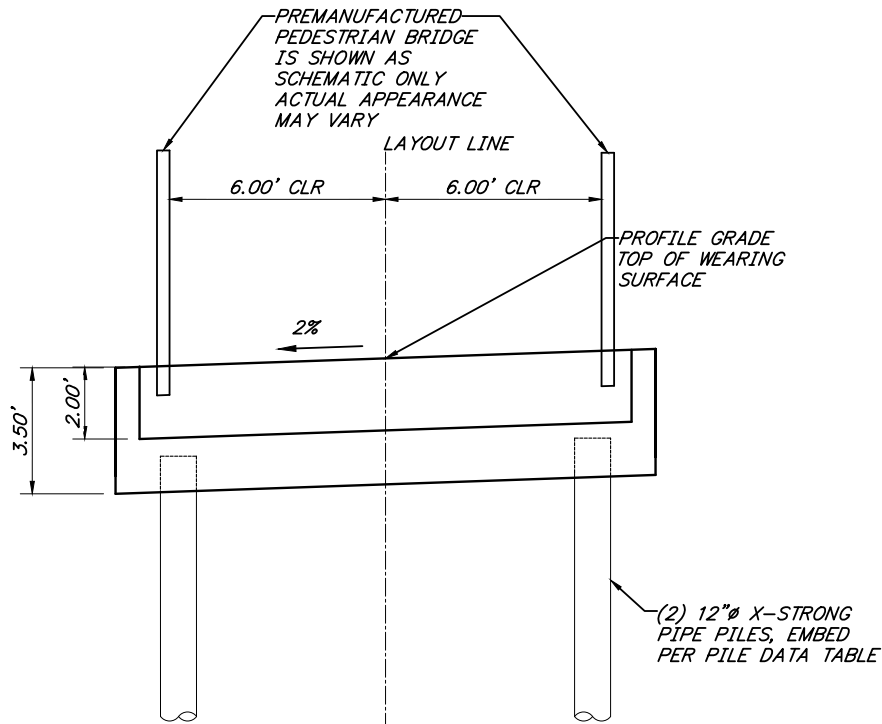
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N13	N20



TYPICAL ABUTMENT PLAN



TYPICAL ABUTMENT SECTION A-A



TYPICAL ABUTMENT SECTION B-B



PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AEC0398

DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY:
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:	

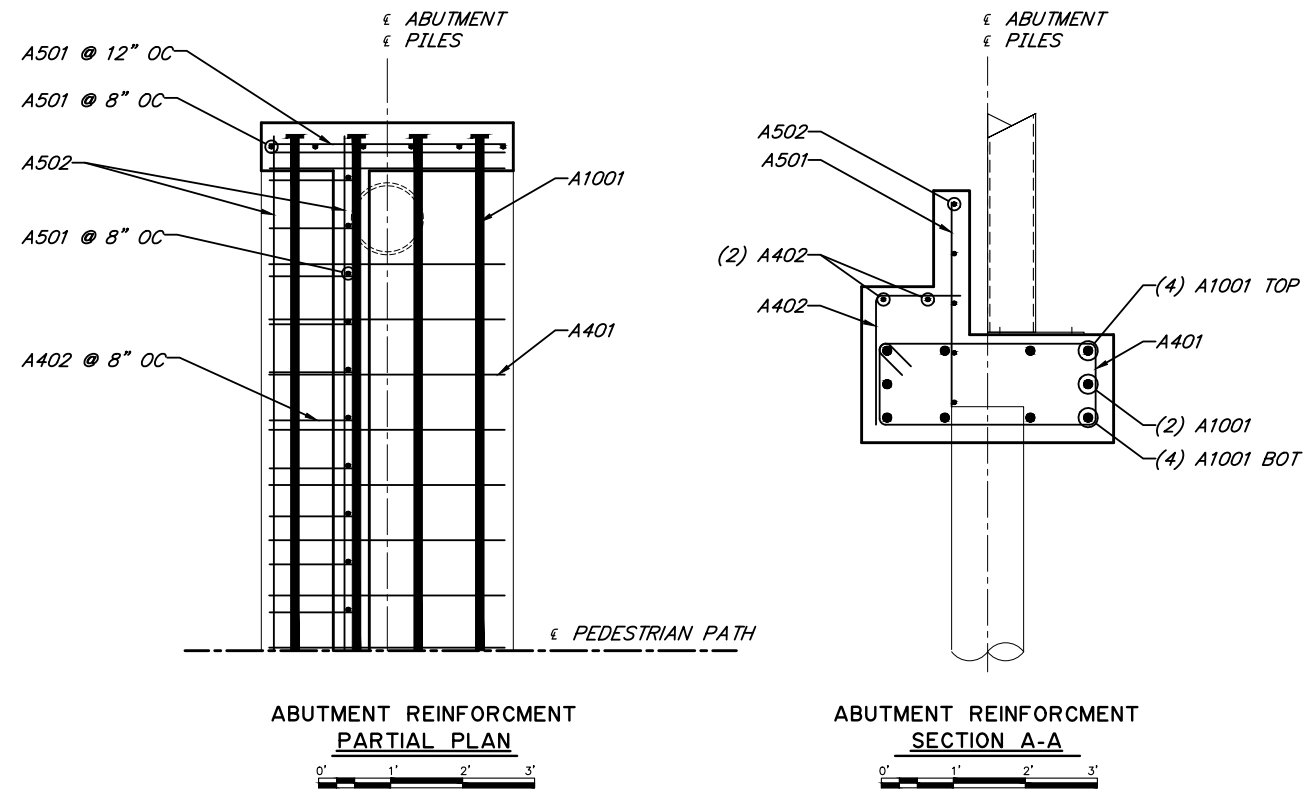
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL
ABUTMENTS

