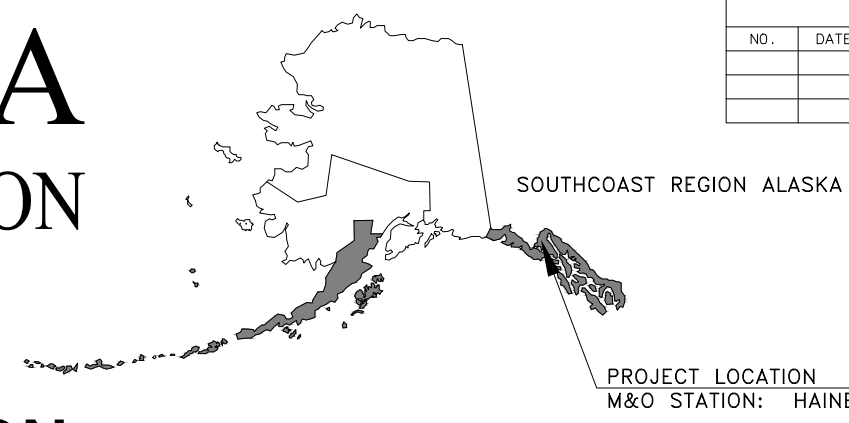


FIRM DOWL
 FILE C:\dowl_pw\0388515\SA-GN-CV-A1-61850.dwg
 ADDRESS 5368 COMMERCIAL BLVD., JUNEAU, AK 99801
 DATE 1/15/2021 LAYOUT A1
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED STAFF
 CERTIFICATE OF AUTH # : AECL848

DRAFT CONCURRENCE SET

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



REVISIONS		
NO.	DATE	DESCRIPTION

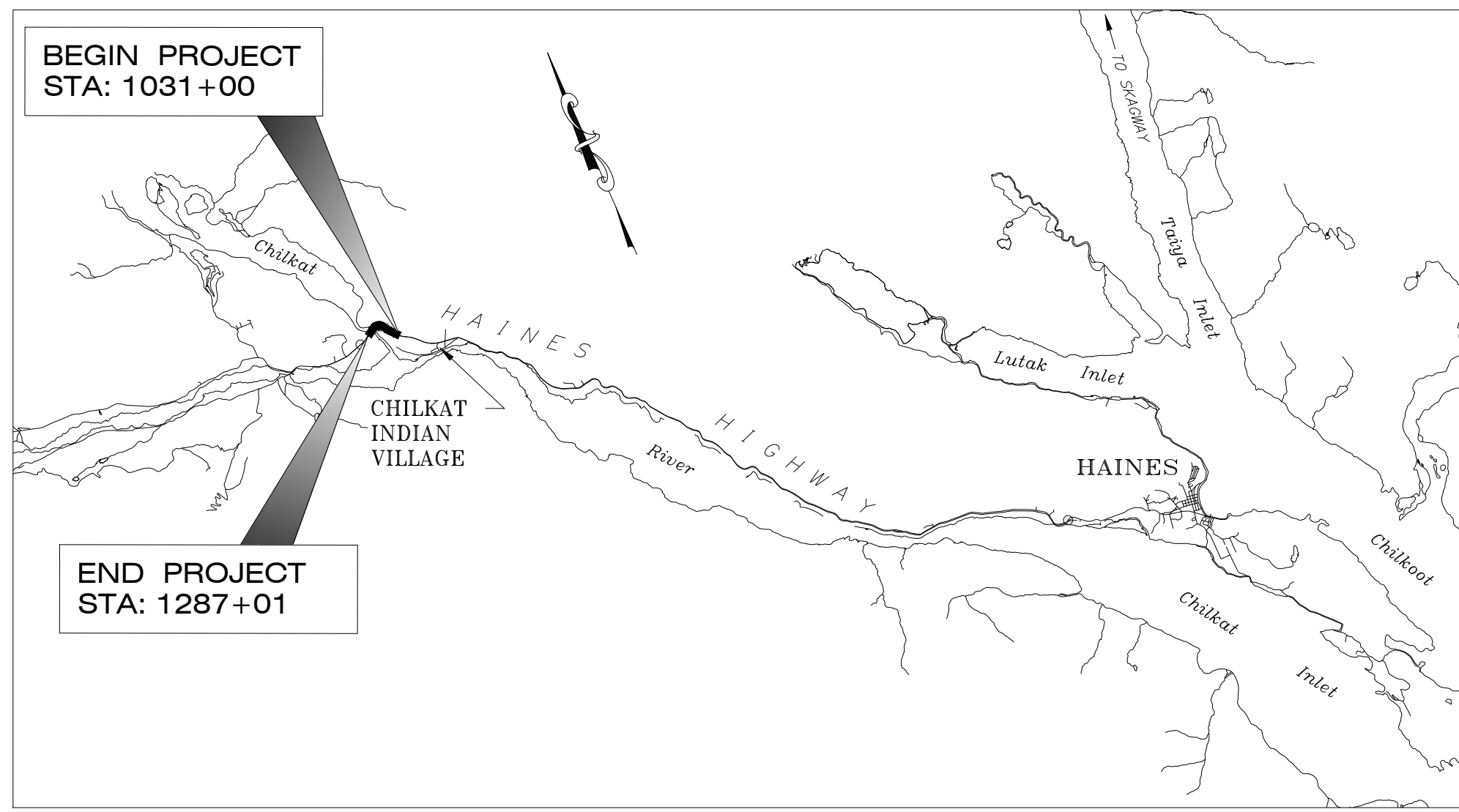
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	A1	A5
CDS ROUTE: 298000			MILEPOINT: 22.4 TO 24.8	
LATITUDE: 59° 18' 26" N			LONGITUDE: 135° 42' 51" W	
			PLAN SET TOTAL	118

HAINES HIGHWAY RECONSTRUCTION MILEPOST 20 TO 25, PHASE 3 PROJECT NO. 0956028/Z686060000

GRADING, DRAINAGE, BRIDGE, PAVING, SIGNING & STRIPING

DESIGN DESIGNATIONS	
FUNCTIONAL CLASS	RURAL OTHER PRINCIPAL ARTERIAL
ADT (2013)	580
ADT (2037)	650
DHV (15.4%) 2011	90
DHV (15.4%) 2037	100
PERCENT TRUCKS (T)	15.1%
DIRECTIONAL SPLIT (D)	55/45
DESIGN SPEED (V)	55 MPH
DESIGN ESAL'S (20 YEARS)	350,000

PROJECT SUMMARY	
HAINES HIGHWAY MP 20 TO MP 25.3	
LENGTH OF PROJECT	4.8 MI.
LENGTH OF PAVING	4.8 MI.
WIDTH OF PAVING	36 FT.



VICINITY MAP
N.T.S.

USE THESE PLANS IN CONJUNCTION WITH THE STATE OF ALASKA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2020 EDITION AND THE PROJECT SPECIAL PROVISIONS.

PLANS DEVELOPED BY: DOWL
 9085 GLACIER HWY - JUNEAU, AK 99801
 907-780-3533 - #AECL848

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

PS&E

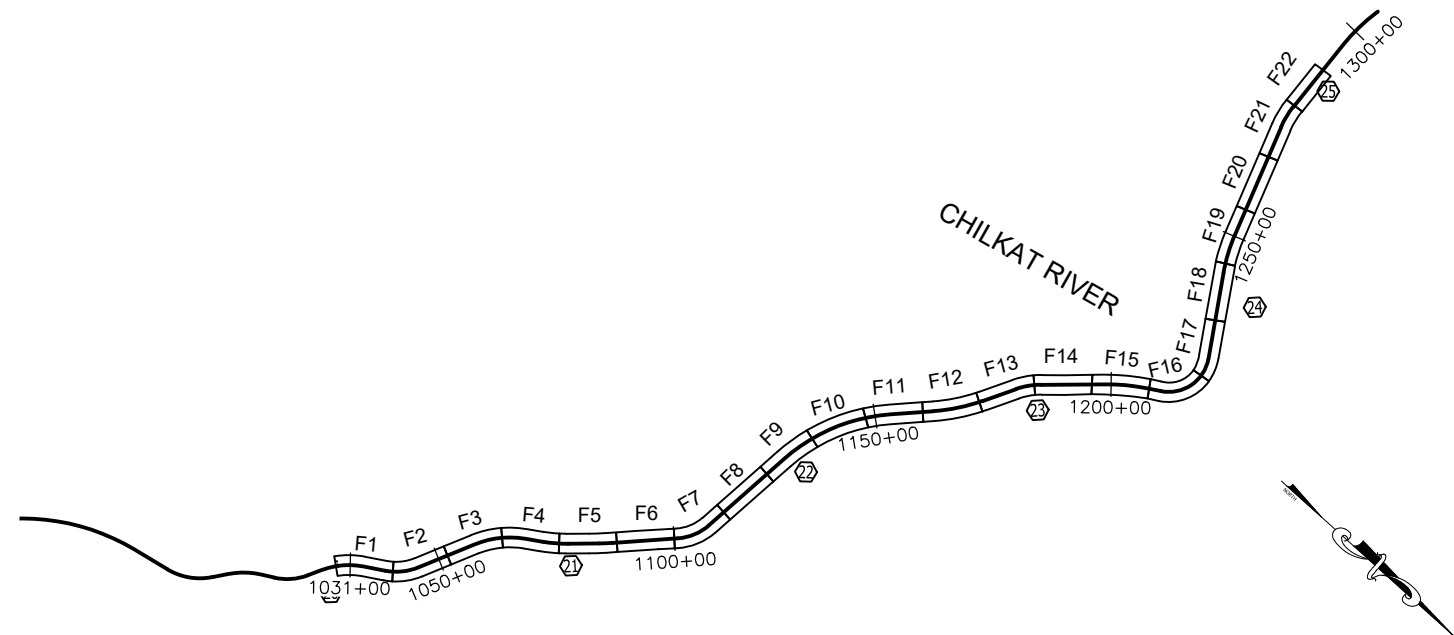
APPROVED:

KIRK MILLER, P.E.
 REGIONAL PRECONSTRUCTION ENGINEER
 CONCUR: _____ DATE _____

D. LANCE MEARIG, P.E.
 DIRECTOR, SOUTHCOAST REGION
 _____ DATE _____

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	A2	A5



ABBREVIATIONS

@	AT	EA	EACH	O.C./ OC	ON CENTER
&	AND	EFS	END FULL SUPERELEVATION	OD	OUTSIDE DIAMETER
ABC	ALUMINUM BOX CULVERT	EG	EXISTING GRADE	PI	POINT OF INTERSECTION
AC	ACRES	EL	ELEVATION	OHW	ORDINARY HIGH WATER
ACI	AMERICAN CONCRETE INSTITUTE	ENGR	ENGINEER	PL	PLACE, PLATE, PROPERTY LINE
ADOT	ALASKA DEPARTMENT OF TRANSPORTATION	E.O.P.	END OF PROJECT	PC, POC	POINT OF CURVATURE
ADT	AVERAGE DAILY TRAFFIC	EP	EDGE OF PAVEMENT	POT, PT	POINT OF TANGENCY
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	ESCP	EROSION SEDIMENT CONTROL PLAN	PRC	POINT OF REVERSE CURVE
APPROX	APPROXIMATE	EXP	EXPOSED, EXPANSION	PST	PERFORATED STEEL TUBE
ATB	ASPHALT TREATED BASE	EXST, EX	EXISTING	PVC	POLYVINYL CHLORIDE PLASTIC
BFS	BEGIN FULL SUPERELEVATION	FDN	FOUNDATION	PVI	POINT OF VERTICAL INTERSECTION
BLC	BALLASTED LOGS CLUSTER	FG	FINAL GRADE	PVMT	PAVEMENT
BM	BENCH MARK	FL	FLOW LINE (ELEV)	R, RAD	RADIUS
B.O.P.	BEGINNING OF PROJECT	FT	FOOT OR FEET	RD	ROAD
BOT	BOTTOM	FW	FISH WHEEL	REF	REFER OR REFERENCE
BRG	BEARING	GAL	GALLONS	REINF	REINFORCED, REINFORCING, REINFORCED
BVCE	BEGIN VERTICAL CURVE ELEVATION	GB	GRADE BREAK	REQD	REQUIRED
BVCS	BEGIN VERTICAL CURVE STATION	HDPE	HIGH DENSITY POLYETHYLENE	ROW, R/W	RIGHT-OF-WAY
CAP	CORRUGATED ALUMINUM PIPE	H	HEIGHT	RP	RIVER PROTRUSION
CAPA	CORRUGATED ALUMINUM PIPE ARCH	HMA	HOT MIX ASPHALT	RT	RIGHT
CC	CENTER TO CENTER	HORIZ	HORIZONTAL	S	SOUTH
CFS	CUBIC FOOT PER SECOND	ILMA	INTERAGENCY LAND MANAGEMENT ASSIGNMENT	SCH	SCHEDULE
CJ	CONSTRUCTION JOINT	IN	INCH	SH, SHT	SHEET
CL	CENTER LINE	INVT, INV	INVERT	SHLD	SHOULDER
CLR	CLEAR	JT	JOINT	SPCAPA	STRUCTURAL PLATE CORRUGATED ALUMINUM PIPE ARCH
CLR	CLEAR	KIP	1000 POUNDS-FORCE	SPECS	SPECIFICATIONS
CMP	CORRUGATED METAL PIPE	L	LENGTH	SQ MI	SQUARE MILES
CSP	CORRUGATED STEEL PIPE	LB	POUNDS	STA	STATION
CONN	CONNECTION	LF	LINEAR FOOT	STD	STANDARD
CONT	CONTINUOUS, CONTINUATION	LT	LEFT	T	SQUARE STEEL TUBE
CPP	CORRUGATED POLYETHYLENE PIPE, TYPE S	LVC	LENGTH OF VERTICAL CURVE	TCE	TEMPORARY CONSTRUCTION EASEMENT
CSP	CORRUGATED STEEL PIPE	MAX	MAXIMUM	TCP	TEMPORARY CONSTRUCTION PERMIT
CTE	CONNECT TO EXISTING	ME	MATCH EXISTING	TYP	TYPICAL
CTR	CENTER	MEP	MATCH EXISTING PAVEMENT	VC, V.C.	VERTICAL CURVE
CY	CUBIC YARD	MIN	MINIMUM	VERT, VI	VERTICAL
DET	DETAIL	MISC	MISCELLANEOUS	VPI	VERTICAL POINT OF INTERSECTION
DHV	DESIGN HOURLY VOLUME	MTE	MATCH TO EXISTING	W	WEST
DI OR Ø	DIAMETER	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES	W	WIDTH
DOT&PF	DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES	N	NORTH		
DWG	DRAWING	NO, #	NUMBER, NUMBERING		
E	EAST	NOM	NOMINAL		
		NTS	NOT TO SCALE		

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	INDEX, SHEET LAYOUT, AND ABBREVIATIONS
A3	LEGEND AND SYMBOLS
A4-A5	EAGLE NEST LOCATIONS
A6-A13	SURVEY CONTROL SHEETS (PS&E REVIEW)
B1-B3	TYPICAL SECTIONS
C1	ESTIMATE OF QUANTITIES
D1-D6	SUMMARY TABLES
F1-F22	PLAN AND PROFILE
G1-G8	TURNOUTS, RECREATION FACILITIES & DRIVEWAYS
H1-H25	SIGNING AND STRIPING
J1-J7	MISCELLANEOUS DETAILS
N1-N17	CHILKAT RIVER BRIDGE
Q1-Q6	DEBRIS CULVERTS
S1-S4	TRAFFIC CONTROL PLAN
T1-T12	EROSION SEDIMENT CONTROL PLAN

THE FOLLOWING ALASKA STANDARD PLANS APPLY TO THIS PROJECT:

C-04.12	D-30.11	G-05.11S	G-20.12	I-20.20	M-16.01	S-01.02	S-31.02
C-05.20	D-31.01	G-10.21	G-26.00	I-21.12	M-20.15	S-05.02	S-32.02
D-01.02	E-09.00	G-11.01	G-29.01	I-81.00	M-23.13	S-20.11	T-21.04
D-04.22	G-00.05	G-14.01		M-13.01	S-00.12	S-30.05	



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**HAINES HIGHWAY RECONSTRUCTION
MILEPOST 20 TO 25**

**INDEX, SHEET LAYOUT, AND
ABBREVIATIONS**

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 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: NOBLE
 CERTIFICATE OF AUTH #: AECL848

DRAFT CONCURRENCE SET

FIRM DOWL
 FILE C:\dowl\p\40388515\SA-GN-CV-A3-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # : AECL848
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED
 LAYOUT A3

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	A3	A5

SYMBOL	DESCRIPTION
	BLM MONUMENT
	GLO MONUMENT
	USC&GS MONUMENT
	PRIMARY MONUMENT
	CENTERLINE MONUMENT IN CASING
	PRIMARY R.O.W. MONUMENT
	BEARING OBJECT
	MISCELLANEOUS MONUMENT
	LINE OF SIGHT MONUMENT
	CONCRETE R.O.W. MONUMENT
	BENCHMARK
	REBAR AND CAP
	REBAR
	IRON PIPE
	PK NAIL
	SPIKE
	HUB AND TACK
	CONSTRUCTION CENTERLINE
	MISCELLANEOUS CENTERLINE
	STATION EQUATION
	PROJECT RIGHT-OF-WAY LINE
	EXISTING RIGHT-OF-WAY LINE
	EXISTING PROPERTY LINE
	EASEMENT/ILMA/MATERIAL SALE AREA
	TCE/TCP
	PROPOSED CUT SLOPE LIMIT
	PROPOSED FILL SLOPE LIMIT
	SECTION LINE
	1/4 SECTION LINE
	1/16 SECTION LINE
	TOWNSHIP & RANGE LINE

EXISTING	PROPOSED

EXISTING	PROPOSED

H = HOUSE
 G = GARAGE
 M = MERCHANT/STORE
 B = BARN
 S = SHED
 P = PRIVY
 SS = SERVICE STATION
 W = WAREHOUSE

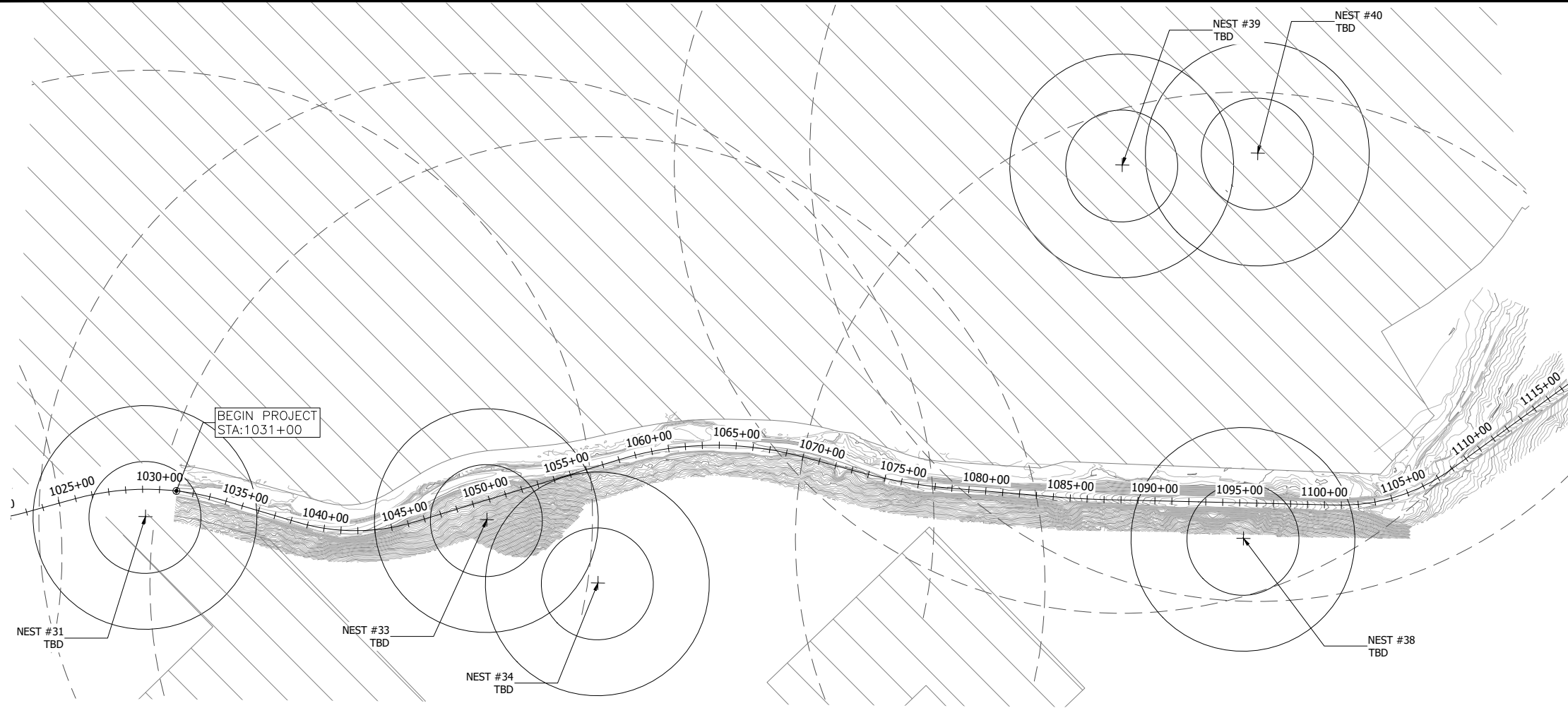
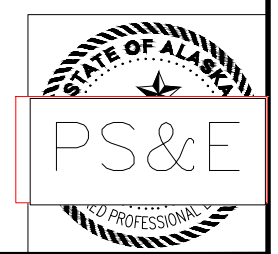
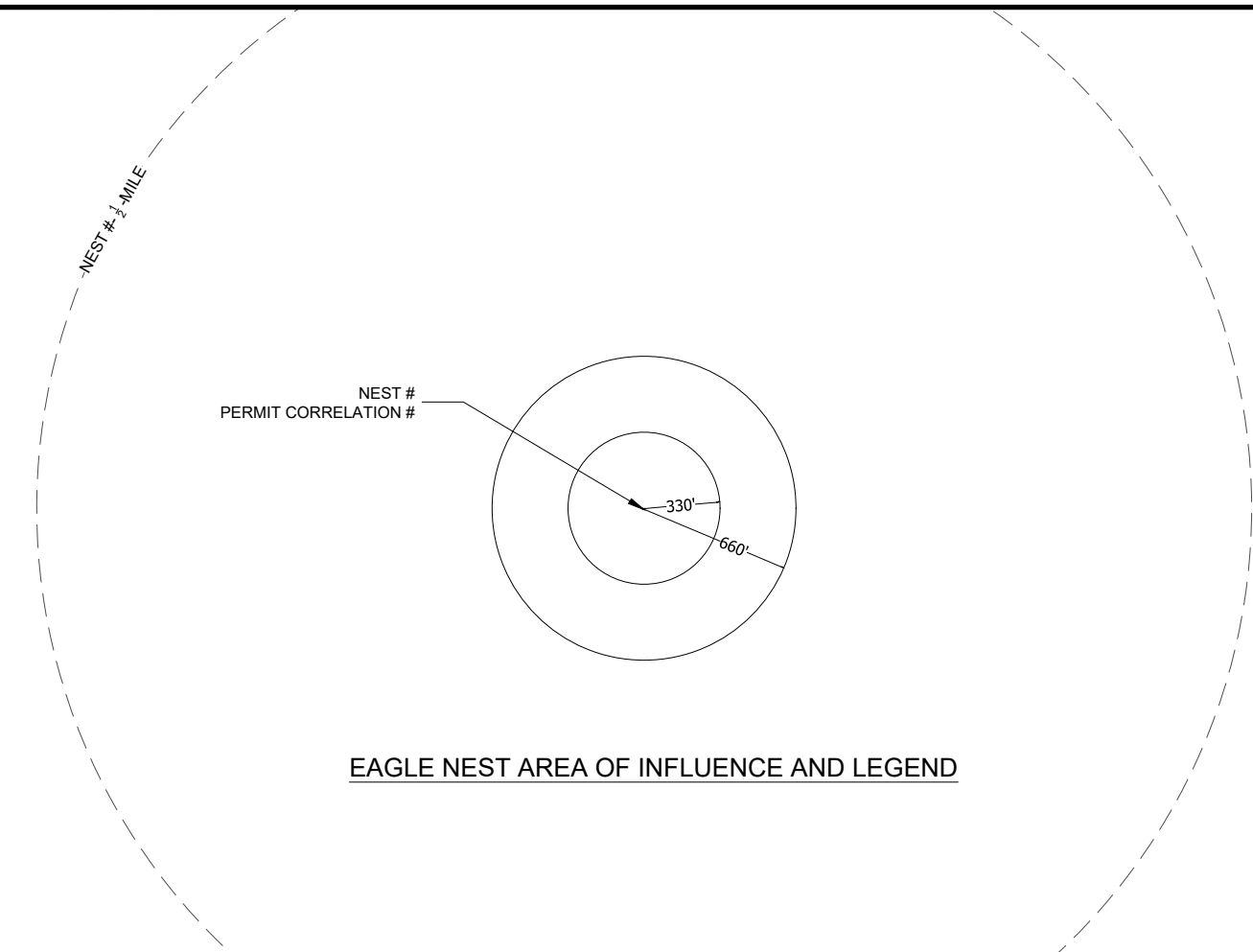


STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
MILEPOST 20 TO 25
LEGEND AND SYMBOLS

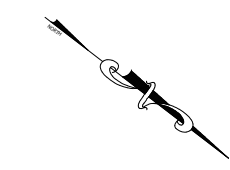
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	A4	A5

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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # AECL848
 DATE 5/4/2020 LAYOUT A4
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR



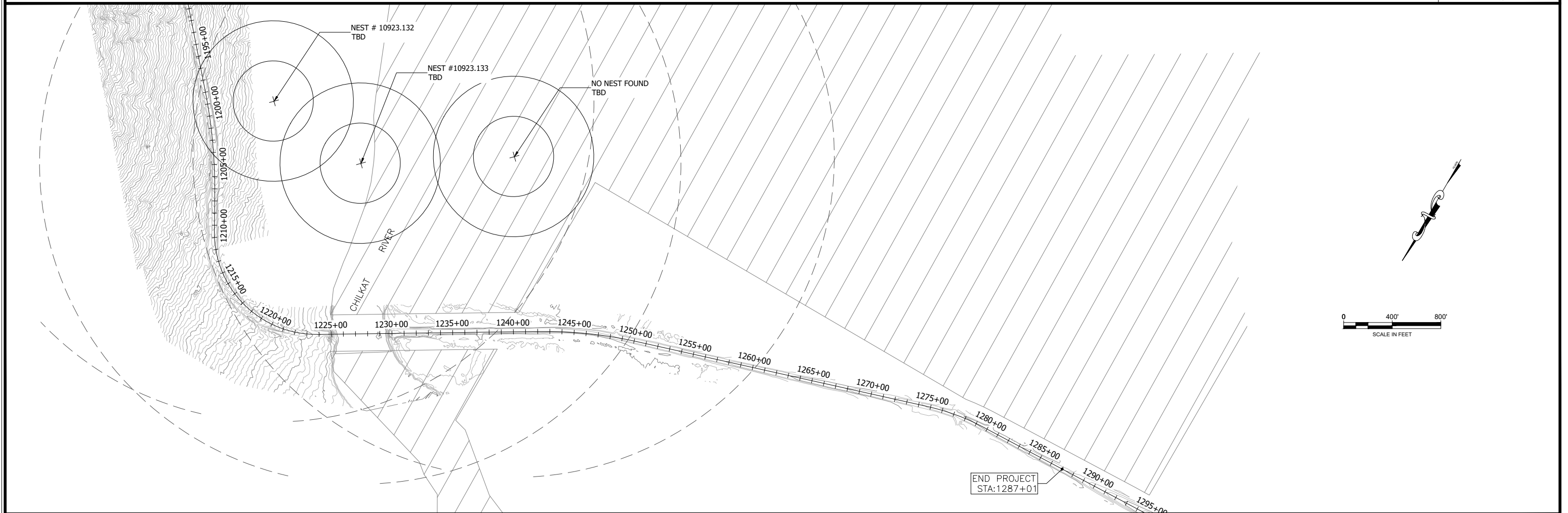
TREE	STATION	OFFSET	PERMIT CORRELATION NUMBER
NEST #31	1029+17	161' RT	TBD
NEST #33	1049+52	111' RT	TBD
NEST #34	1054+69	660' RT	TBD
NEST #38	1095+30	217' RT	TBD
NEST #39	1087+61	1968' LT	TBD
NEST #40	1095+32	2058' LT	TBD
NEST #10923.132	1200+61	543' LT	TBD
NEST #10923.133	1205+37	1208' LT	TBD
NO NEST FOUND	1240+28	1440' LT	TBD



DRAFT CONCURRENCE SET

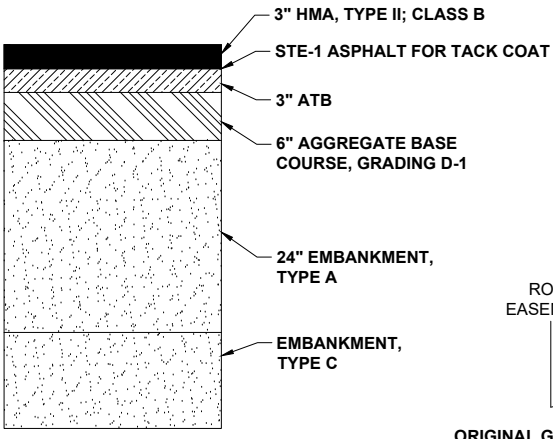
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 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # AECL848
 DATE 5/4/2020
 LAYOUT A5
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR

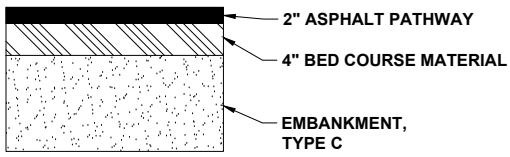


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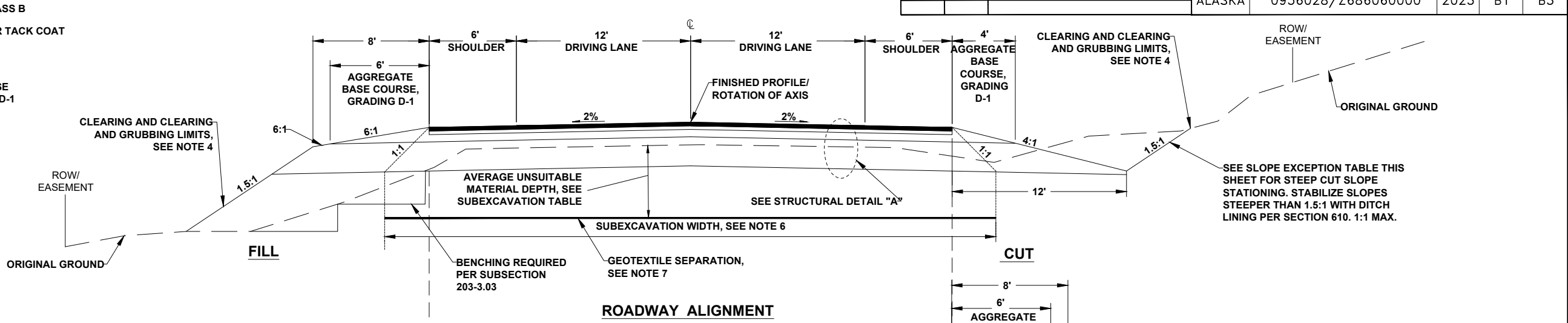
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	B1	B3



STRUCTURAL DETAIL "A"

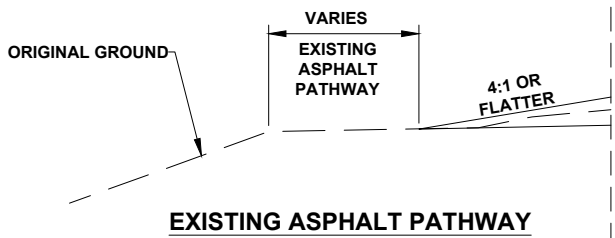


STRUCTURAL DETAIL "B"

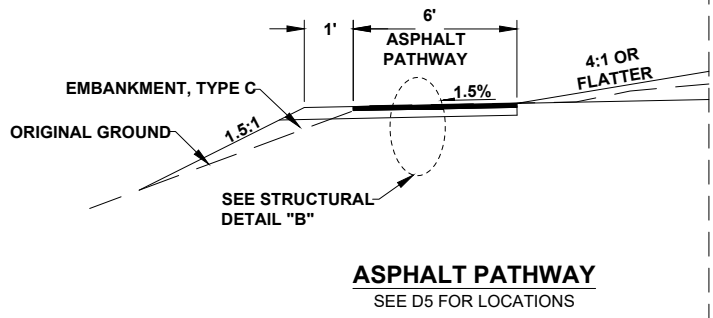


ROADWAY ALIGNMENT NOTES

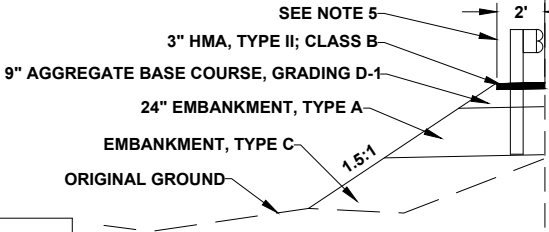
1. THE EXISTING PAVEMENT VARIES IN THICKNESS. SEE THE TEST HOLE DATA IN THE GEOTECHNICAL REPORT FOR KNOWN LOCATIONS OF PAVEMENT THICKNESS.
 2. SEEDING, SCHEDULE A PER SECTION 618 SHALL BE APPLIED TO ALL CONSTRUCTION SLOPES, EXCEPT BEDROCK SLOPES AND GRAVEL SHOULDER AND RIPRAP SLOPES BELOW OHW.
 3. FOR SUPERELEVATION TRANSITION REFER TO THE DETAILS ON SHEET J3.
 4. CLEARING LIMITS QUANTITY IS BASED ON AN ASSUMED LINE LOCATED 10' BEYOND THE SLOPE CATCH POINT OR TO ROW, WHICHEVER IS CLOSEST. EXCLUDING AREAS OF RIVER BED, WETLANDS AND STREAM CHANNELS.
 5. PROVIDE AN ADDITIONAL 2-FOOT BUFFER FROM BEHIND GUARDRAIL POST TO INFLECTION POINT AT LOCATIONS OF LONG SPAN GUARDRAIL.
- CLEARING AND GRUBBING LIMITS QUANTITY IS BASED ON THE AREA BETWEEN THE SLOPE CATCH POINTS, EXCLUDING AREAS OF EXISTING ROADWAY, DRIVEWAYS AND PULLOUT AREAS.



EXISTING ASPHALT PATHWAY



ASPHALT PATHWAY
SEE D5 FOR LOCATIONS



GUARDRAIL
SEE D5 FOR LOCATIONS

DEBRIS FLOW SITE BETWEEN STA 1178+00 AND 1191+00 IS AN AVAILABLE SOURCE FOR ADDITIONAL EMBANKMENT CONSTRUCTION MATERIAL (APPROX. 67,300 CY). REFER TO SECTIONS 106 AND 203 OF SPECIFICATIONS.

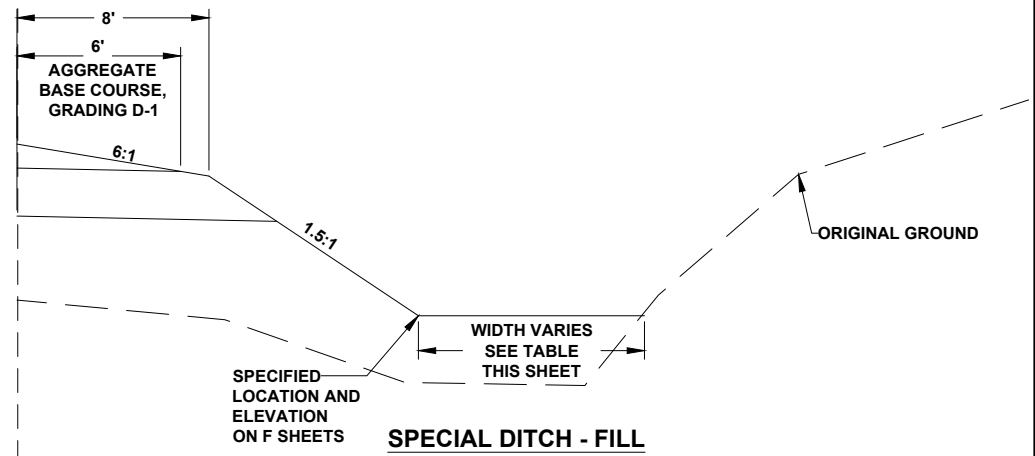
SPECIAL DITCH TABLE				
FROM STA	TO STA	OFFSET	WIDTH	SHEET
1033+00	1037+75	RT	4	F1
1047+50	1065+00	RT	4	F2-F4

SLOPE EXCEPTION TABLE				
FROM STA	TO STA	OFFSET	SLOPE	REMARK
1042+75	1044+50	RT	1.3:1	MINIMIZE CUT SLOPE LIMITS
1096+00	N/A	RT	1.4:1	MINIMIZE CUT SLOPE LIMITS

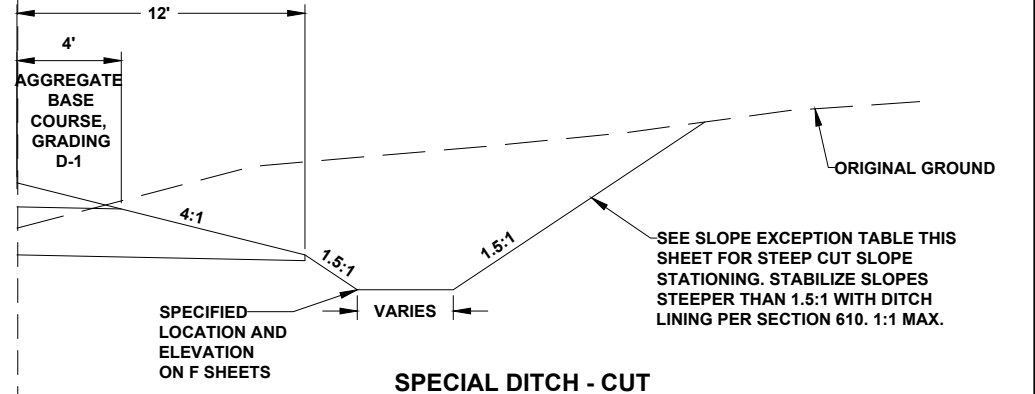
SUBEXCAVATION NOTES

6. FULL WIDTH SUBEXCAVATION ON THE TYPICAL SECTION REPRESENTS THE MAXIMUM WIDTH. NOT ALL INSTANCES OF SUBEXCAVATION WILL NEED THE FULL WIDTH.
7. CLASS 3 NONWOVEN GEOTEXTILE SEPARATION FABRIC SHALL BE PLACED AT BOTTOM OF EXCAVATION OVER SILTY SUBGRADES SUPPORTING OR WITHIN 12 INCHES OF THE TYPICAL SECTION TYPE A MATERIAL.

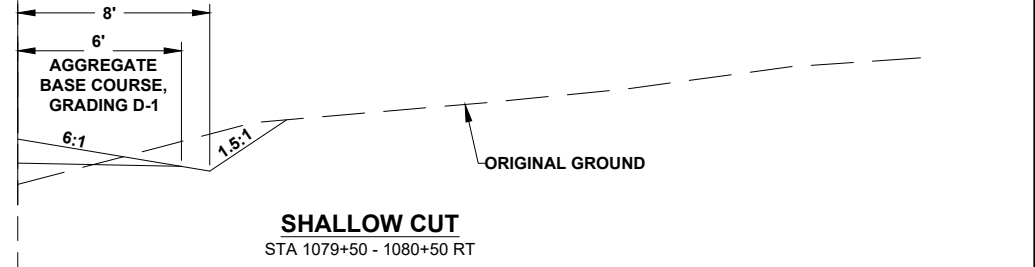
SUBEXCAVATION OF UNSUITABLE MATERIAL			
FROM STA	TO STA	AVERAGE DEPTH OF ORGANICS (FT)	REMARKS
1043+00	1046+00	1	
1052+50	1058+00	1	
1067+00	1075+00	1	



SPECIAL DITCH - FILL



SPECIAL DITCH - CUT



SHALLOW CUT
STA 1079+50 - 1080+50 RT

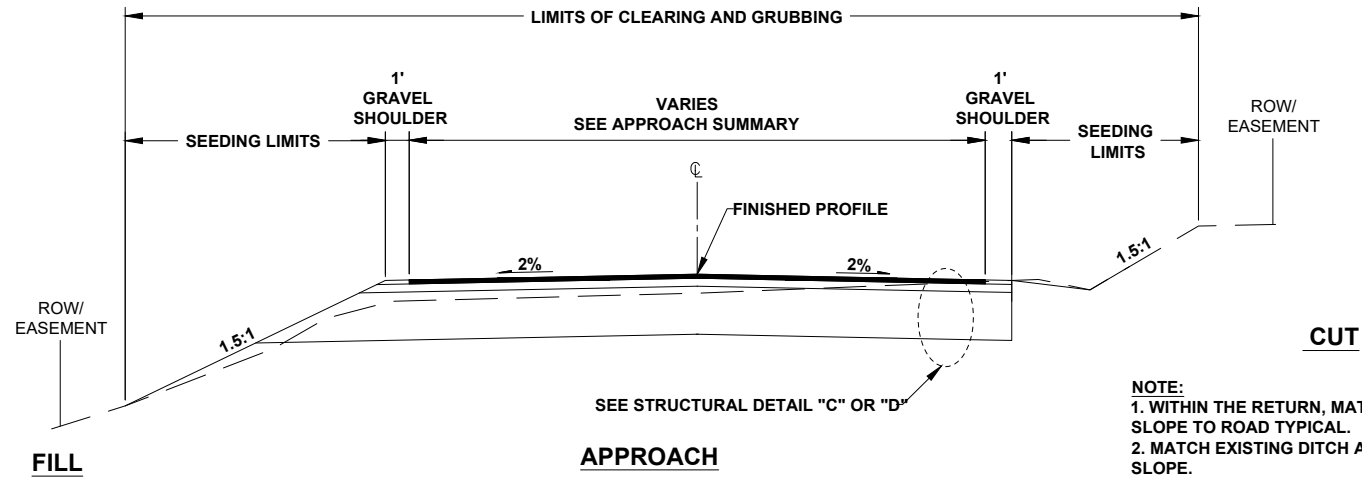


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
MILEPOST 20 TO 25
TYPICAL SECTIONS

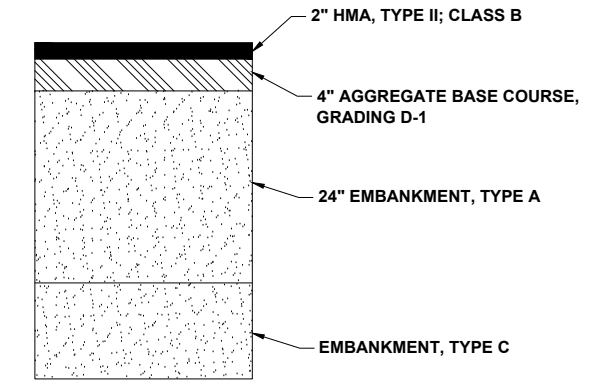
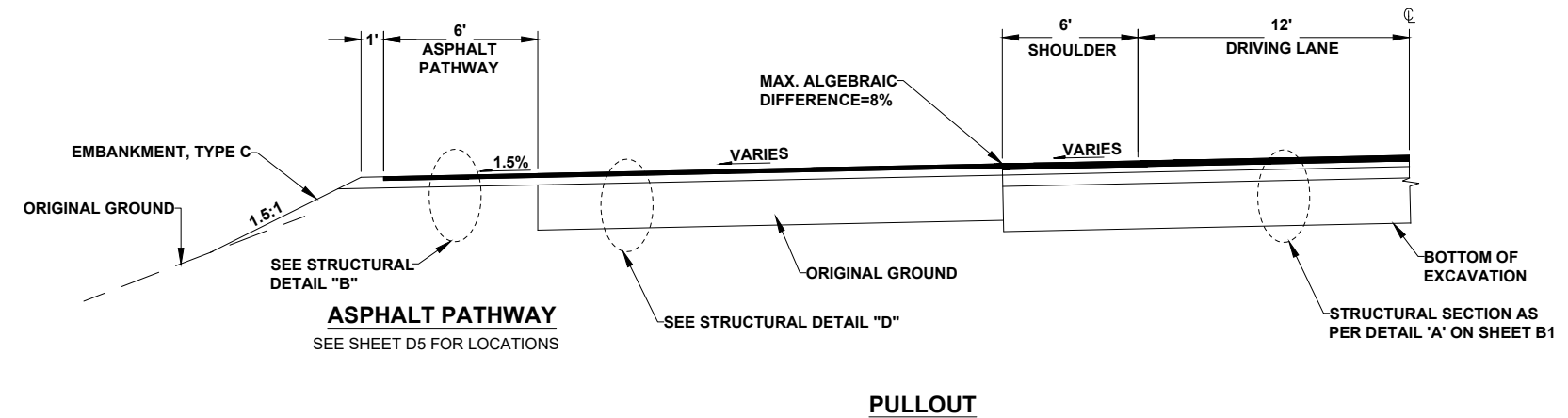
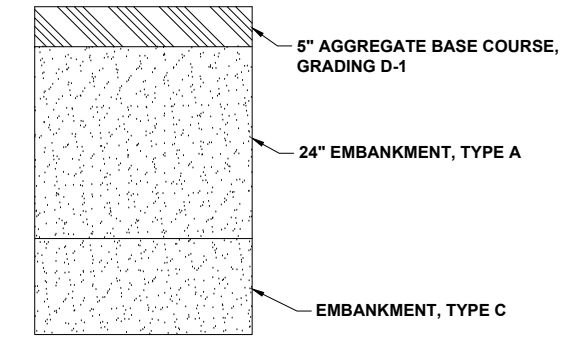
CERTIFICATE OF AUTH # : AECL848
 DRAFTED
 NOBLE
 CHECKED
 HOBBS
 DESIGNED
 IB1
 LAYOUT
 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 ADDRESS
 907 780-3533
 PHONE
 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 ADDRESS
 DATE

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	B2	B3



NOTE:
 1. WITHIN THE RETURN, MATCH FILL SLOPE TO ROAD TYPICAL.
 2. MATCH EXISTING DITCH AND CUT SLOPE.