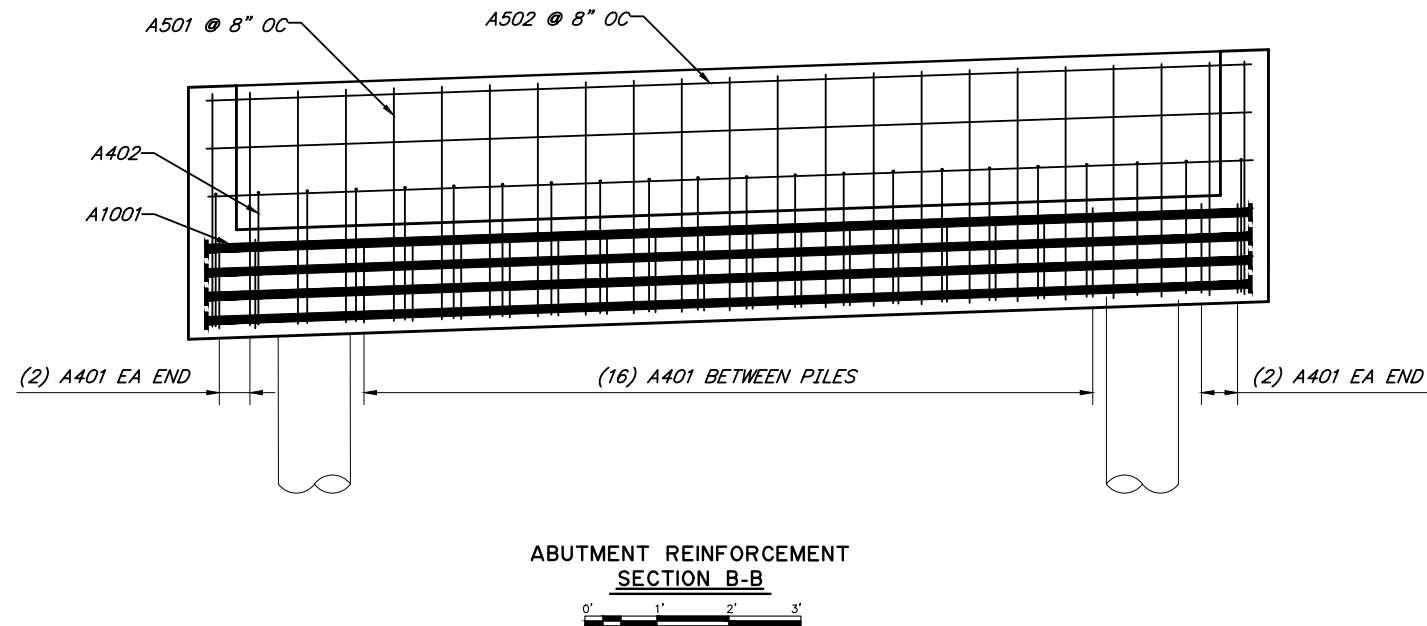
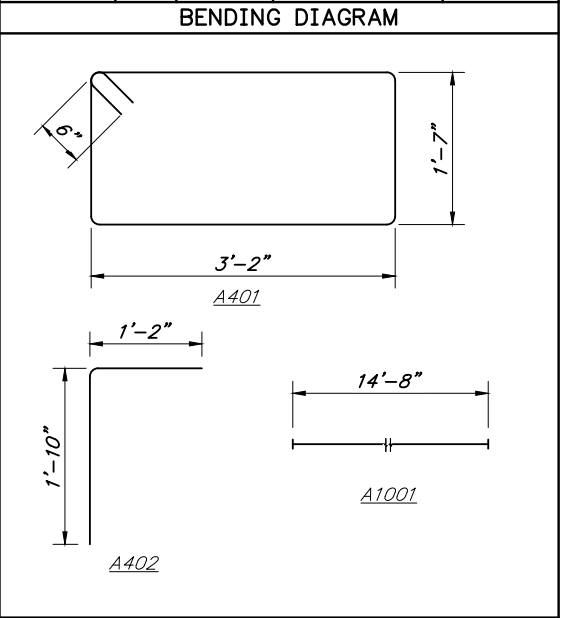


BRIDGE NO. 3
DWG. NO. 3

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N14	N20



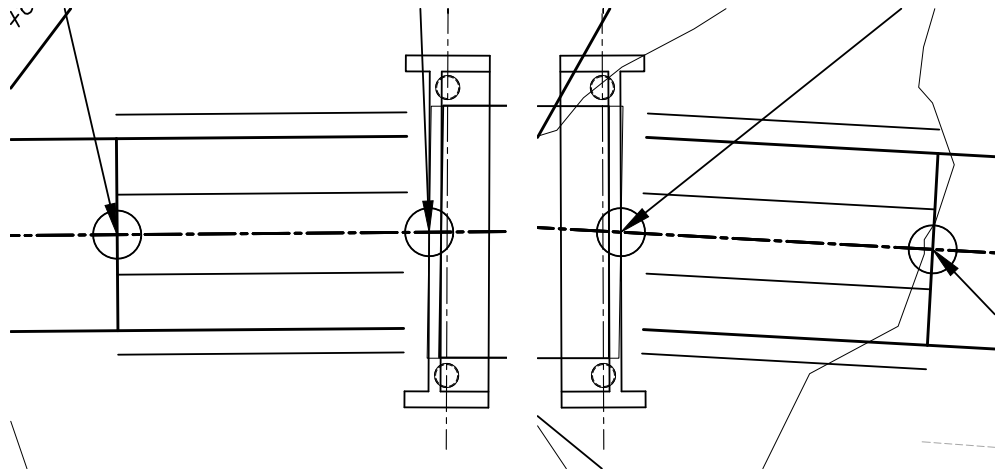
REINFORCING STEEL - ONE ABUTMENT				
MARK	SIZE	NO.	LENGTH	TYPE
A401	4	20	10'-6"	BENT
A402	4	22	3'-0"	BENT
A501	5	30	3'-2"	-
A502	5	17	14'-8"	-
A1001	10	12	14'-8"	-



PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AEC0398

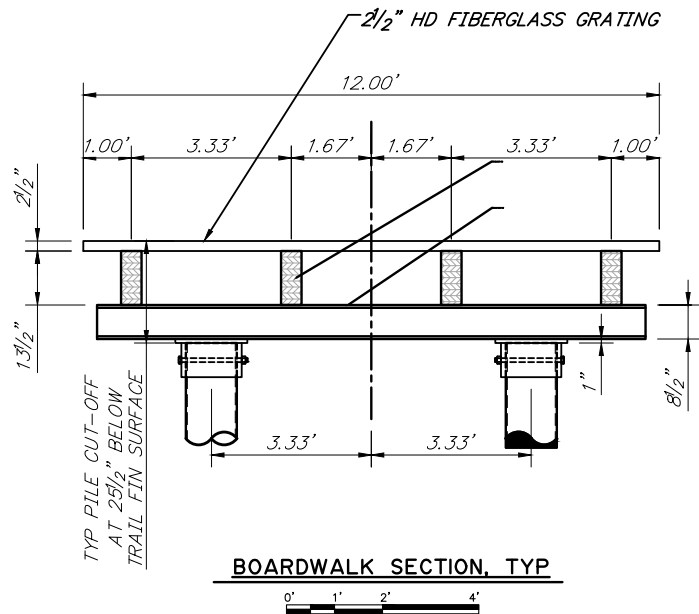
DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	AMATS: ANCHORAGE AREA WIDE TRAILS REHABILITATION FISH CREEK TRAIL ABUTMENT REINFORCING	 BRIDGE NO. 3 DWG. NO. 4
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:			
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:				

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N15	N20

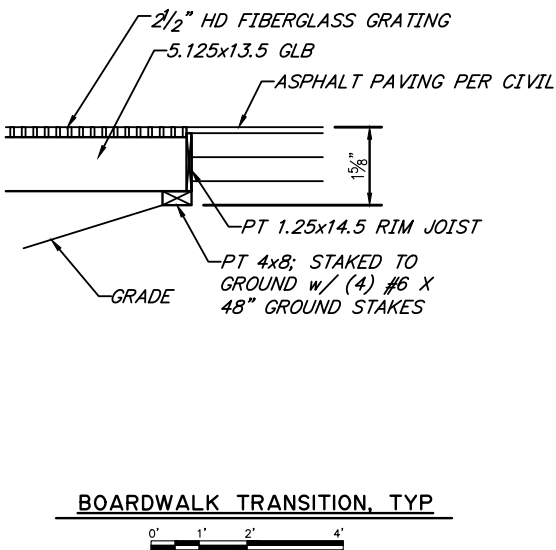


BOARDWALK FRAMING PLAN

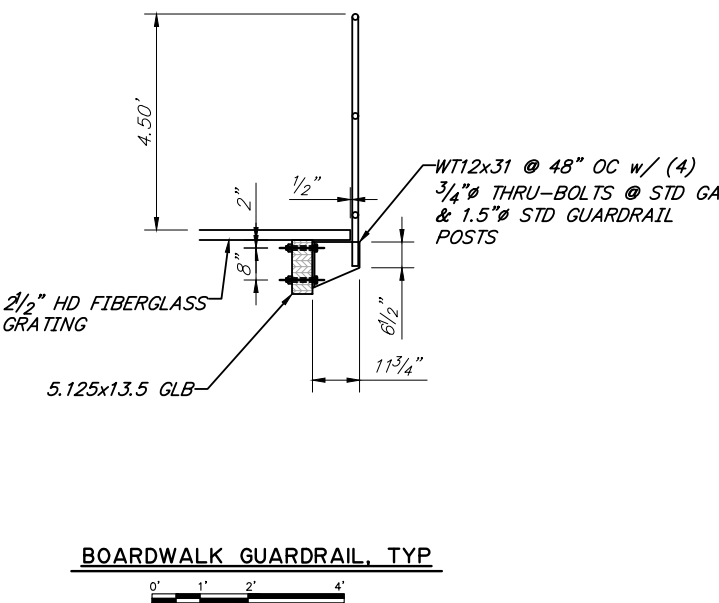
BOARDWALK FRAMING PLAN



BOARDWALK SECTION, TYP



BOARDWALK TRANSITION, TYP

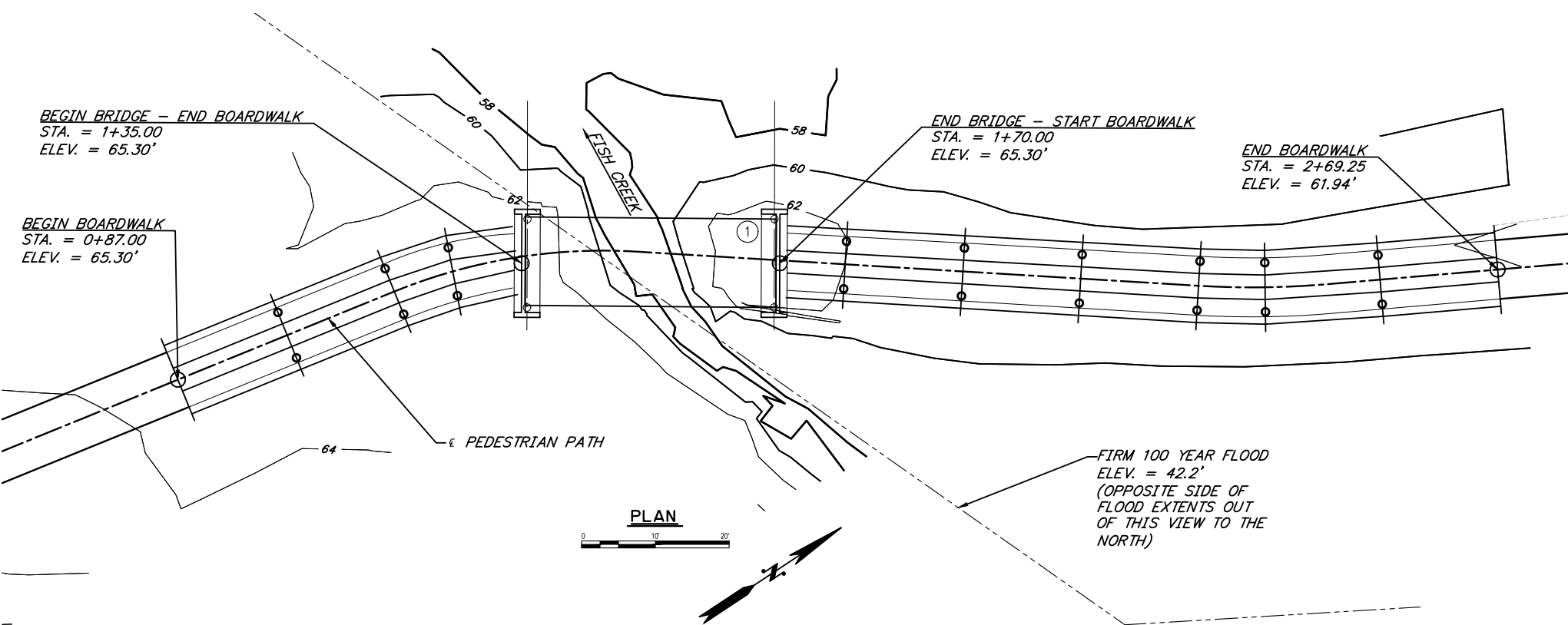
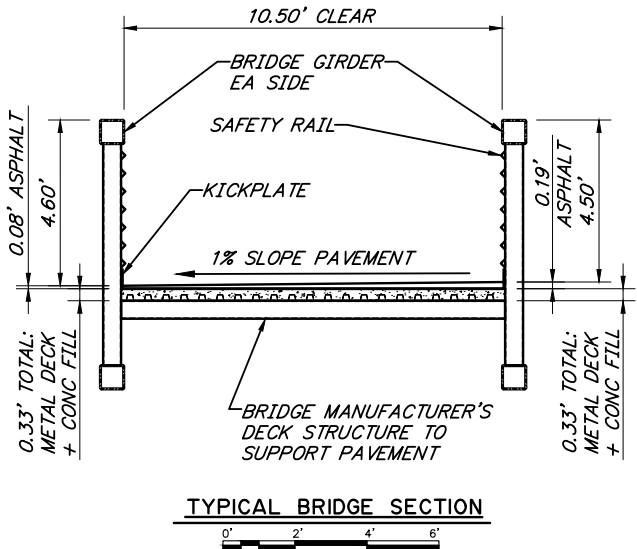
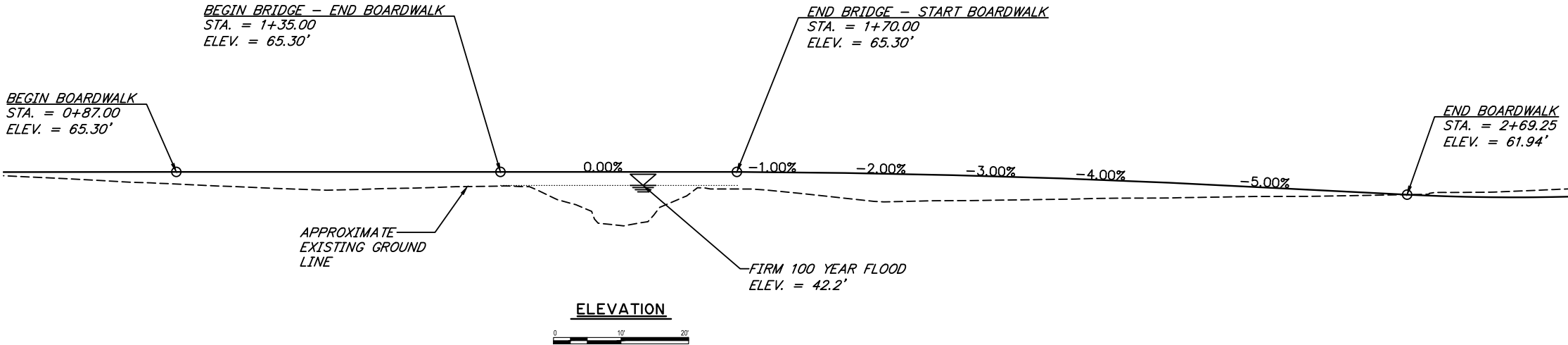


BOARDWALK GUARDRAIL, TYP

PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AECC598

DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION		AMATS: ANCHORAGE AREA WIDE TRAILS REHABILITATION FISH CREEK TRAIL BOARDWALK DETAILS	 BRIDGE NO. 3 DWG. NO. 5
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:				
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:					

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N16	N20



BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	N16
SITE PLAN	N17
ABUTMENTS	N18
ABUTMENT REINFORCING	N19
BOARDWALK DETAILS	N20
LOG OF TEST BORINGS	N-