FIRM DOWL
 FILE C:\dowl_pw\40388515\SA-CT-DT-B-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # : AECL848
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED
 LAYOUT B2
 DATE



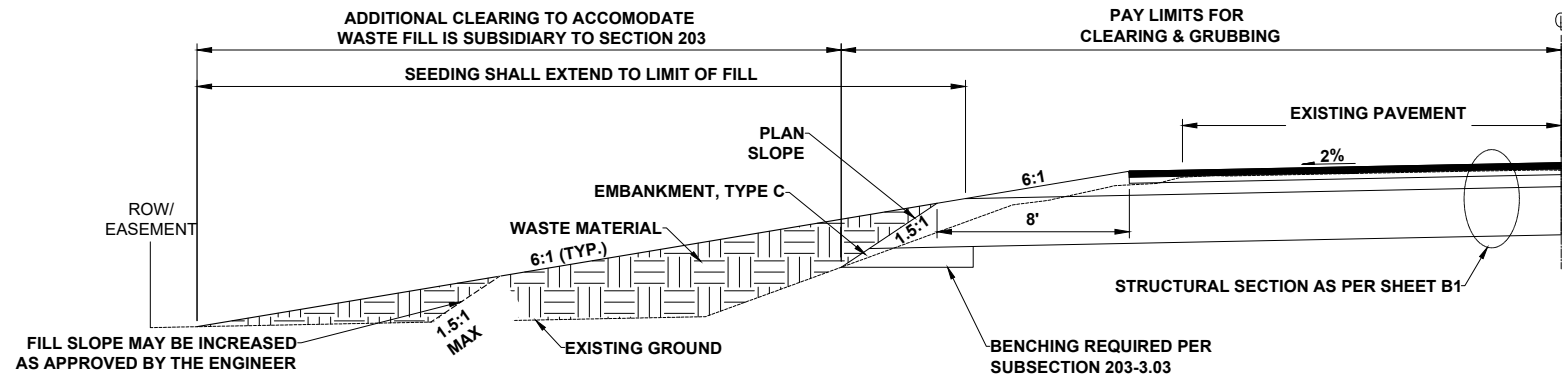
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES

**HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25**

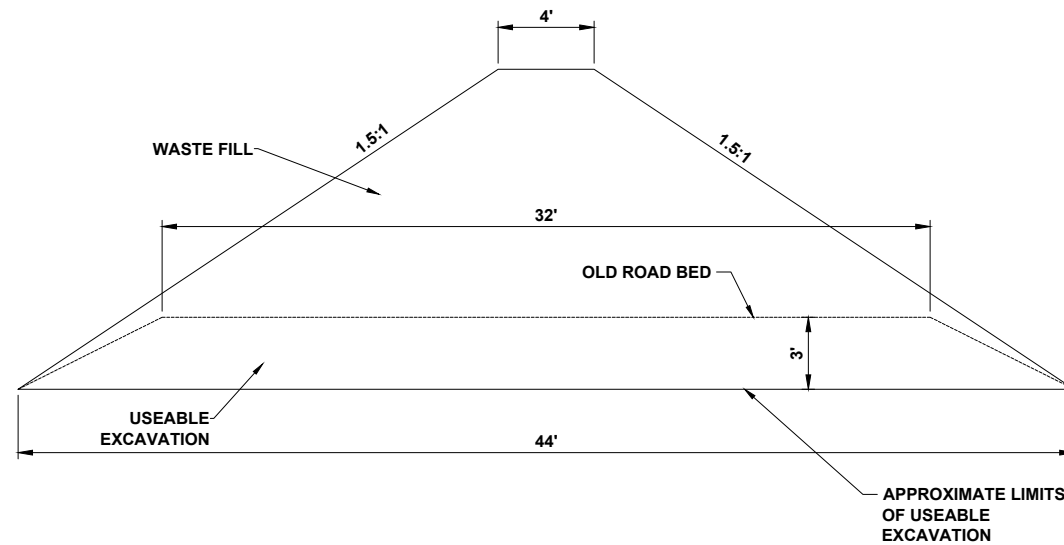
TYPICAL SECTIONS

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	B3	B3



DOWNHILL WASTE FILL



WASTE BERM

NOTES:

- SEE WASTE FILL LOCATIONS TABLE FOR OPTIONAL WASTE DISPOSAL AREAS. OTHER LOCATIONS MAY BE APPROVED BY THE ENGINEER.
- WOODY DEBRIS NOT USED ON THE PROJECT SHALL BE BURNED AT APPROVED SITES WITHIN THE RIGHT-OF-WAY OR HAULED OFF-SITE AT THE CONTRACTOR'S EXPENSE.
- LEAVE AN UNDISTURBED BUFFER OF 50' FROM THE TOP BANK OF ANY STREAM CHANNELS TO THE TOE OF THE WASTE SLOPE. DO NOT EXCEED 2:1 ON THE SLOPES THAT ABUT THE STREAM BUFFER.

WASTE FILL LOCATIONS				
FROM STA	TO STA	OFFSET	SHEET	REMARKS
1067+00	1070+50	LT	F4	OLD ROAD BED
1071+50	1074+50	LT	F4	OLD ROAD BED
1196+00	1222+00	LT	F15-F17	OLD ROAD BED

FIRM DOWL
 FILE C:\dowl_pw\0388515\SA-CT-DT-B-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
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 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED
 CERTIFICATE OF AUTH # : AECL848
 LAYOUT B3



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25
TYPICAL SECTIONS

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	C2	E1

FIRM DOWL
 FILE C:\dowl_pw\0388515\SA-CT-DT-C-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED
 CERTIFICATE OF AUTH # : AECL848

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL QUANTITY
641.0001.0000	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED
641.0003.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	LUMP SUM	ALL REQUIRED
641.0005.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE	CONTINGENT SUM	ALL REQUIRED
641.0006.0000	WITHHOLDING	CONTINGENT SUM	ALL REQUIRED
641.0007.0000	SWPPP MANAGER	LUMP SUM	ALL REQUIRED
642.0001.0000	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED
642.0003.0000	THREE PERSON SURVEY PARTY	HOURL	500
642.0004.0000	SET PRIMARY MONUMENT	EACH	13
642.0006.0000	REPLACE EXISTING WITH PRIMARY MONUMENT	EACH	4
642.0007.0000	REPLACE EXISTING WITH SECONDARY MONUMENT	EACH	4
642.0008.0000	ADJUST EXISTING MONUMENT	EACH	2
642.0009.0000	REFERENCE EXISTING MONUMENT	EACH	9
643.0002.0000	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
643.0003.0000	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQUIRED
643.0011.0000	SPECIAL CONSTRUCTION SIGNS	SQUARE FOOT	128
643.0032.0000	FLAGGING	CONTINGENT SUM	ALL REQUIRED
643.0023.0000	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED
643.0025.0000	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQUIRED
644.0001.0000	FIELD OFFICE	LUMP SUM	ALL REQUIRED
644.0002.0000	FIELD LABORATORY	LUMP SUM	ALL REQUIRED
644.2004.0000	ENGINEERING COMMUNICATIONS	CONTINGENT SUM	ALL REQUIRED
645.0001.0000	TRAINING PROGRAM, 6 TRAINEES/APPRENTICES	LABOR HOUR	3000
654.2004.0000	MONITOR, ARCHAEOLOGICAL	CONTINGENT SUM	ALL REQUIRED
654.2008.0000	MONITOR, MITIGATION MANAGER	LUMP SUM	ALL REQUIRED
670.0001.0000	PAINTED TRAFFIC MARKINGS	LUMP SUM	ALL REQUIRED
683.2002.0000	UTILITY RELOCATION	LUMP SUM	ALL REQUIRED

TABLE OF ESTIMATING FACTORS		
ITEM NO.	ITEM DESCRIPTION	UNIT
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	1.15 TON/CY
306.0001.0000	ATB	2.14 TON/CY
306.0002.5834	ASPHALT BINDER, GRADE PG 58-34 E	5.30% OF TOTAL WEIGHT OF 306.0001.0000
401.0001.002B	HMA, TYPE II; CLASS B	159 LB/CF
401.0004.5834	ASPHALT BINDER, GRADE PG 58-34 E	5.30% OF TOTAL WEIGHT OF 401.0001.002B
402.0001.STE1	STE-1 ASPHALT FOR TACK COAT	0.10 GAL/SY, 240 GAL/TON
608.2002.0000	ASPHALT PATHWAY	131 LB/SY PER INCH DEPTH, 175 LB/CF
611.0002.0001	RIPRAP, CLASS I	108 LB/CF, 1.46 TON/CY
611.0002.0002	RIPRAP, CLASS II	108 LB/CF, 1.46 TON/CY
611.0002.0003	RIPRAP, CLASS III	108 LB/CF, 1.46 TON/CY
618.0003.0000	WATER FOR SEEDING	GAL/1,000 SF



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
MILEPOST 20 TO 25
ESTIMATE OF QUANTITIES

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	D1	D4

FIRM DOWL
 FILE C:\dowl_pw\0388515\SA-CT-DT-D-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED
 CERTIFICATE OF AUTH # : AECL848

201.0001.0000 – CLEARING					
SHEET	FROM STATION	TO STATION	OFFSET	AREA (ACRE)	REMARKS
F1	1031+00	1040+00	LT/RT	0.5	
F2	1040+00	1052+00	LT/RT	1.0	
F3	1052+00	1064+00	LT/RT	0.7	
F4	1064+00	1076+00	LT/RT	0.7	
F5	1076+00	1088+00	LT/RT	0.7	
F6	1088+00	1100+00	LT/RT	0.7	
F7	1100+00	1112+00	LT/RT	1.0	
F8	1112+00	1124+00	LT/RT	0.7	
F9	1124+00	1136+00	LT/RT	0.7	
F10	1136+00	1148+00	LT/RT	0.7	
F11	1148+00	1160+00	LT/RT	0.7	
F12	1160+00	1172+00	LT/RT	0.7	
F13	1172+00	1184+00	LT/RT	0.6	
F14	1184+00	1196+00	LT/RT	0.6	
F15	1196+00	1208+00	LT/RT	0.7	
F16	1208+00	1220+00	LT/RT	0.7	
F17	1220+00	1232+00	LT/RT	0.4	
F18	1232+00	1244+00	LT/RT	0.7	
F19	1244+00	1256+00	LT/RT	0.7	
F20	1256+00	1268+00	LT/RT	0.6	
F21	1268+00	1280+00	LT/RT	0.6	
F22	1280+00	1287+01	LT/RT	0.4	
TOTAL:				14.8	ACRE

202.0002.0000 – REMOVAL OF PAVEMENT					
SHEET	FROM STATION	TO STATION	OFFSET	AREA (SY)	REMARKS
F1	1031+00	1040+00	LT/RT	2,920	PATHWAY INCLUDED
F2	1040+00	1052+00	LT/RT	3,720	
F3	1052+00	1064+00	LT/RT	3,859	PATHWAY INCLUDED
F4	1064+00	1076+00	LT/RT	3,769	
F5	1076+00	1088+00	LT/RT	3,701	
F6	1088+00	1100+00	LT/RT	3,711	
F7	1100+00	1112+00	LT/RT	3,684	
F8	1112+00	1124+00	LT/RT	3,721	
F9	1124+00	1136+00	LT/RT	3,737	
F10	1136+00	1148+00	LT/RT	3,696	
F11	1148+00	1160+00	LT/RT	3,681	
F12	1160+00	1172+00	LT/RT	3,719	
F13	1172+00	1184+00	LT/RT	3,668	
F14	1184+00	1196+00	LT/RT	3,660	
F15	1196+00	1208+00	LT/RT	3,660	
F16	1208+00	1220+00	LT/RT	3,674	
F17	1220+00	1232+00	LT/RT	2,115	
F18	1232+00	1244+00	LT/RT	3,682	
F19	1244+00	1256+00	LT/RT	3,674	
F20	1256+00	1268+00	LT/RT	3,677	
F21	1268+00	1280+00	LT/RT	3,733	
F22	1280+00	1287+01	LT/RT	2,159	
F21	1268+00	1280+00	LT/RT	3,739	
F22	1280+00	1287+01	LT/RT	2,268	
TOTAL:				77,620	SY

201.0003.0000 – CLEARING AND GRUBBING					
SHEET	FROM STATION	TO STATION	OFFSET	AREA (ACRE)	REMARKS
F1	1031+00	1040+00	LT/RT	1.1	
F2	1040+00	1052+00	LT/RT	3.9	
F3	1052+00	1064+00	LT/RT	2.8	
F4	1064+00	1076+00	LT/RT	1.9	
F5	1076+00	1088+00	LT/RT	1.2	
F6	1088+00	1100+00	LT/RT	1.9	
F7	1100+00	1112+00	LT/RT	2.2	
F8	1112+00	1124+00	LT/RT	1.2	
F9	1124+00	1136+00	LT/RT	1.1	
F10	1136+00	1148+00	LT/RT	1.2	
F11	1148+00	1160+00	LT/RT	0.9	
F12	1160+00	1172+00	LT/RT	1.3	
F13	1172+00	1184+00	LT/RT	1.8	
F14	1184+00	1196+00	LT/RT	1.6	
F15	1196+00	1208+00	LT/RT	1.3	
F16	1208+00	1220+00	LT/RT	1.1	
F17	1220+00	1232+00	LT/RT	1.0	
F18	1232+00	1244+00	LT/RT	1.4	
F19	1244+00	1256+00	LT/RT	1.3	
F20	1256+00	1268+00	LT/RT	1.4	
F21	1268+00	1280+00	LT/RT	1.2	
F22	1280+00	1287+01	LT/RT	0.6	
TOTAL:				33.4	ACRE

202.0009.0000 – REMOVAL OF CURB AND GUTTER					
SHEET	FROM STATION	TO STATION	OFFSET	LENGTH (LF)	REMARKS
F1	1032+45	1036+01	LT	369	
F3	1060+24	1061+00	LT	107	
TOTAL:				476	LF

202.0010.0000 – SINGLE MAILBOX INSTALLATION						
SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	QUANTITY (EA)	REMARKS
F17	1222+77	70.0' LT	1222+77	70.0' LT	1	REMOVE AND RESET
TOTAL:					1	EA



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
MILEPOST 20 TO 25
SUMMARY TABLES

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	D2	D4

FIRM: DOWL
 FILE: C:\dowl_pw\0388515\SA-CT-DT-D-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED:

202.0004.0000 – REMOVAL OF CULVERT PIPE							
SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	LENGTH (LF)	REMARKS	
F2	1040+08	27.5' RT	1040+08	59.4' LT	92	P-110	
F2	1043+88	15.6' LT	1043+71	95.8' LT	82	P-111	
F2	1046+44	81.3' LT	1046+31	141.4' LT	62	P-112	
F2	1048+63	117.8' LT	1048+64	179.1' LT	62	P-113	
F2	1050+73	94.2' LT	1050+84	159.6' LT	67	P-114	
F3	1052+74	55.3' LT	1052+86	116.5' LT	63	P-115	
F3	1055+33	8.9' LT	1055+46	82.5' LT	75	P-116	
F3	1060+29	14.7' RT	1060+31	50.4' LT	66	P-117	
F3	1061+34	42.7' LT	1060+38	55.7' LT	99	P-118	
F4	1072+89	12.2' LT	1072+94	62.5' LT	51	P-119	
F4	1074+44	7.3' RT	1073+95	3.5' RT	50	P-120	
F5	1081+10	15.0' RT	1081+10	41.6' LT	57	P-121	
F5	1083+28	16.7' RT	1083+26	39.9' LT	57	P-122	
F6	1097+78	28.7' RT	1097+76	25.1' LT	54	P-123	
F7	1103+73	32.6' RT	1103+74	33.4' LT	67	P-124	
F7	1106+63	156.5' LT	1106+44	197.0' LT	44		
F7	1110+26	246.6' LT	1110+64	258.8' LT	41		
F7	1111+60	293.3' LT	1111+93	308.2' LT	36		
F8	1112+82	355.4' LT	1113+17	374.7' LT	41		
F12	1167+03	29.8' RT	1167+05	49.8' LT	80	P-125	
F13	1172+36	32.7' RT	1172+38	52.7' LT	86	P-126	
F13	1181+30	33.3' RT	1181+35	24.8' LT	59	P-127	
F14	1188+87	22.7' RT	1188+93	31.3' LT	55	P-128	
F17	1220+44	28.2' LT	1220+78	26.3' LT	26	P-129	
F17	1222+95	29.6' LT	1223+43	32.5' LT	47	P-130	
					TOTAL:	1,519	LF

606.0001.0000 – W-BEAM GUARDRAIL							
SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	LENGTH (LF)	REMARKS	
F4-F7	1074+60	18' LT	1106+34	18' LT	3,163		
F12-F13	1168+58	18' LT	1183+68	18' LT	1,513		
F12-F13	1169+05	18' RT	1176+41	18' RT	738		
F13	1177+12	18' RT	1183+66	18' RT	650		
F14-F15	1184+33	18' LT	1197+65	18' LT	1,338		
F14	1184+34	18' RT	1190+98	18' RT	663		
F17	1224+10	18' RT	1224+35	18' RT	25		
F17	1224+22	18' LT	1224+35	18' LT	13		
F17	1230+23	18' RT	1230+60	18' RT	38		
F17	1230+23	18' LT	1231+23	18' LT	100		
					TOTAL:	8,241	LF

606.0009.0000 – SHORT RADIUS GUARDRAIL							
SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	QUANTITY	REMARKS	
F13	1176+41	18' RT	1176+65	55' RT	1	CURVE RADIUS, 12'	
F13	1176+88	55' RT	1177+12	18' RT	1	CURVE RADIUS, 12'	
F13	1183+66	18' RT	1183+88	51' RT	1	CURVE RADIUS, 12'	
F13	1183+68	18' LT	1183+88	51' LT	1	CURVE RADIUS, 12'	
F14	1184+13	51' LT	1184+33	18' LT	1	CURVE RADIUS, 12'	
F14	1184+13	51' RT	1184+34	18' RT	1	CURVE RADIUS, 12'	
					TOTAL:	6	EA

203.0009.0000 – OBLITERATION OF ROADWAY				
SHEET	FROM STATION	TO STATION	AREA (SY)	REMARKS
F2	1042+48	1046+89	1,116	
F2	1051+41	1052+00	132	
F3	1052+00	1057+55	1,116	
F4	1066+50	1070+77	1,103	
F4	1071+04	1074+95	828	
F7	1104+71	1109+56	1,037	
			TOTAL:	5,332 SY

606.0013.0000 – PARALLEL GUARDRAIL TERMINAL					
SHEET	FROM STATION	TO STATION	OFFSET	QUANTITY	REMARKS
F4	1074+09	1074+60	LT	1	
F7	1106+34	1106+85	LT	1	
F12	1168+07	1168+58	LT	1	
F12	1168+55	1169+05	RT	1	
F14	1190+88	1191+48	RT	1	
F15	1197+65	1198+19	LT	1	
F17	1223+60	1224+10	RT	1	
F17	1223+72	1224+22	LT	1	
F17	1230+60	1231+10	RT	1	
F17	1231+23	1231+73	LT	1	
				TOTAL:	10 EA

606.0006.0000 – REMOVING AND DISPOSING OF GUARDRAIL						
SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	LENGTH (LF)	REMARKS
F4-F5	1074+64	LT	1085+18	LT	1,052	
F17	1224+02	RT	1224+80	RT	78	
F17	1224+27	LT	1224+80	LT	53	
F17	1229+84	RT	1230+36	RT	52	
F17	1229+84	LT	1230+61	LT	78	
					TOTAL:	1,313 LF



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25
SUMMARY TABLES

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	D3	D4

FIRM: DOWL
 FILE: C:\dowl\p\40388515\SA-CT-DT-D-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED:

606.2014.0000 – GUARDRAIL PAVING						
SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	LENGTH (LF)	REMARKS
F4-F7	1074+09	19.6' LT	1106+85	20.2' LT	3,262	
F12-F13	1168+07	20.0' LT	1183+88	51.0' LT	1,612	
F12-F13	1168+55	20.0' RT	1176+65	54.9' RT	844	
F13	1176+88	54.9' RT	1183+88	50.8' RT	756	
F14-F15	1184+13	51.1' LT	1198+19	20.0' LT	1,438	
F14-F15	1184+13	50.8' RT	1191+48	20.0' RT	763	
F17	1223+60	20.0' RT	1224+35	18.0' RT	75	
F17	1223+72	20.0' LT	1224+35	18.0' LT	63	
F17	1230+23	18.0' RT	1231+10	20.0' RT	88	
F17	1230+23	18.0' LT	1231+73	20.0' LT	150	
TOTAL:					9,051	LF

608.0006.0000 – CURB RAMP						
SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	QUANTITY	REMARKS
F3	1060+92	67.7' LT	1061+00	76.5' LT	1	
TOTAL:					1	EA

608.2002.0000 – ASPHALT PATHWAY					
SHEET	FROM STATION	TO STATION	OFFSET	WEIGHT (TONS)	REMARKS
F1	1031+45	1036+87	LT	49	
F3	1059+87	1060+92	LT	10	
TOTAL:				59.0	TON

609.0002.0001 – CURB AND GUTTER, TYPE 1						
SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	LENGTH (LF)	REMARKS
F3	1060+71	34' LT	1060+98	88' LT	67	
TOTAL:					67	LF

611.0001.0001 – RIPRAP, CLASS I				
SHEET	STATION	OFFSET	VOLUME (CY)	REMARKS
F2	1040+09	59' LT	12	RIPRAP APRON (P2-1)
F3	1060+30	51' LT	25	RIPRAP APRON (P3-2)
F4	1074+95	33' LT	12	RIPRAP APRON (P4-1)
F5	1081+09	32' LT	12	RIPRAP APRON (P5-2)
F5	1083+52	31' LT	12	RIPRAP APRON (P5-1)
F7	1103+67	50' LT	25	RIPRAP APRON (P7-1)
F7	1107+89	193' LT	12	RIPRAP APRON (P7-2)
F12	1167+06	50' LT	12	RIPRAP APRON (P12-1)
F13	1172+37	53' LT	25	RIPRAP APRON (P13-1)
F13	1181+38	44' LT	46	DP13-2
F14	1189+02	36' LT	60	DP14-1
N2			1035	BRIDGE NO. 742
TOTAL:			1,286	CY

611.0001.0002 – RIPRAP, CLASS II				
SHEET	STATION	OFFSET	VOLUME (CY)	REMARKS
F2	1049+00	40' LT	97	RIPRAP APRON (P2-2)
F3	1057+82	49' LT	97	RIPRAP APRON (P3-1)
TOTAL:			193	CY

611.0001.0003 – RIPRAP, CLASS III				
SHEET	STATION	OFFSET	VOLUME (CY)	REMARKS
F13	1181+38	44' LT	293	DP13-2
F14	1189+02	36' LT	367	DP13-2
N2			7,120	BRIDGE NO. 742
TOTAL:			7,781	CY

618.0001.0000 – SEEDING				
SHEET	FROM STATION	TO STATION	AREA (ACRE)	REMARKS
F1	1031+00	1040+00	0.9	
F2	1040+00	1052+00	3.0	ROADWAY OBLITERATION INCLUDED
F3	1052+00	1064+00	2.4	ROADWAY OBLITERATION INCLUDED
F4	1064+00	1076+00	1.1	ROADWAY OBLITERATION INCLUDED
F5	1076+00	1088+00	0.9	
F6	1088+00	1100+00	1.6	
F7	1100+00	1112+00	1.9	ROADWAY OBLITERATION INCLUDED
F8	1112+00	1124+00	0.7	
F9	1124+00	1136+00	0.6	
F10	1136+00	1148+00	0.8	
F11	1148+00	1160+00	0.9	
F12	1160+00	1172+00	0.9	
F13	1172+00	1184+00	1.5	
F14	1184+00	1196+00	1.3	
F15	1196+00	1198+76	0.9	
F16	1208+00	1198+76	0.7	
F17	1220+00	1198+76	0.7	
F18	1232+00	1198+76	1.0	
F19	1244+00	1198+76	0.8	
F20	1256+00	1198+76	0.9	
F21	1268+00	1198+76	0.8	
F22	1280+00	1289+51	0.4	
TOTAL:			24.7	ACRE



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
**HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25**
SUMMARY TABLES

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	D4	D4

FIRM: DOWL
 FILE: C:\dowl\p\0388515\SA-CT-DT-D-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED:

618.0003.0000 – WATER FOR SEEDING				
SHEET	FROM STATION	TO STATION	VOLUME (MGAL)	REMARKS
F1	1031+00	1040+00	40.7	
F2	1040+00	1052+00	132.8	ROADWAY OBLITERATION INCLUDED
F3	1052+00	1064+00	106.0	ROADWAY OBLITERATION INCLUDED
F4	1064+00	1076+00	47.5	ROADWAY OBLITERATION INCLUDED
F5	1076+00	1088+00	41.2	
F6	1088+00	1100+00	69.8	
F7	1100+00	1112+00	83.0	ROADWAY OBLITERATION INCLUDED
F8	1112+00	1124+00	32.5	
F9	1124+00	1136+00	27.3	
F10	1136+00	1148+00	36.4	
F11	1148+00	1160+00	37.1	
F12	1160+00	1172+00	41.0	
F13	1172+00	1184+00	63.9	
F14	1184+00	1196+00	56.1	
F15	1196+00	1198+76	37.8	
F16	1208+00	1198+76	32.5	
F17	1220+00	1198+76	28.8	
F18	1232+00	1198+76	43.1	
F19	1244+00	1198+76	36.8	
F20	1256+00	1198+76	40.5	
F21	1268+00	1198+76	34.6	
F22	1280+00	1289+51	16.6	
TOTAL:			1,086.0	ACRE

620.0001.0000 – TOPSOIL				
SHEET	FROM STATION	TO STATION	AREA (SY)	REMARKS
F1	1031+00	1040+00	4,521	
F2	1040+00	1052+00	14,758	ROADWAY OBLITERATION INCLUDED
F3	1052+00	1064+00	11,783	ROADWAY OBLITERATION INCLUDED
F4	1064+00	1076+00	5,275	ROADWAY OBLITERATION INCLUDED
F5	1076+00	1088+00	4,578	
F6	1088+00	1100+00	7,755	
F7	1100+00	1112+00	9,226	ROADWAY OBLITERATION INCLUDED
F8	1112+00	1124+00	3,608	
F9	1124+00	1136+00	3,038	
F10	1136+00	1148+00	4,042	
F11	1148+00	1160+00	4,119	
F12	1160+00	1172+00	4,552	
F13	1172+00	1184+00	7,100	
F14	1184+00	1196+00	6,235	
F15	1196+00	1198+76	4,195	
F16	1208+00	1198+76	3,609	
F17	1220+00	1198+76	3,200	
F18	1232+00	1198+76	4,788	
F19	1244+00	1198+76	4,086	
F20	1256+00	1198+76	4,502	
F21	1268+00	1198+76	3,846	
F22	1280+00	1289+51	1,850	
TOTAL:			120,665	SY

630.0002.0000 – GEOTEXTILE, STABILIZATION, CLASS I				
SHEET	STATION	OFFSET	AREA (SY)	REMARKS
F2	1040+09	59.4' LT	27	RIPRAP APRON (P2-1)
F2	1060+30	51.1' LT	48	RIPRAP APRON (P3-2)
F3	1074+95	33.0' LT	27	RIPRAP APRON (P4-1)
F4	1081+09	32' LT	27	RIPRAP APRON (P5-2)
F5	1083+52	30.9' LT	27	RIPRAP APRON (P5-1)
F7	1103+67	50.4' LT	48	RIPRAP APRON (P7-1)
F7	1107+89	193.1' LT	27	RIPRAP APRON (P7-2)
F12	1167+06	49.8' LT	27	RIPRAP APRON (P12-1)
F13	1172+37	52.8' LT	48	RIPRAP APRON (P13-1)
F2	1049+00	40.0' LT	126	RIPRAP APRON (P2-2)
F3	1057+82	49' LT	126	RIPRAP APRON (P3-1)
F13	1181+38	44.0' LT	101	DP13-2
F14	1189+02	36.0' LT	101	DP14-1
TOTAL:			757	SY

631.0002.0001 – GEOTEXTILE, EROSION CONTROL, CLASS I				
SHEET	STATION	OFFSET	AREA (SY)	REMARKS
N2			3,950	BRIDGE NO. 742
TOTAL:			3,950	SY

639.2001.0000 – TURNOUT				
SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
F1	1034+10	LT	1	HNS 23
F2	1049+03	LT	1	WAYSIDE
F9	1131+11	LT	1	BUS
TOTAL:			3	EA

639.2000.0000 – APPROACH				
SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
F3	1060+83	LT	1	HNS 25A
F3	1063+98	LT	1	HNS 25B
F4	1070+90	LT	1	HNS 26
F7	1107+36	LT	1	KLUKWAN ROAD
F7	1108+51	LT	1	DW-12
F8	1122+19	RT	1	DW-13
F8	1122+37	LT	1	DW-14
F9	1132+33	LT	1	DW-15
F13	1176+76	RT	1	DW-16
F17	1220+56	LT	1	DW-17
F17	1223+15	LT	1	DW-19
F17	1223+17	RT	1	DW-18
F18	1237+29	RT	1	DW-20
F19	1248+49	LT	1	DW-21
F20	1256+64	LT	1	DW-22
F20	1258+24	RT	1	DW-23
F20	1262+02	LT	1	DW-24
F21	1268+12	LT	1	DW-25
F21	1276+96	LT	1	DW-26
F21	1277+51	RT	1	DW-27/DUCK MARSH RD
F22	1280+22	LT	1	DW-28
F22	1283+68	LT	1	DW-29
TOTAL:			22	EA

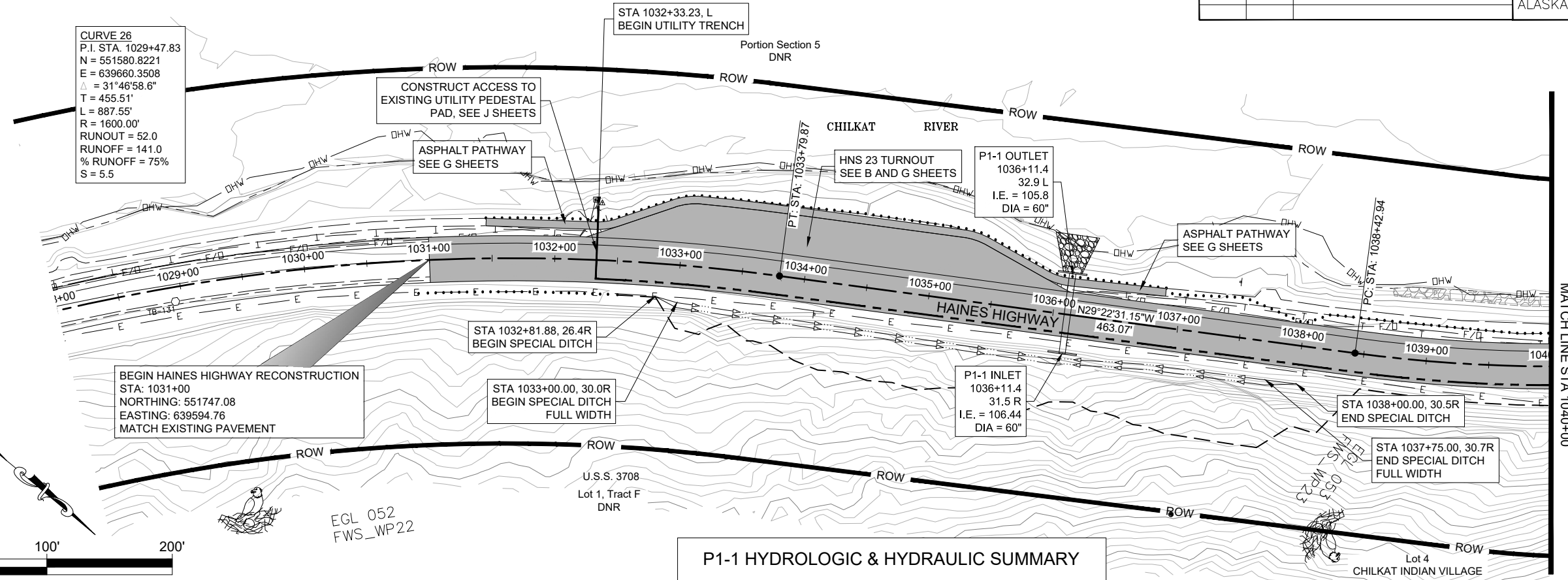


STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
MILEPOST 20 TO 25
SUMMARY TABLES

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F1	F22

CURVE 26
 P.I. STA. 1029+47.83
 N = 551580.8221
 E = 639660.3508
 $\Delta = 31^\circ 46' 58.6''$
 T = 455.51'
 L = 887.55'
 R = 1600.00'
 RUNOUT = 52.0
 RUNOFF = 141.0
 % RUNOFF = 75%
 S = 5.5

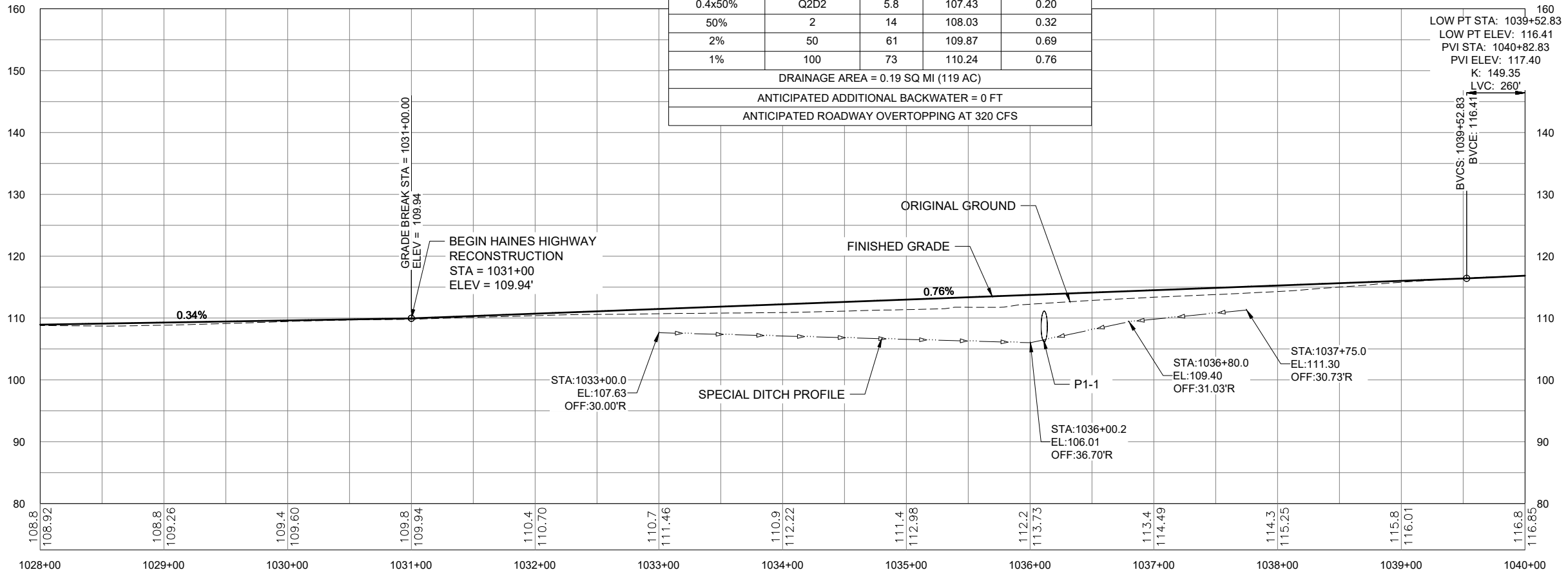


P1-1 HYDROLOGIC & HYDRAULIC SUMMARY

EXCEEDANCE PROBABILITY	RECURRENCE INTERVAL (YEAR)	Q (FLOW) (CFS)	HIGH WATER ELEVATION (FT)	HEADWATER/DEPTH RATIO
0.4x50%	Q2D2	5.8	107.43	0.20
50%	2	14	108.03	0.32
2%	50	61	109.87	0.69
1%	100	73	110.24	0.76

DRAINAGE AREA = 0.19 SQ MI (119 AC)
 ANTICIPATED ADDITIONAL BACKWATER = 0 FT
 ANTICIPATED ROADWAY OVERTOPPING AT 320 CFS

DRAFT

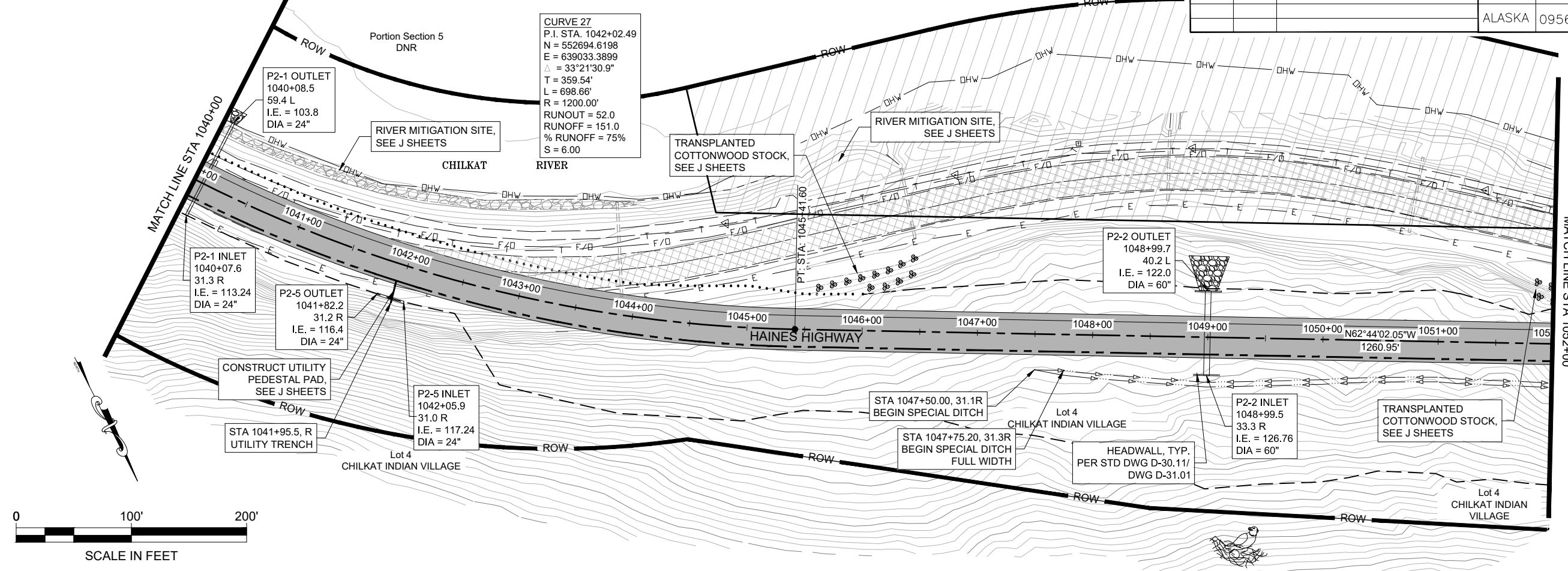


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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT F1
 DESIGNED HOBBS CHECKED NOBLE DRAFTED LUHR
 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # : AECL848

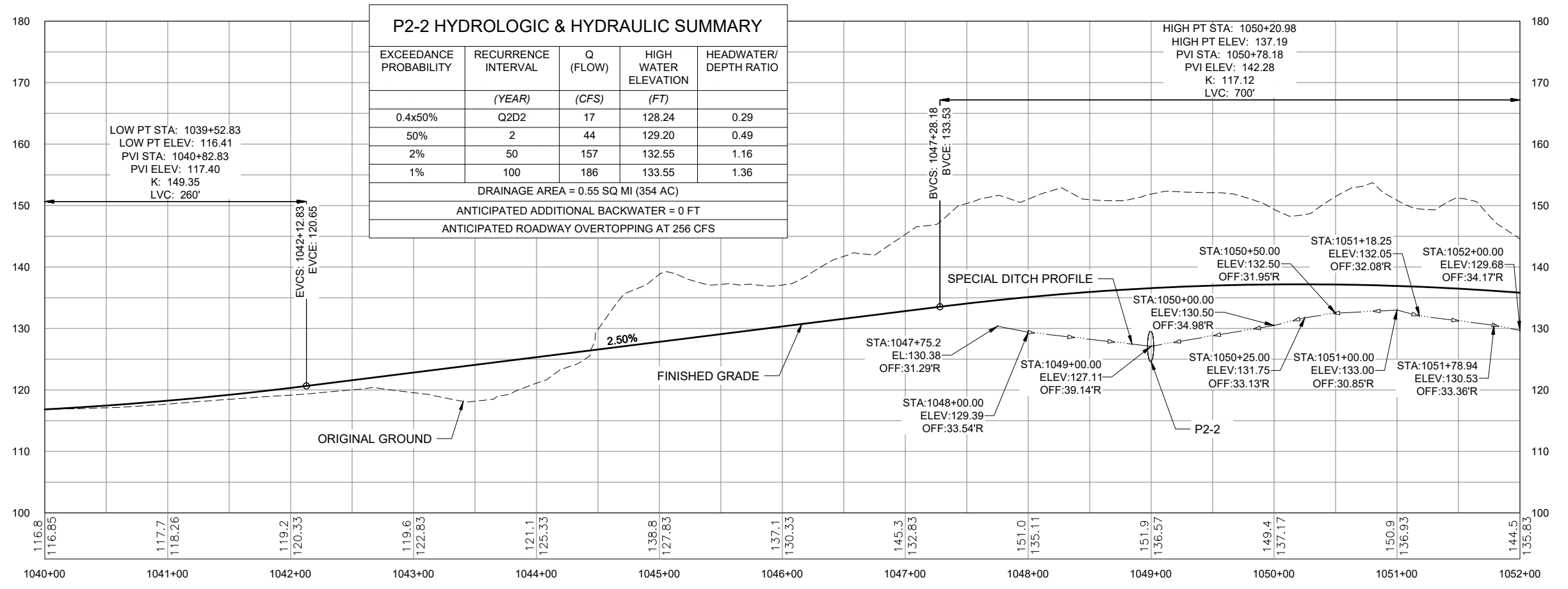
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F2	F22

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 DATE: 5/4/2020
 LAYOUT: F2
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH # : AECL848

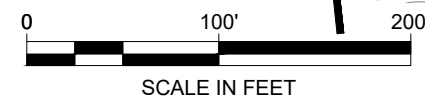
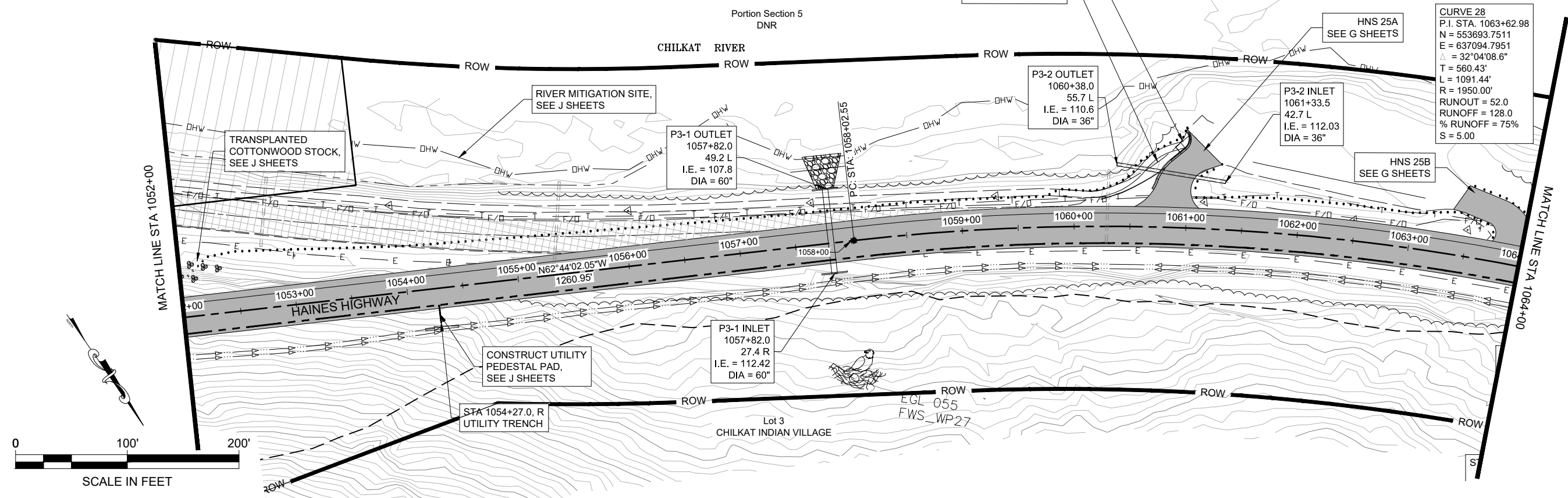


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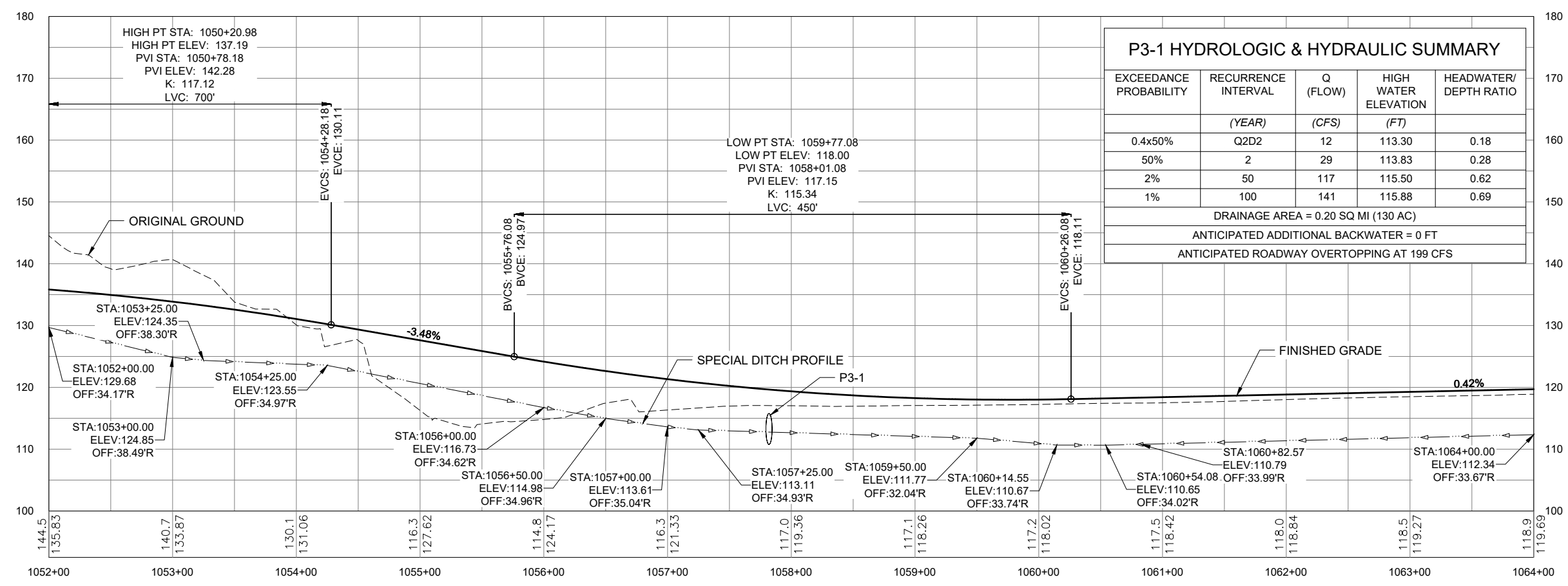


DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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DRAFT

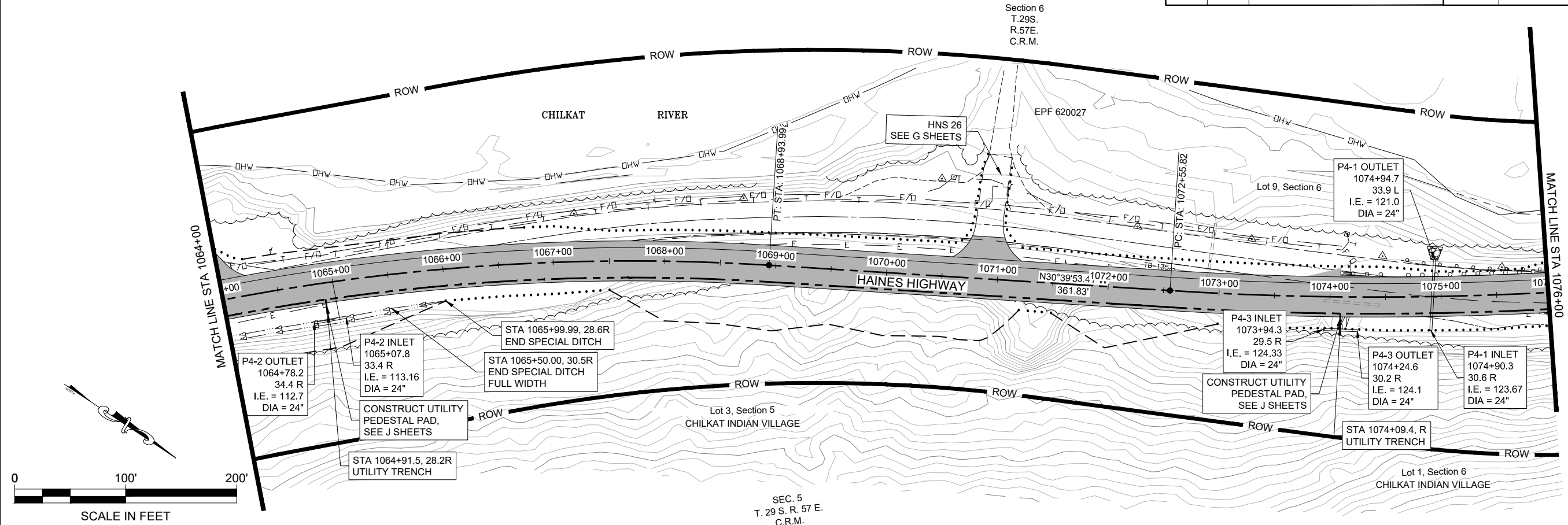


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 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 DATE: 5/4/2020
 LAYOUT: F3
 CERTIFICATE OF AUTH # : AECL848
 CHECKED: NOBLE
 DRAFTED: LUHR

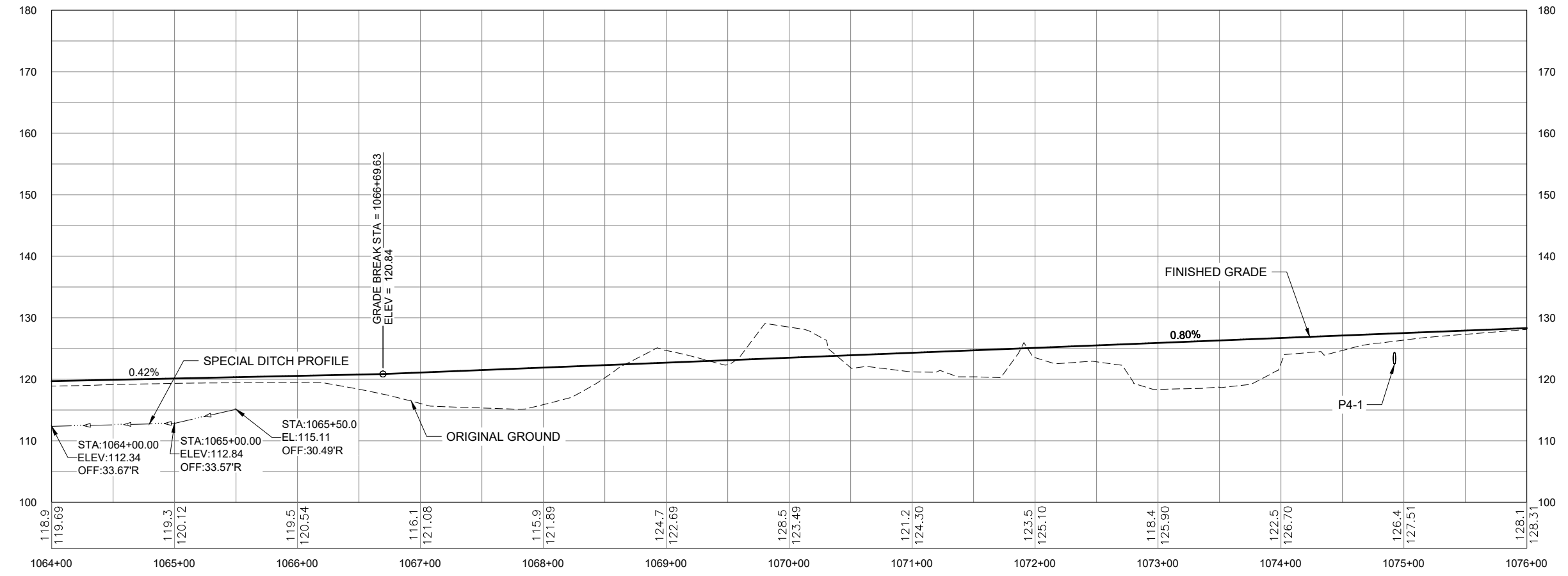
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F4	F22

FIRM: DOWL
 FILE: C:\dowl_pw\0388515\SC-CT-RD-F-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 CERTIFICATE OF AUTH #: AECL848
 DATE: 5/4/2020
 LAYOUT: F4



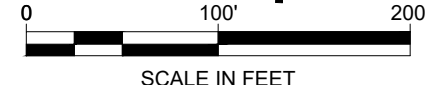
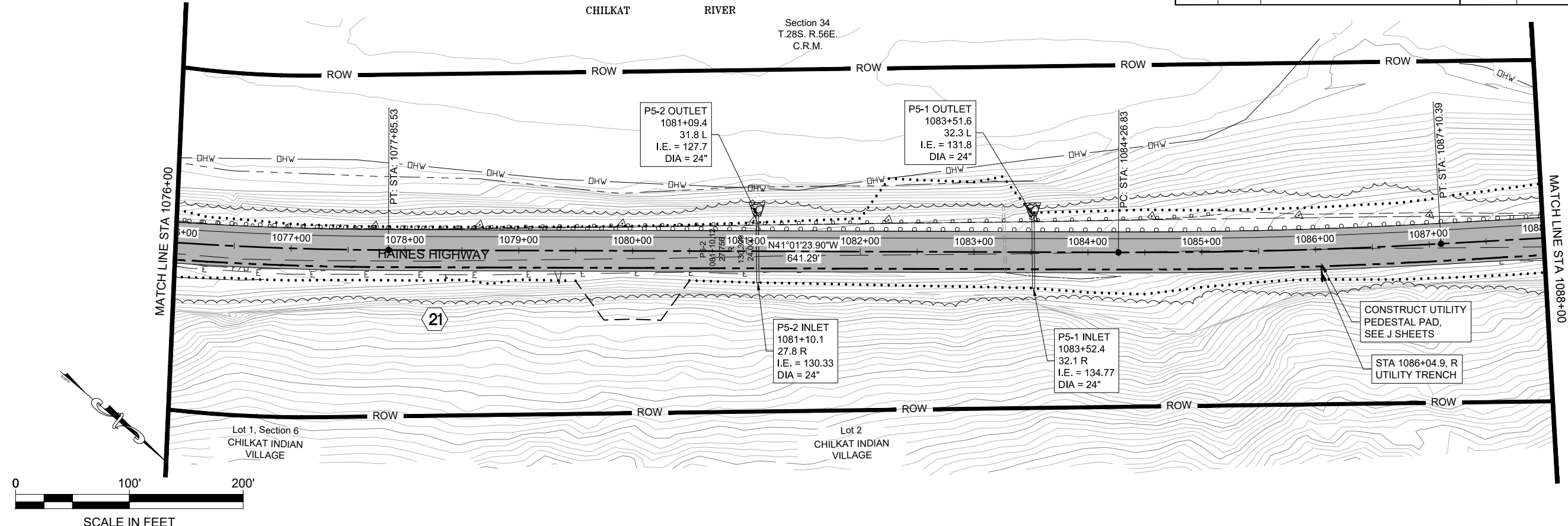
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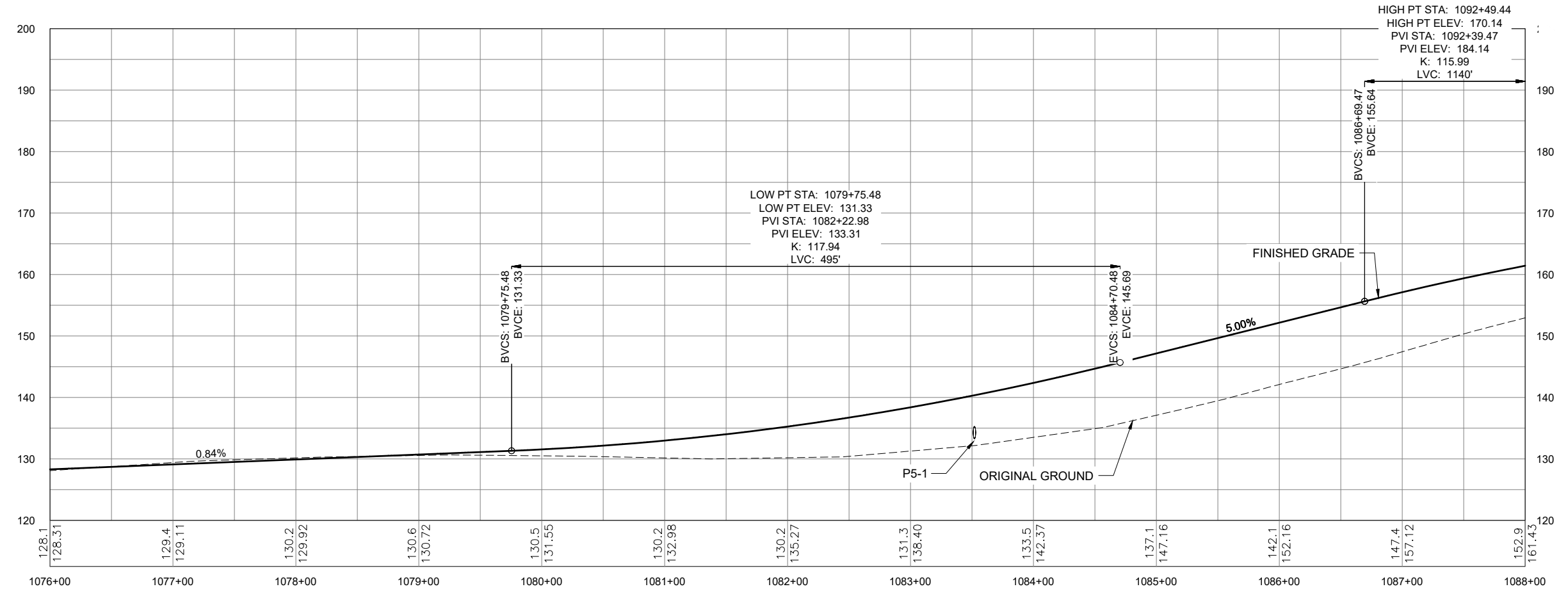
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F5	F22

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 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE: 5/4/2020
 LAYOUT: F5
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH #: AECL848

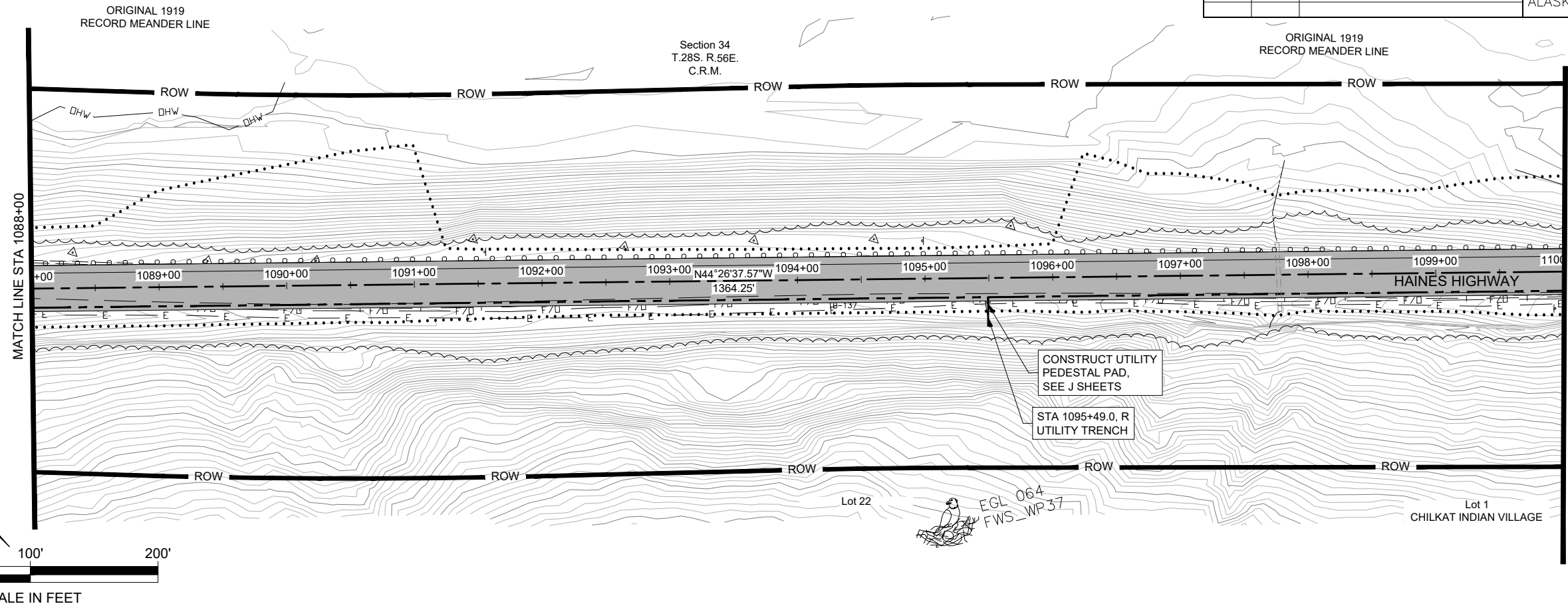


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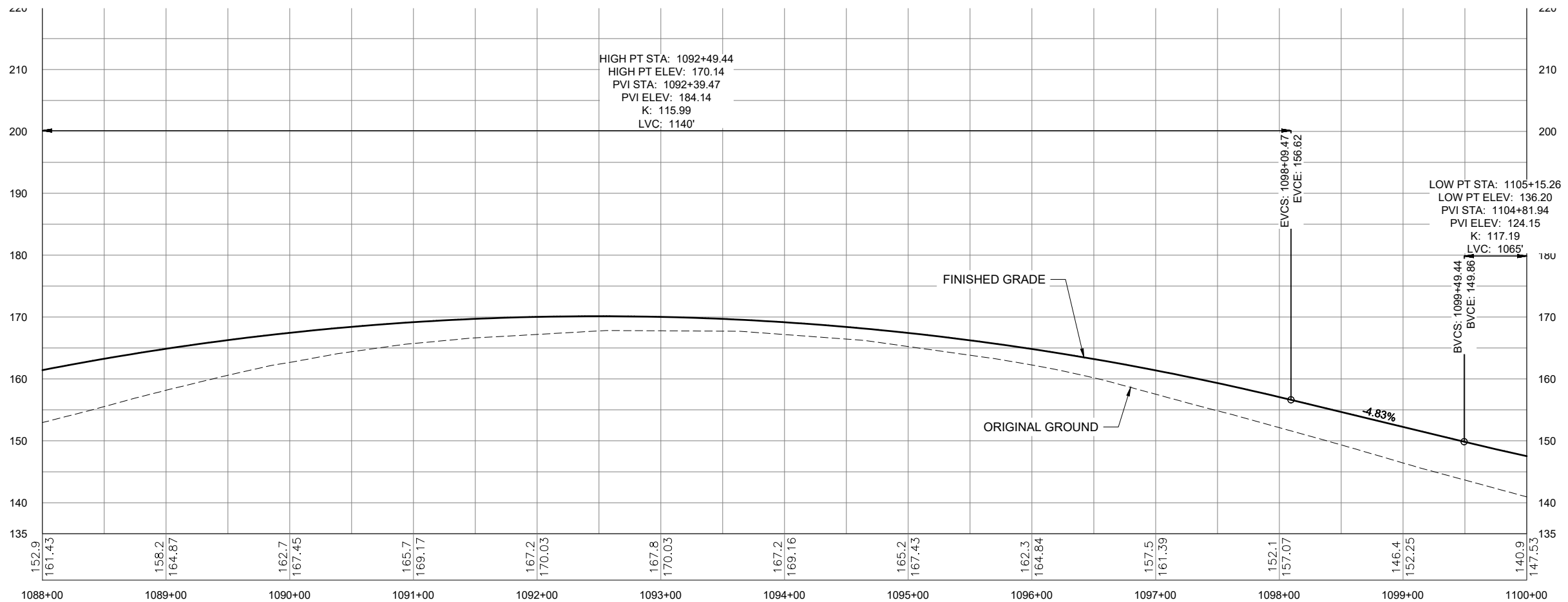


DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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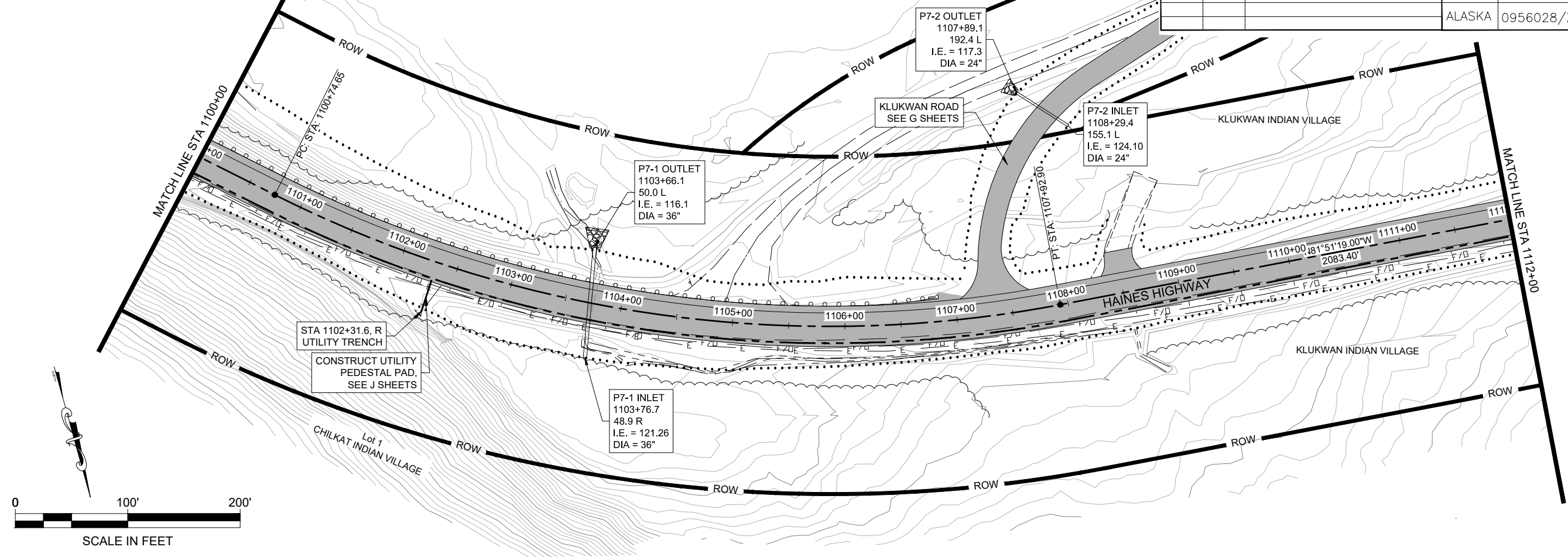


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 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 DATE: 5/4/2020
 LAYOUT: F6
 CERTIFICATE OF AUTH #: AECL848

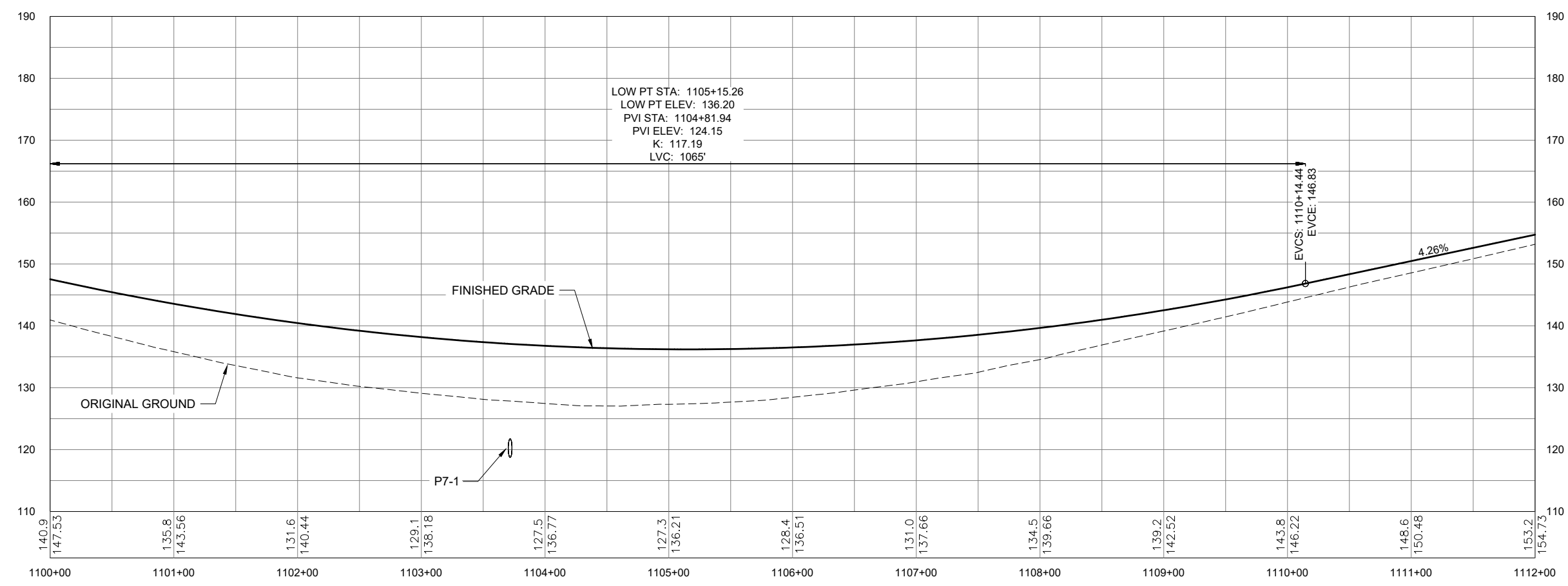
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F7	F22

FIRM: DOWL
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 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 DATE: 5/4/2020
 LAYOUT: F7



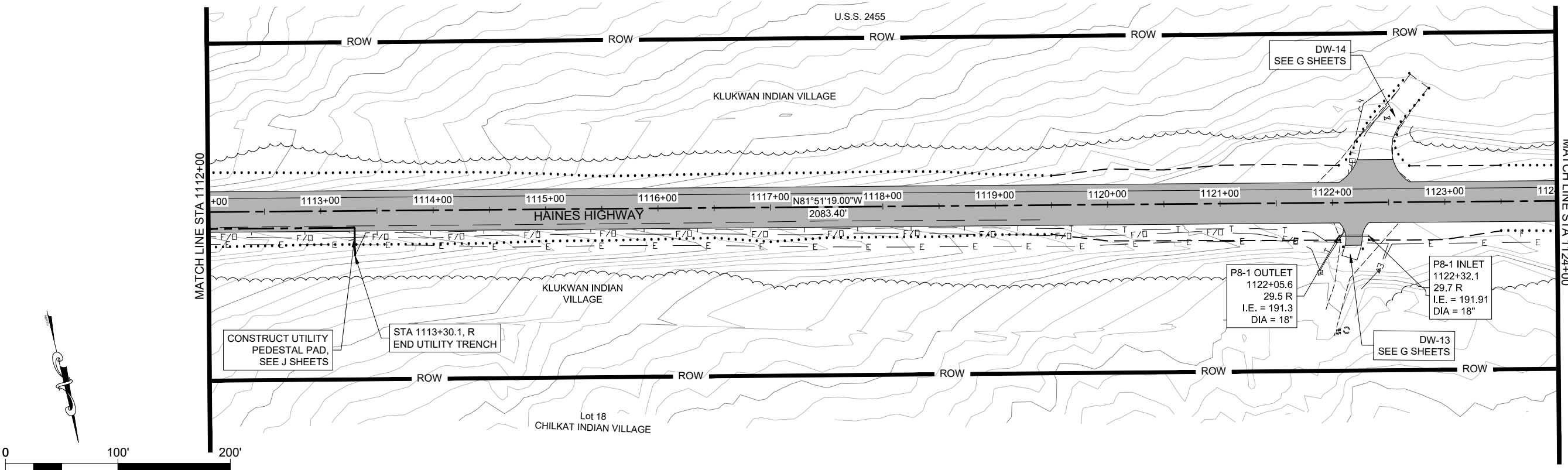
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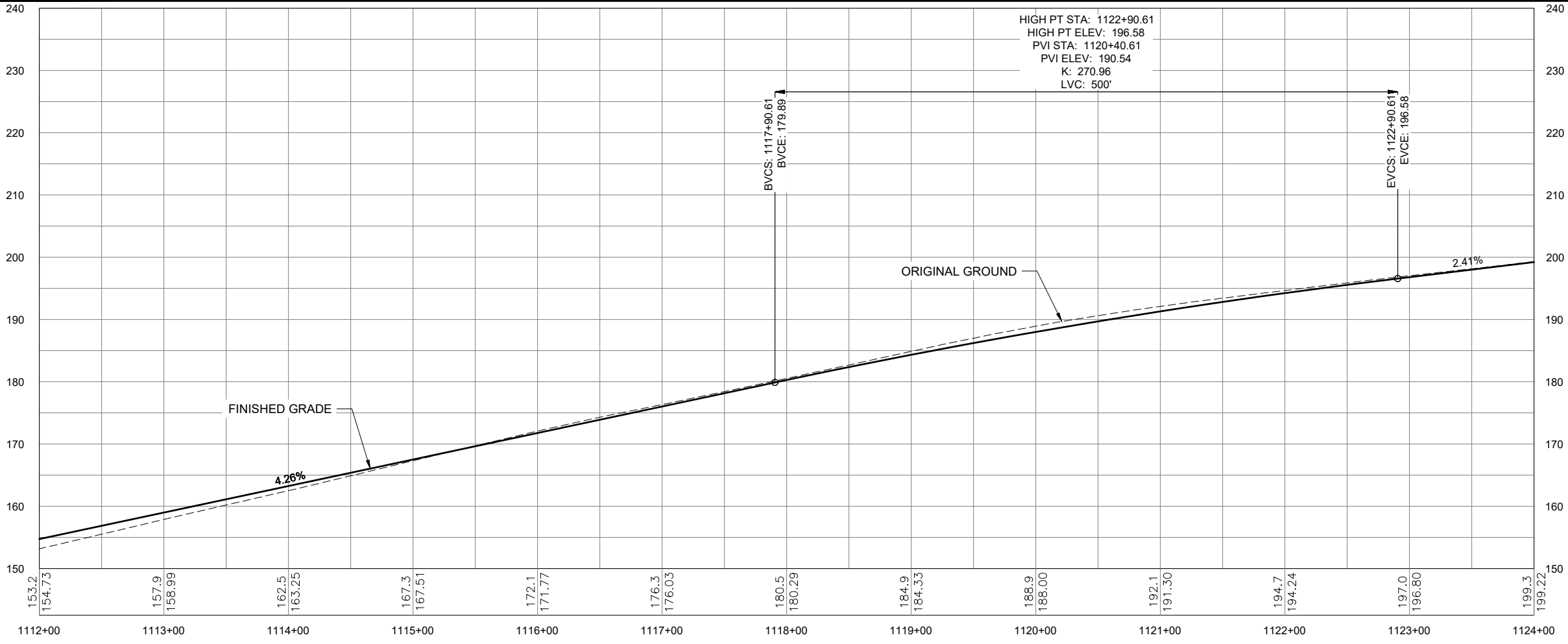
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F8	F22

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 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE: 5/4/2020
 LAYOUT: F8
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH #: AECL848



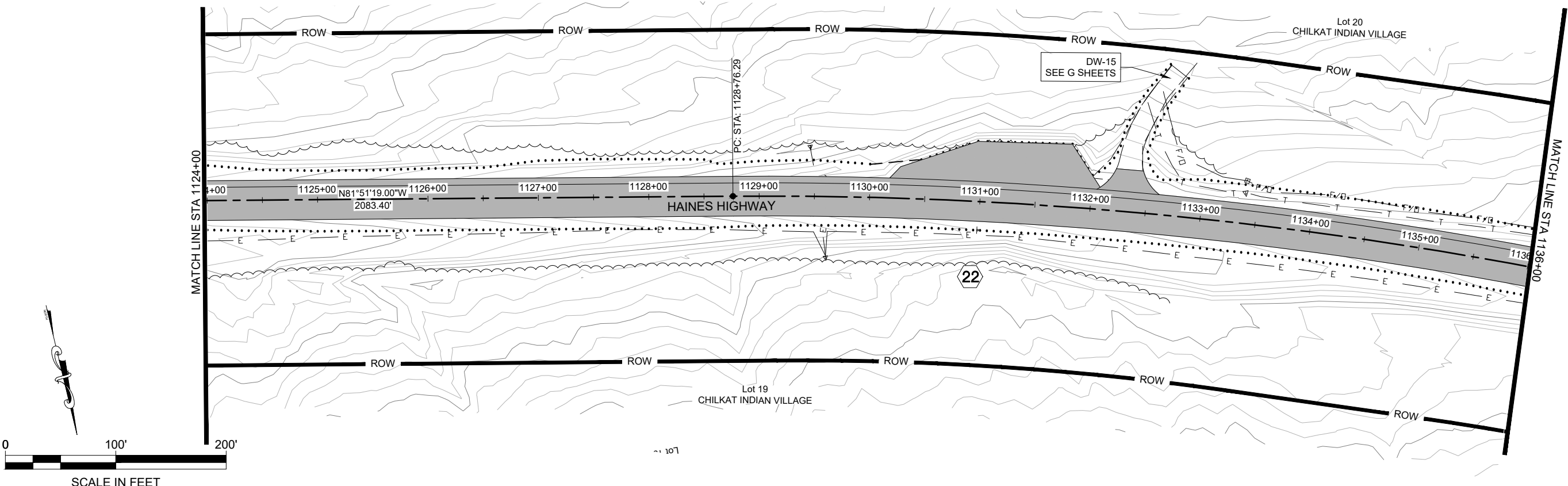
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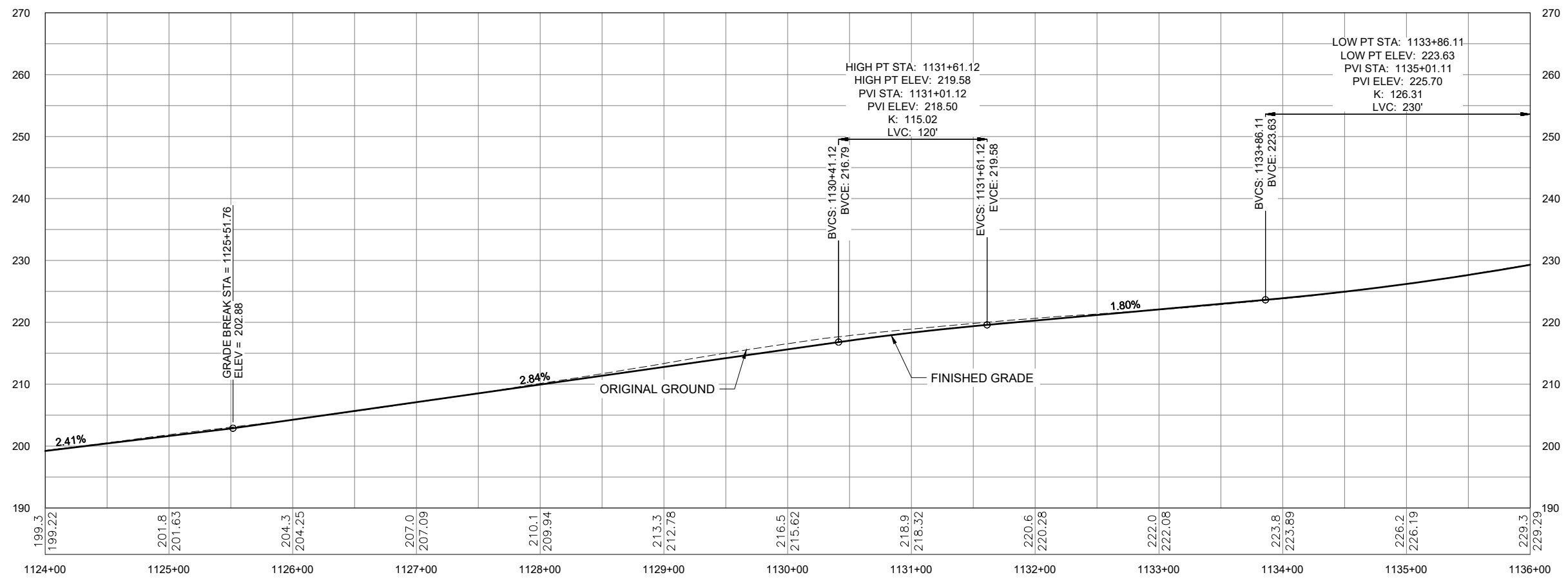
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F9	F22

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 PHONE: (907) 780-3533
 DESIGNED: HOBBS
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 DRAFTED: LUHR
 CERTIFICATE OF AUTH # : AECL848
 DATE: 5/4/2020
 LAYOUT: F9



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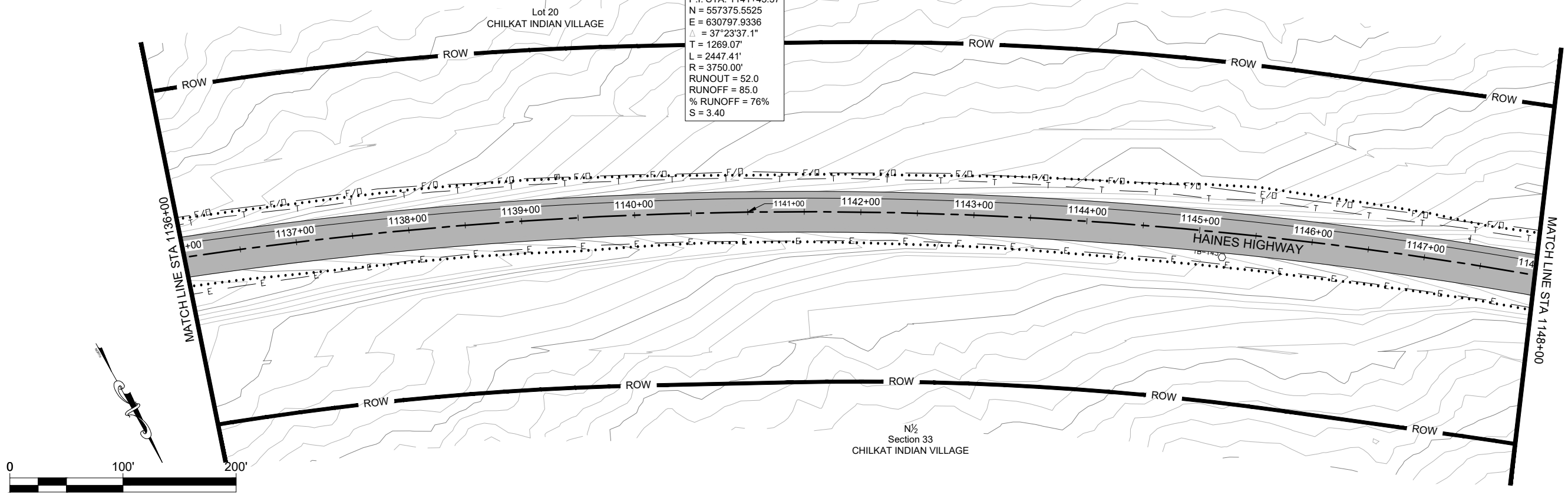


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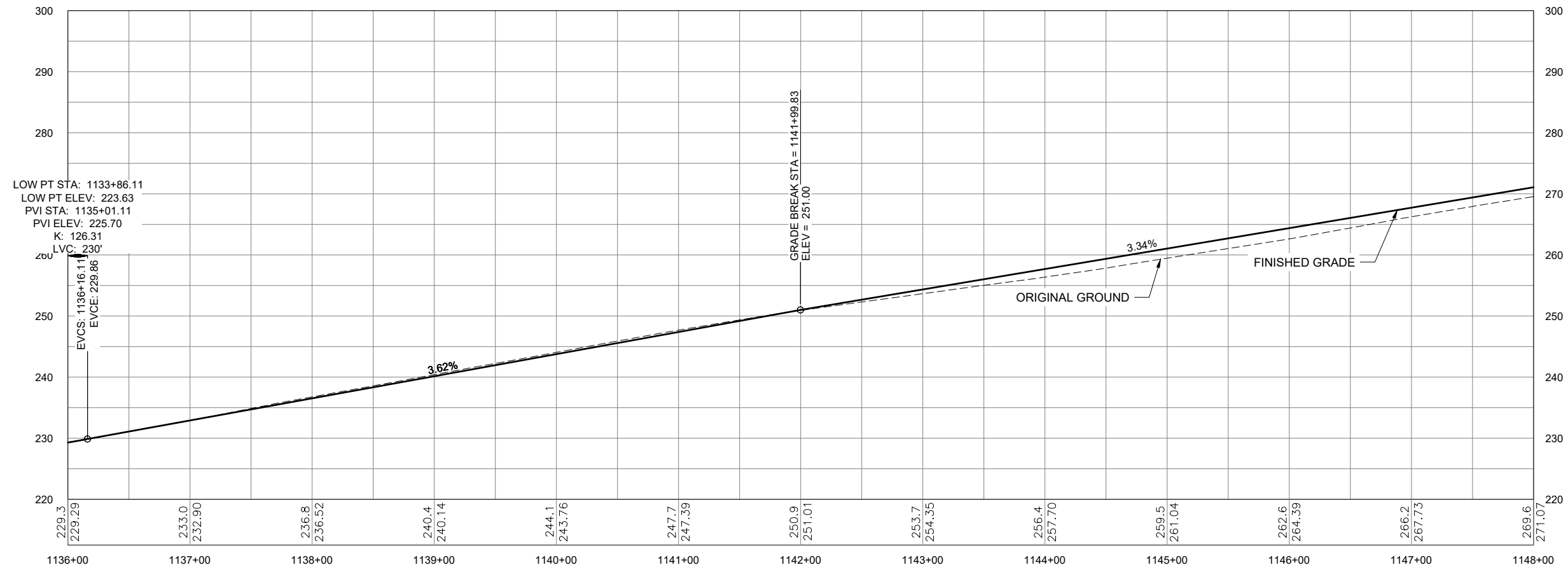
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			ALASKA	0956028/Z686060000	2023	F10	F22

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 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 CERTIFICATE OF AUTH #: AECL848
 DATE: 5/4/2020
 LAYOUT: F10

CURVE 33
 P.I. STA. 1141+45.37
 N = 557375.5525
 E = 630797.9336
 $\Delta = 37^{\circ}23'37.1''$
 T = 1269.07'
 L = 2447.41'
 R = 3750.00'
 RUNOUT = 52.0
 RUNOFF = 85.0
 % RUNOFF = 76%
 S = 3.40



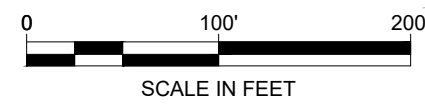
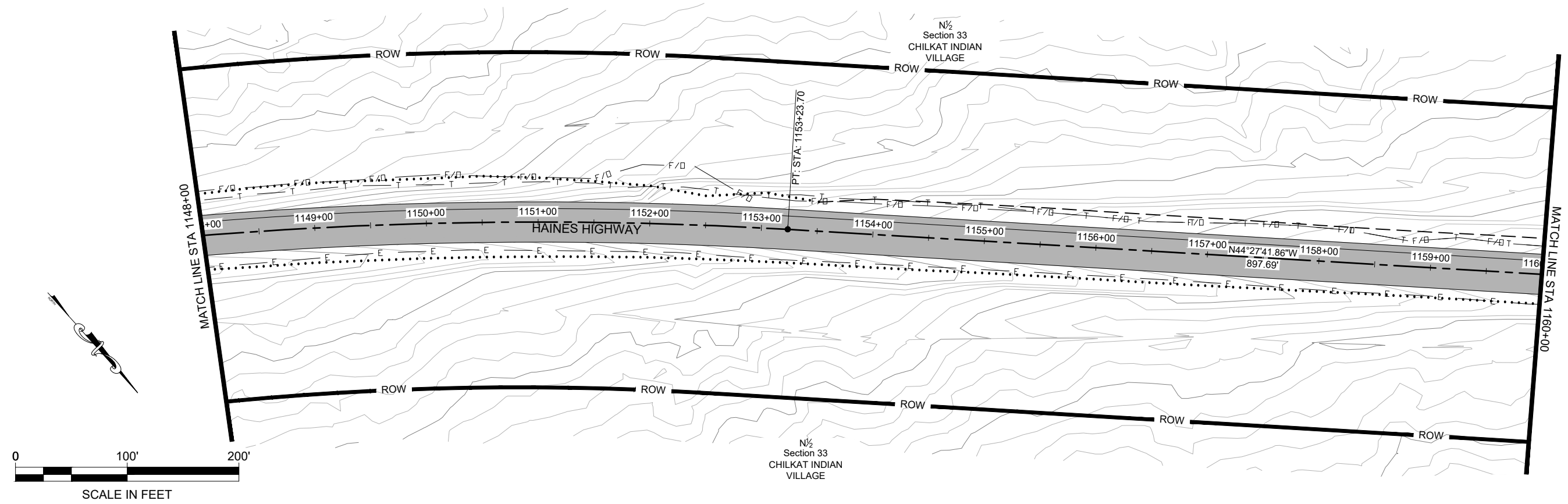
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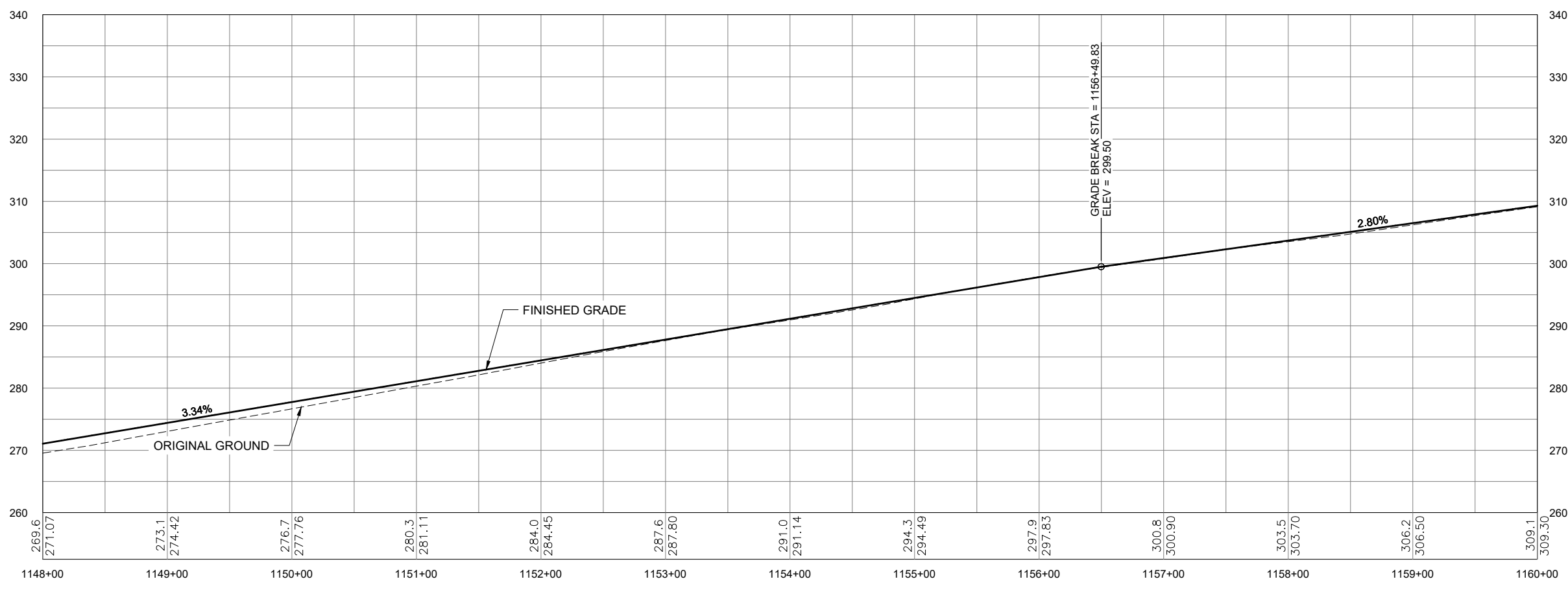
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F11	F22