NOTES:
① APPROXIMATE LOCATION OF BRIDGE NUMBER PLATE

PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AECC598

DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	AMATS: ANCHORAGE AREA WIDE TRAILS REHABILITATION FISH CREEK TRAIL GENERAL LAYOUT	 BRIDGE NO. 4 DWG. NO. 1
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:			
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:				

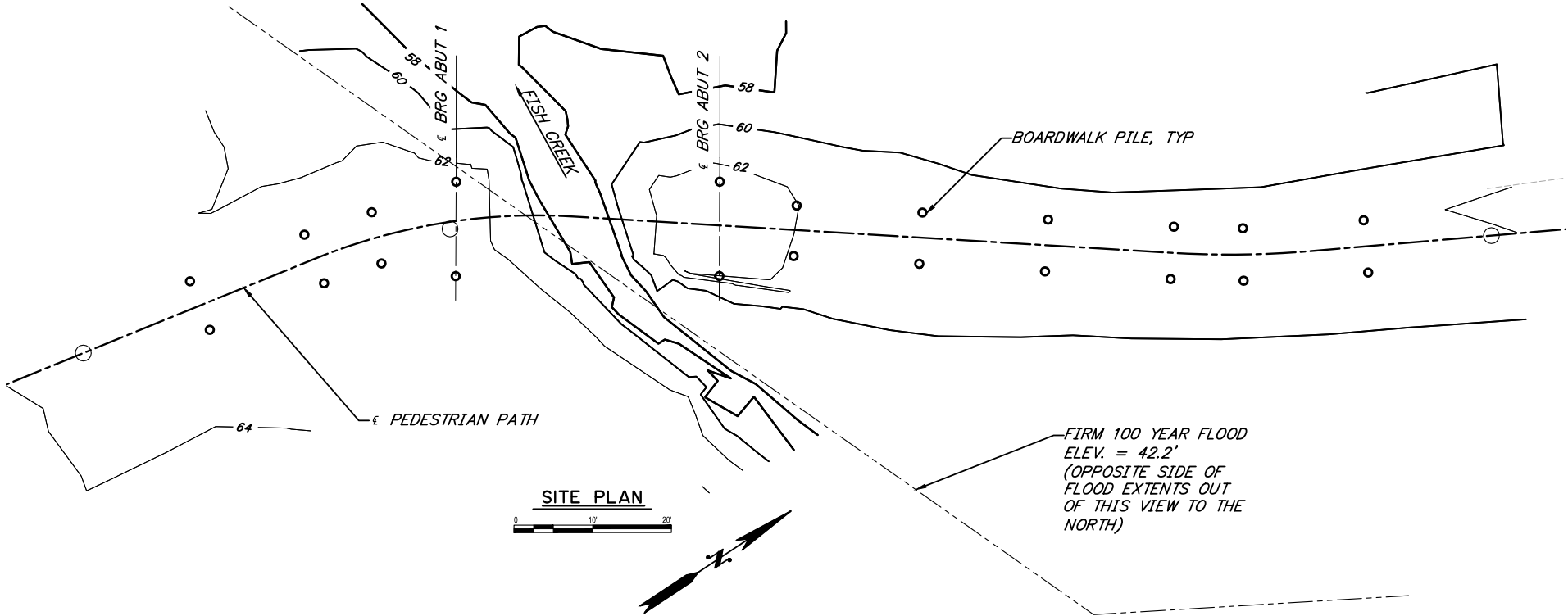
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N17	N20

GENERAL NOTES

DESIGN:	AASHTO GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES (LGSDPB), AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION, 2010, WITH LATEST INTERIM SPECIFICATIONS (AASHTO).
LIVE LOAD:	90 PSF PEDESTRIAN LOAD HIO VEHICLE LOAD
DEAD LOAD:	ASSUMED BRIDGE WEIGHT OF 42 KIPS INCLUDES STEEL SELF-WEIGHT AND 40 PSF FOR CONCRETE DECK AND ASPHALT WEARING SURFACING.
SNOW LOAD:	50 PSF GROUND, Is=1.0, Ce=1.0
SEISMIC DESIGN:	PGA = 0.61 Ss = 1.50 S1 = 0.676 SITE CLASS = D LIQUEFACTION DURING AN EARTHQUAKE IS POSSIBLE AT ALL FOUR BRIDGE SITES AND IS CONSIDERED IN ALL PILE CAPACITY CALCULATIONS. 2% PROBABILITY OF EXCEEDANCE IN 50 YEARS
WIND DESIGN:	BASIC WIND SPEED (3-SECOND GUST, Vasd)=100 MPH, Kz=1.21, Cd=1.3, UTILIZING FULL BRIDGE PROFILE AREA, Ir=1.15
REINFORCING STEEL:	ASTM A706, Fy = 60,000 PSI
C.I.P. CONCRETE:	CONCRETE DECK: CLASS A, f'c = 4,000 PSI CONCRETE ABUTMENTS: CLASS A-A, f'c = 4,000 PSI
STRUCTURAL STEEL:	ASTM A709 GR36T3, Fy = 36,000 PSI GALVANIZE ALL STRUCTURAL STEEL IN ACCORDANCE WITH AASHTO MIII.
STRUCTURAL STEEL PILE:	API 5L X52 PSL2, Fy = 52,000 PSI

ABBREVIATIONS:

CL = CENTERLINE	JT. = JOINT
PL = PLATE	KIPS = 1000 POUND FORCE
& = AND	KSF = KIPS PER SQUARE FOOT
@ = AT	LT. = LEFT
Ø = DIAMETER	LOC. = LOCATION
A/C = ASPHALT CONCRETE	MAX. = MAXIMUM
API = AMERICAN PETROLEUM INSTITUTE	MFR = MANUFACTURER
APPROX. = APPROXIMATE	MIN. = MINIMUM
ABUT. = ABUTMENT	N.A. = NOT APPLICABLE
BOT. = BOTTOM	N.F. = NEAR FACE
BR. = BRIDGE	NO. = NUMBER
BTWN. = BETWEEN	N/C = NOT CALCULATED
BRG. = BEARINGS	OFF. = OFFSET
C.I.P. = CAST IN PLACE	O.H.W. = ORDINARY HIGH WATER
CJP = COMPLETE JOINT PENETRATION	PSF = POUNDS PER SQUARE FOOT
CLR. = CLEAR, CLEARANCE	PSI = POUNDS PER SQUARE INCH
D.S. = DOWNSTREAM	REC = RECOMMENDATIONS
DIA. = DIAMETER	R.O.W. = RIGHT OF WAY
DWG. = DRAWING	RT. = RIGHT
ELEV. = ELEVATION	SPC. = SPACE, SPACES
E.F. = EACH FACE	STA. = STATION
E = EXPANSION BEARING	SYMM. = SYMMETRIC
F = FIXED BEARING	TYP. = TYPICAL
F.F. = FAR FACE	U.S. = UPSTREAM
H.S. = HIGH STRENGTH (A449) BOLTS	UT = ULTRASONIC TESTING
	YR. = YEAR
	W/ = WITH



PILE DATA							
		DRIVING CRITERIA			DESIGN DATA		
LOCATION	PILE TYPE	MINIMUM PENETRATION (FT)	ESTIMATED PILE TIP ELEVATION	DRIVING RESISTANCE (K)	STRENGTH I FACTORED LOAD (K)	NOMINAL RESISTANCE (K)	RESISTACE FACTOR, Φ
ABUTMENT 1	PIPE 12"Ø X-STRONG	42	TBD	TBD	104.1	240	0.45
ABUTMENT 2	PIPE 12"Ø X-STRONG	42	TBD	TBD	104.1	240	0.45
BOARDWALK	PIPE 12"Ø X-STRONG	36	TBD	TBD	39.3	90	0.45

PILE DATA IS BASED UPON STRUCTURAL FOUNDATION ENGINEERING REPORT, FISH CREEK BIKE TRAIL REHABILITATION, SHANNON AND WILSON, INC. AUGUST 2016