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 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 CERTIFICATE OF AUTH # : AECL848
 DATE: 5/4/2020
 LAYOUT: F11



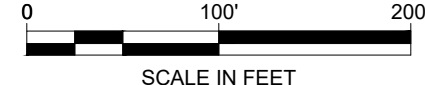
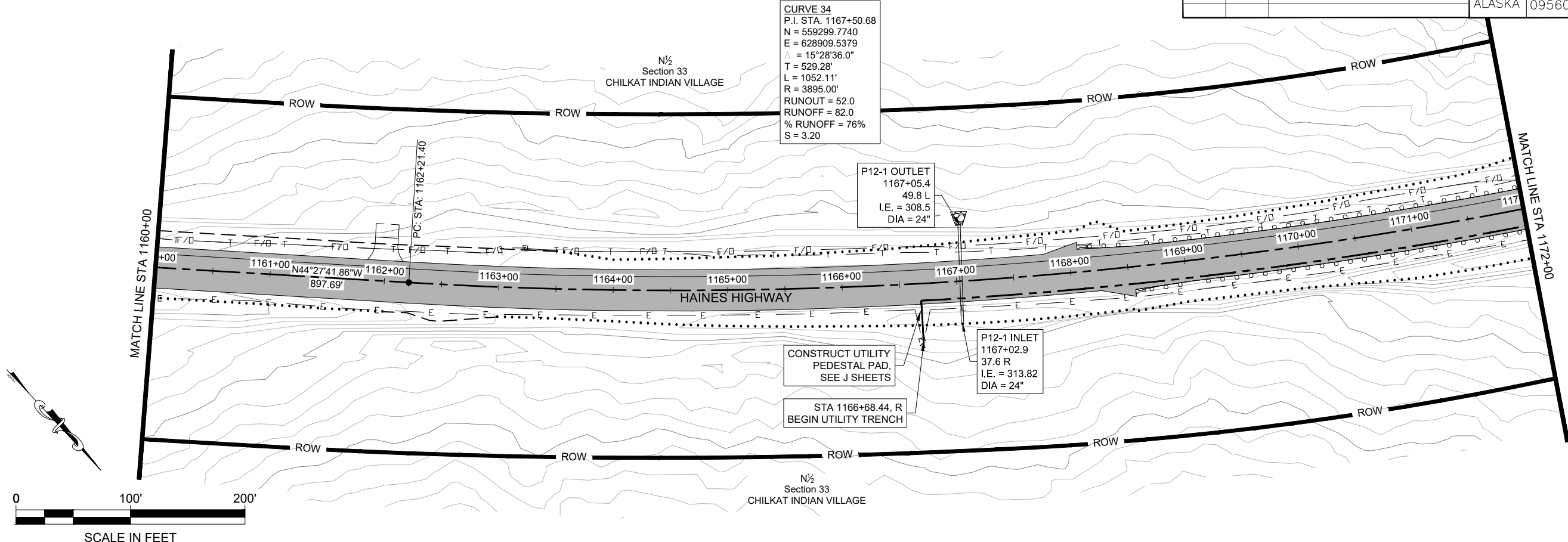
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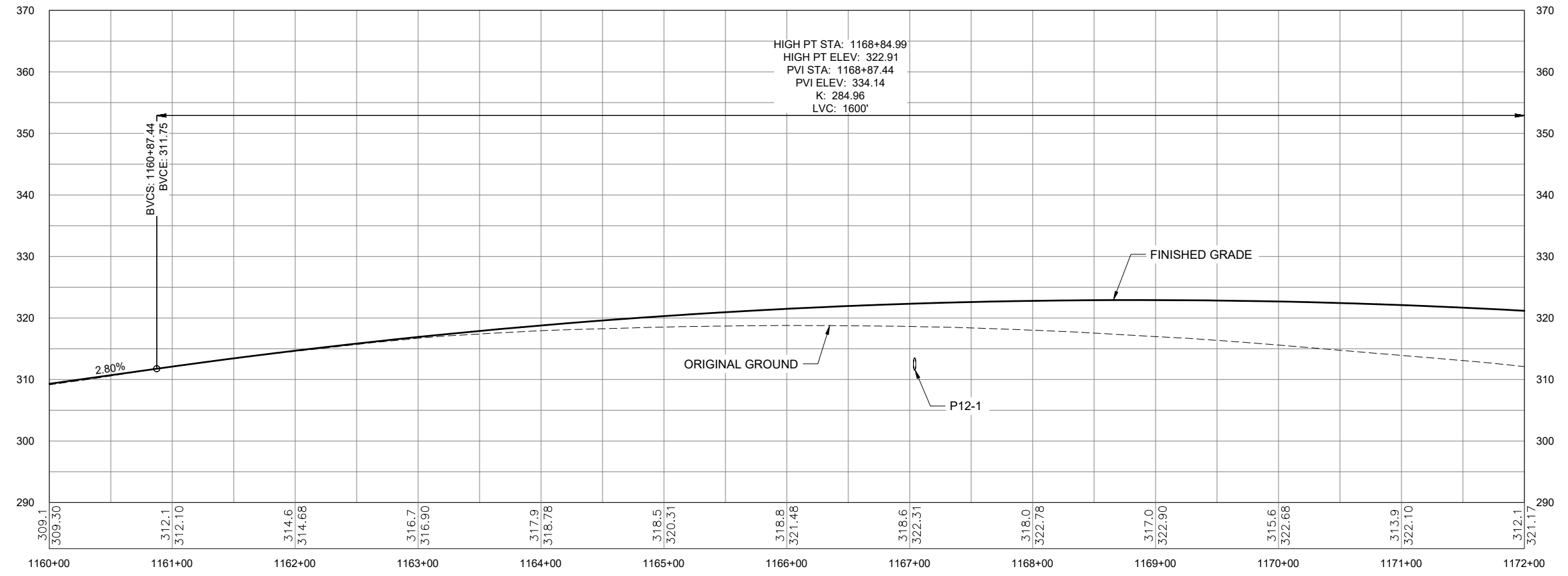
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F12	F22

FIRM DOWL C:\dowl_pw\0388515\SC-CT-RD-F-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR
 CERTIFICATE OF AUTH # : AECL848



DRAFT

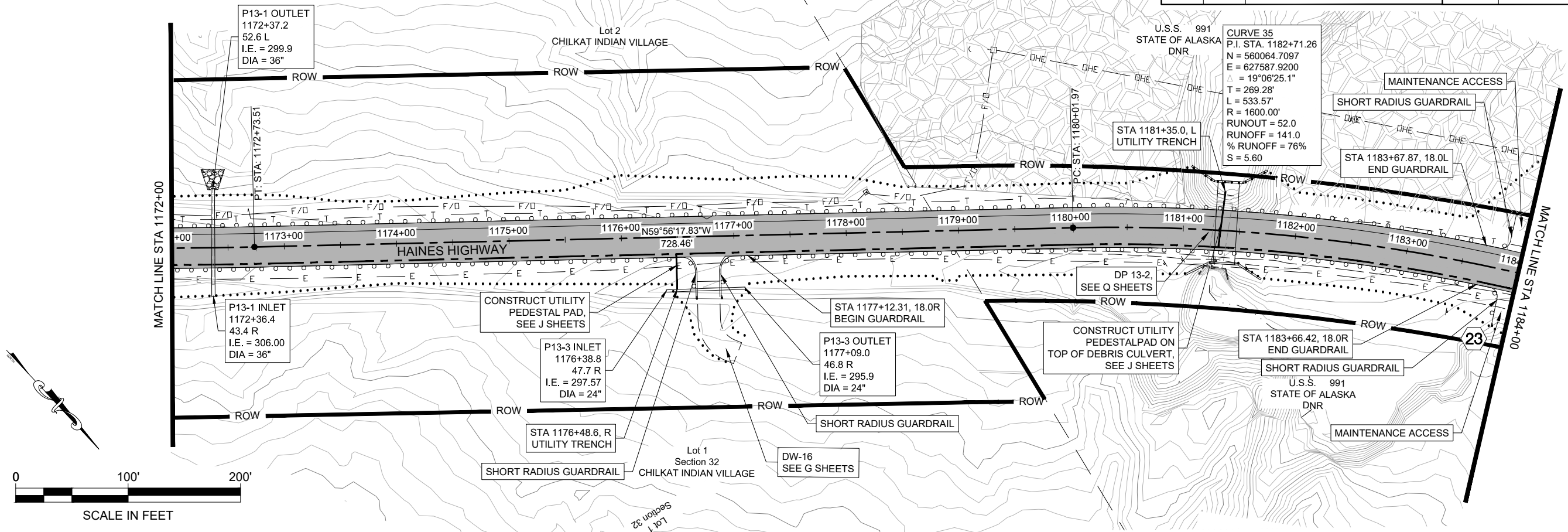


Station	Elevation
1160+00	309.1
1160+00	309.30
1161+00	312.1
1161+00	312.10
1162+00	314.6
1162+00	314.68
1163+00	316.7
1163+00	316.90
1164+00	317.9
1164+00	318.78
1165+00	318.5
1165+00	320.31
1166+00	318.8
1166+00	321.48
1167+00	318.6
1167+00	322.31
1168+00	318.0
1168+00	322.78
1169+00	317.0
1169+00	322.90
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1172+00	321.17

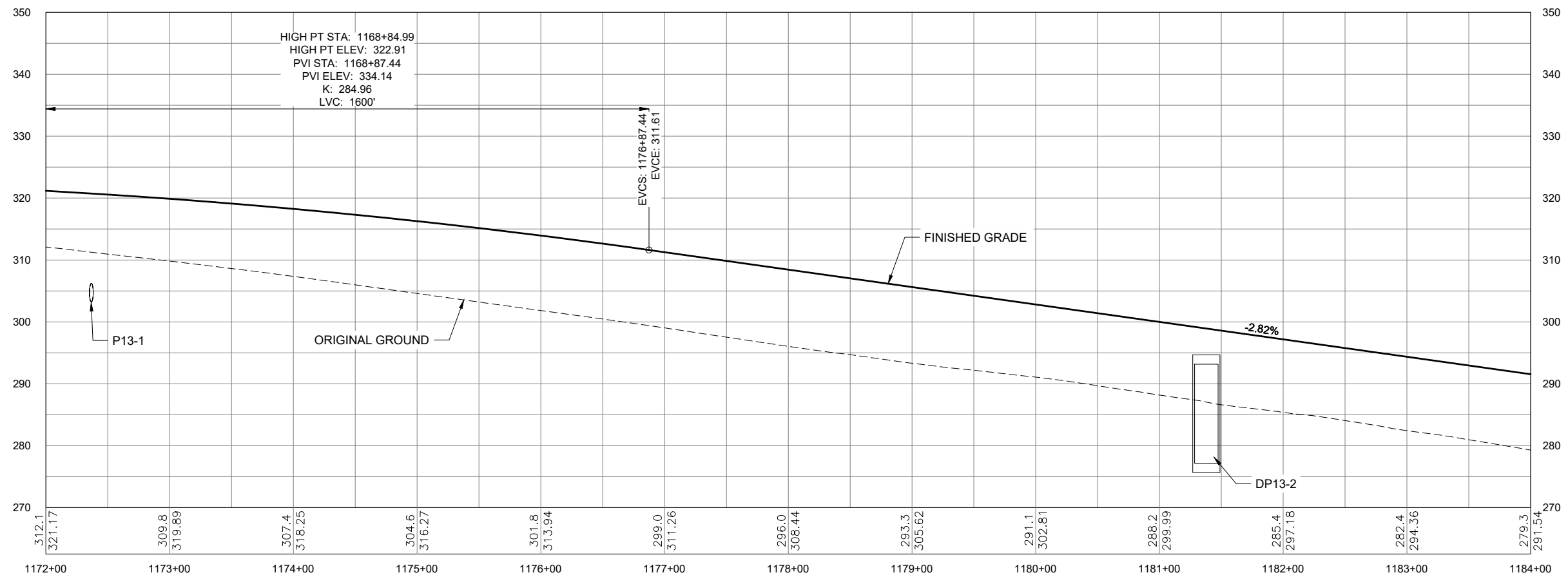
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F13	F22

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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT F13
 PHONE (907) 780-3533 DESIGNED HOBBS CHECKED NOBLE DRAFTED LUHR
 CERTIFICATE OF AUTH # : AECL848



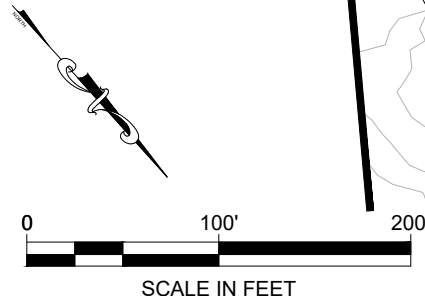
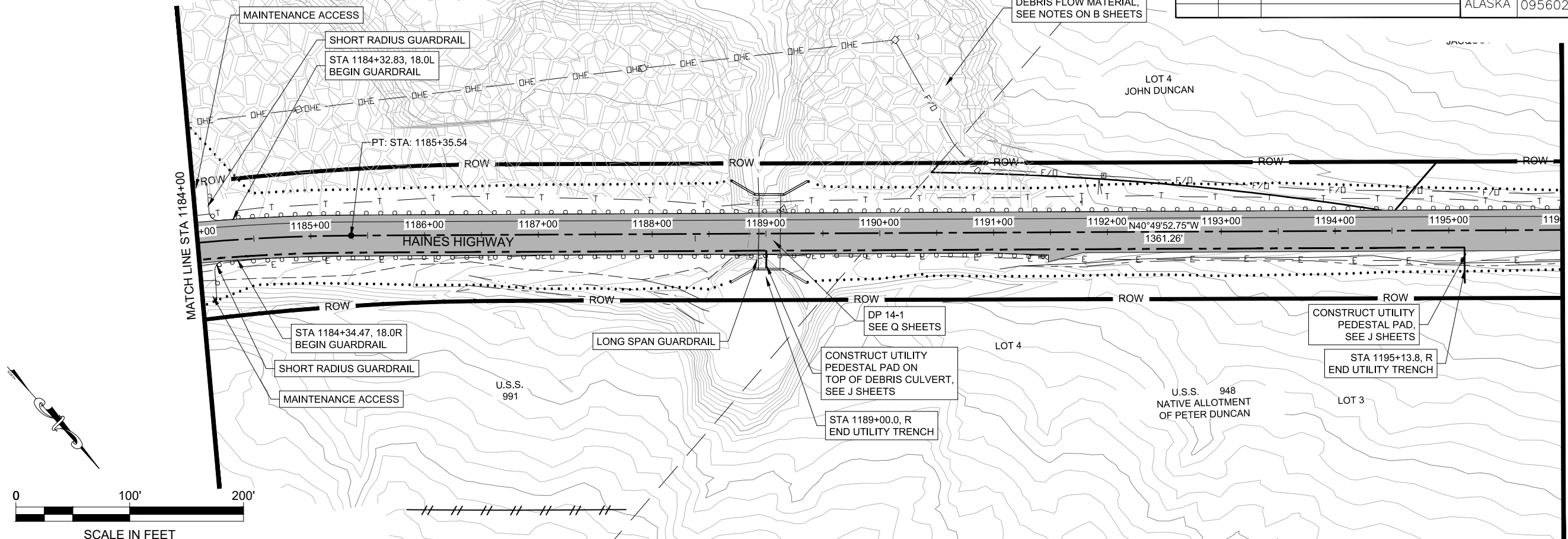
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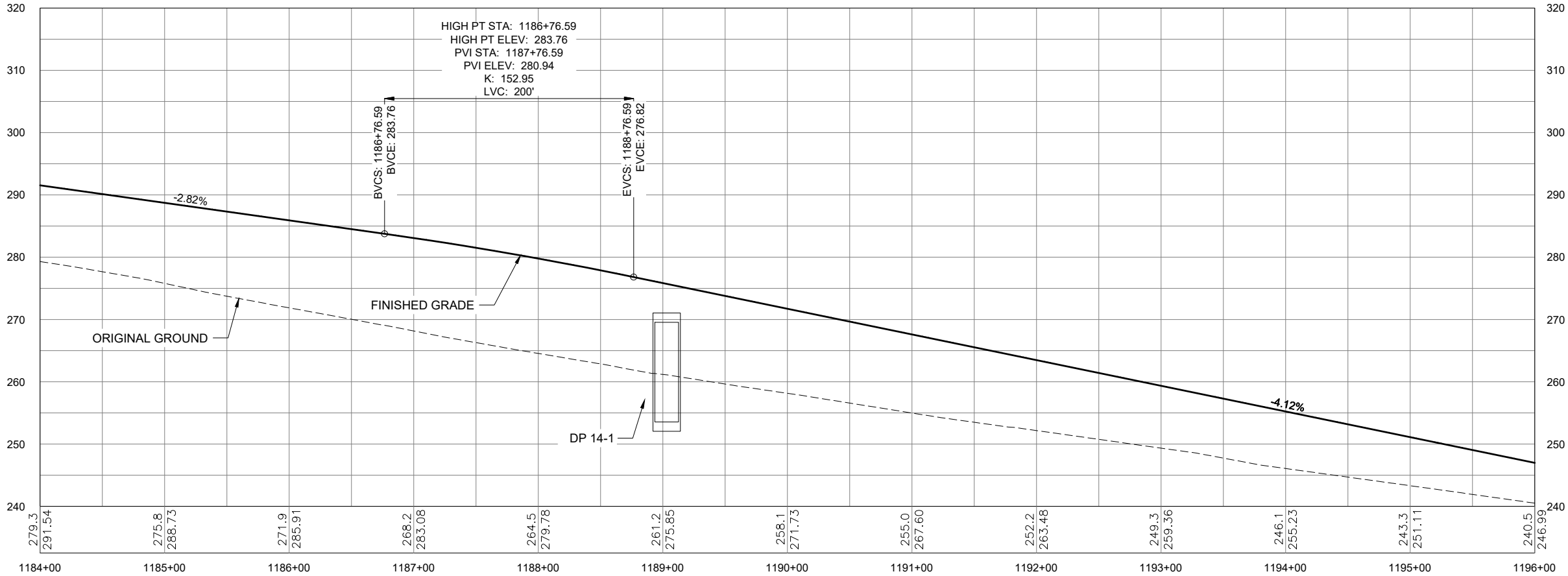
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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT F14
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR
 CERTIFICATE OF AUTH # : AECL848



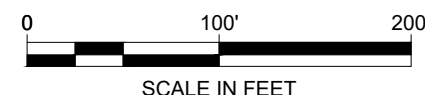
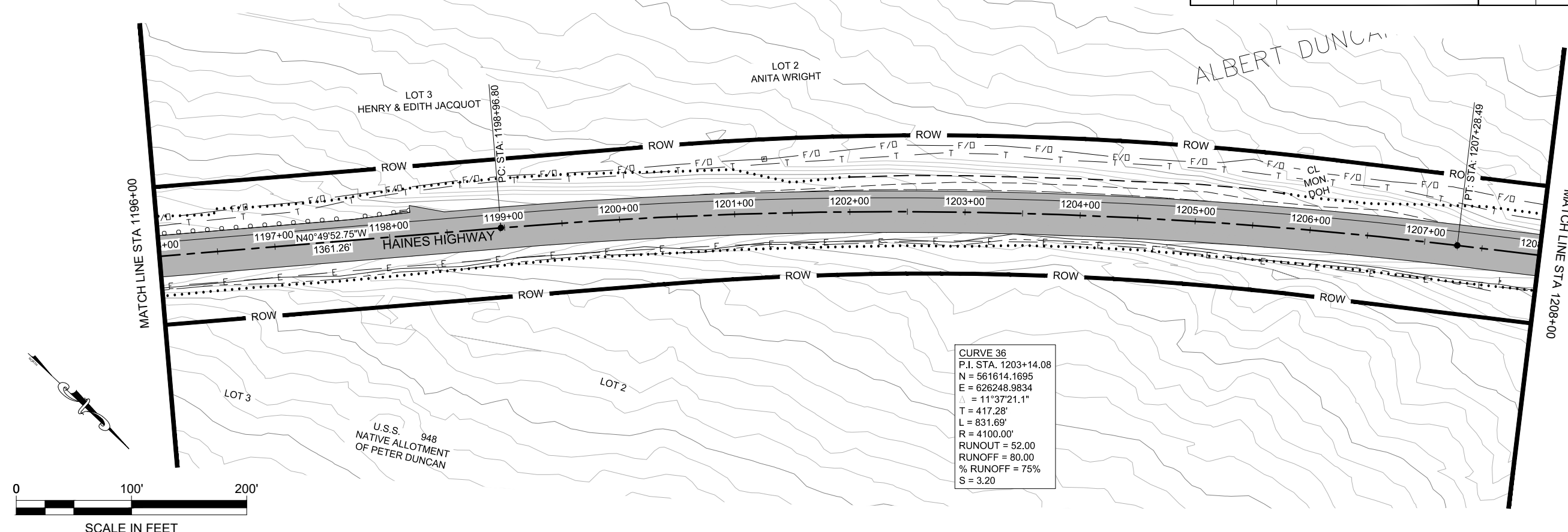
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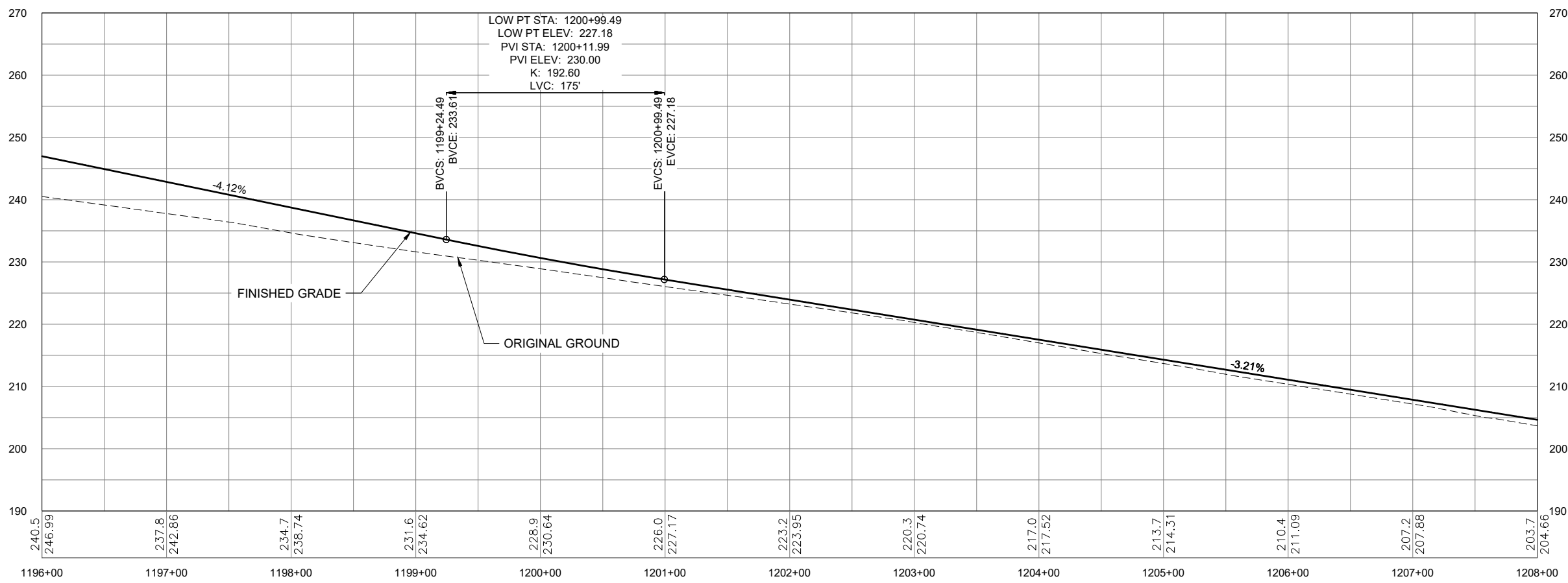
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F15	F22

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 DATE 5/4/2020 LAYOUT F15
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR
 CERTIFICATE OF AUTH # : AECL848



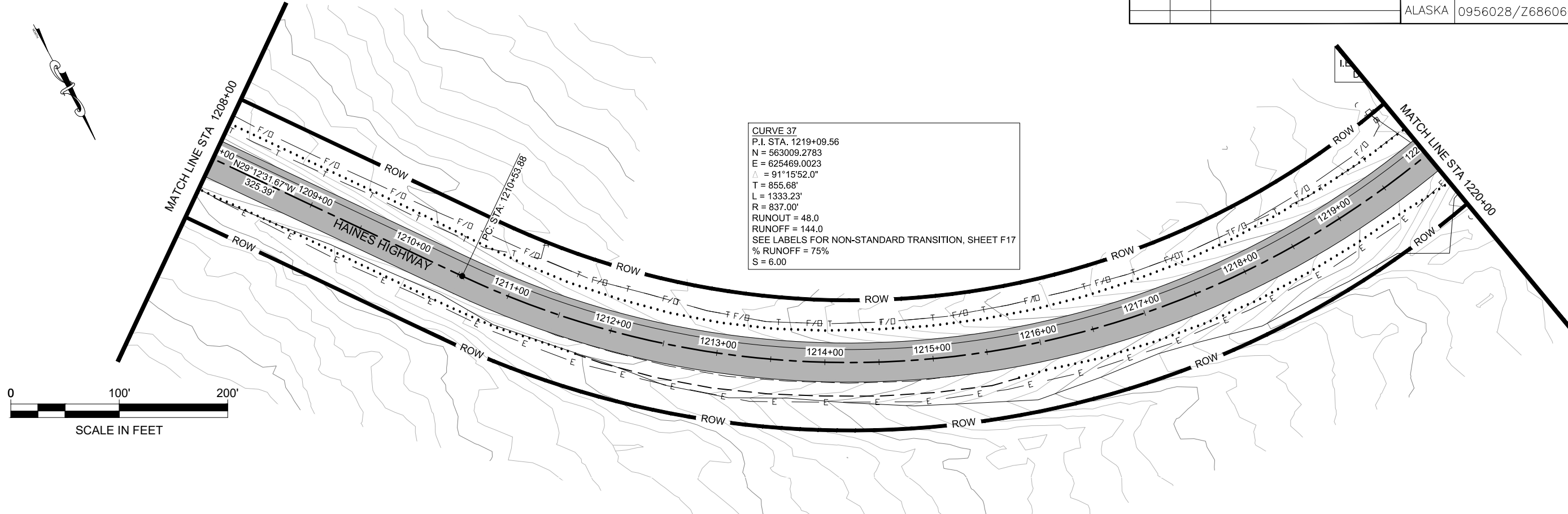
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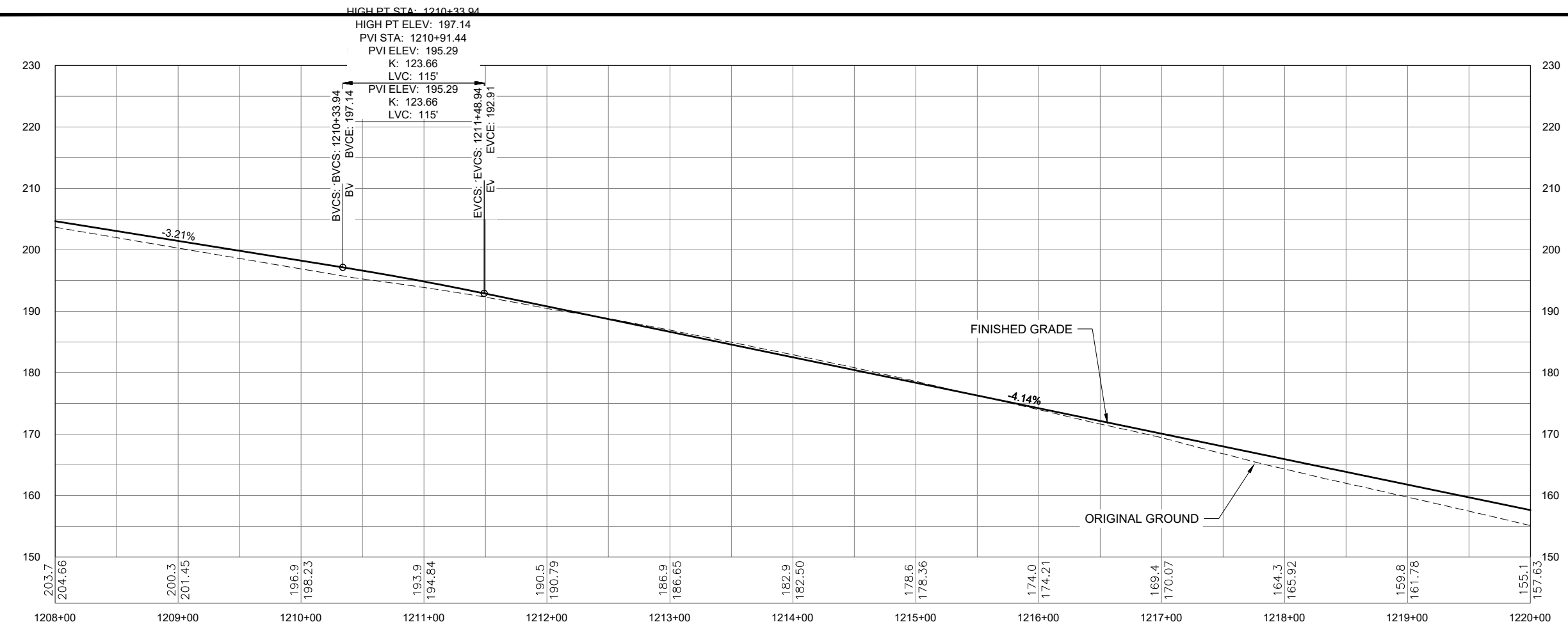
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F16	F22

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 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # : AECL848
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR
 DATE 5/4/2020 LAYOUT F16



DRAFT

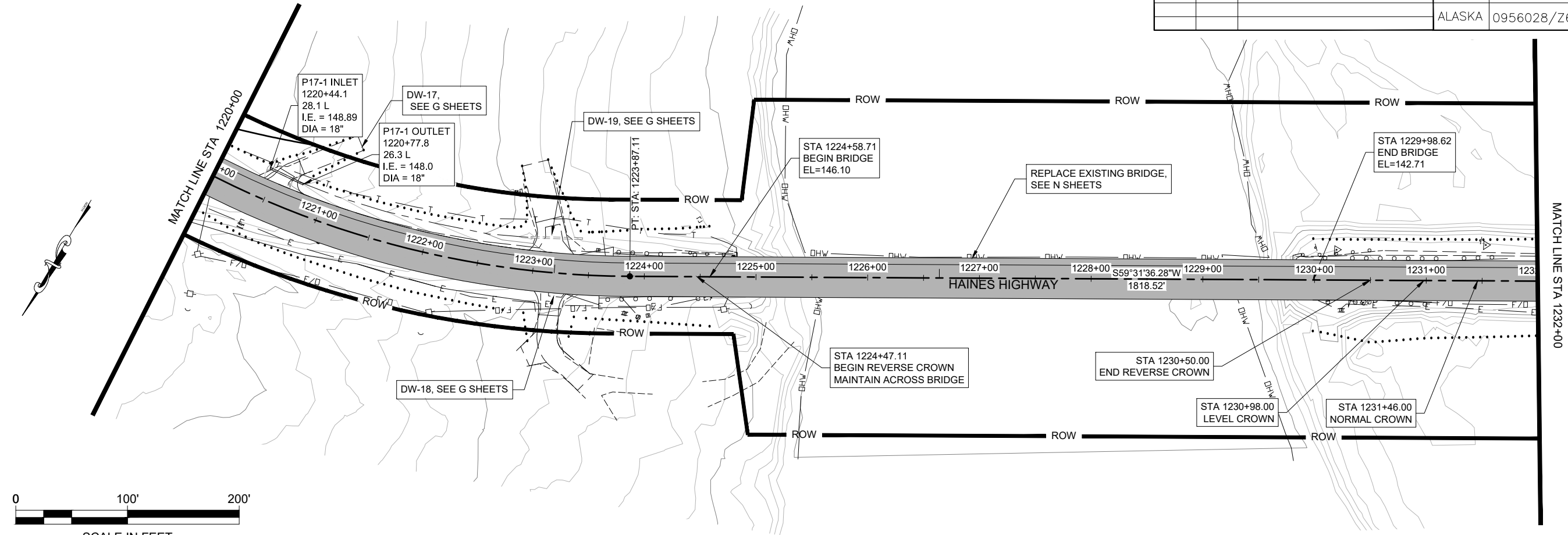


Station	Original Ground Elevation	Finished Grade Elevation
1208+00	157.63	203.7
1209+00	161.78	200.3
1210+00	165.92	198.23
1211+00	169.4	194.84
1212+00	174.21	190.5
1213+00	178.36	186.65
1214+00	182.50	182.50
1215+00	186.65	178.36
1216+00	190.5	174.21
1217+00	194.84	169.4
1218+00	198.23	164.3
1219+00	200.3	159.8
1220+00	203.7	155.1

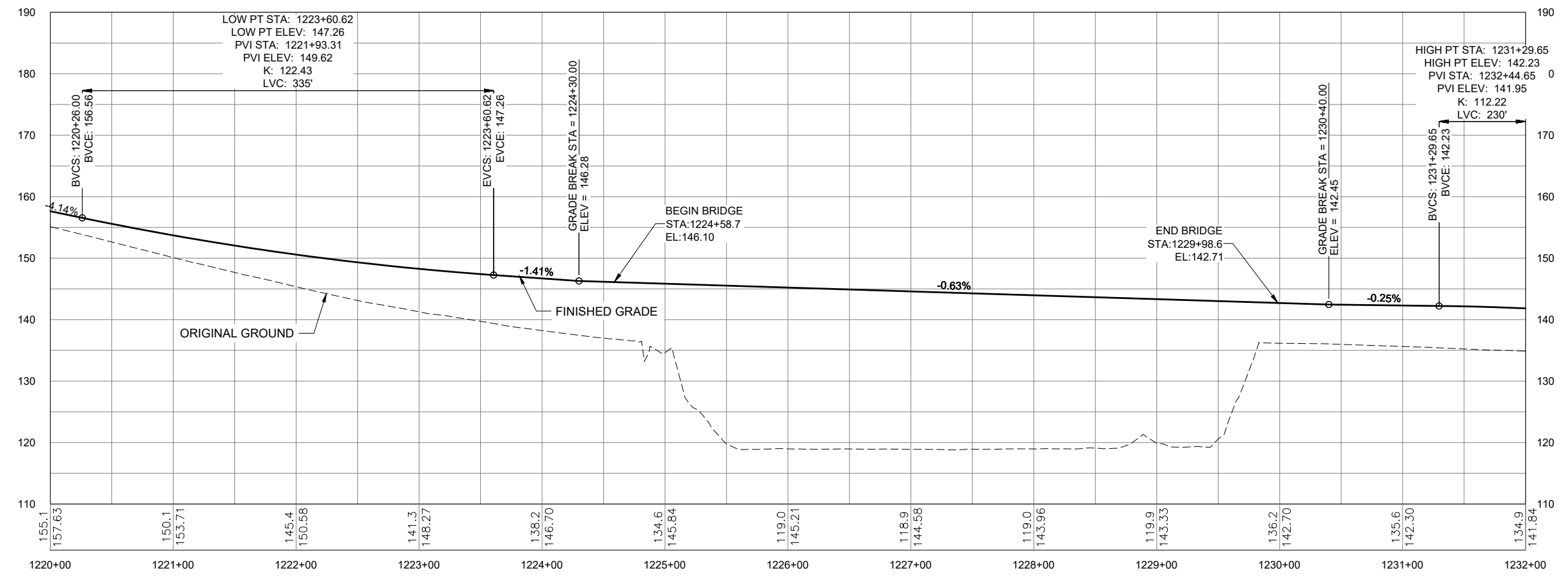
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F17	F22

FIRM DOWL
 FILE C:\dowl_pw\0388515\SC-CT-RD-F-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # : AECL848
 DATE 5/4/2020
 LAYOUT F17
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR



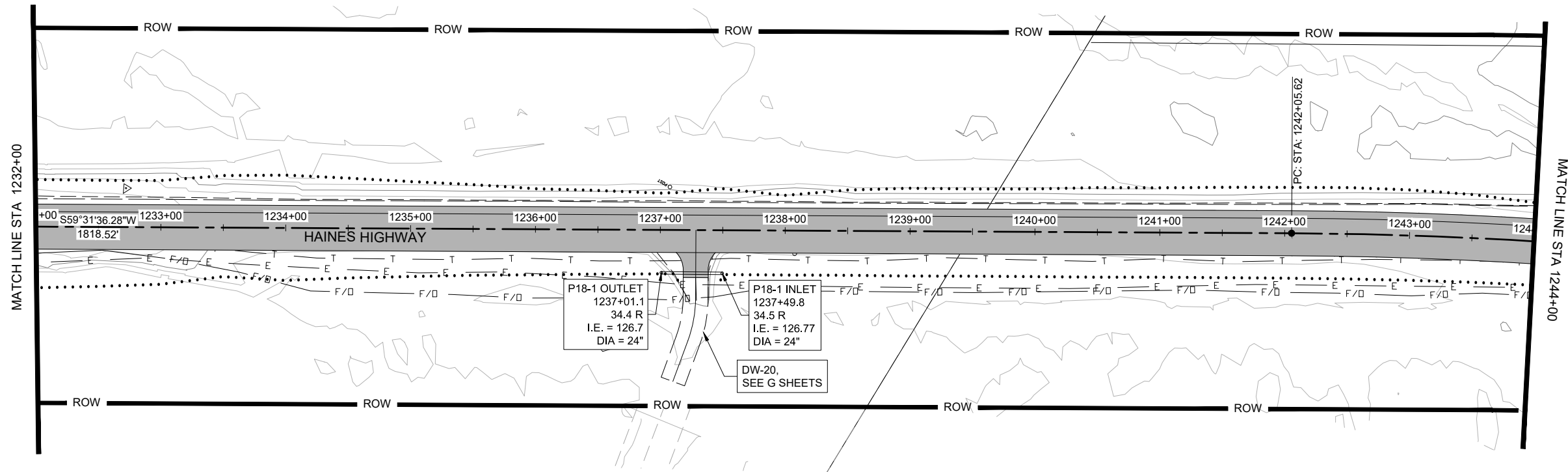
DRAFT



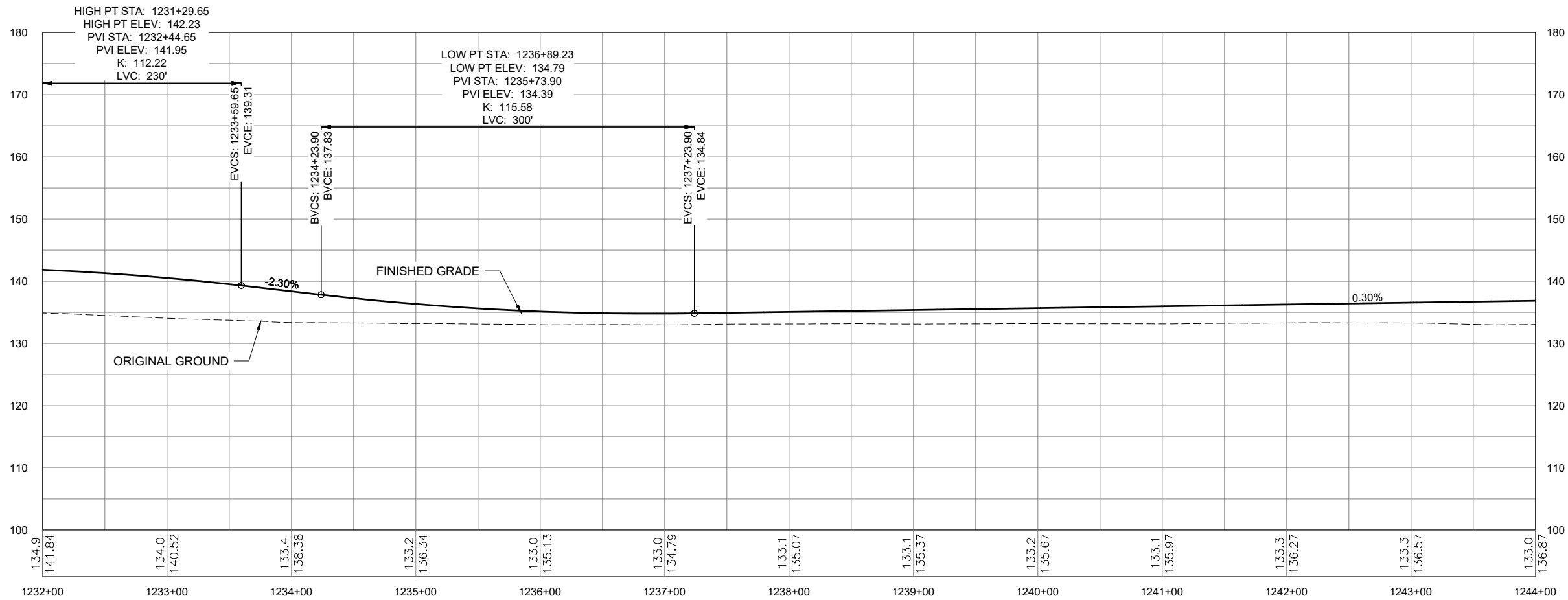
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F18	F22

FIRM DOWL
 FILE C:\dowl_pw\0388515\SC-CT-RD-F-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT F18
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR
 CERTIFICATE OF AUTH # : AECL848



DRAFT



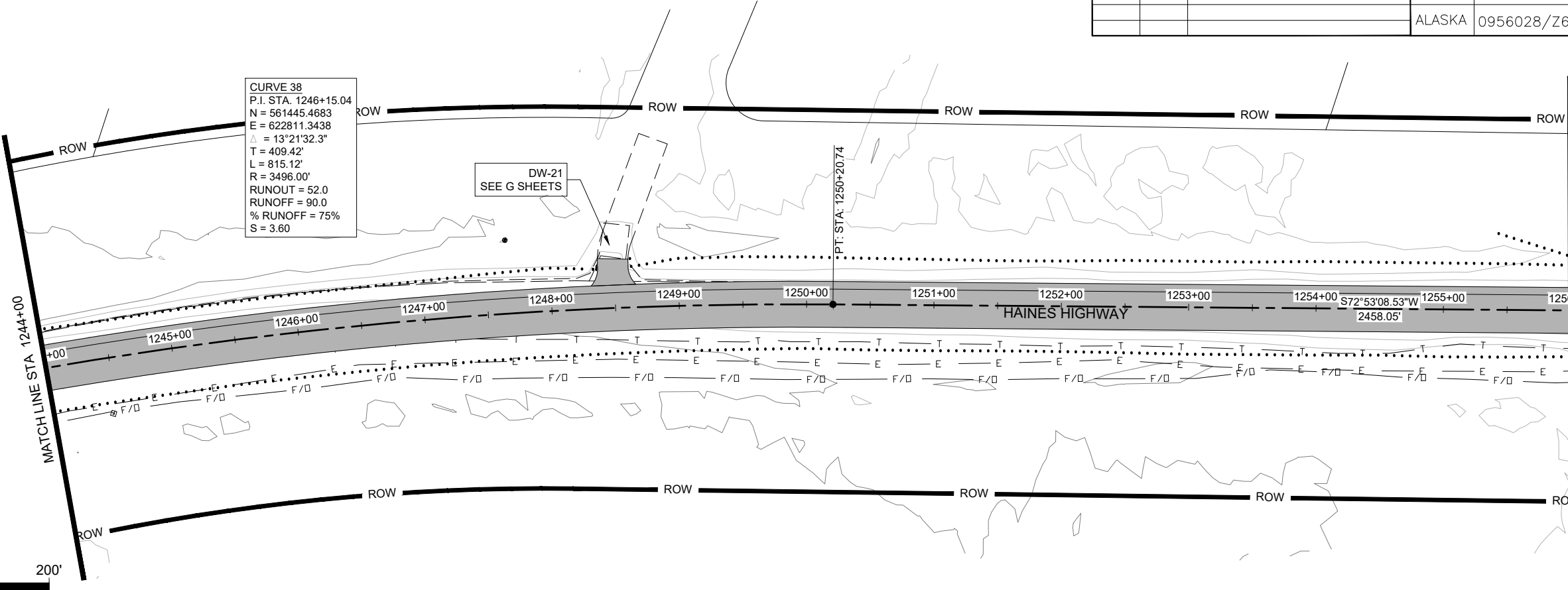
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F19	F22

CURVE 38
 P.I. STA. 1246+15.04
 N = 561445.4683
 E = 622811.3438
 $\Delta = 13^{\circ}21'32.3"$
 T = 409.42'
 L = 815.12'
 R = 3496.00'
 RUNOUT = 52.0
 RUNOFF = 90.0
 % RUNOFF = 75%
 S = 3.60

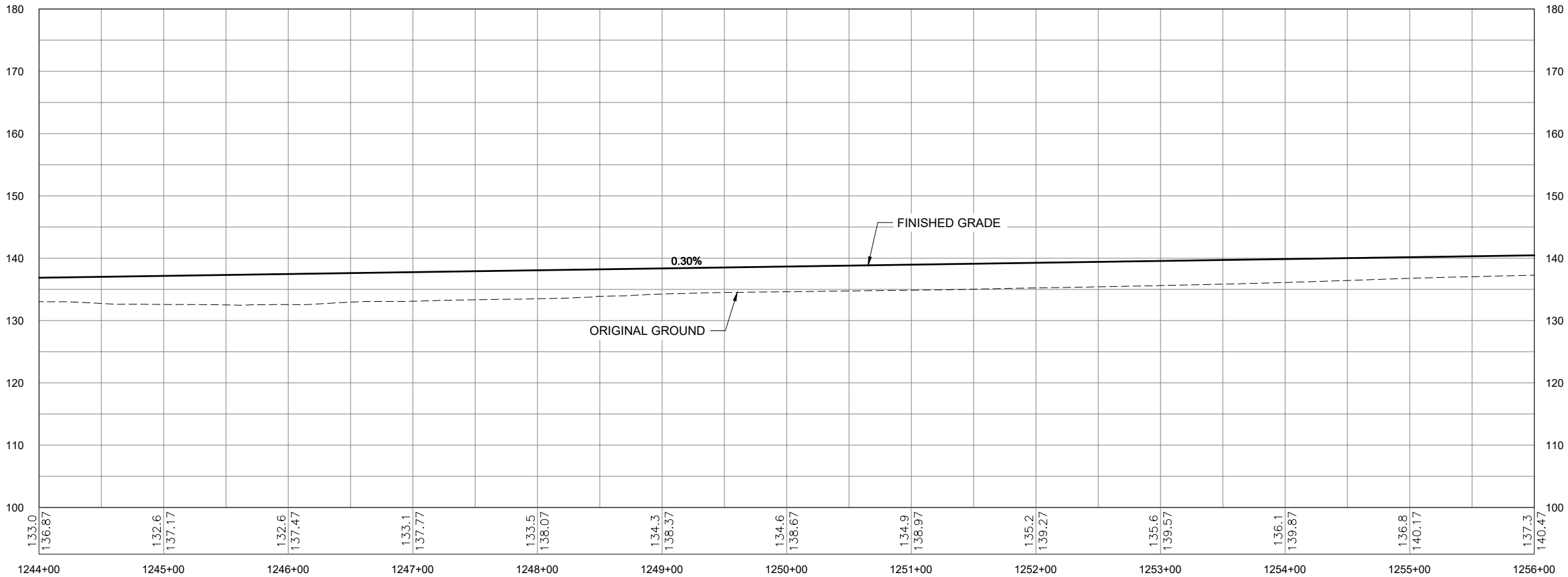
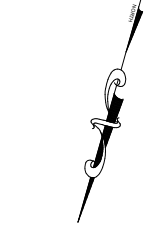
DW-21
 SEE G SHEETS

PT. STA. 1250+20.74



MATCH LINE STA 1256+00

DRAFT

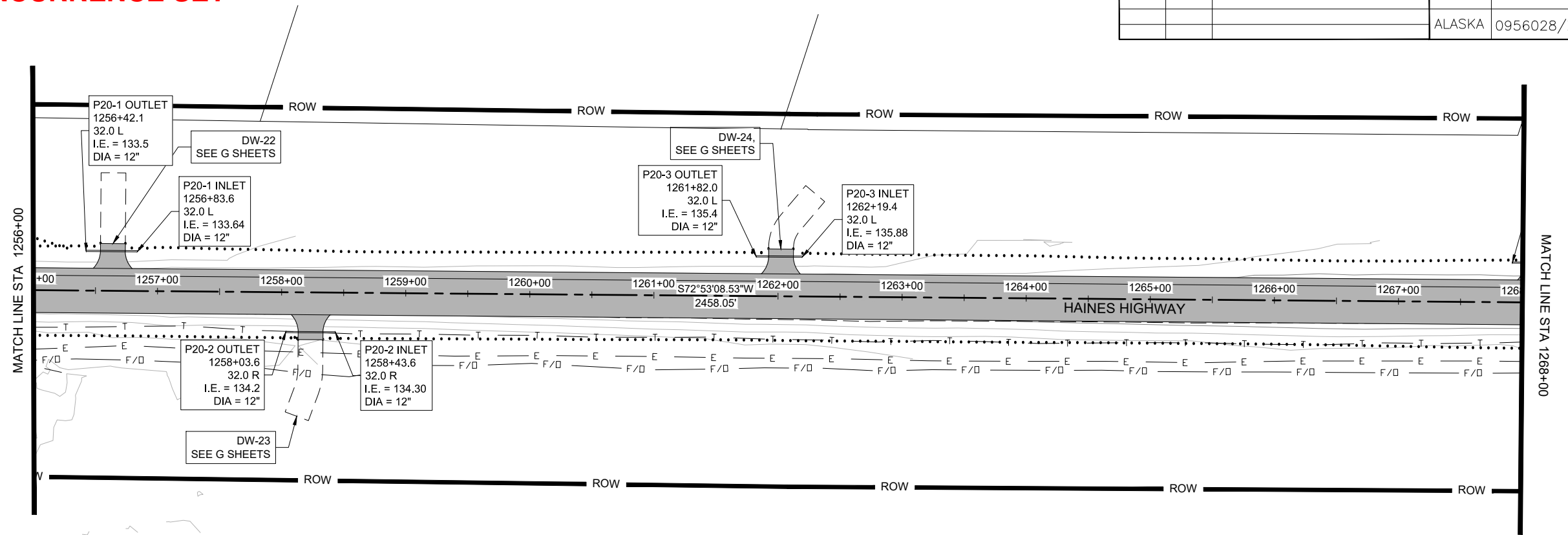


FIRM DOWL
 FILE C:\dow\p\0388515\SC-CT-RD-F-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT F19
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR
 CERTIFICATE OF AUTH # : AECL848

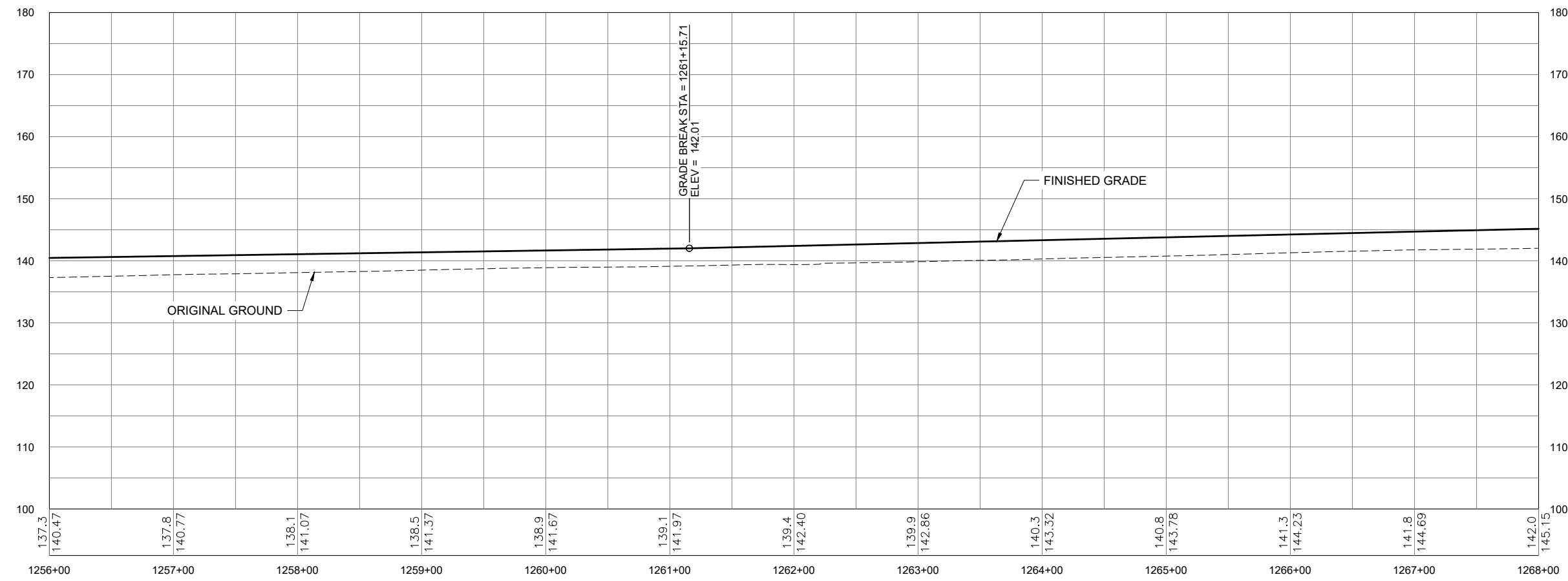
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F20	F22

FIRM DOWL
 FILE C:\dowl_pw\0388515\SC-CT-RD-F-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT F20
 PHONE (907) 780-3533 DESIGNED HOBBS
 CHECKED NOBLE
 CERTIFICATE OF AUTH # : AECL848
 DRAFTED LUHR



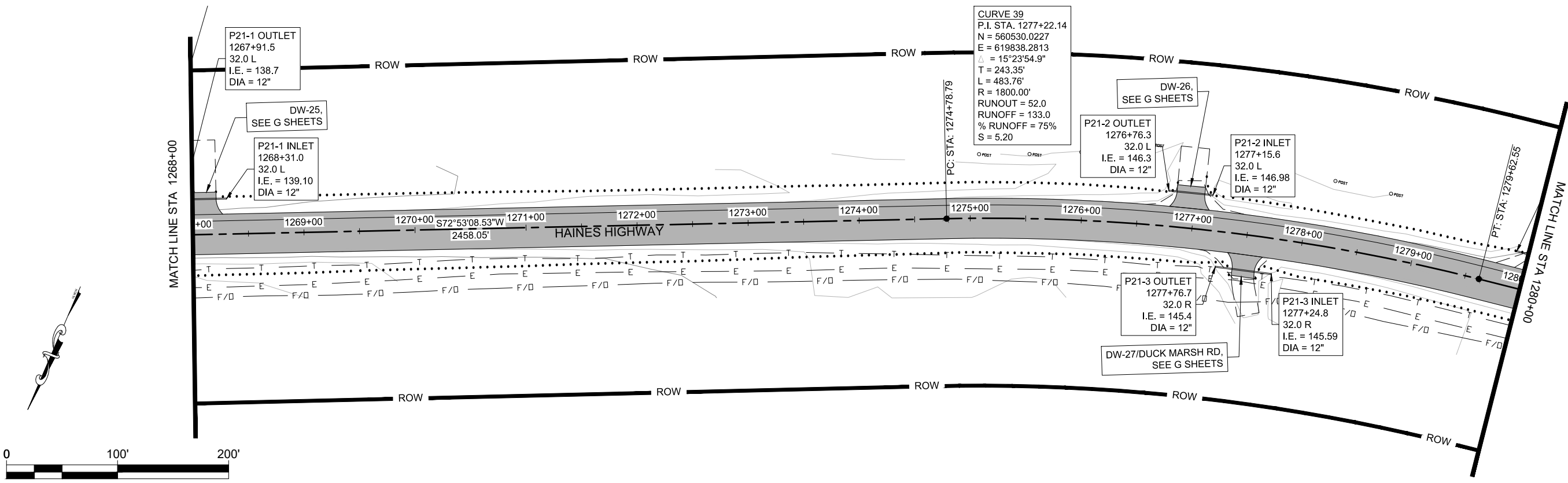
DRAFT



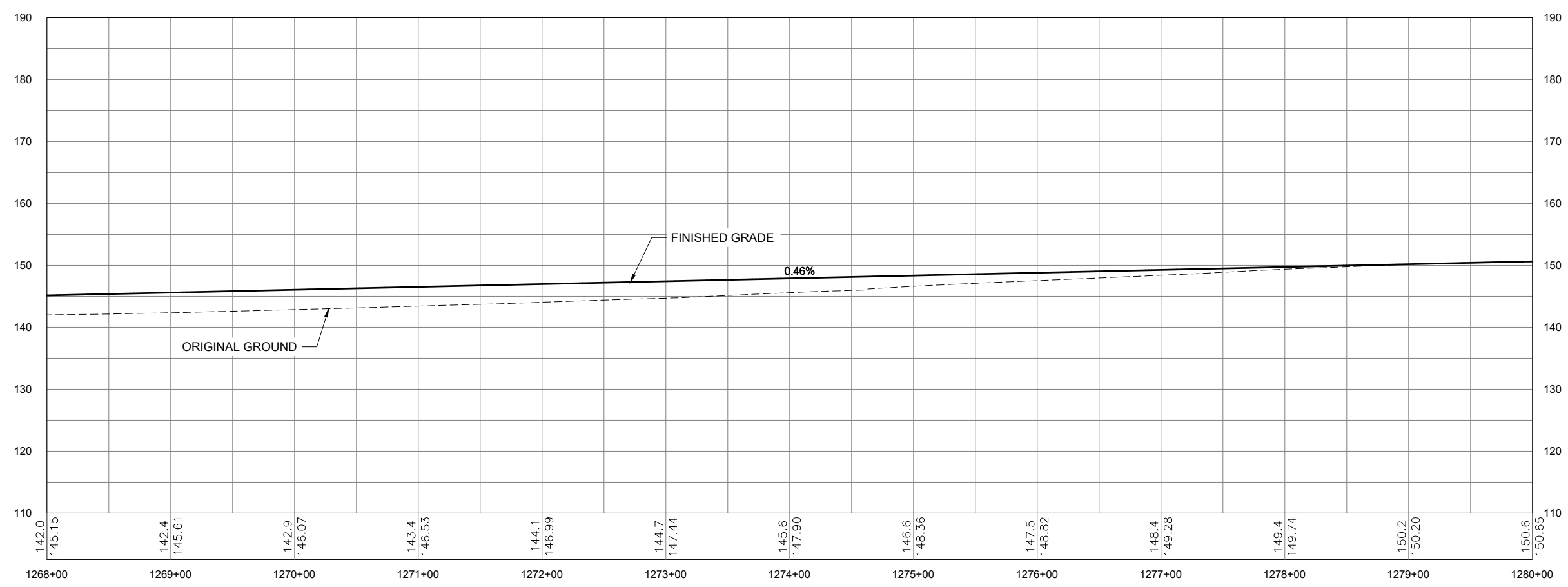
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F21	F22

FIRM DOWL
 FILE C:\dowl_pw\0388515\SC-CT-RD-F-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT F21
 PHONE (907) 780-3533 DESIGNED HOBBS
 CERTIFICATE OF AUTH # : AECL848 CHECKED NOBLE
 DRAFTED LUHR



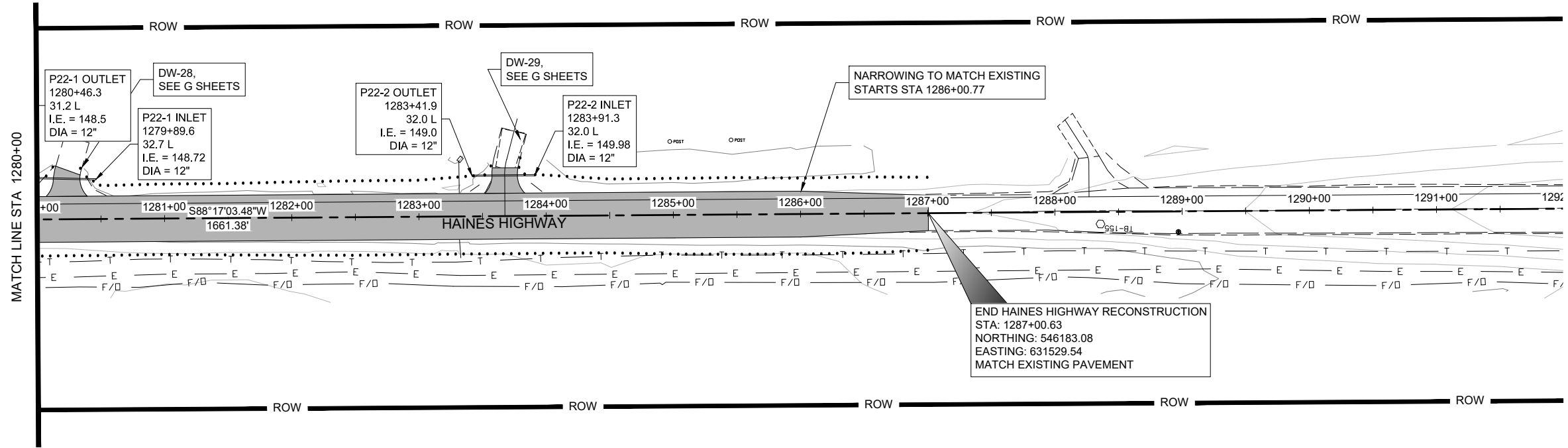
DRAFT



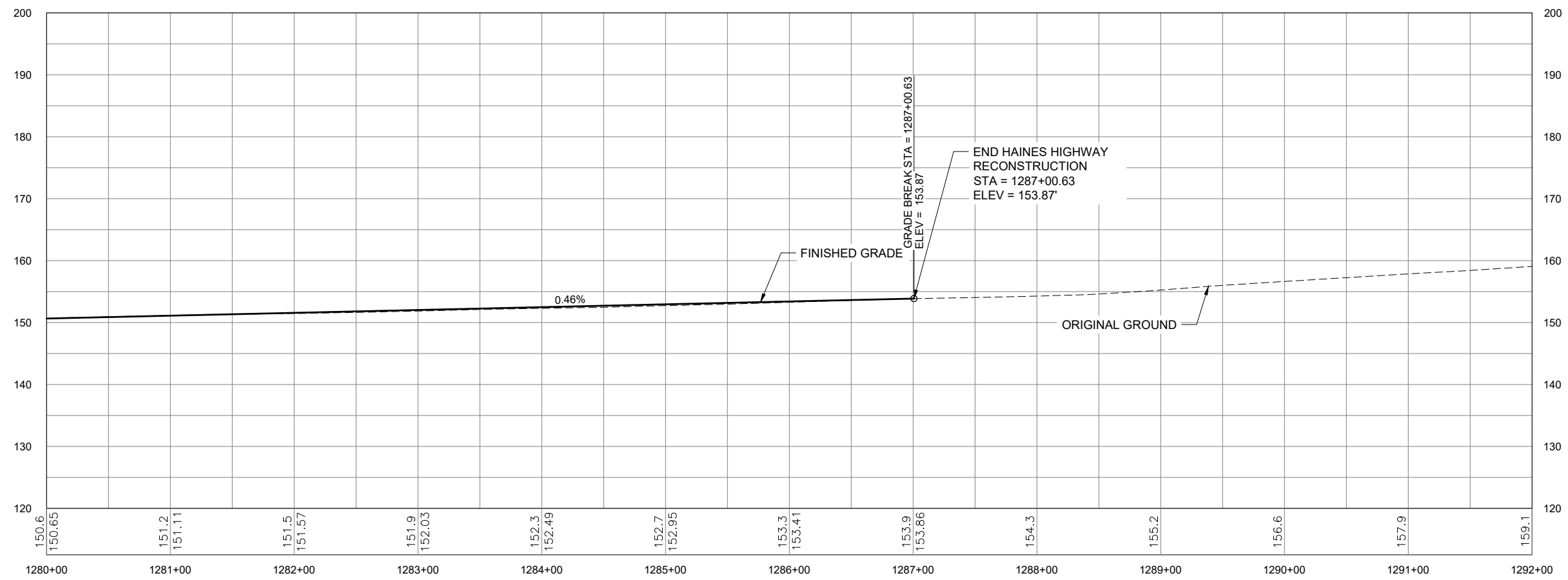
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	F22	F22

FIRM DOWL
 FILE C:\dowl_pw\0388515\SC-CT-RD-F-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT F22
 PHONE (907) 780-3533 DESIGNED HOBBS
 CERTIFICATE OF AUTH # : AECL848 CHECKED NOBLE DRAFTED LUHR



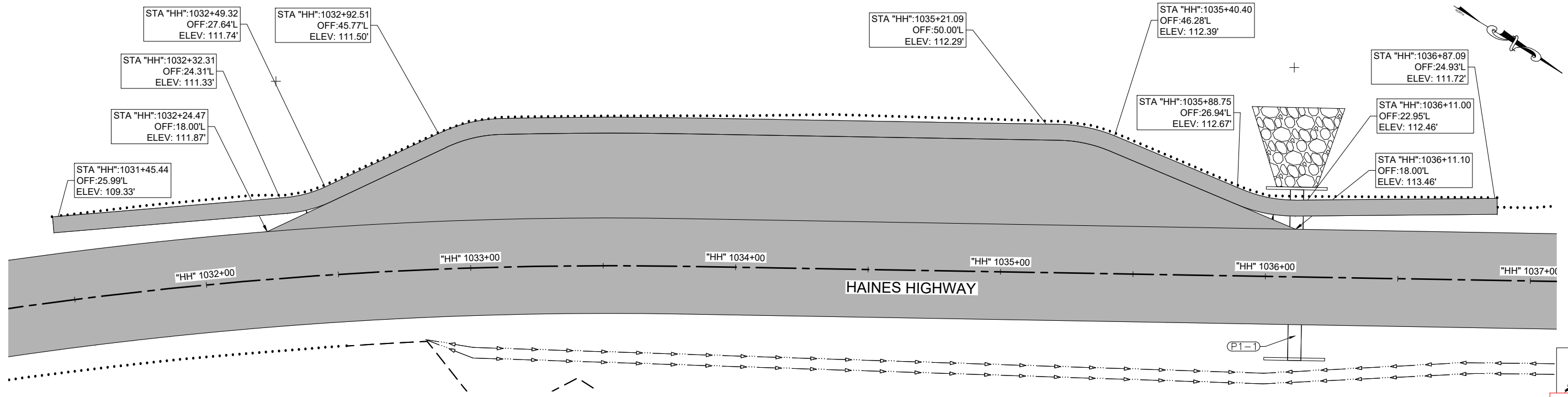
DRAFT



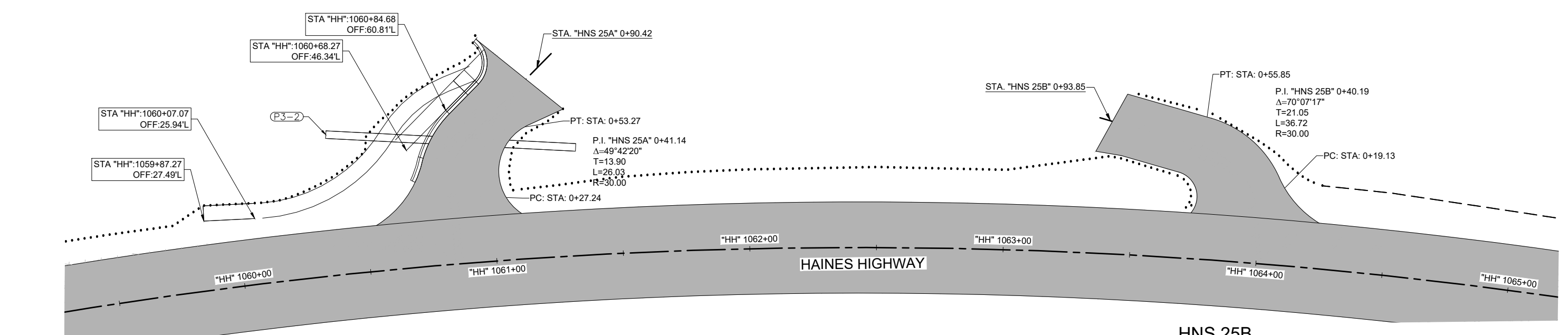
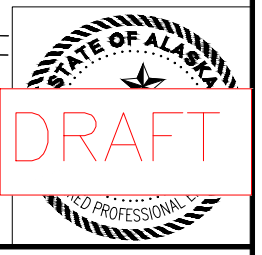
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	G1	G8

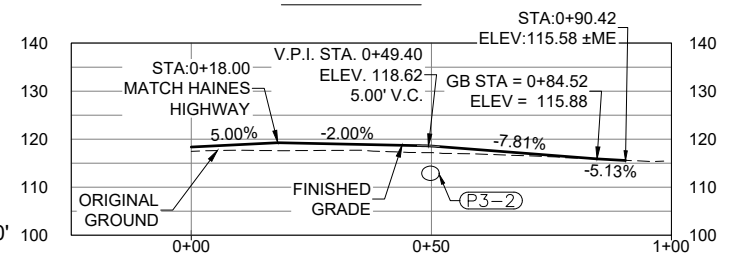
FIRM: DOWL
 FILE: C:\dow\1_p\40388515\SC-CT-RD-G-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH #1: AECL848
 DATE: 5/4/2020
 LAYOUT: G1
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR



HNS 23 PULLOUT

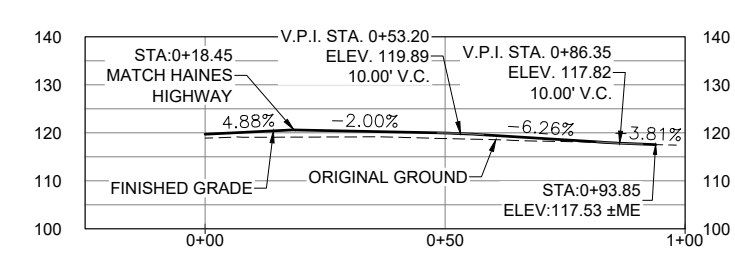


HNS 25A

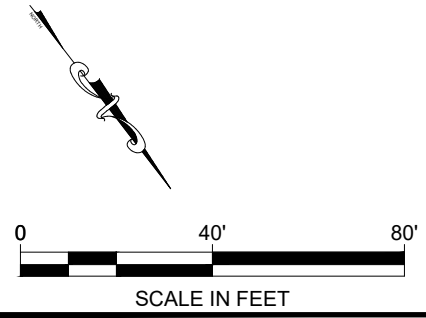


HNS 25A PROFILE

HNS 25B



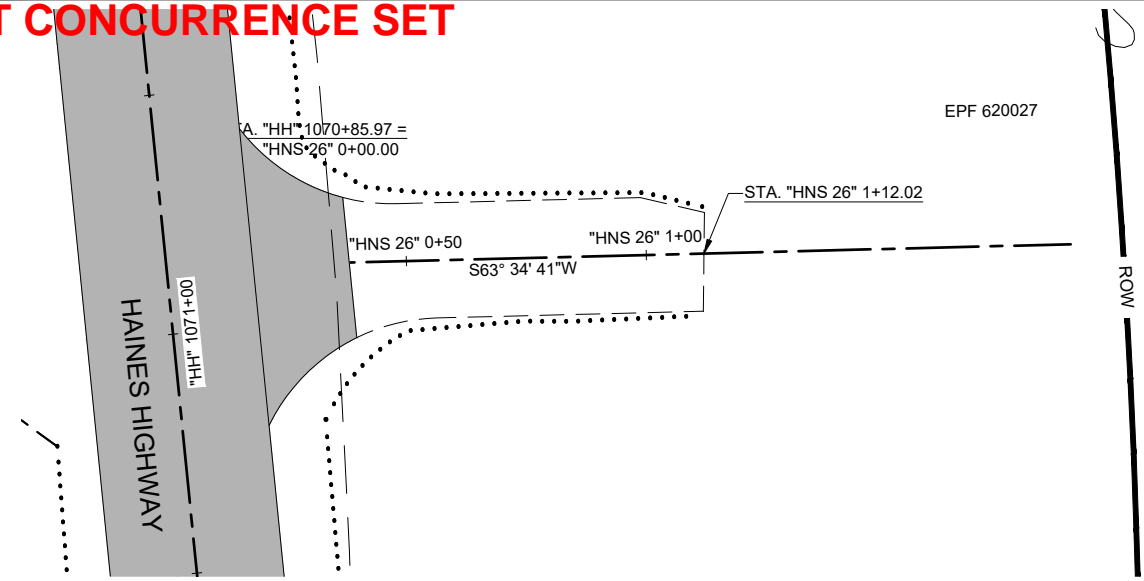
HNS 25B PROFILE



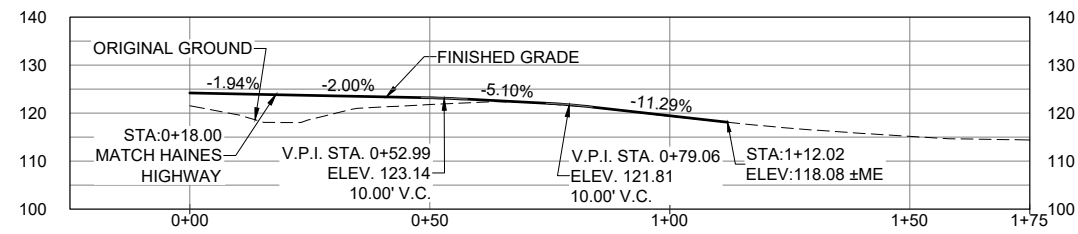
DRAFT CONCURRENCE SET

FIRM: DOWL
 FILE: C:\dowl\pwa\0388515\SC-CT-RD-C-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH #1: AECL848
 DATE: 5/4/2020
 LAYOUT: G3
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 NOBLE

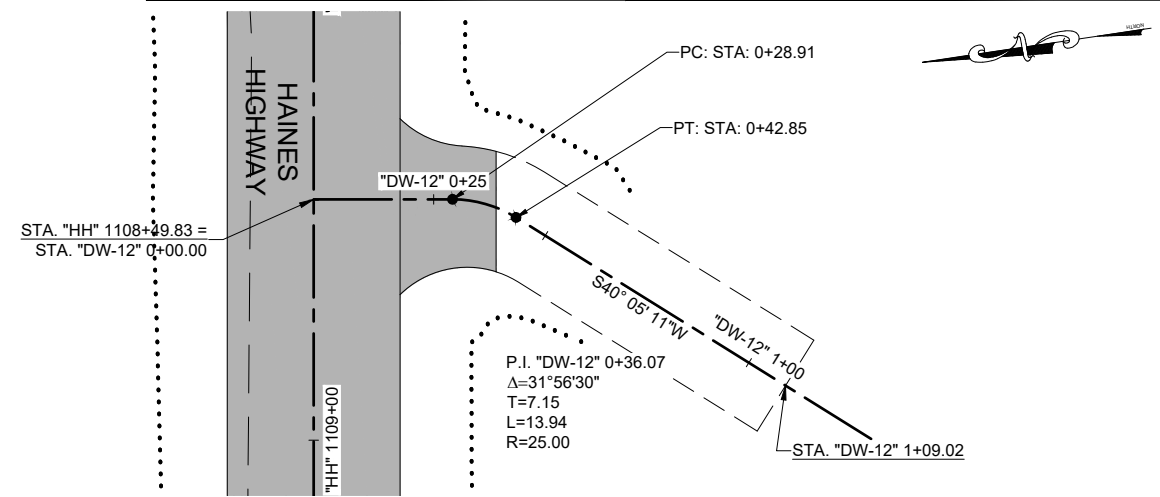
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	G3	G8



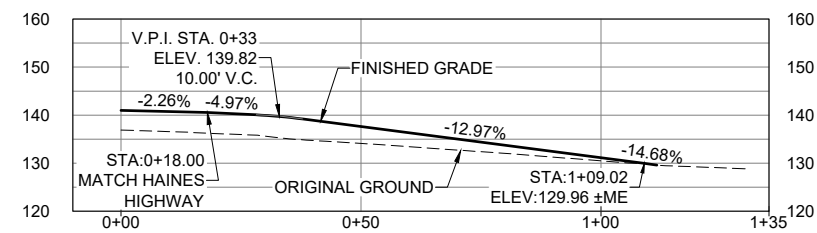
HNS 26 PULLOUT



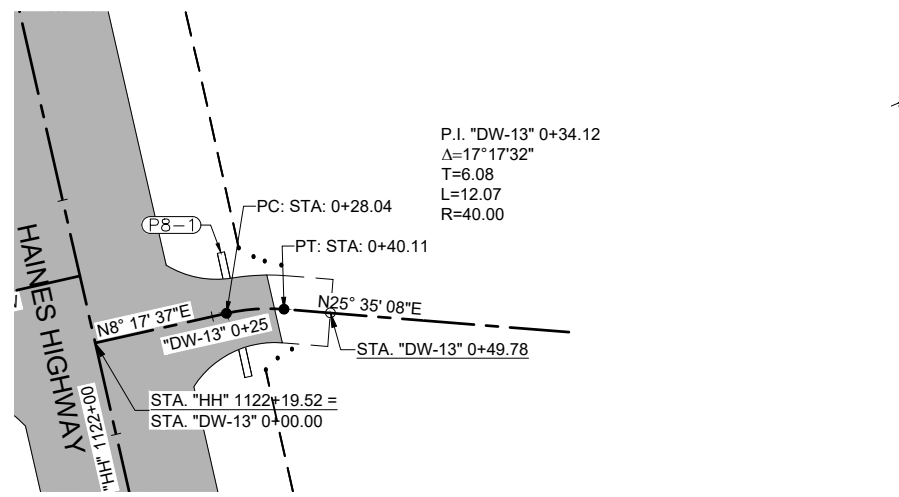
HNS 26 PULLOUT PROFILE



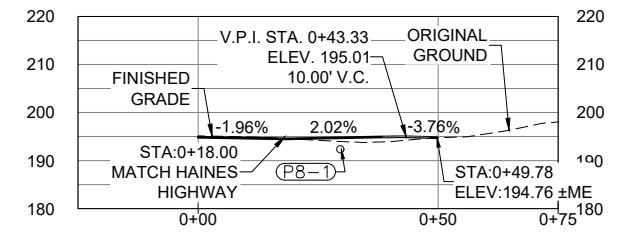
DW-12



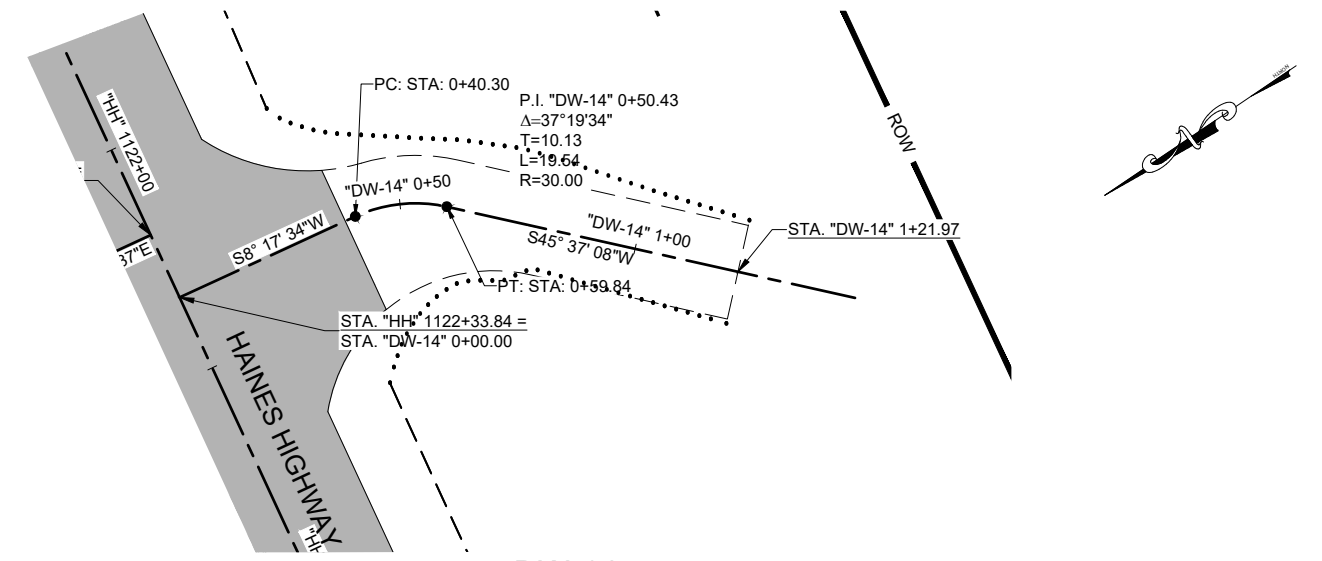
DW-12 PROFILE



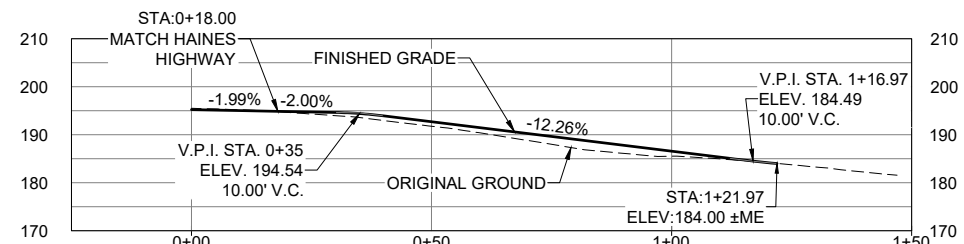
DW-13



DW-13 PROFILE



DW-14



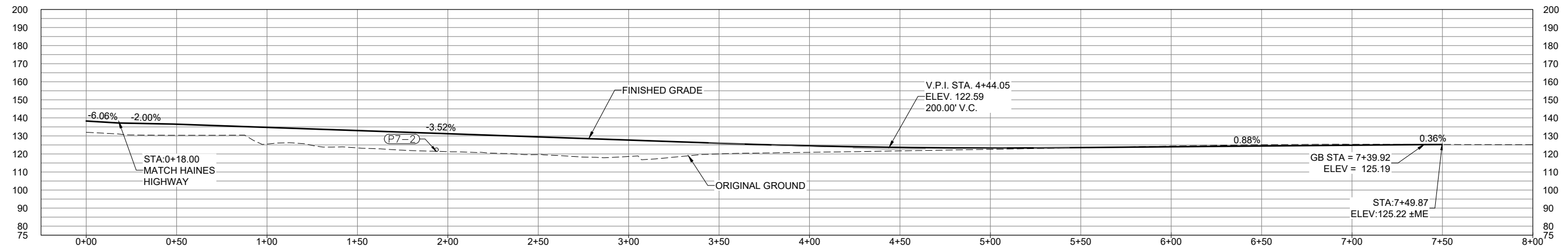
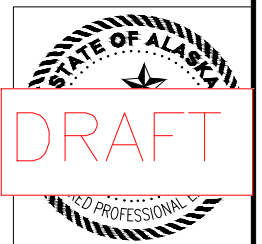
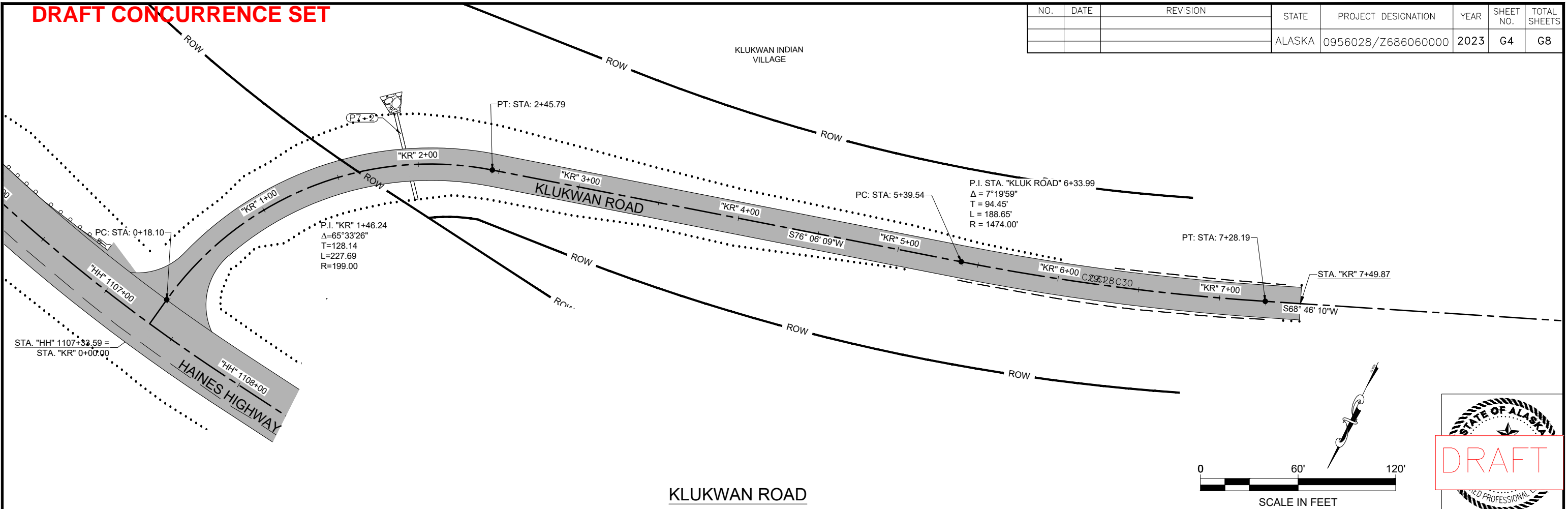
DW-14 PROFILE



DRAFT CONCURRENCE SET

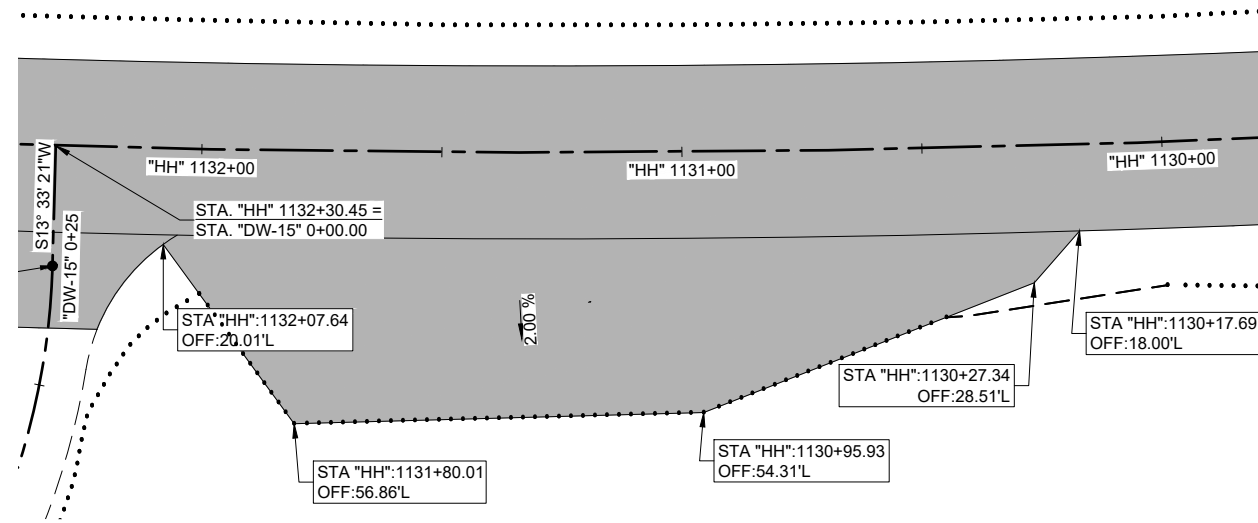
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	G4	G8

FIRM: DOWL
 FILE: C:\dow1_p\40388515\SC-CT-RD-G-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH #1: AECL848
 DATE: 5/4/2020
 LAYOUT: G4
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR

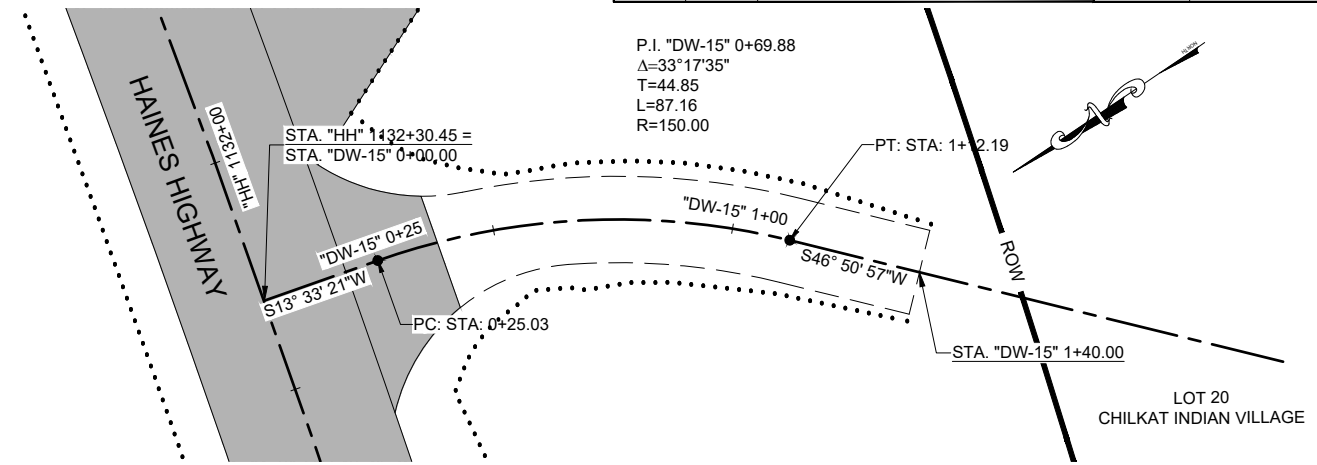


DRAFT CONCURRENCE SET

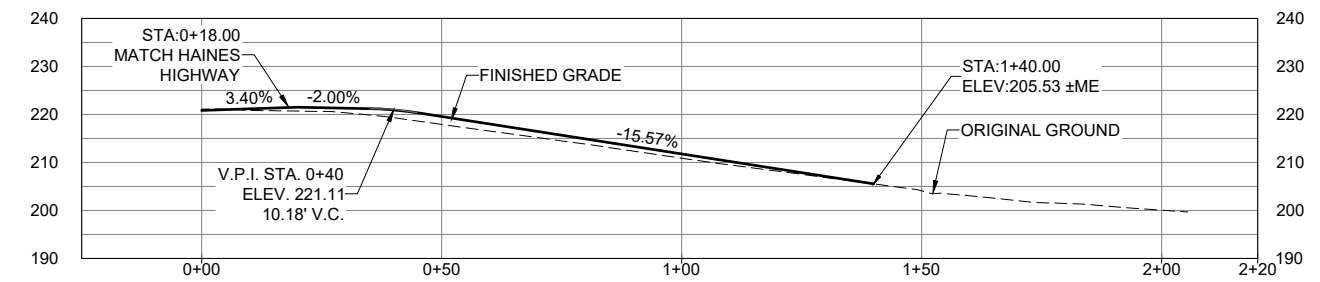
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	G5	G8