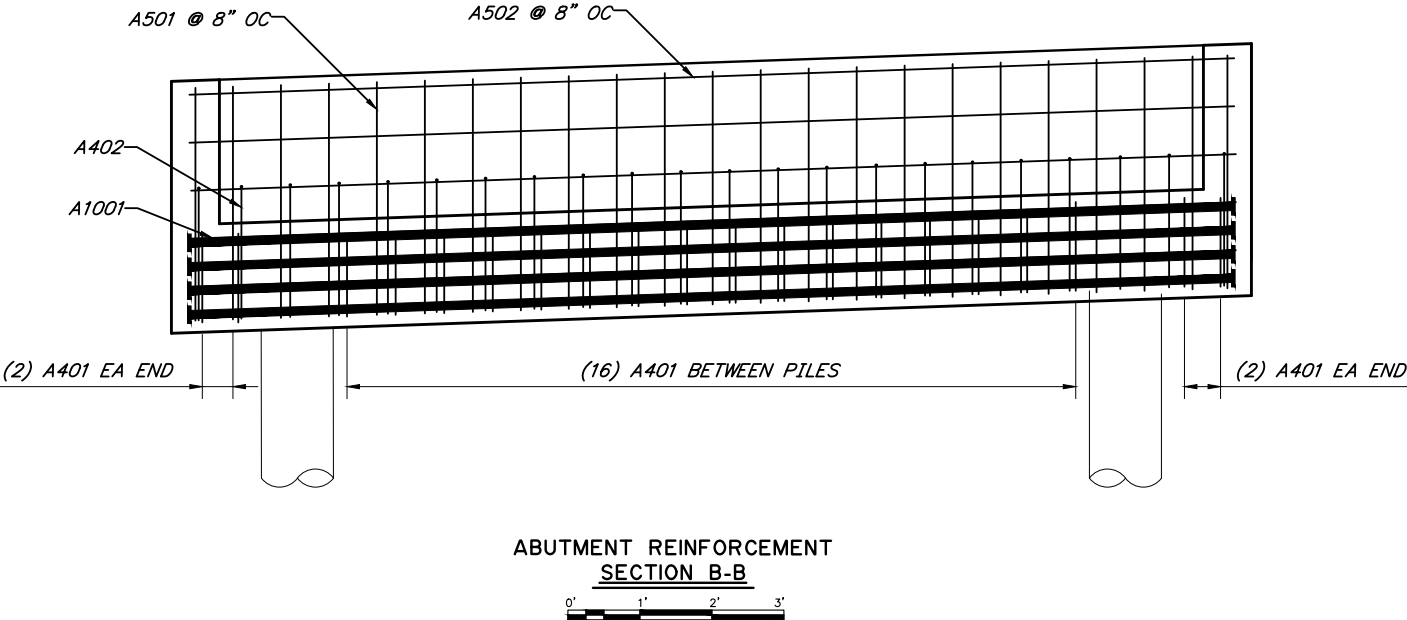
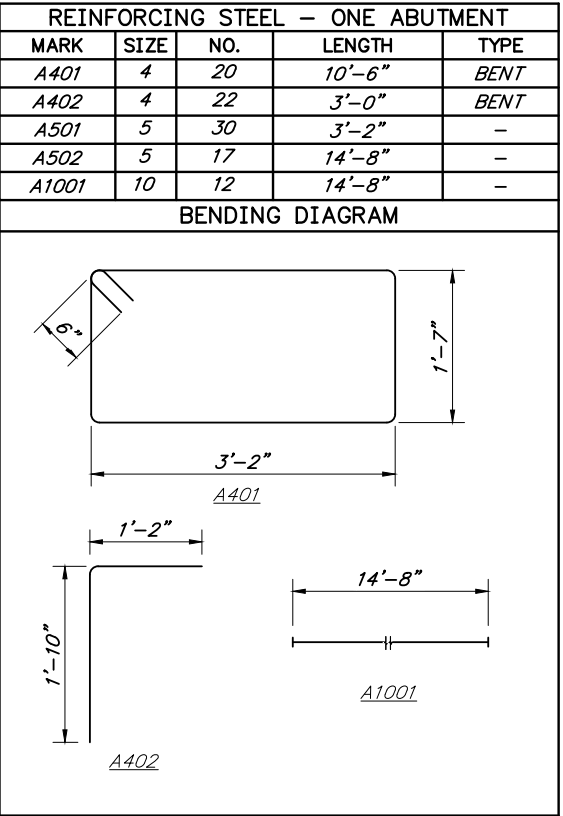
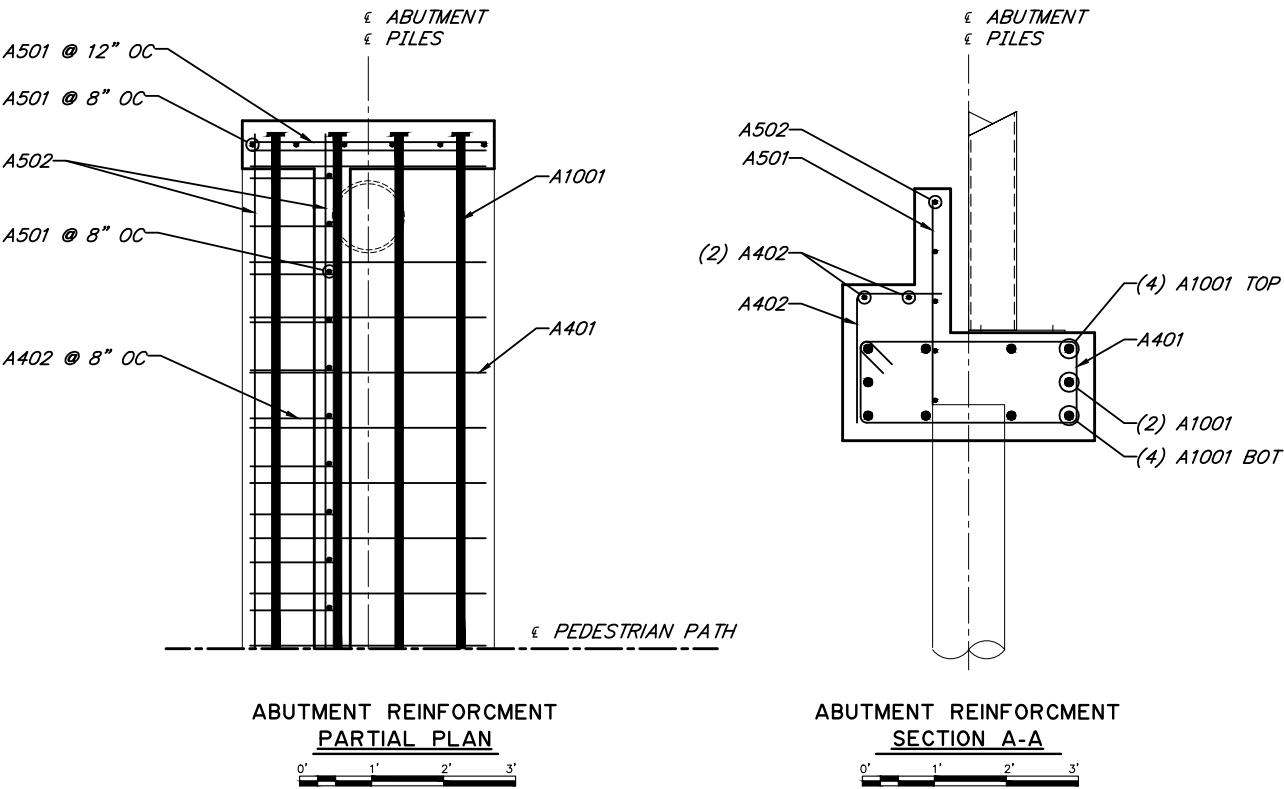
BRIDGE BASIS OF ESTIMATE			
ITEM	PAY UNIT	ESTIMATING UNIT	TOTAL
501(1) CLASS A CONCRETE	LS	CY	##
503(1) REINFORCING STEEL	LS	LBS.	##
505(1) FURNISH STRUCTURAL STEEL PILES	LF	LF	##
505(2) DRIVE STRUCTURAL STEEL PILES	EA	EA	##
514(1) PREMANUFACTURED BRIDGE	EA	EA	1

ITEM NUMBERS ARE FOR REFERENCE ONLY. QUANTITIES SHOWN ARE NOT NECESSARILY THE PAY QUANTITIES NOR THE TOTAL QUANTITY OF THE PARTICULAR ITEM.

PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AECC598

DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION		AMATS: ANCHORAGE AREA WIDE TRAILS REHABILITATION FISH CREEK TRAIL SITE PLAN	 BRIDGE NO. 4 DWG. NO. 2
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:				
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:					

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N19	N20



PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AECC398

DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY: Engineer
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:	

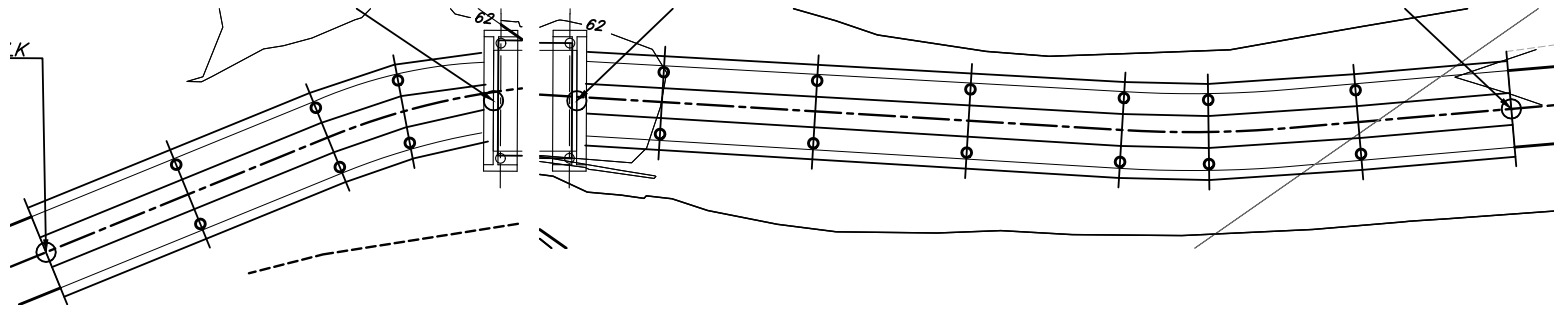
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

AMATS: ANCHORAGE AREA WIDE
TRAILS REHABILITATION
FISH CREEK TRAIL
ABUTMENT REINFORCING



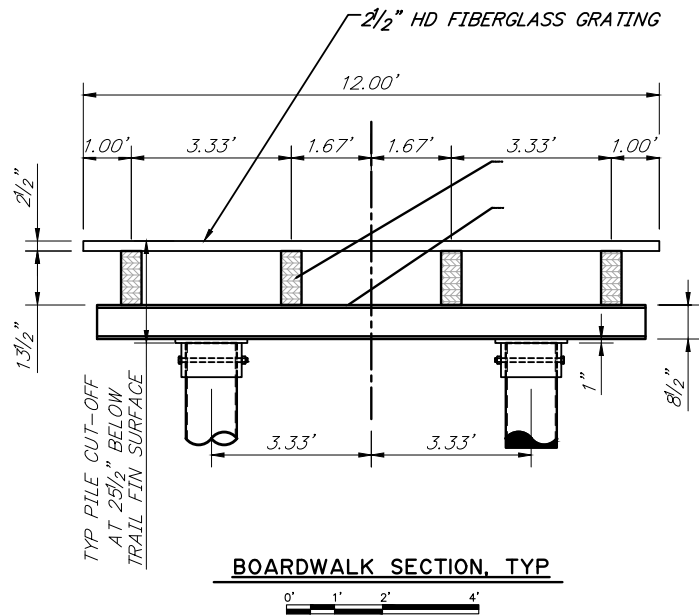
BRIDGE NO. 4
DWG. NO. 4

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z584640000/001521	2016	N20	N20

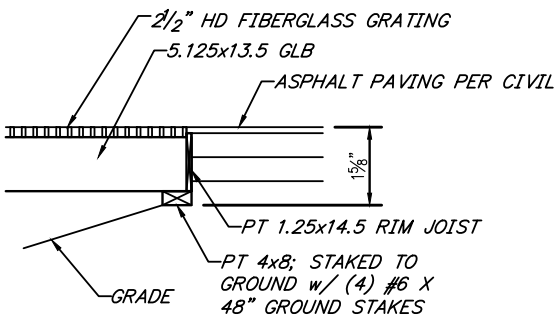
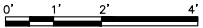


BOARDWALK FRAMING PLAN

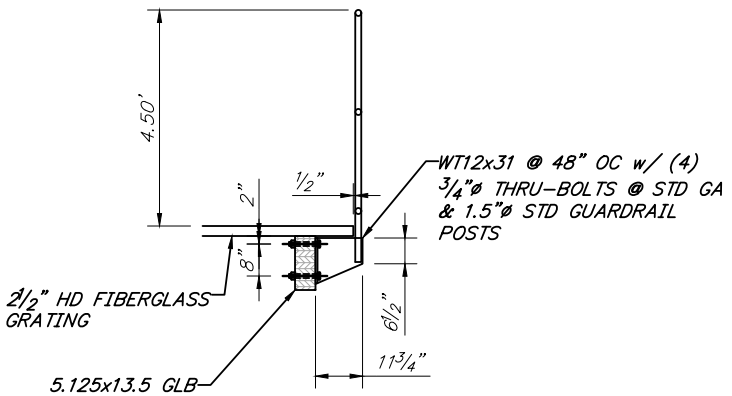
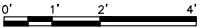
BOARDWALK FRAMING PLAN



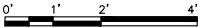
BOARDWALK SECTION, TYP



BOARDWALK TRANSITION, TYP



BOARDWALK GUARDRAIL, TYP



PLANS DEVELOPED BY:
REID MIDDLETON INC.
4300 B STREET SUITE 302
ANCHORAGE, ALASKA 99503
#AECC598

DESIGNED BY: DDS	CHECKED: DDS	LAYOUT BY:	CHECKED BY:	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	AMATS: ANCHORAGE AREA WIDE TRAILS REHABILITATION FISH CREEK TRAIL BOARDWALK DETAILS	 BRIDGE NO. 4 DWG. NO. 5
DRAWN BY: DAVID PARK	CHECKED: DDS	SPECIFICATIONS BY: DDS	P S & E COMPARED:			
QUANTITIES BY: DDS	CHECKED: DDS	APPROVAL RECOMMENDED BY:				