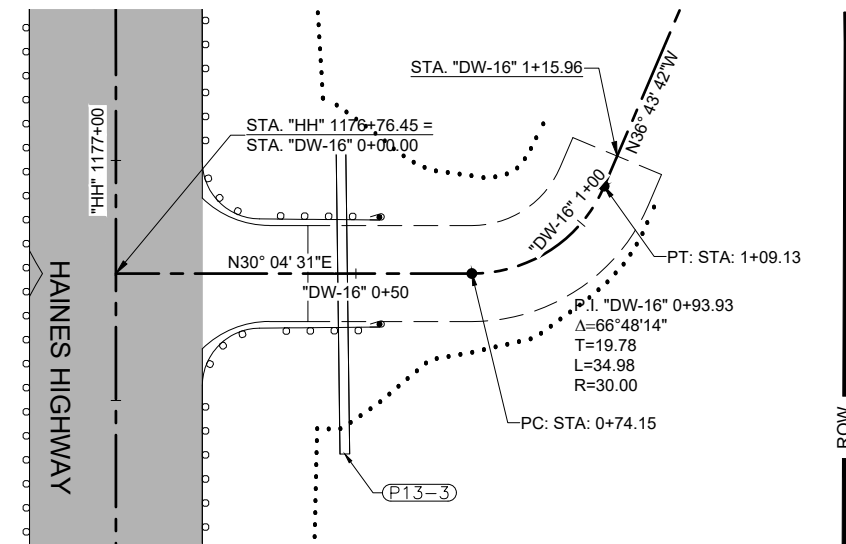
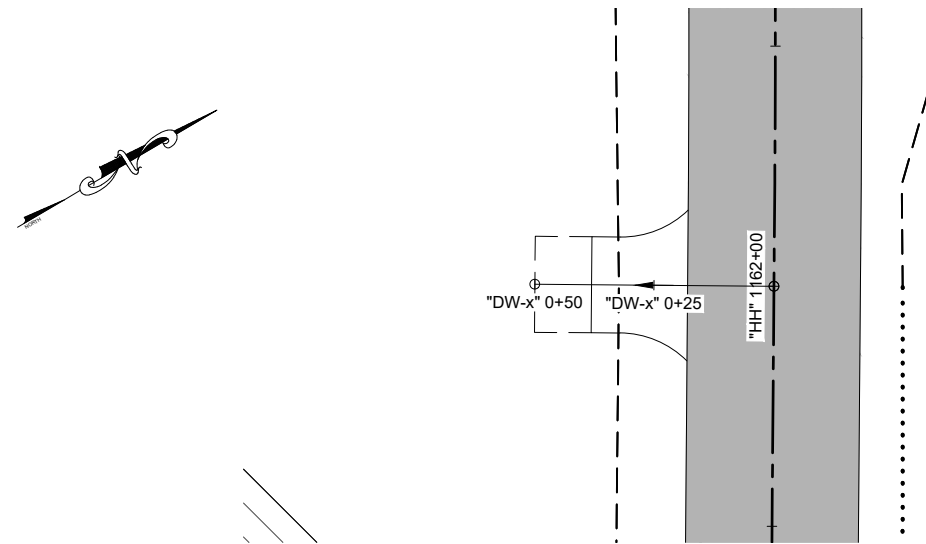
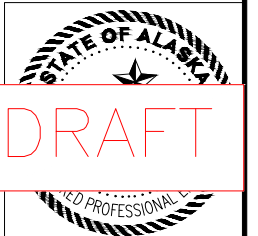
BUS TURNOUT



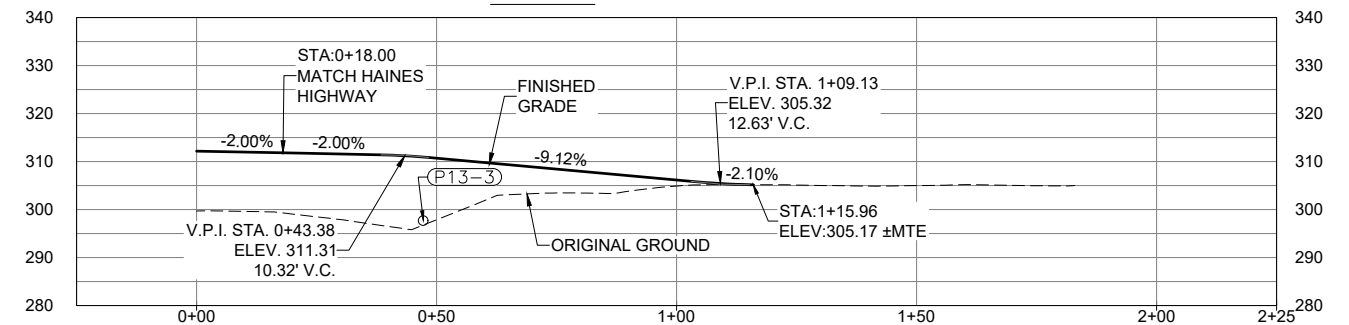
DW-15



DW-15 PROFILE



DW-16



DW-16 PROFILE

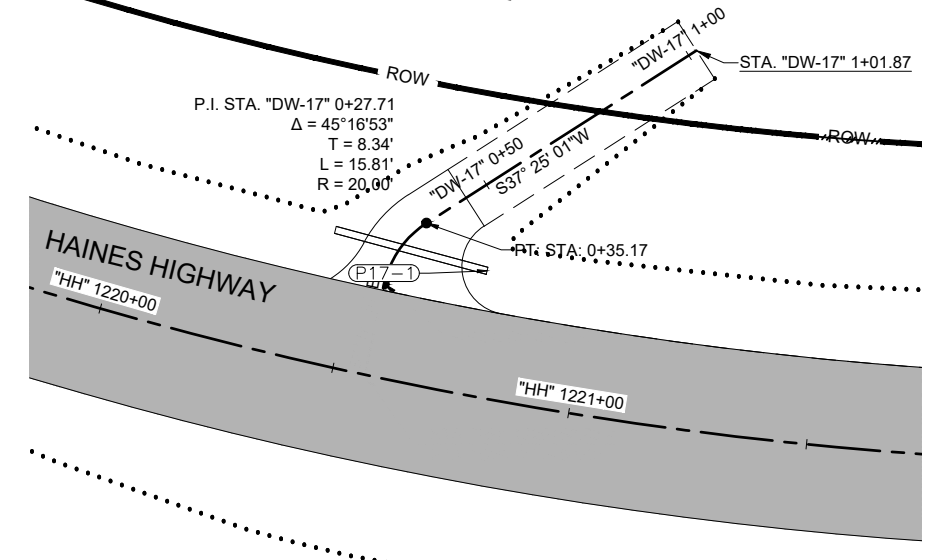


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 FILE C:\down\p\0388515\SC-CT-RD-C-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # AECL848
 DATE 5/4/2020
 LAYOUT G5
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR

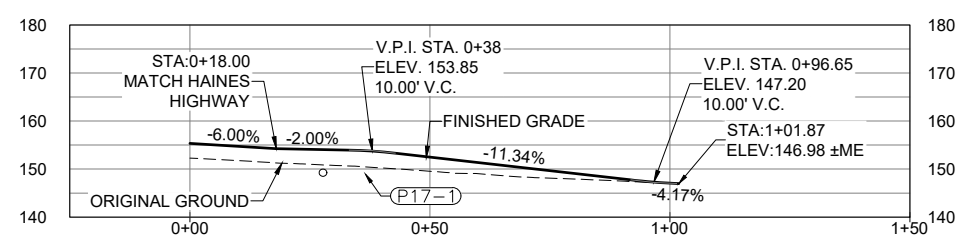
DRAFT CONCURRENCE SET

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 FILE: C:\dowl\pwa\0388515\SC-CT-RD-C-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH #1: AECL848
 DATE: 5/4/2020
 LAYOUT: G6
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 NOBLE

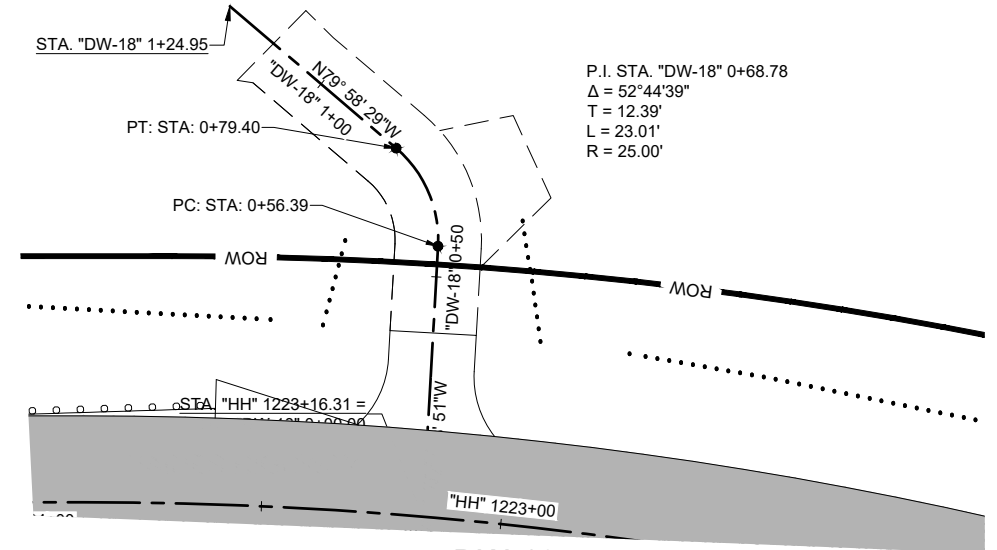
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	G6	G8



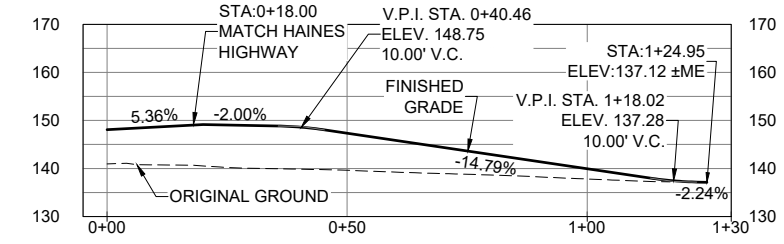
DW-17



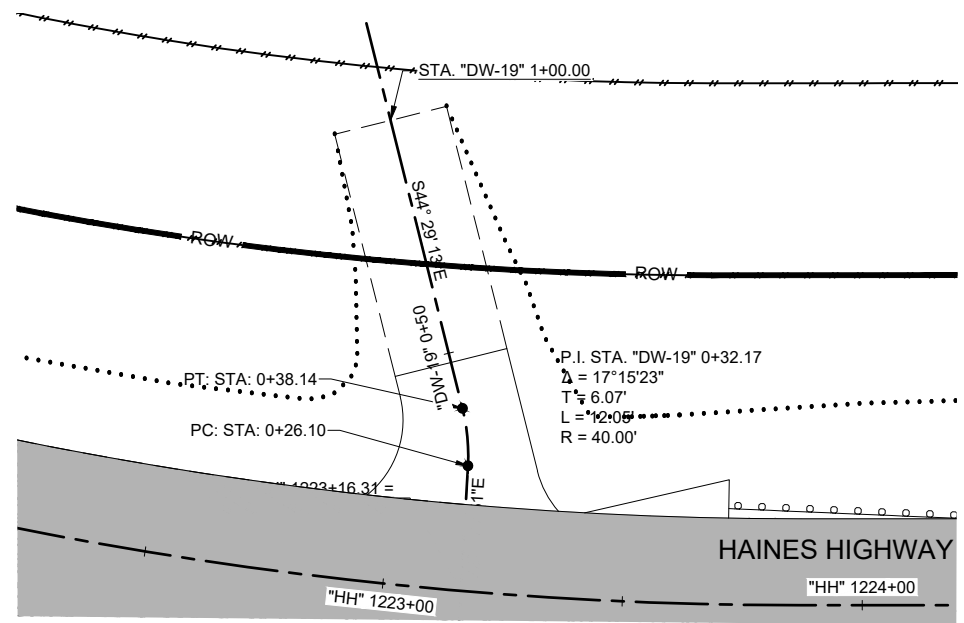
DW-17 PROFILE



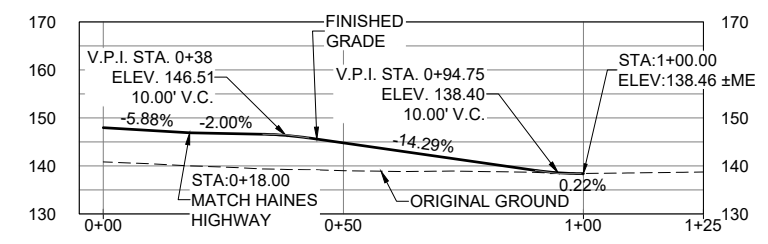
DW-18



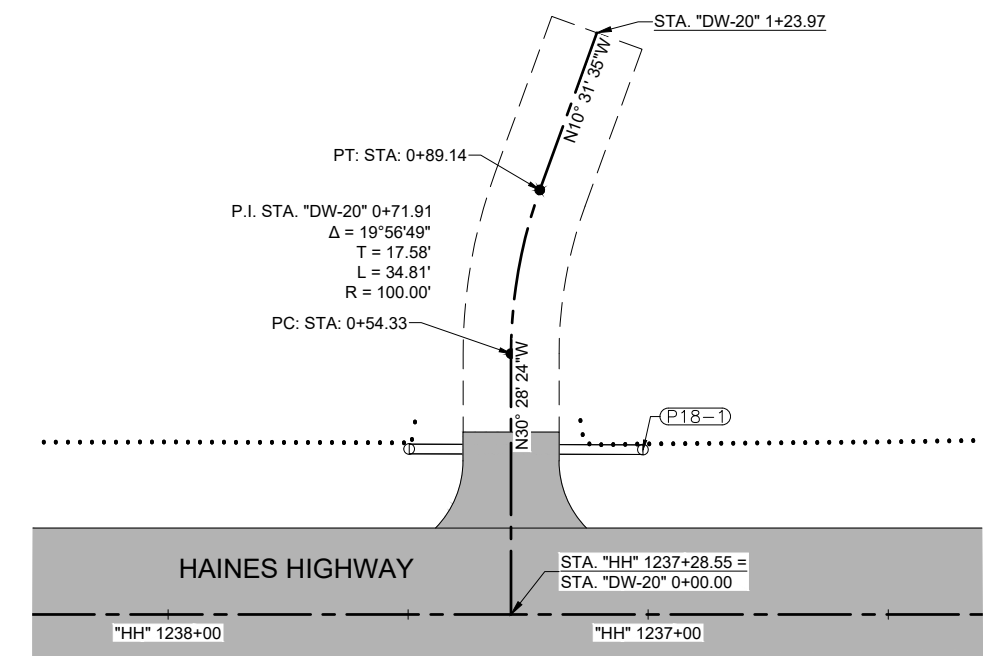
DW-18 PROFILE



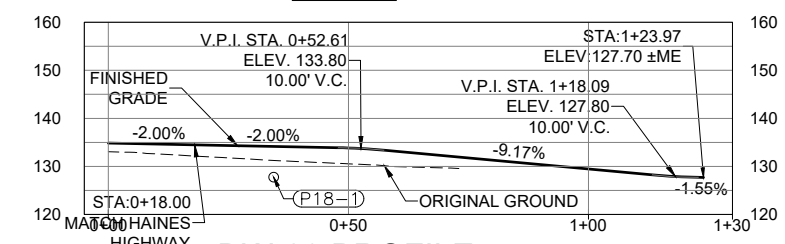
DW-19



DW-19 PROFILE



DW-20



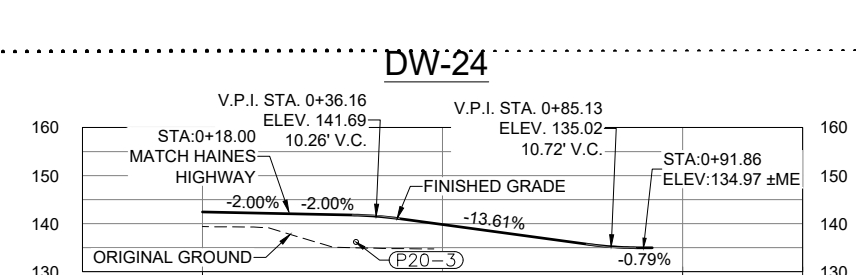
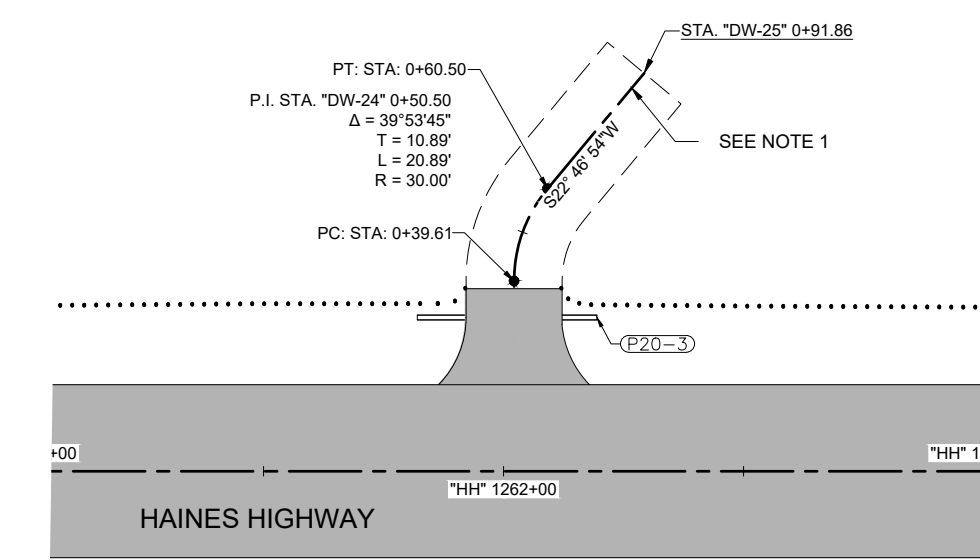
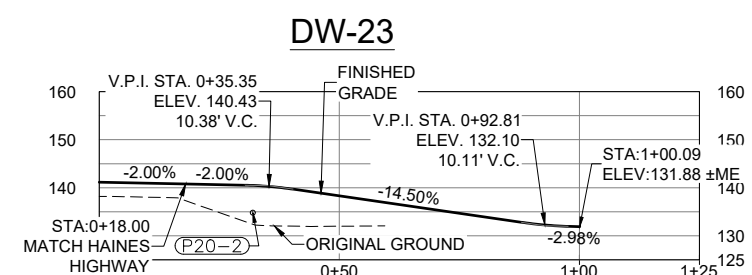
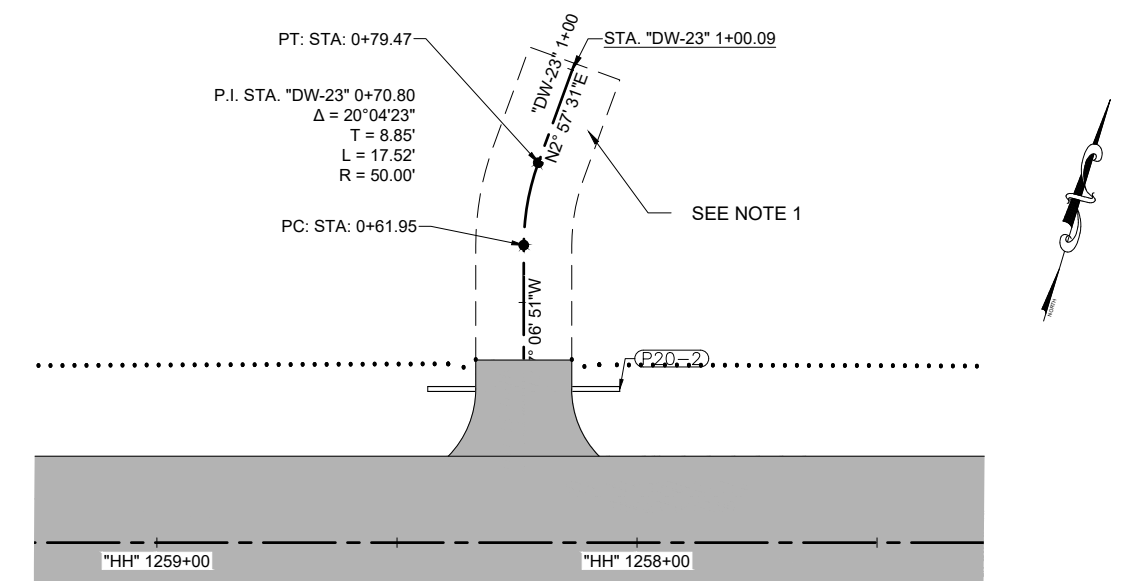
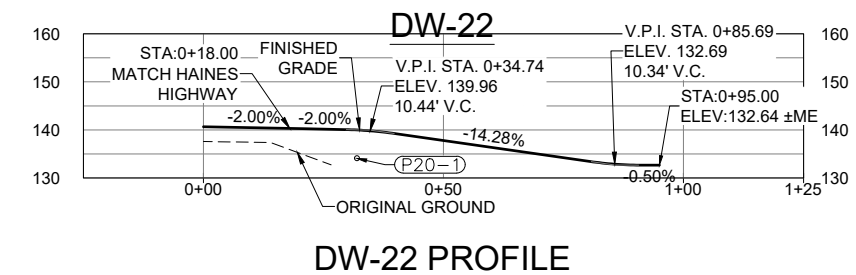
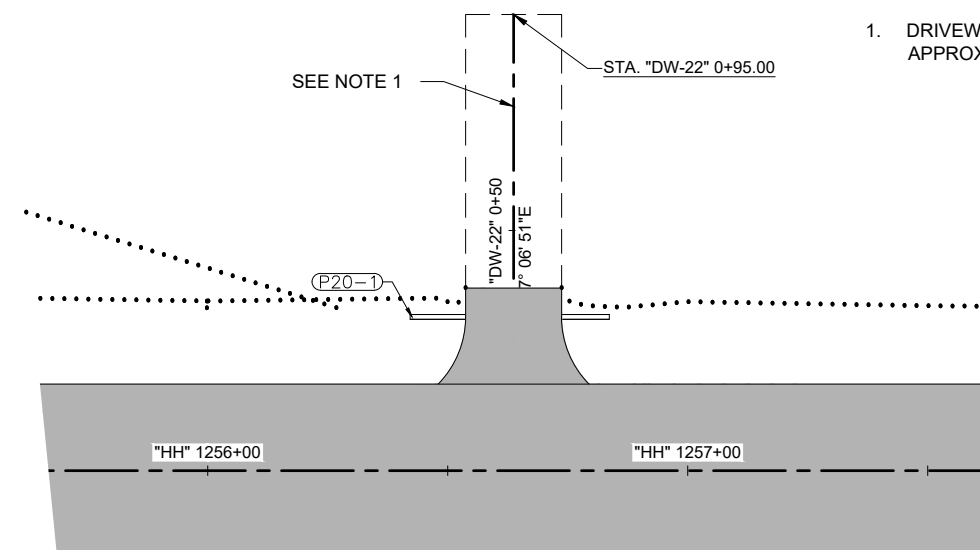
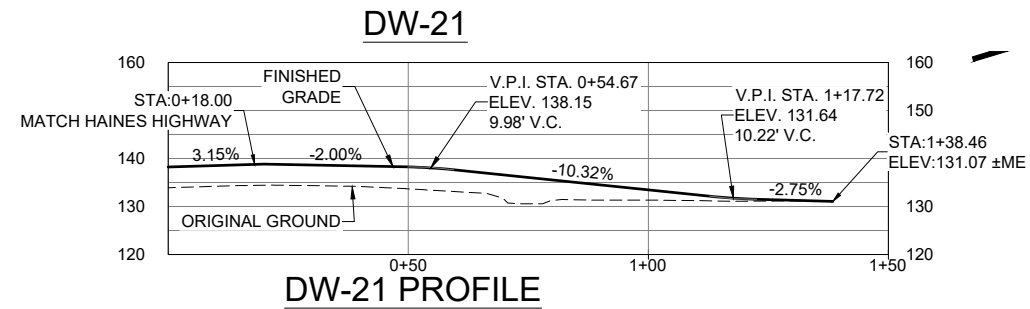
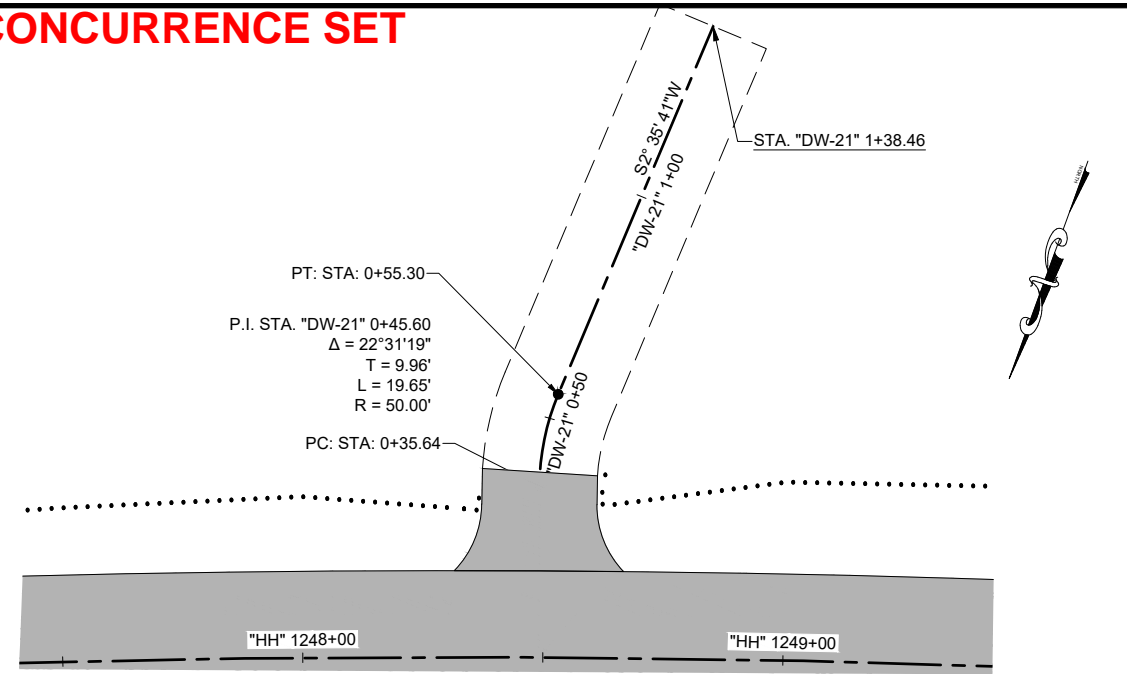
DW-20 PROFILE

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	G7	G8

NOTES:

1. DRIVEWAYS ARE NOT SURVEYED AND ARE APPROXIMATE. FIELD ADJUST AS NECESSARY.



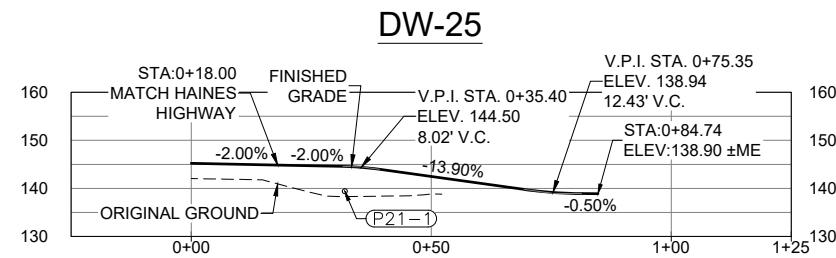
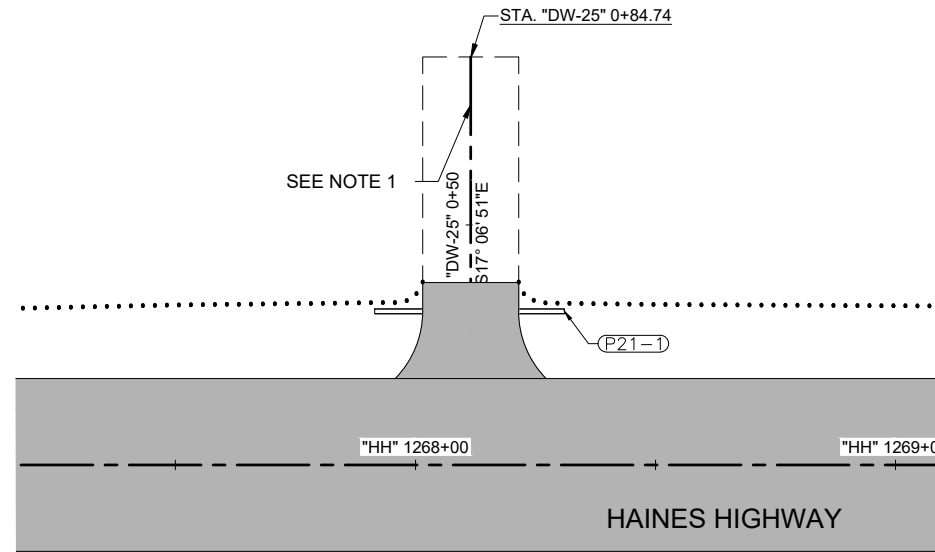
FIRM: DOWL
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH #1: AECL848
 FILE: C:\dowl\pwa\d0388515\SC-CT-RD-C-61850.dwg
 DATE: 5/4/2020
 LAYOUT: G7
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR

DRAFT CONCURRENCE SET

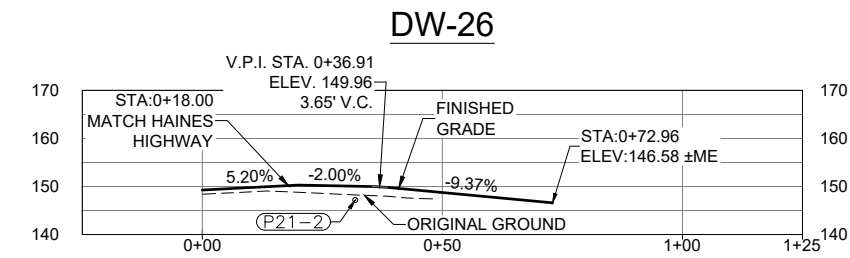
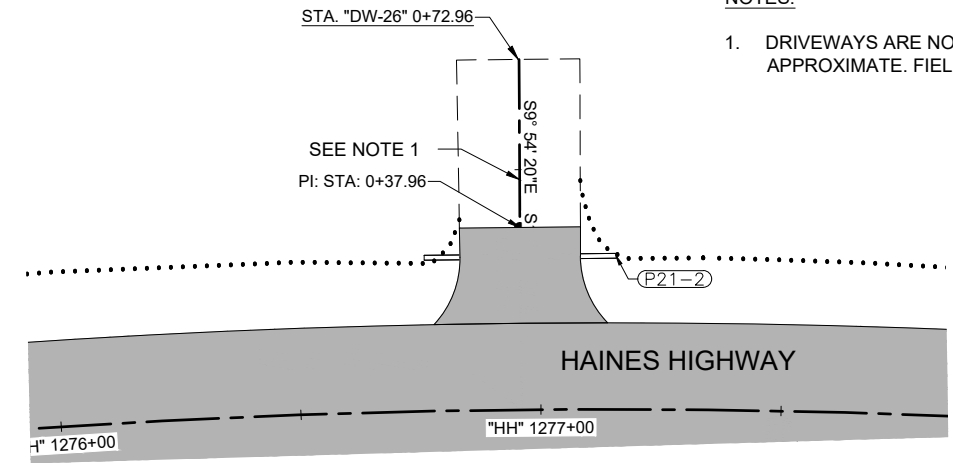
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	G8	G8

NOTES:

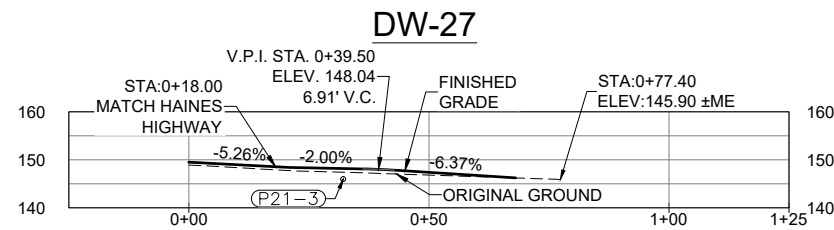
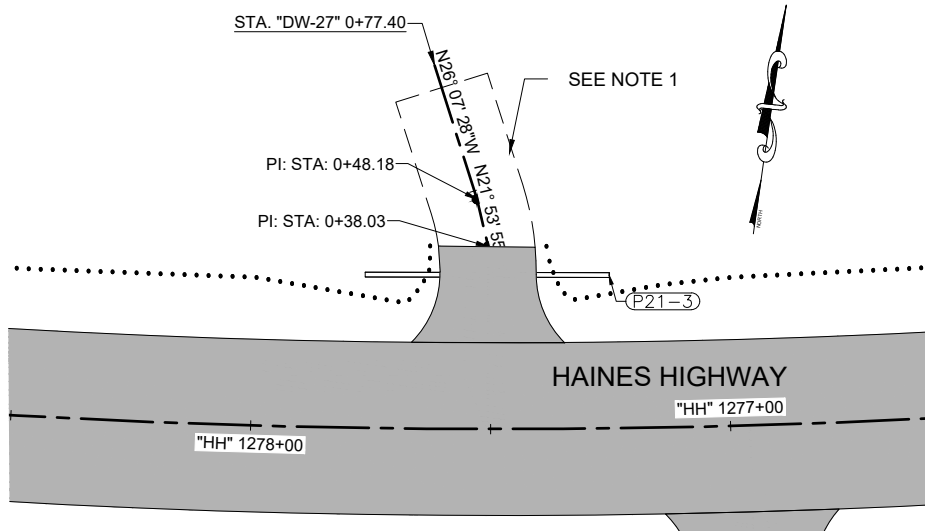
- DRIVEWAYS ARE NOT SURVEYED AND ARE APPROXIMATE. FIELD ADJUST AS NECESSARY.



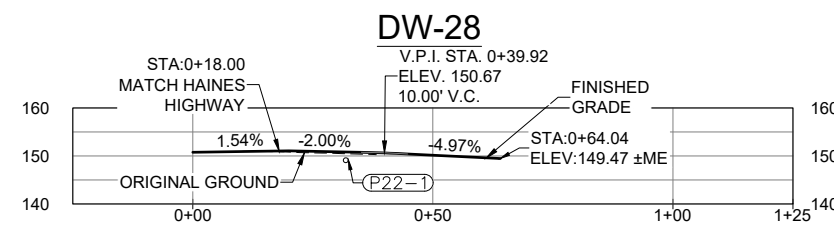
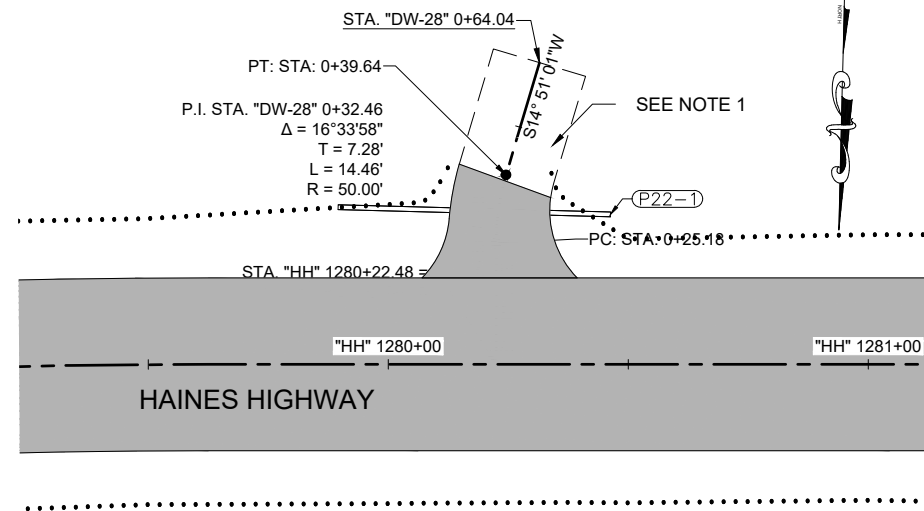
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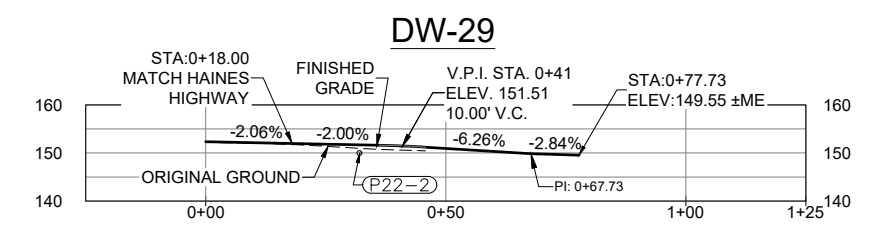
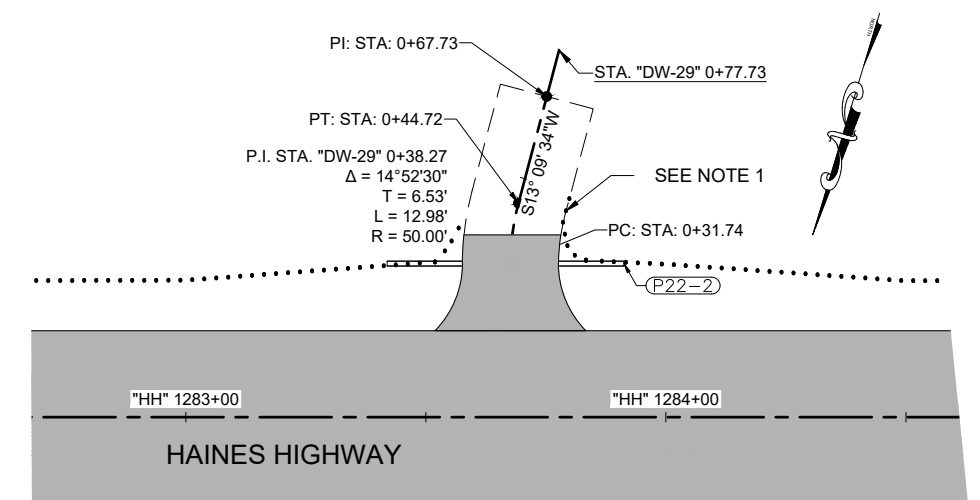
DW-26 PROFILE



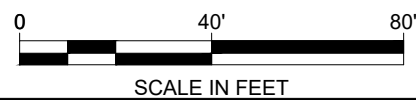
DW-27 PROFILE



DW-28 PROFILE



DW-29 PROFILE

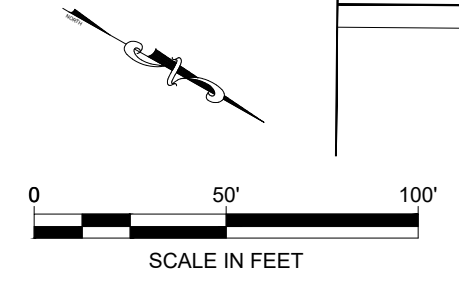
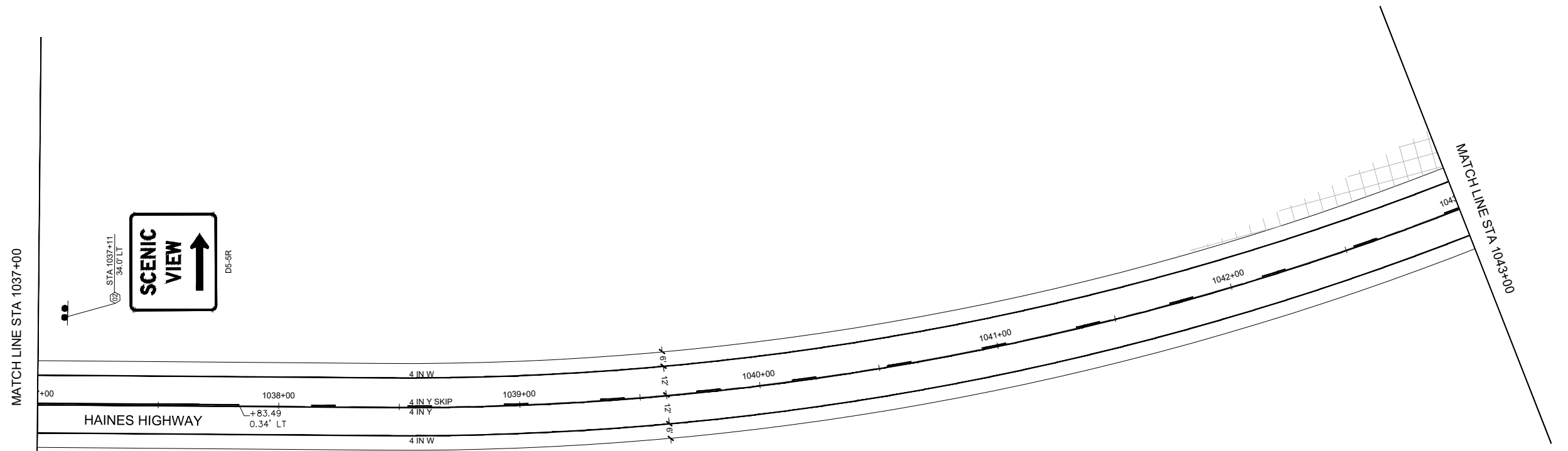
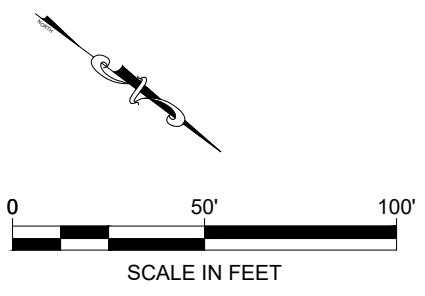
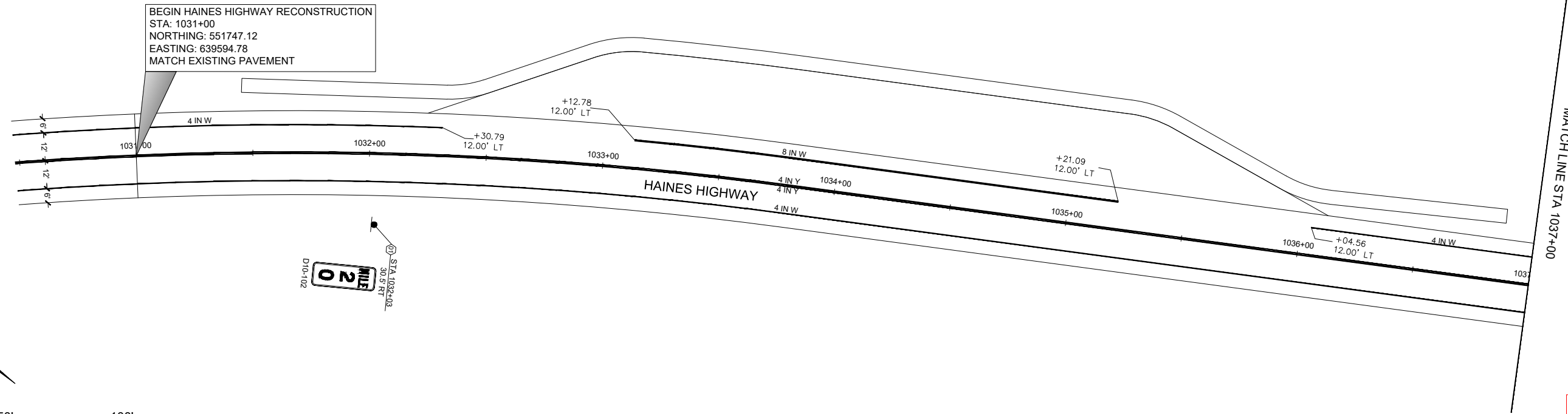


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 FILE: C:\dowl\pwa\0388515\SC-C1-RD-C-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 DATE: 5/4/2020
 LAYOUT: G8

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H1	H25

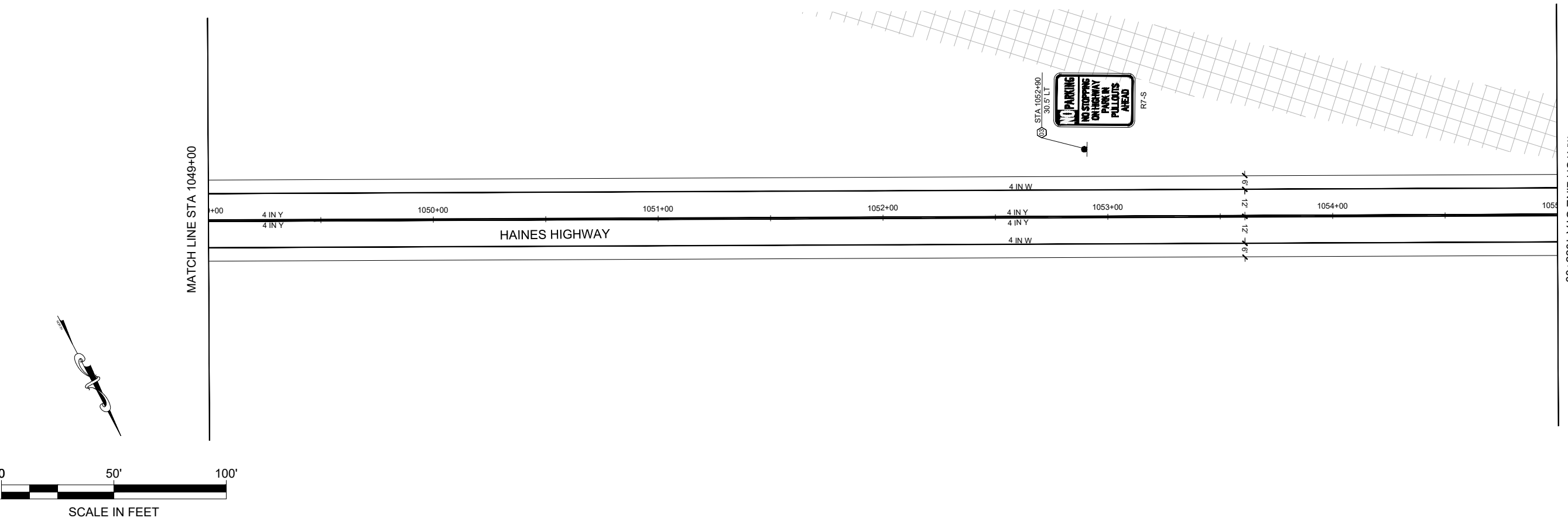
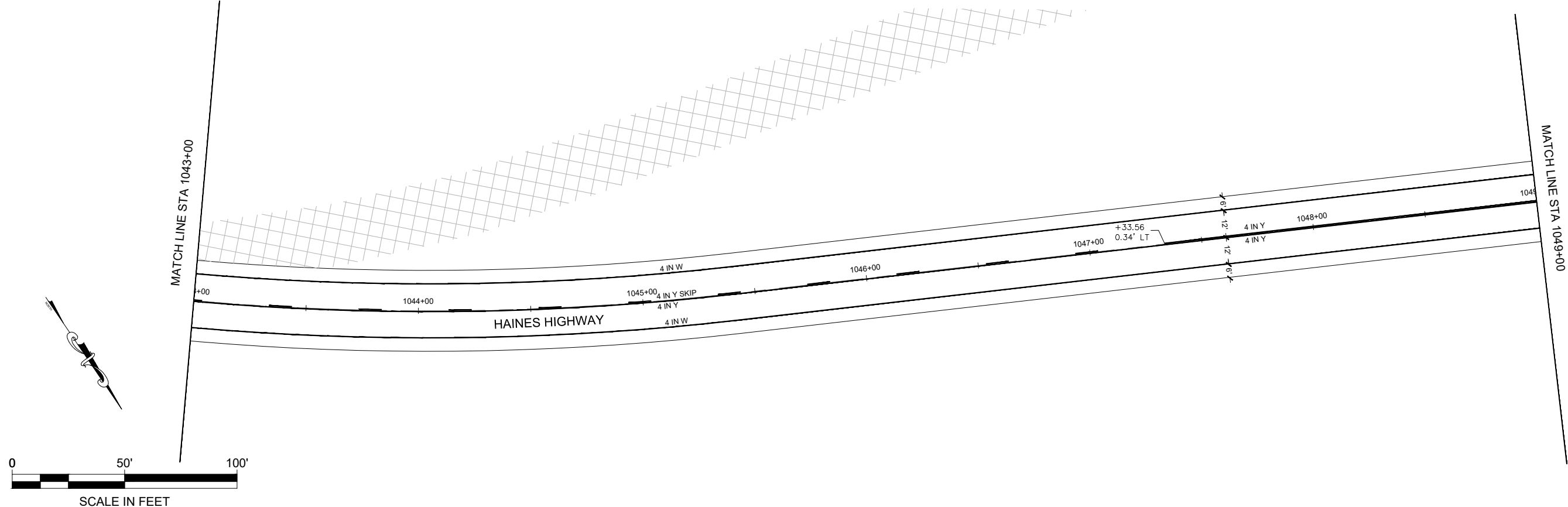
FIRM DOWL
 FILE C:\dowl\pww\d0388515\SC-CT-SG-H-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # AECL848
 DATE 5/4/2020
 LAYOUT H1
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR



DRAFT CONCURRENCE SET

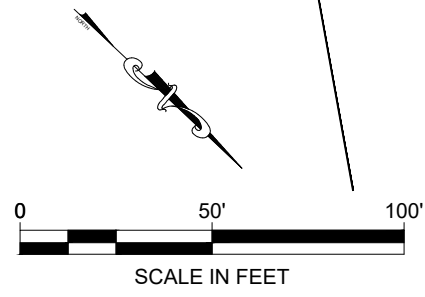
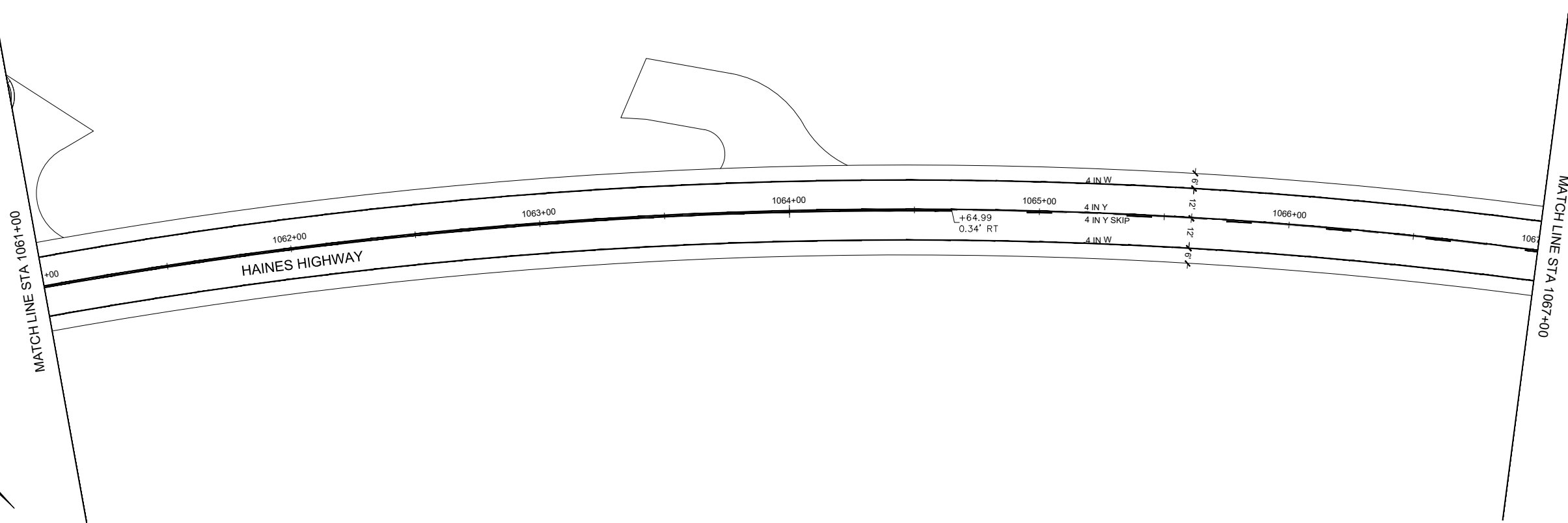
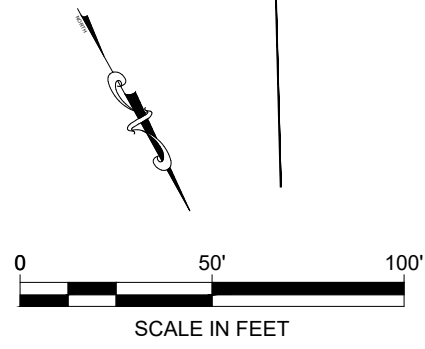
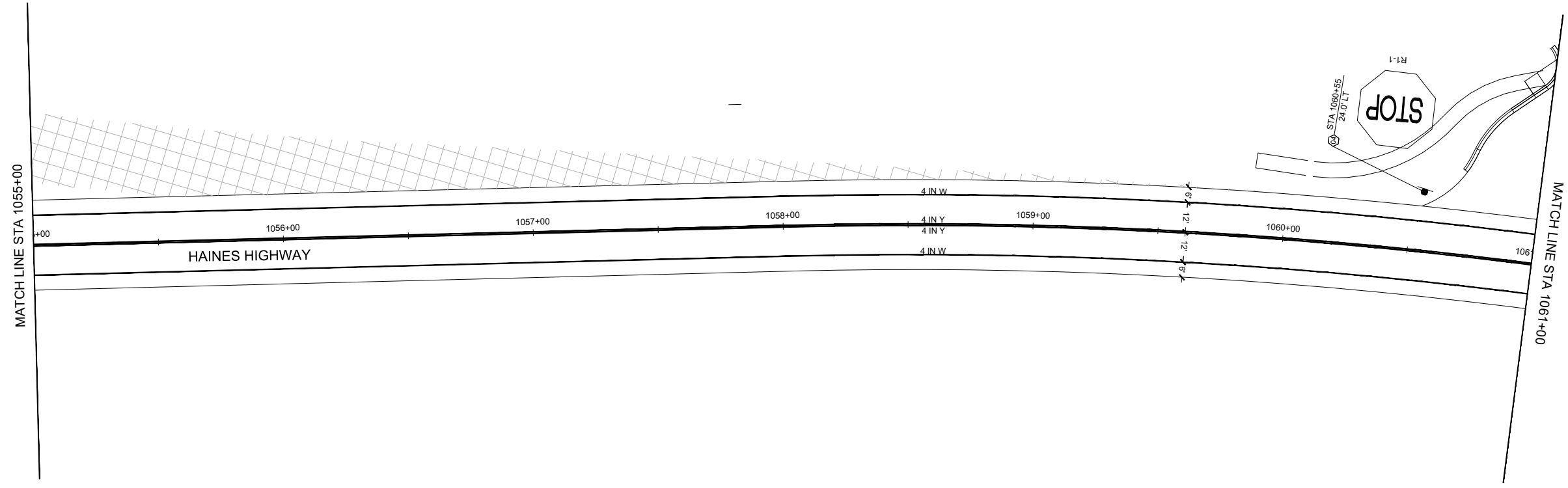
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H2	H25

FIRM DOWL
 FILE C:\dowl\pww\d0388515\SC-CT-SG-H-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT H2
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 CERTIFICATE OF AUTH # AECL848
 DRAFTED LUHR



DRAFT CONCURRENCE SET

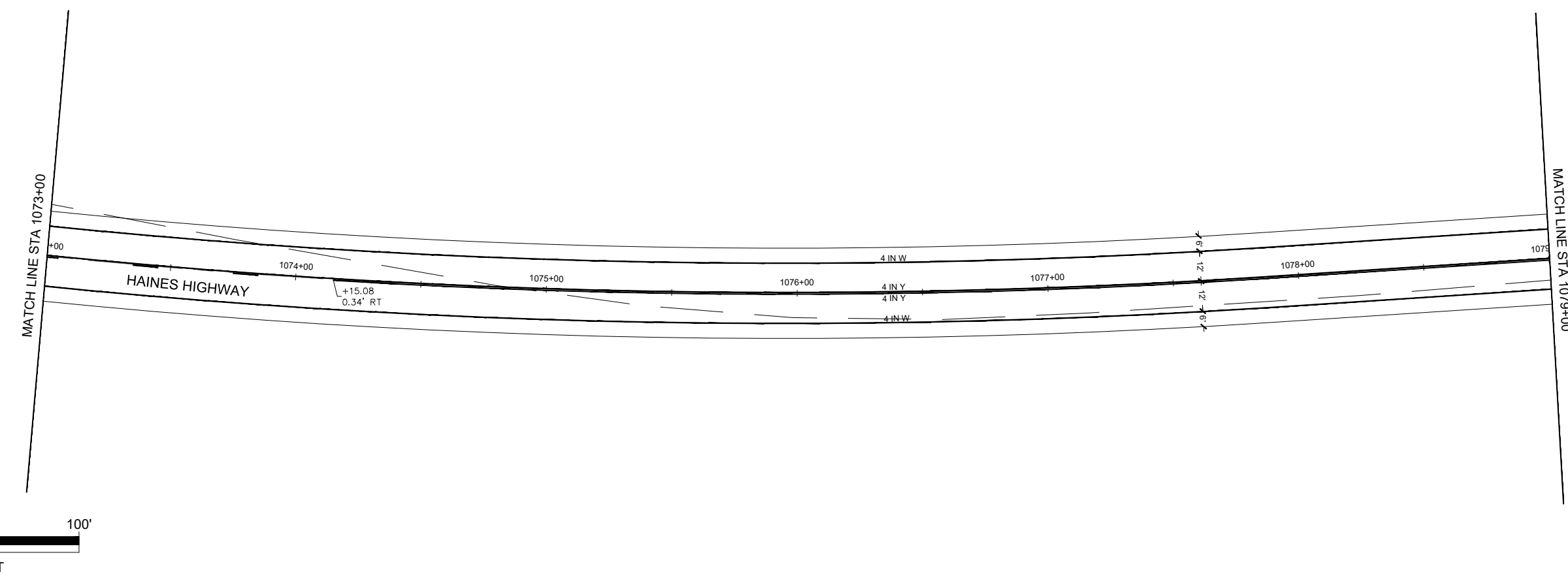
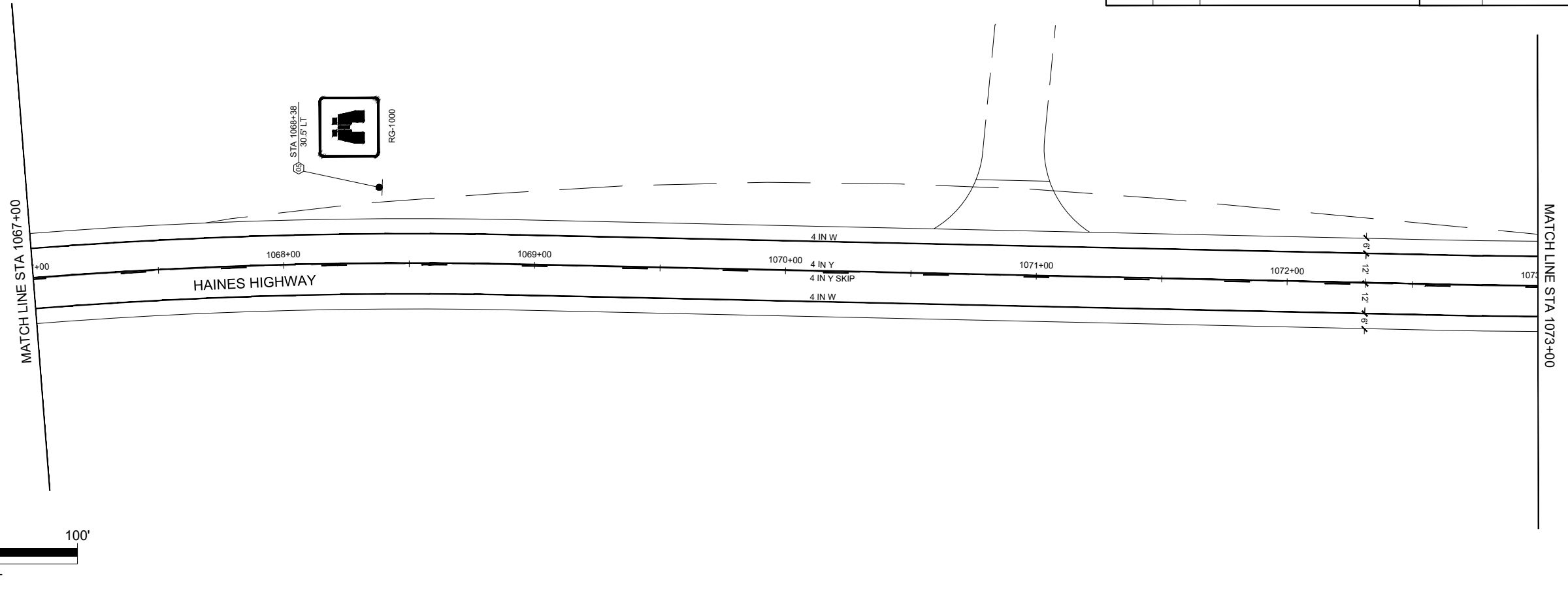
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H3	H25



FIRM: DOWL
 FILE: C:\dowl_pw\0388515\SC-CT-SG-H-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH #: AECL848
 DATE: 5/4/2020
 LAYOUT: H3
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H4	H25

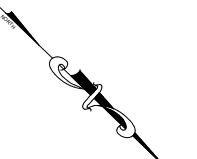
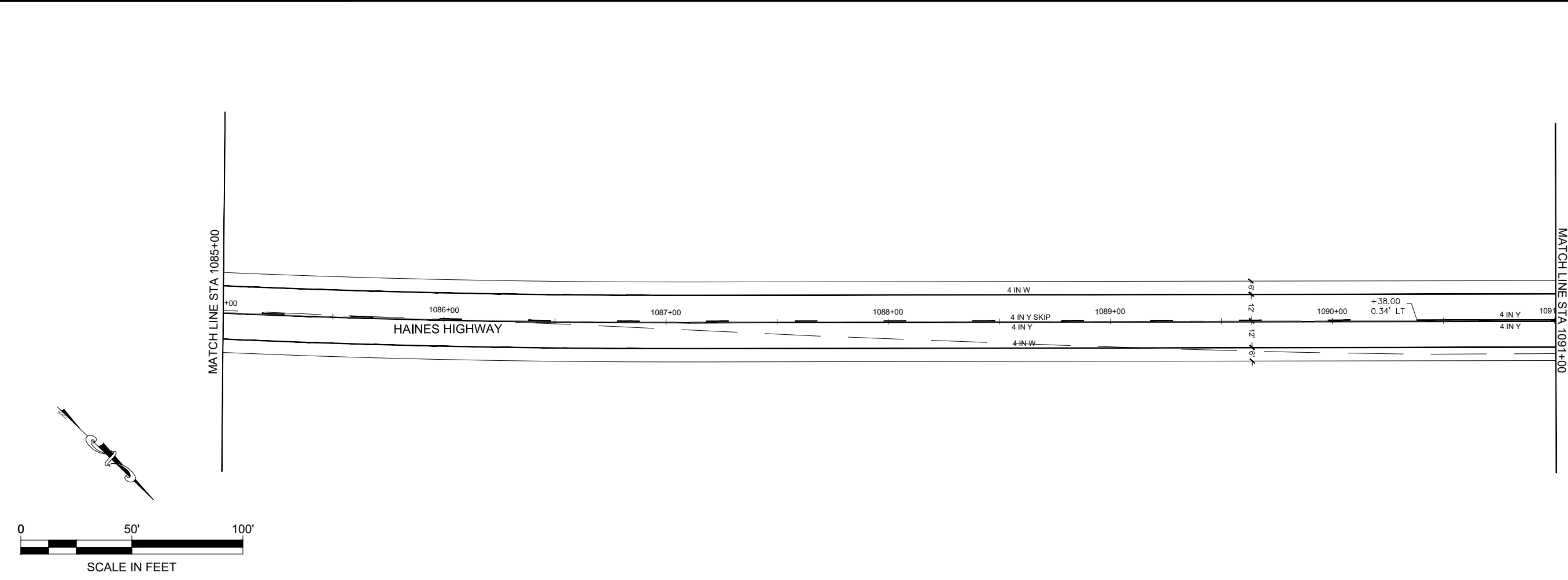
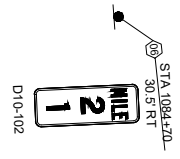
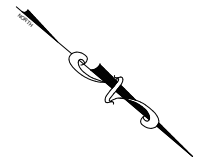
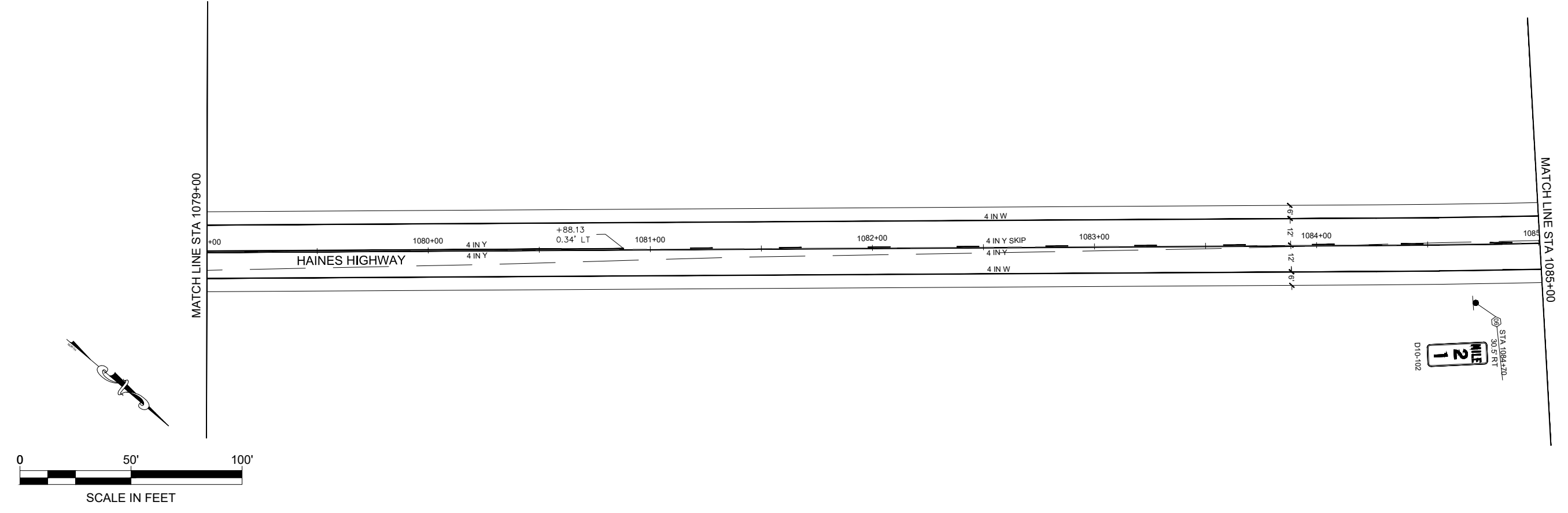


FIRM DOWL
 FILE C:\dowl_pw\0388515\SC-CT-SG-H-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT H4
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR
 CERTIFICATE OF AUTH # : AECL848

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H5	H25

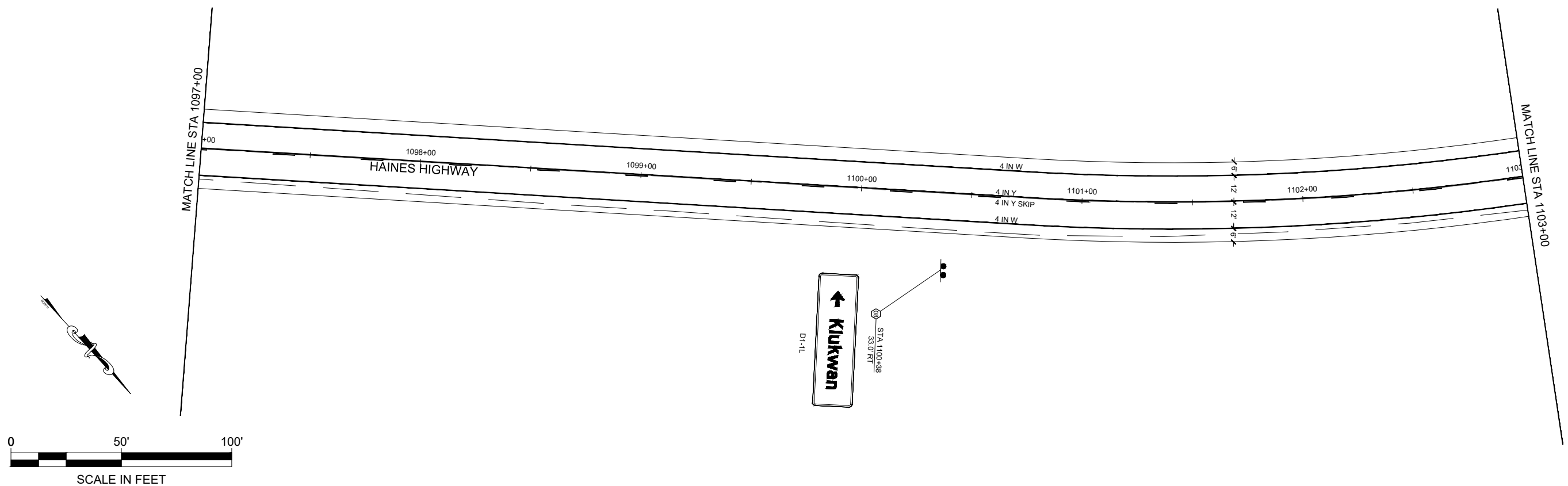
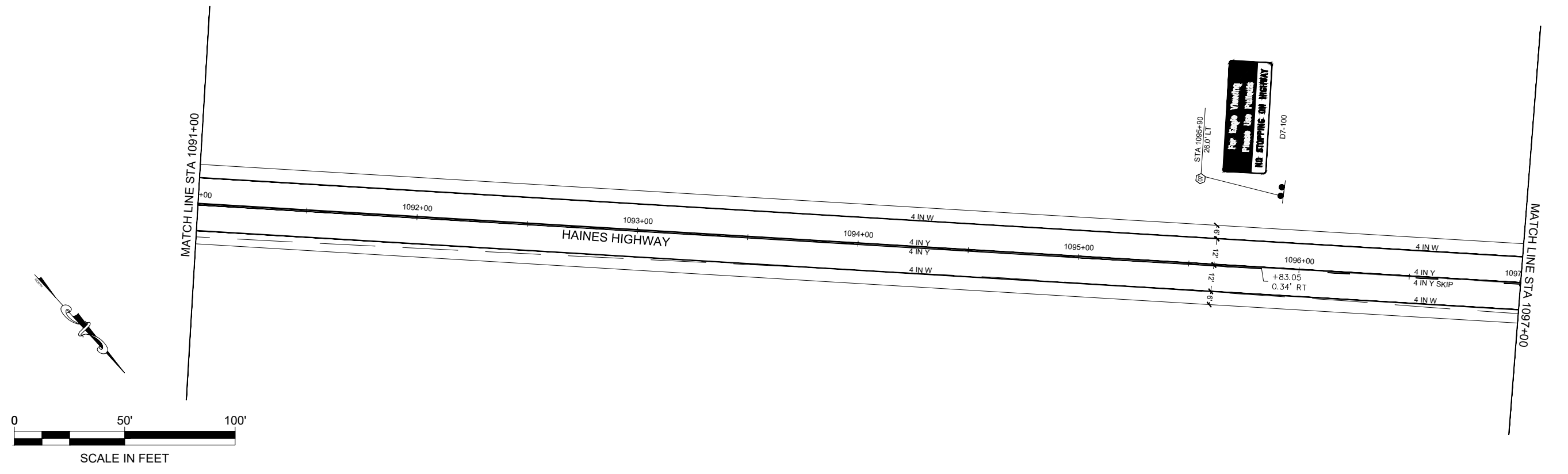
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 FILE C:\dowl_pw\0388515\SC-CT-SG-H-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # AECL848
 DATE 5/4/2020
 LAYOUT H5
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR



DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H6	H25

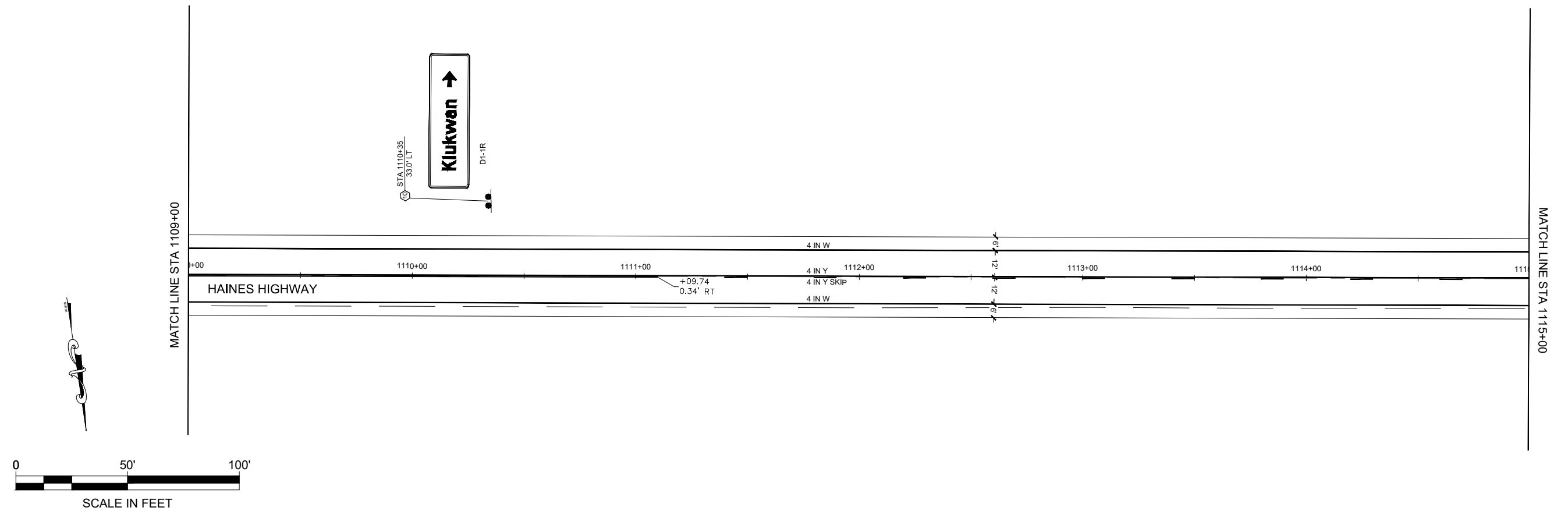
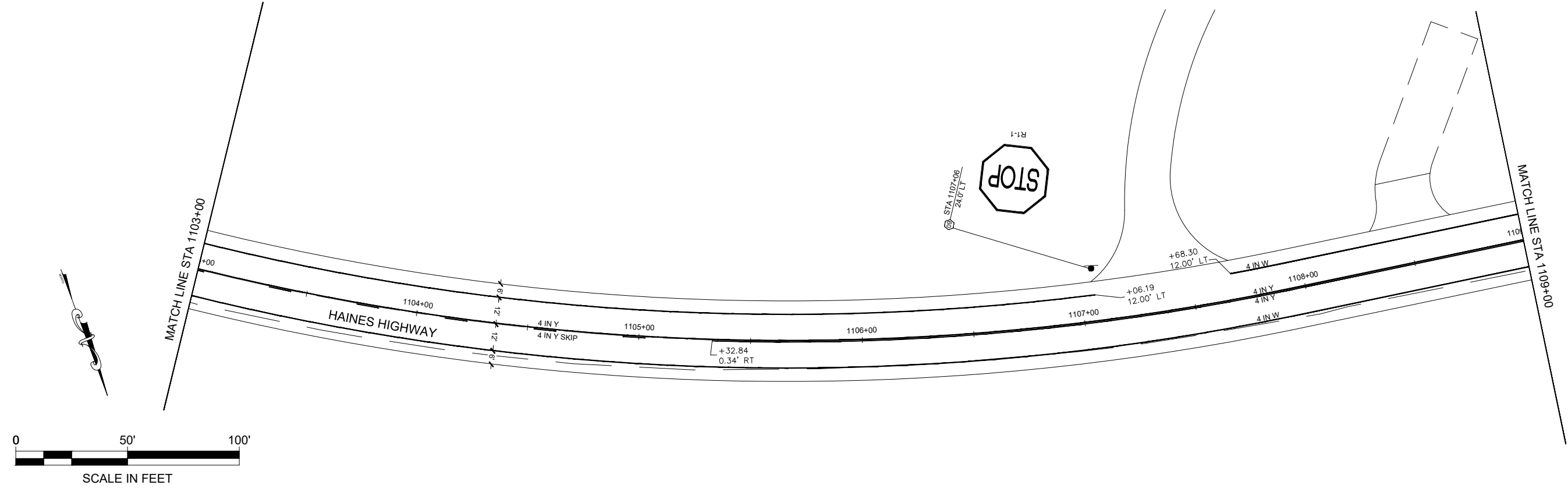
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 FILE C:\dowl\pww\0388515\SC-CT-SG-H-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT H6
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR
 CERTIFICATE OF AUTH # : AECL848



DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H7	H25

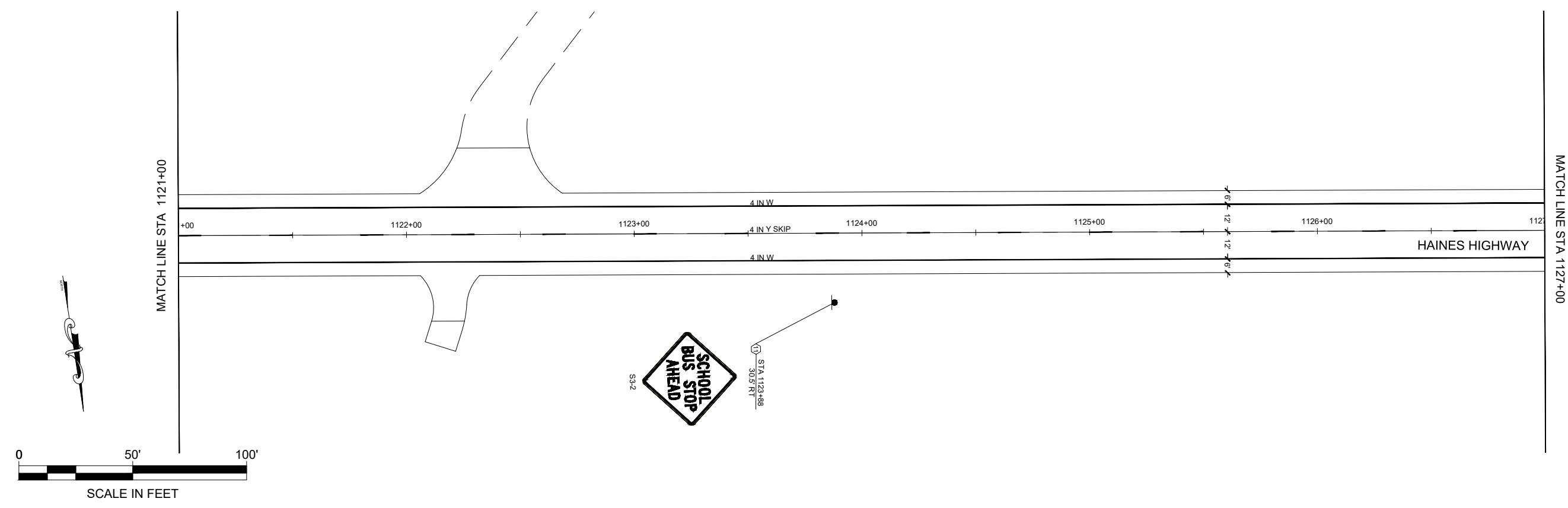
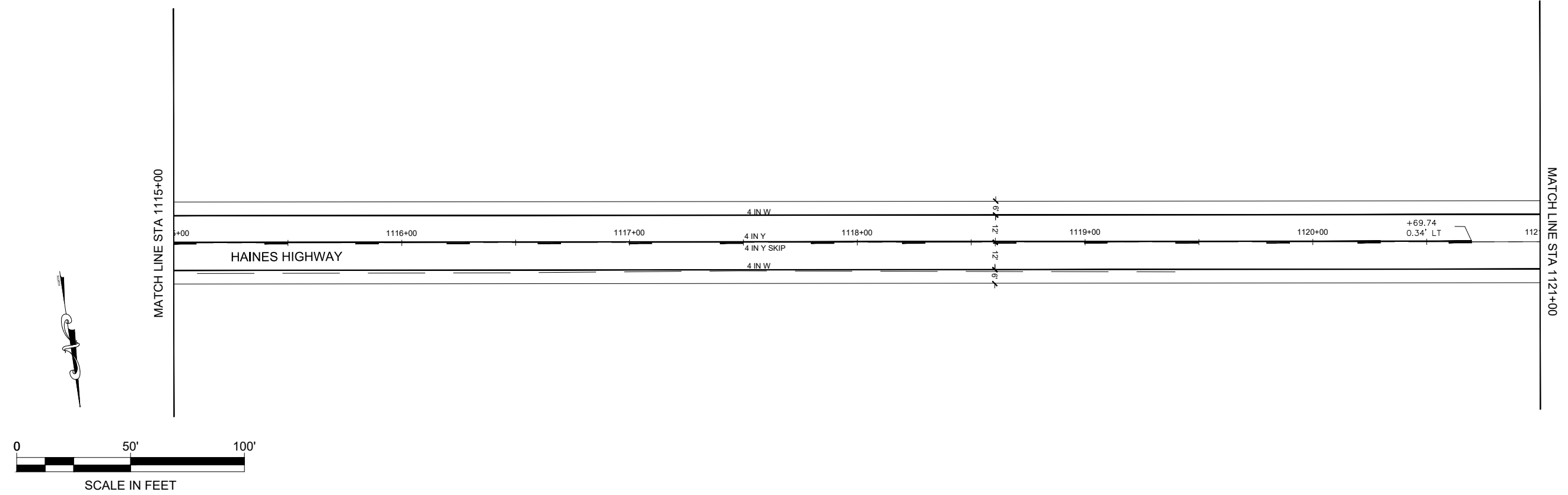
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 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH # : AECL848
 DATE: 5/4/2020
 LAYOUT: H7
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR



DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H8	H25

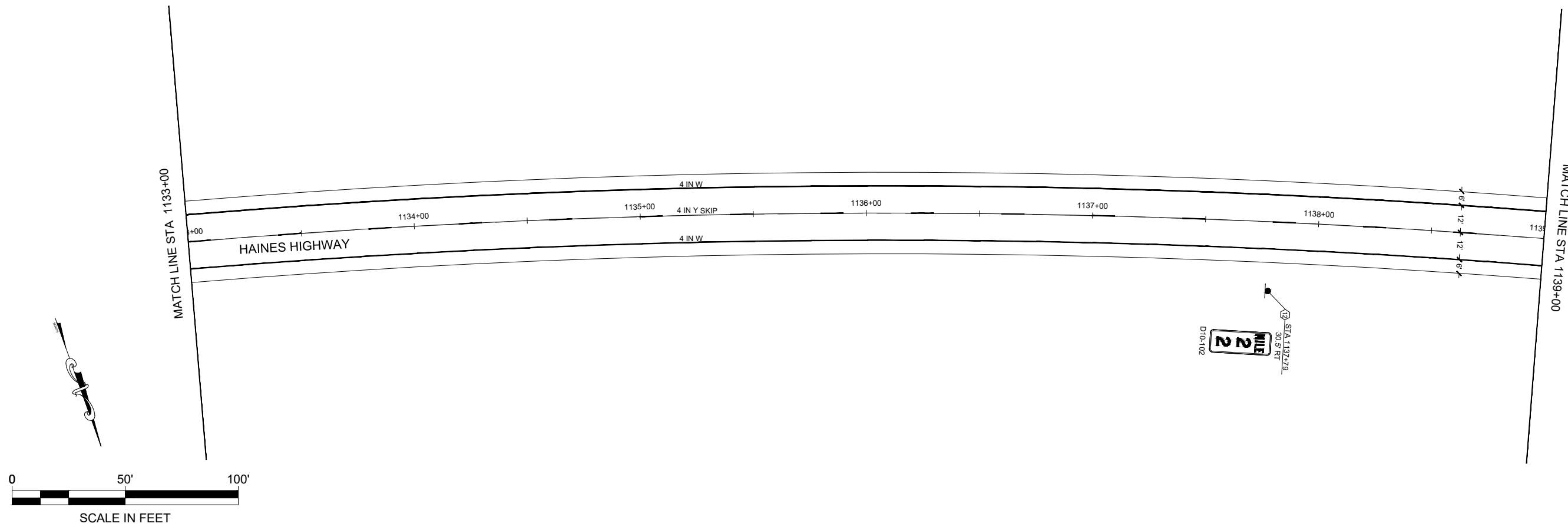
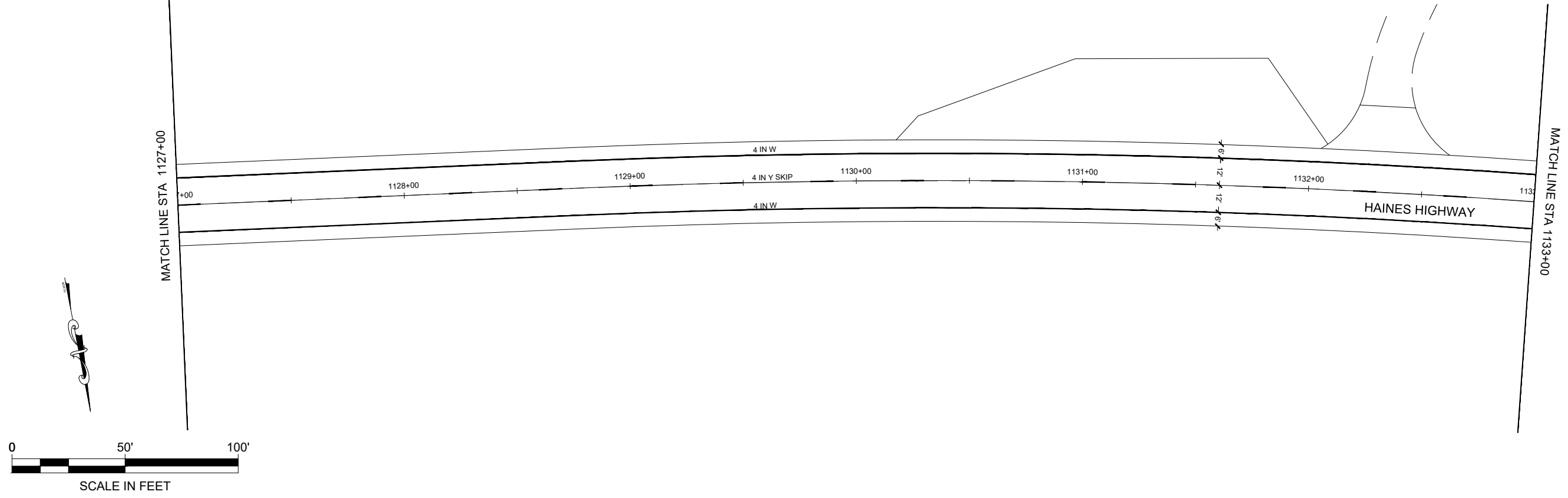
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 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH #: AECL848
 DATE: 5/4/2020
 LAYOUT: HB
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR



DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H9	H25

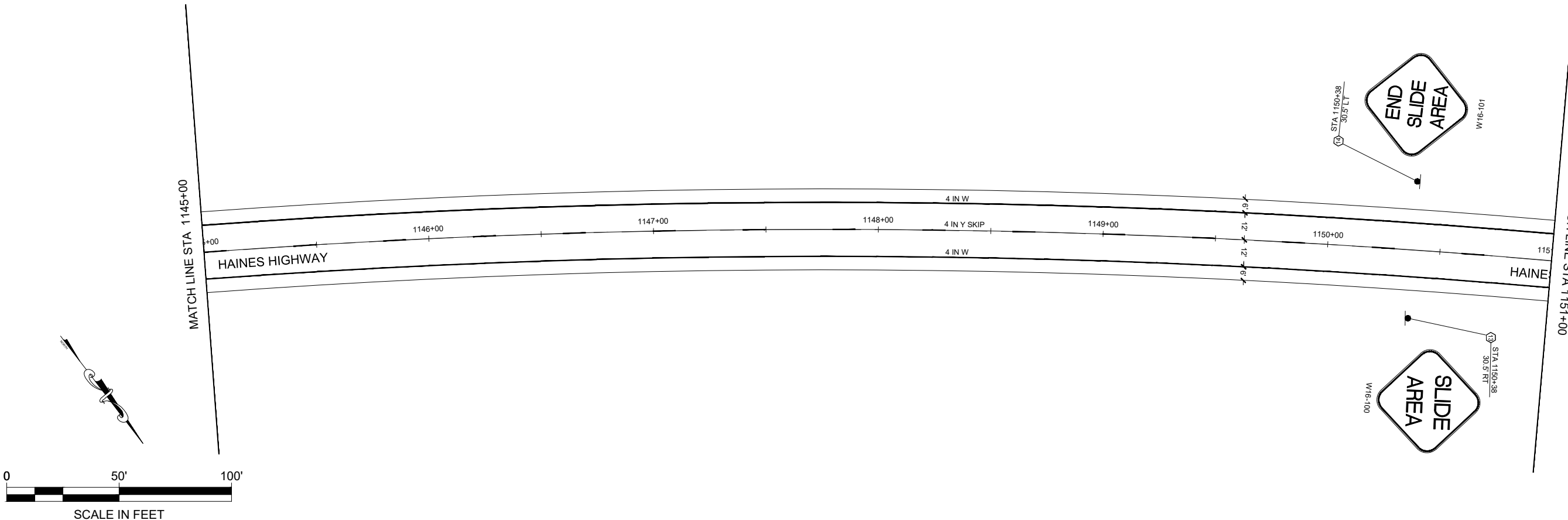
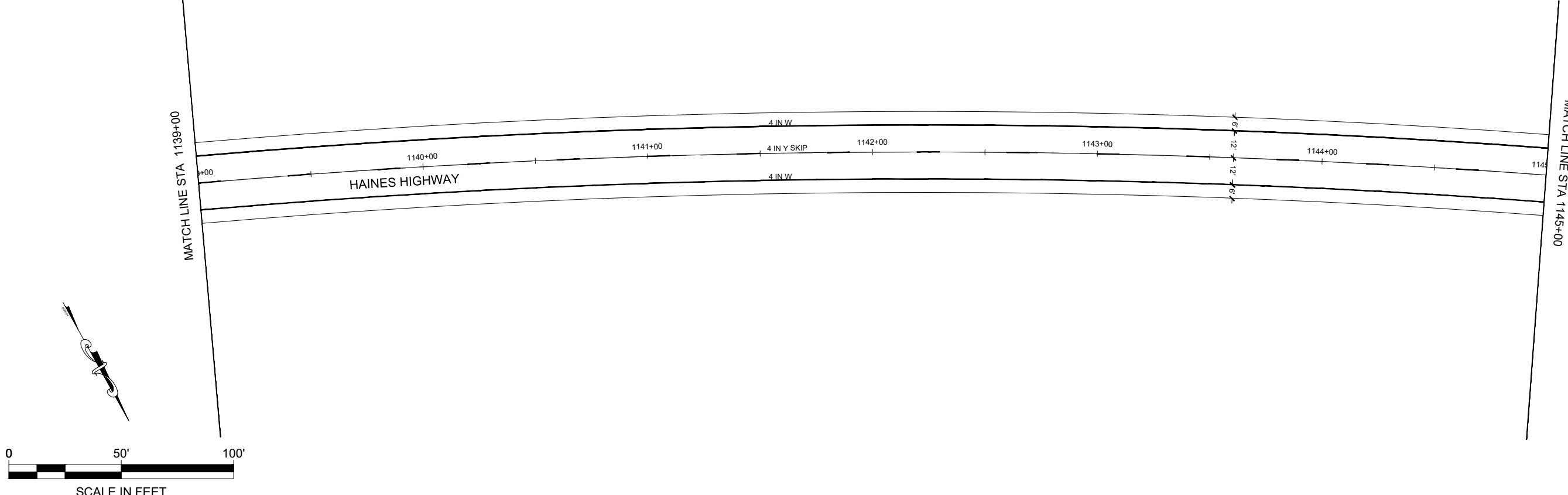
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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT H9
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 CERTIFICATE OF AUTH # : AECL848
 DRAFTED LUHR



DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H10	H25

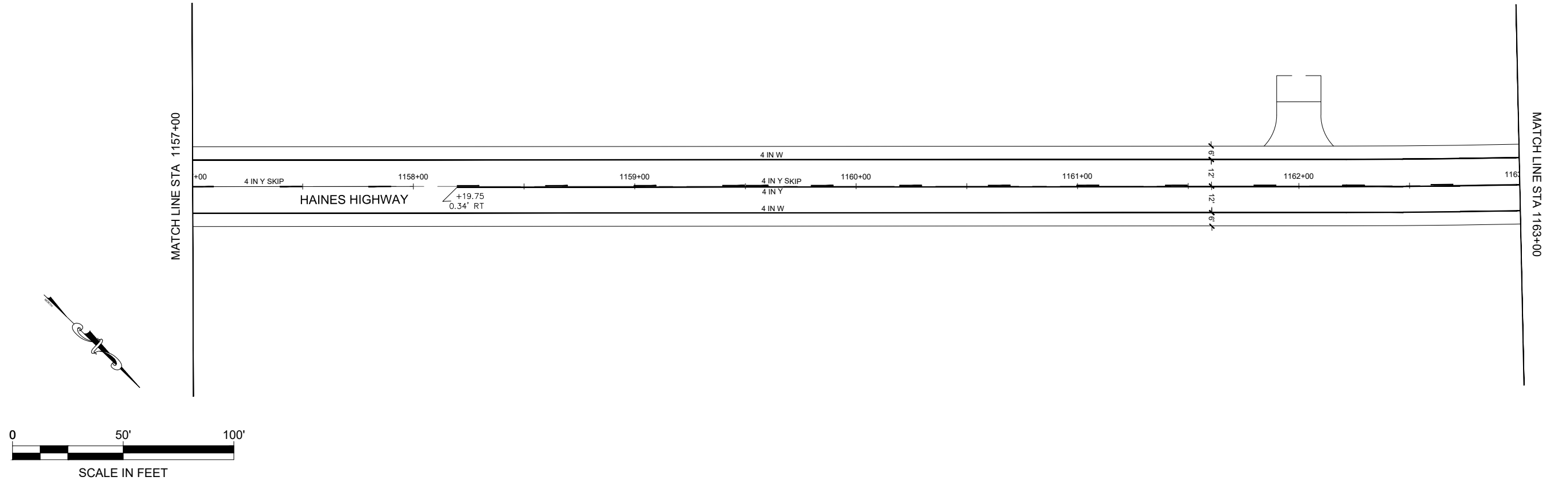
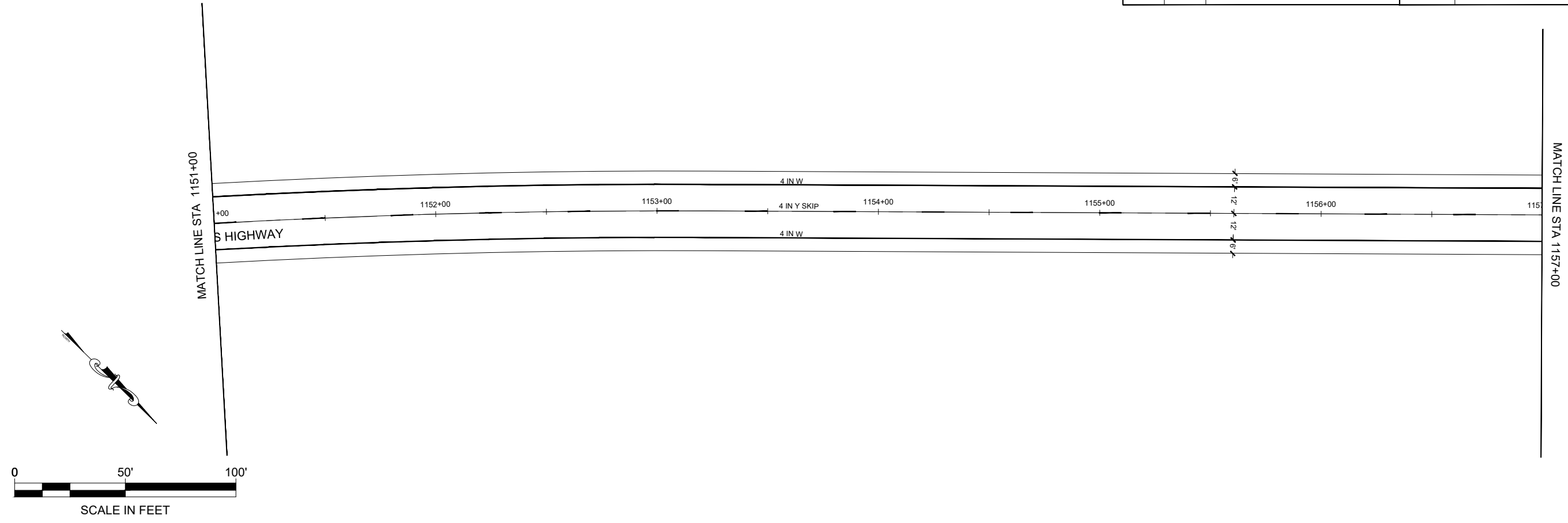
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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT H10
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 CERTIFICATE OF AUTH # AECL848
 DRAFTED LUHR



DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H11	H25

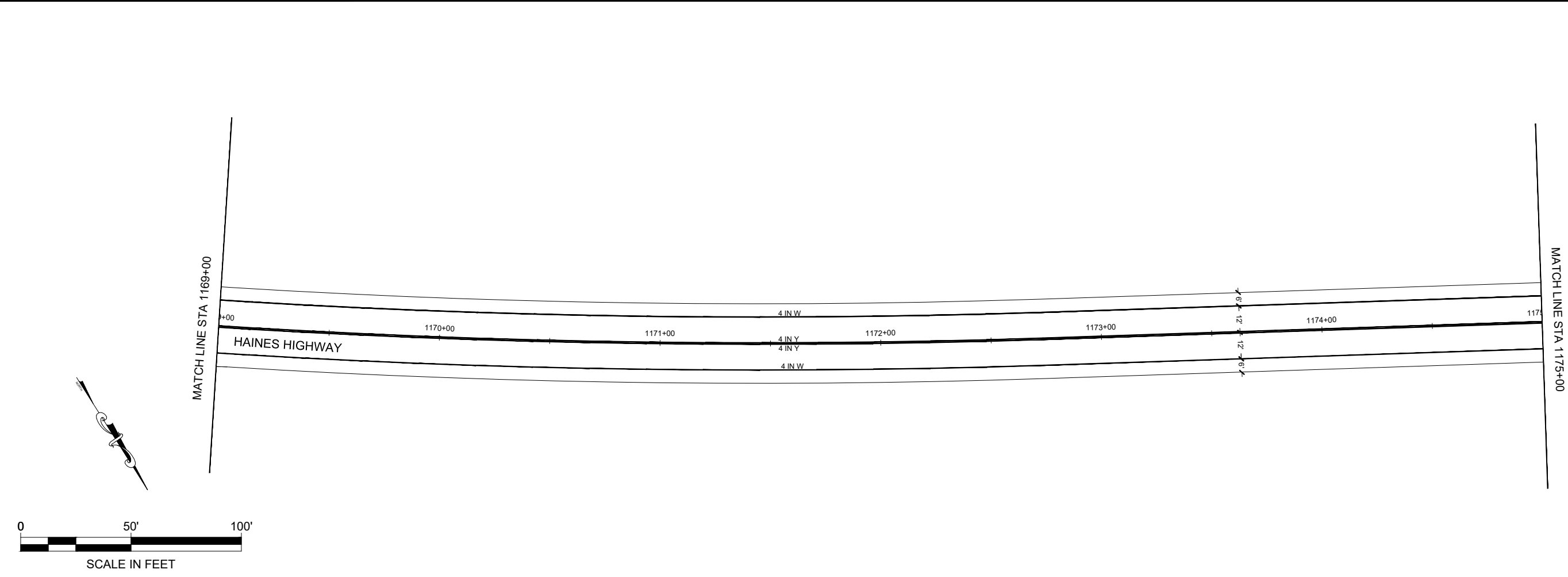
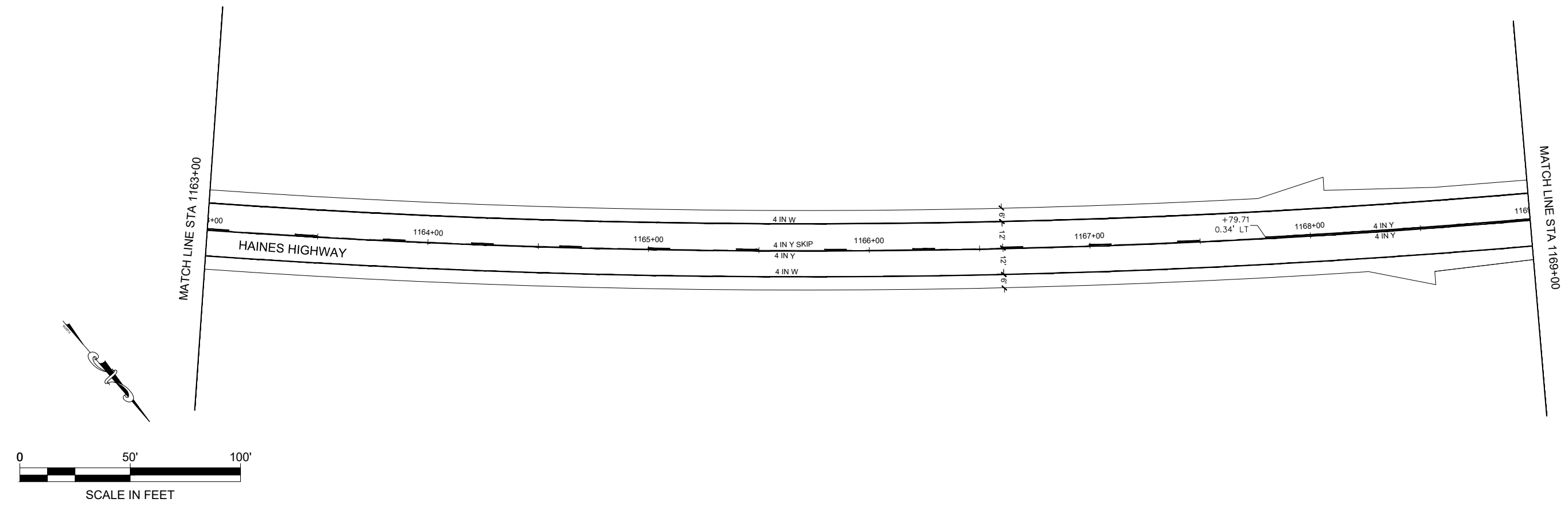
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 FILE: C:\dowl_pw\0388515\SC-CT-SG-H-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH # : AECL848
 DATE: 5/4/2020
 LAYOUT: H11
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR



DRAFT CONCURRENCE SET

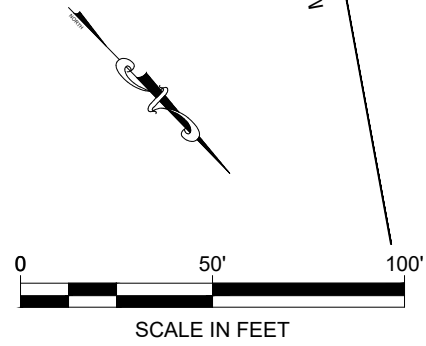
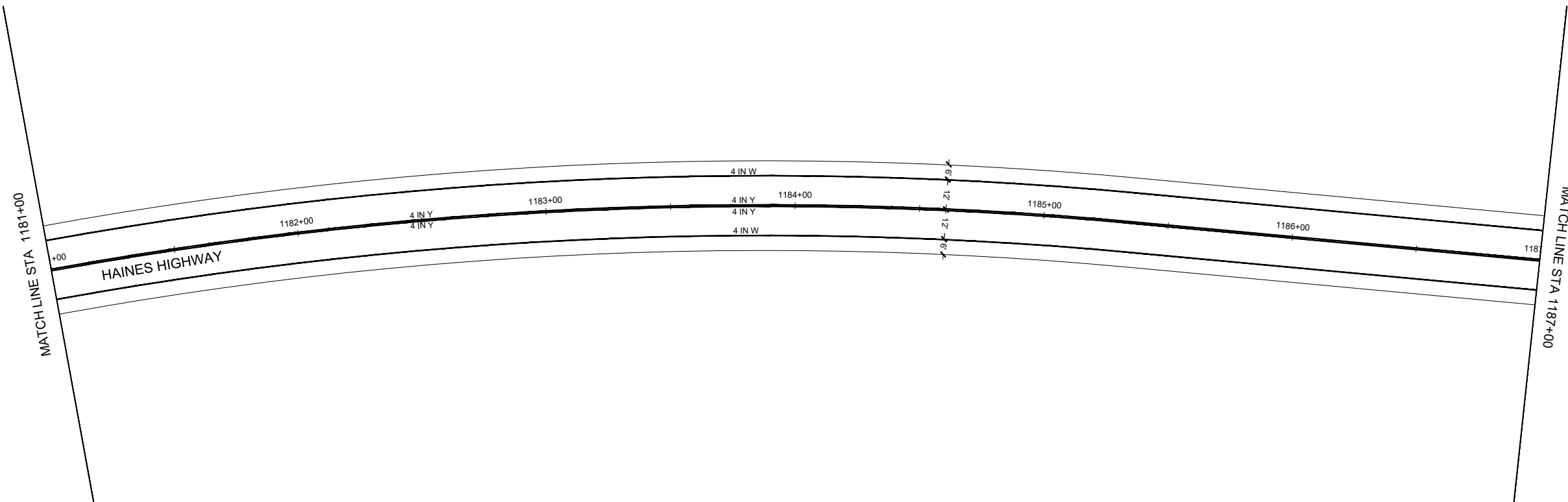
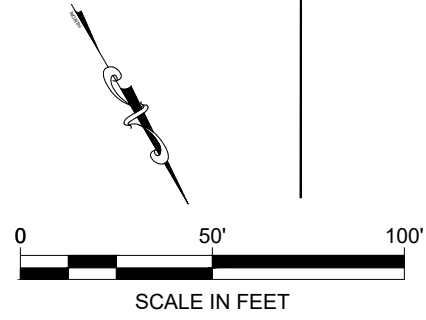
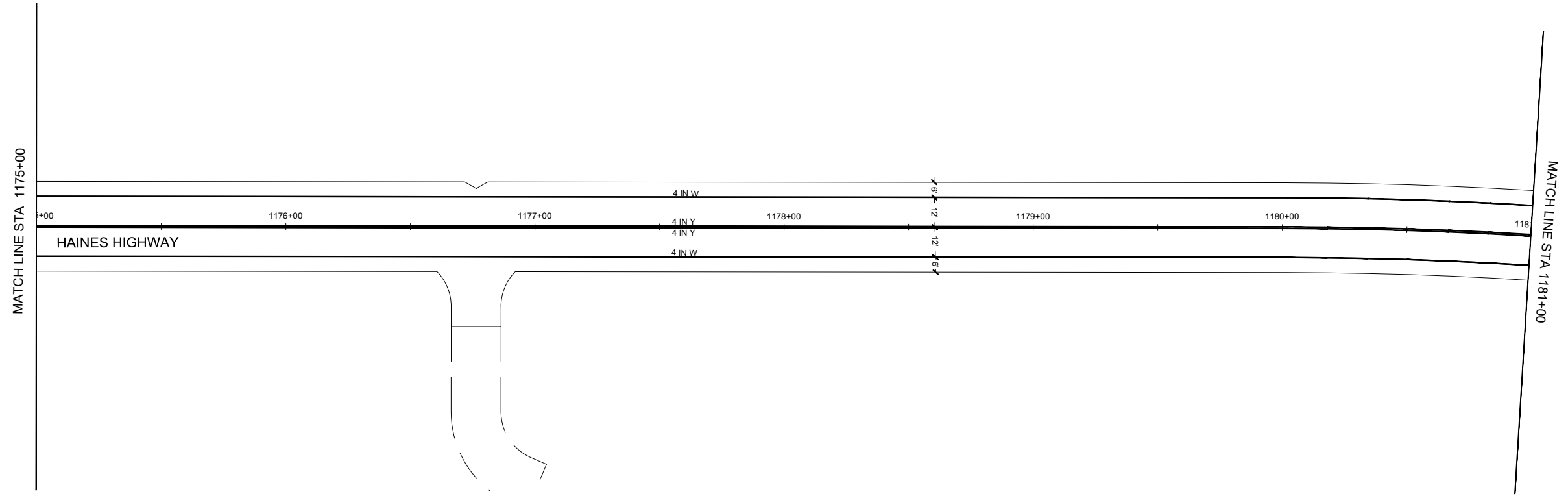
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H12	H25

FIRM: DOWL
 FILE: C:\dowl\pww\d0388515\SC-CT-SG-H-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH # : AECL848
 DATE: 5/4/2020
 LAYOUT: H12
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR



DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H13	H25

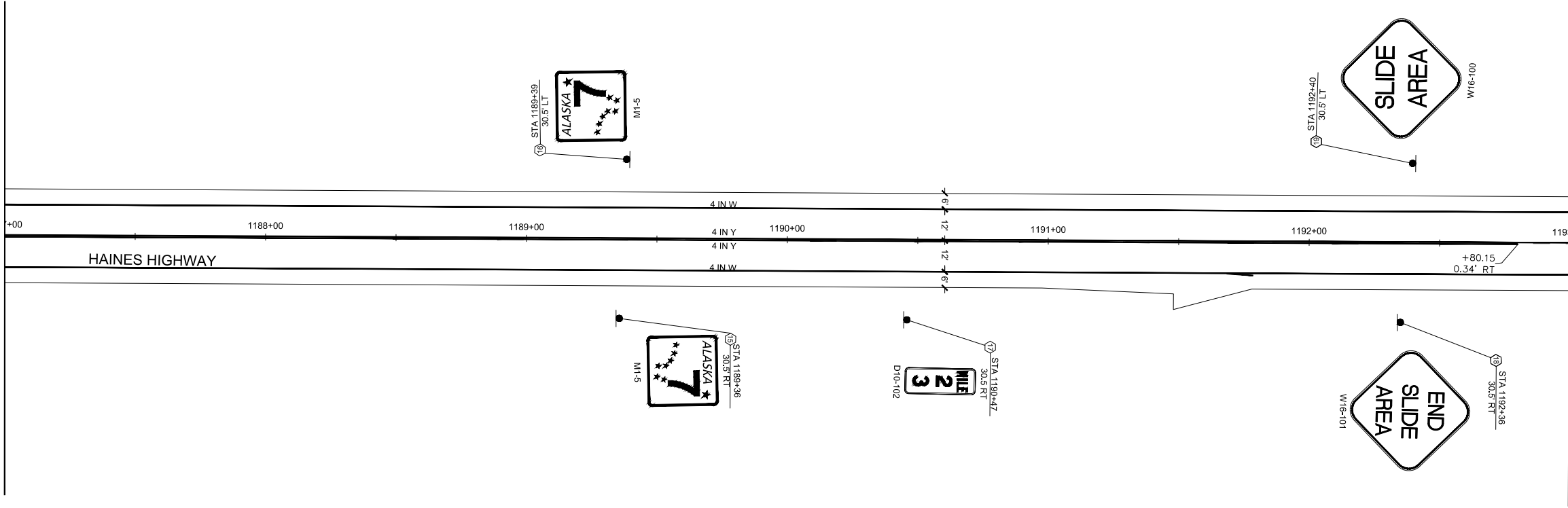


FIRM: DOWL
 FILE: C:\dowl_pw\0388515\SC-CT-SG-H-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH #: AECL848
 DATE: 5/4/2020
 LAYOUT: H13
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR

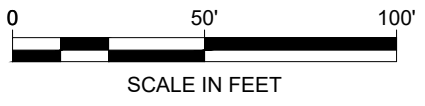
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H14	H25

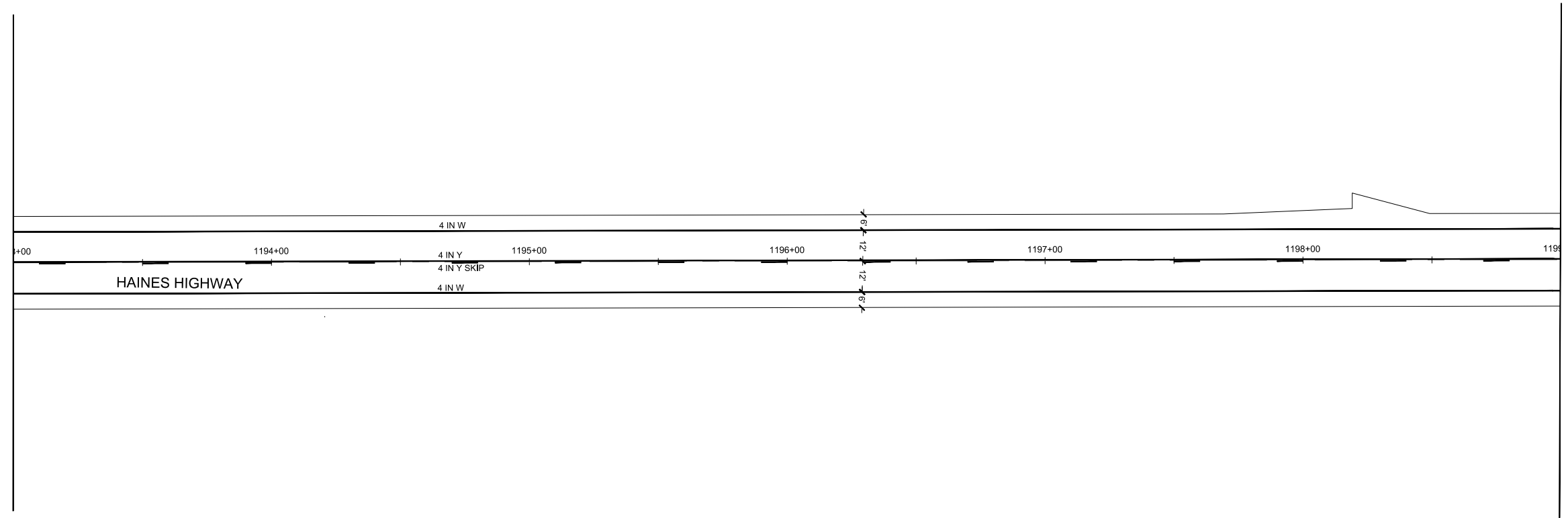
MATCH LINE STA 1187+00



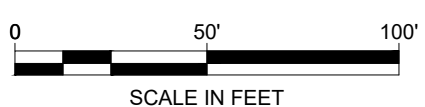
MATCH LINE STA 1193+00



MATCH LINE STA 1193+00



MATCH LINE STA 1199+00

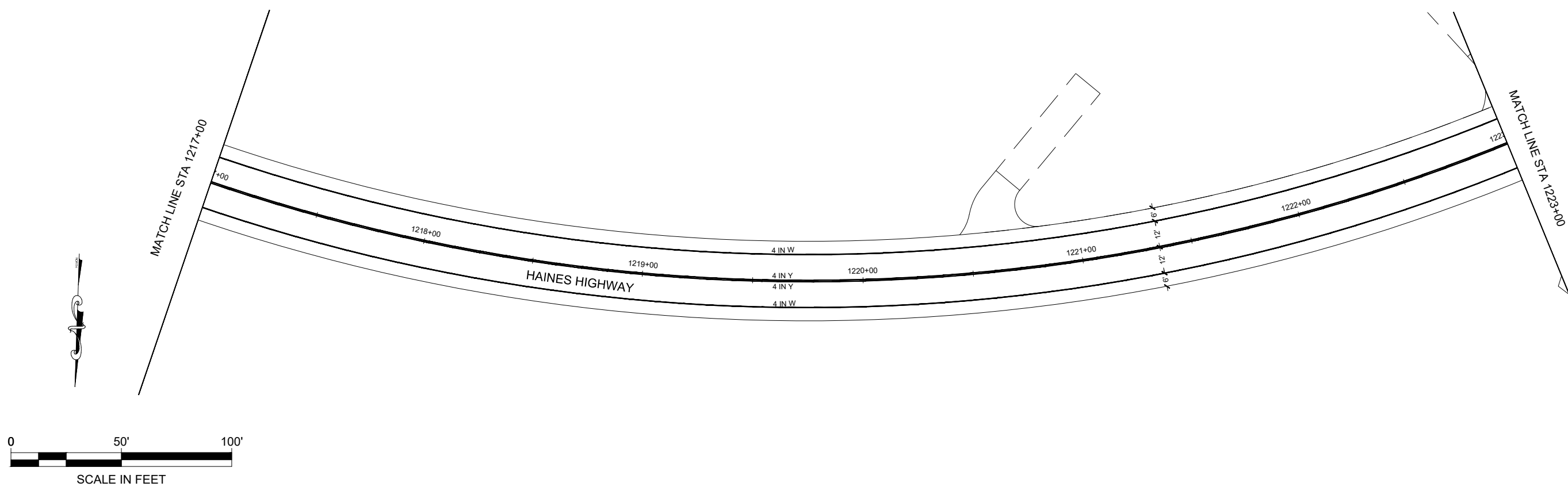
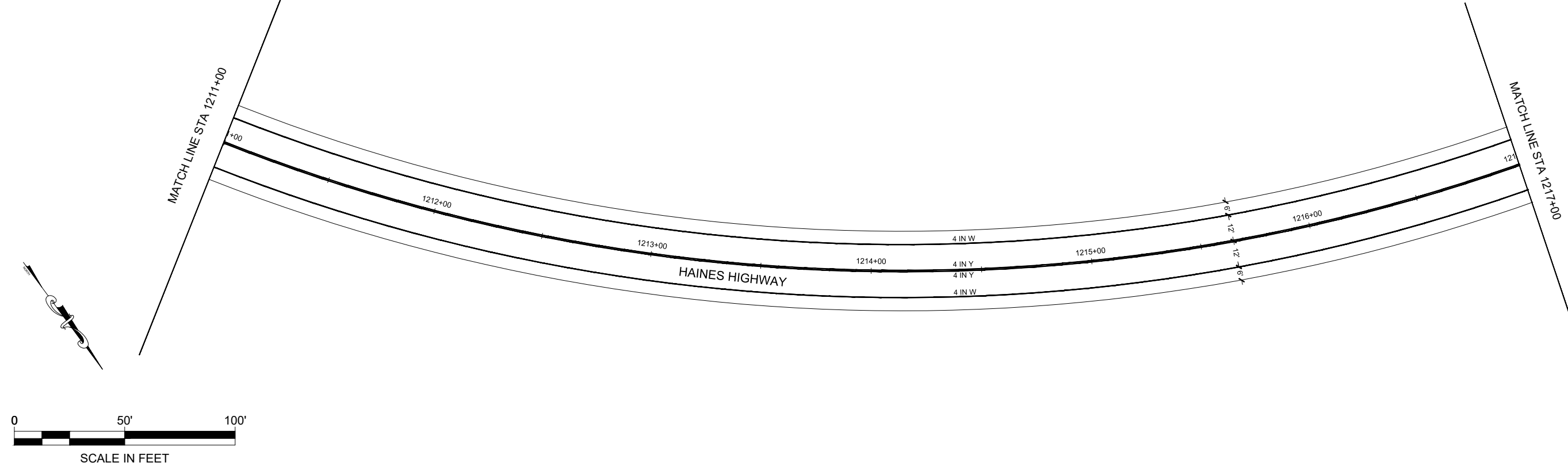


FIRM: DOWL
 FILE: C:\dowl_pw\0388515\SC-CT-SG-H-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR
 DATE: 5/4/2020
 LAYOUT: H14

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H16	H25

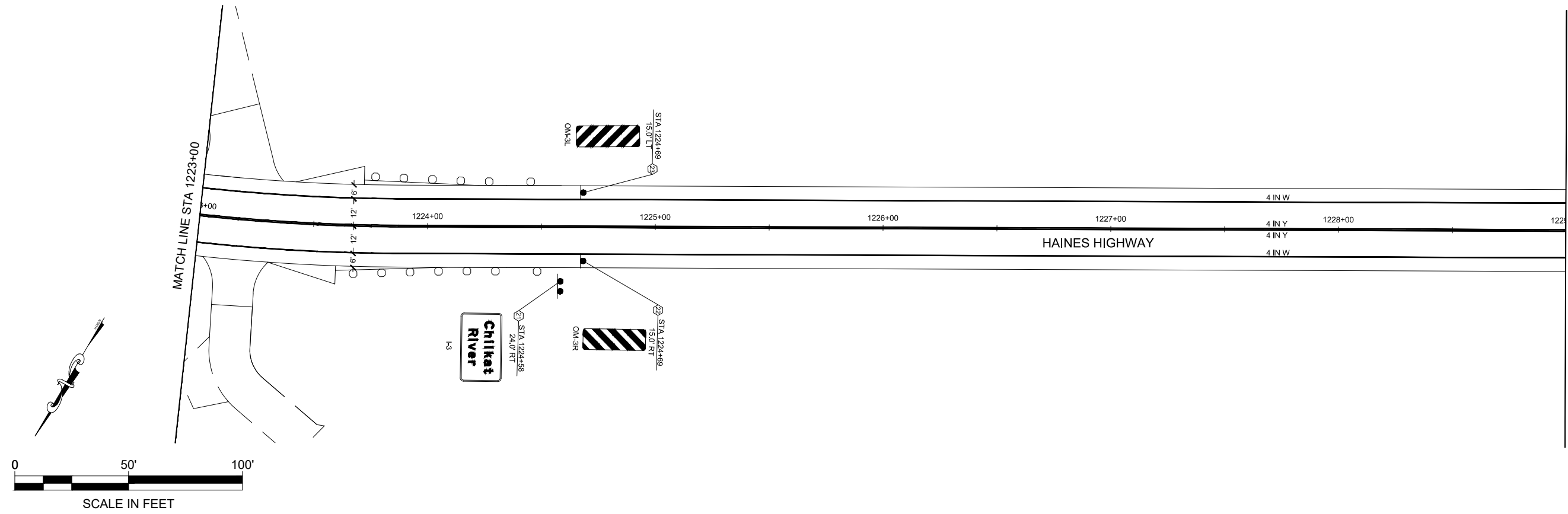
FIRM DOWL
 FILE C:\dowl_pw\0388515\SC-CT-SG-H-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # AECL848
 DATE 5/4/2020
 LAYOUT H16
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR



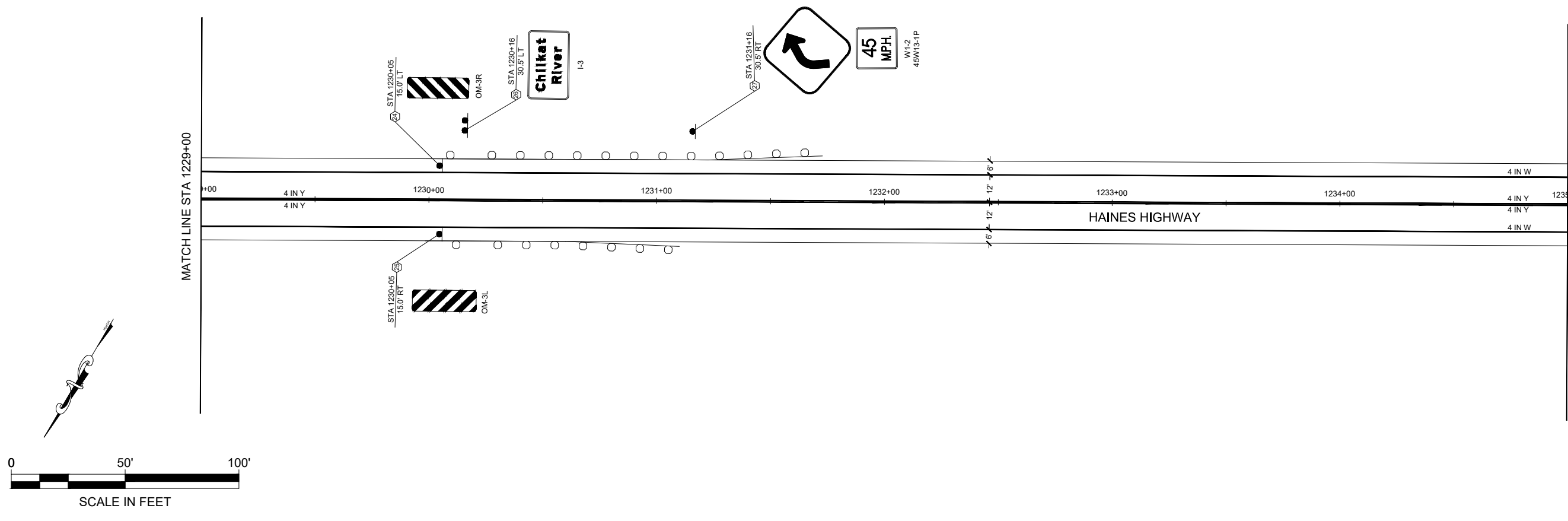
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H17	H25

FIRM: DOWL
 FILE: C:\dowl\pww\d0388515\SC-CT-SG-H-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH #: AECL848
 DATE: 5/4/2020
 LAYOUT: H17
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR



MATCH LINE STA 1229+00

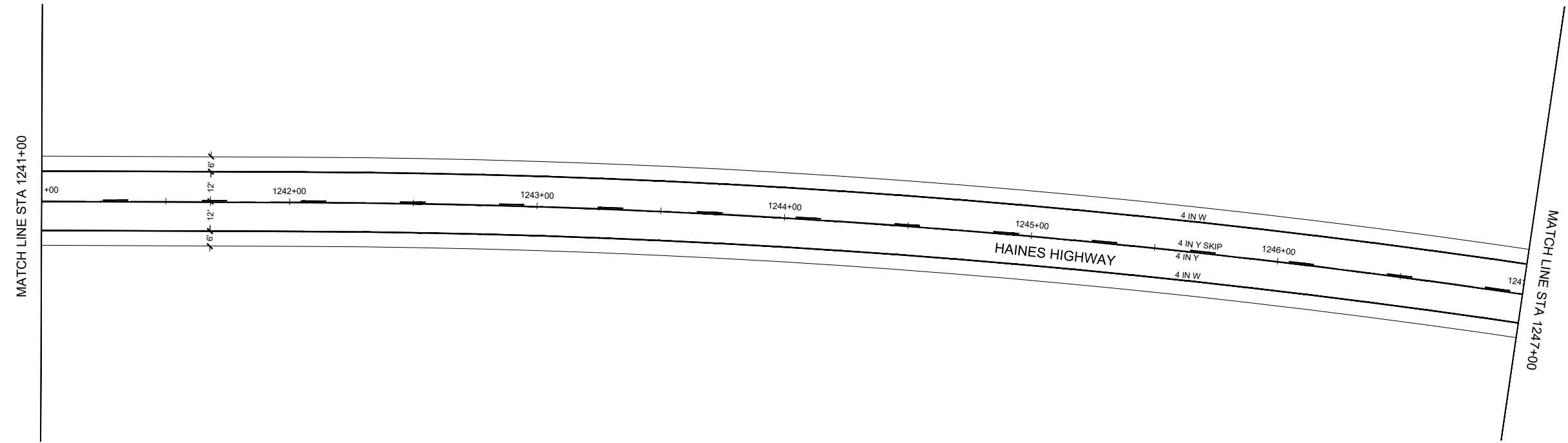
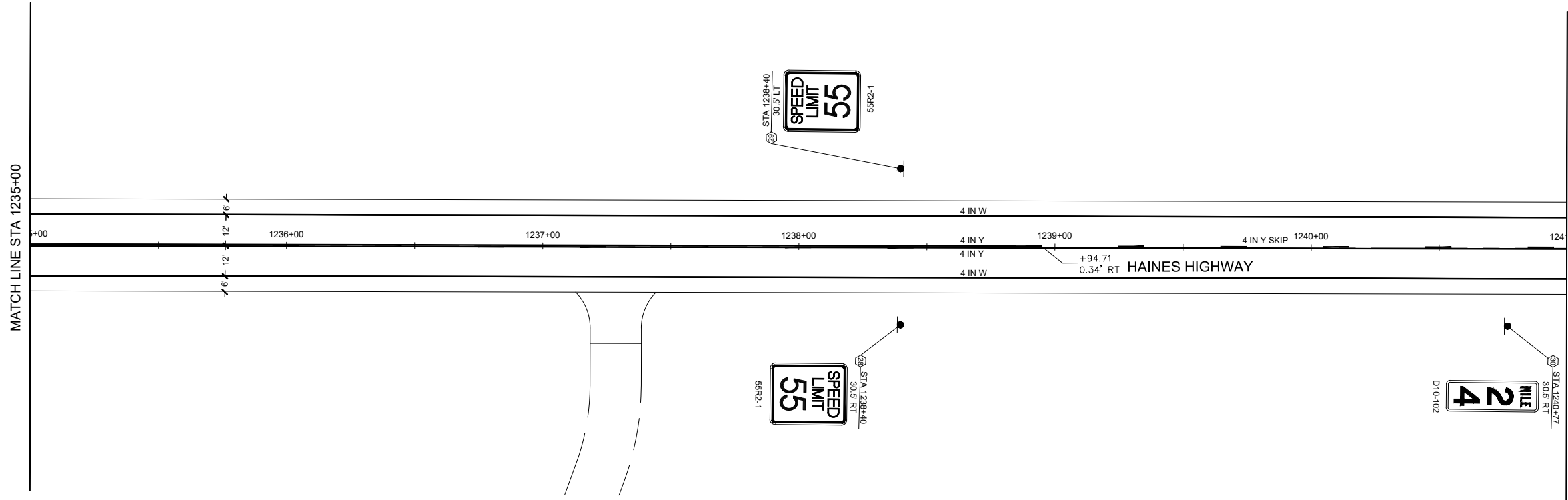
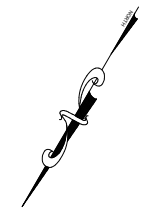
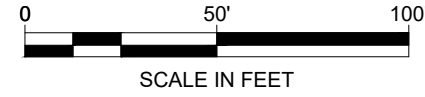


MATCH LINE STA 1235+00

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H18	H25

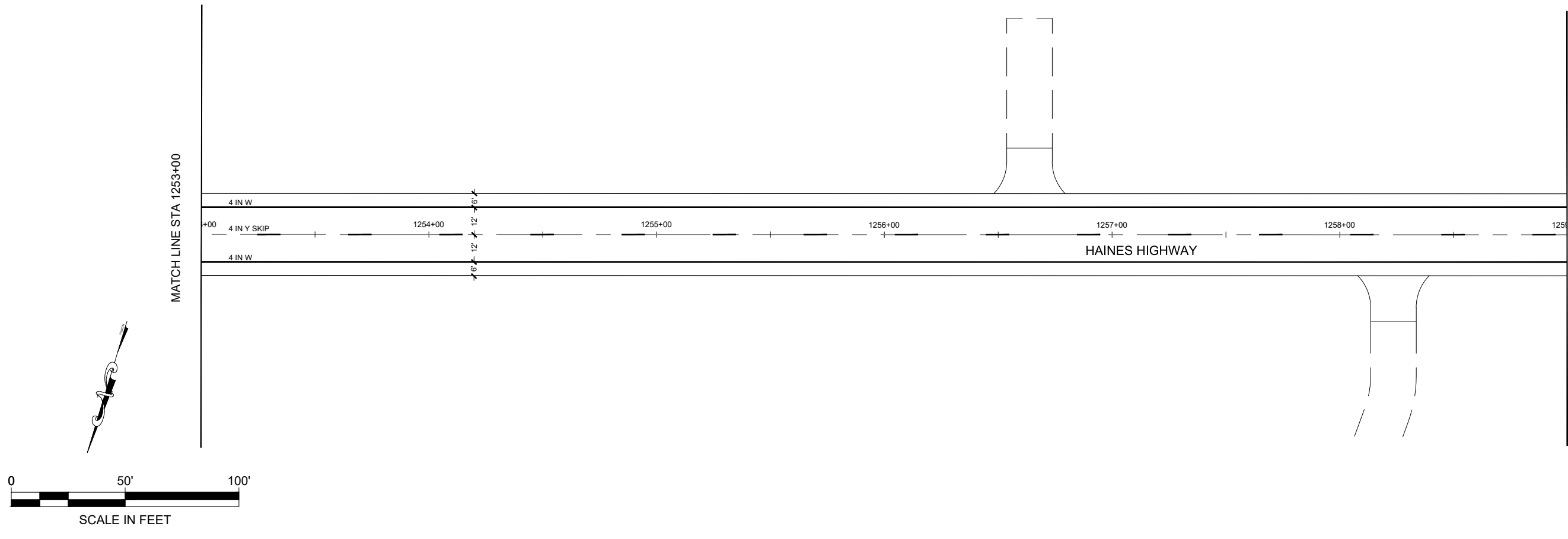
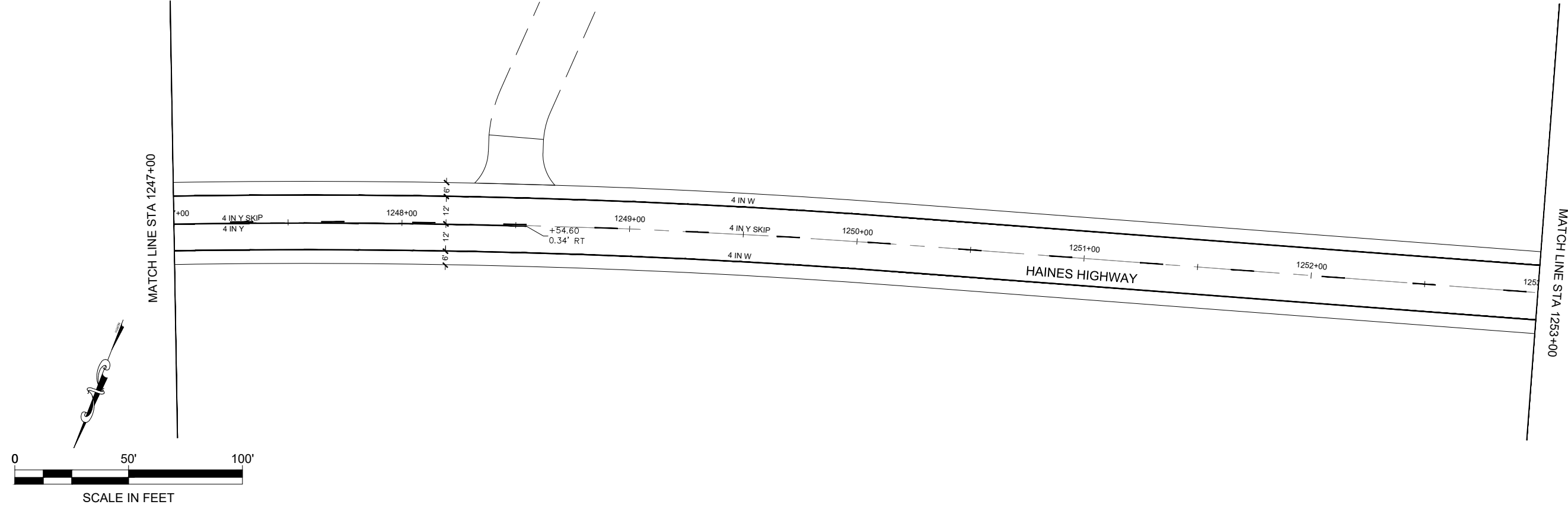
FIRM DOWL
 FILE C:\dowl_pw\0388515\SC-CT-SG-H-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT H18
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 CERTIFICATE OF AUTH # AECL848
 DRAFTED LUHR



DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H19	H25

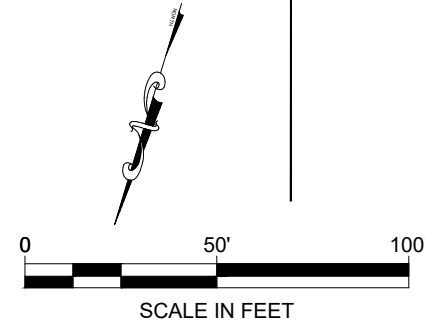
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 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH #: AECL848
 DATE: 5/4/2020
 LAYOUT: H19
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: LUHR



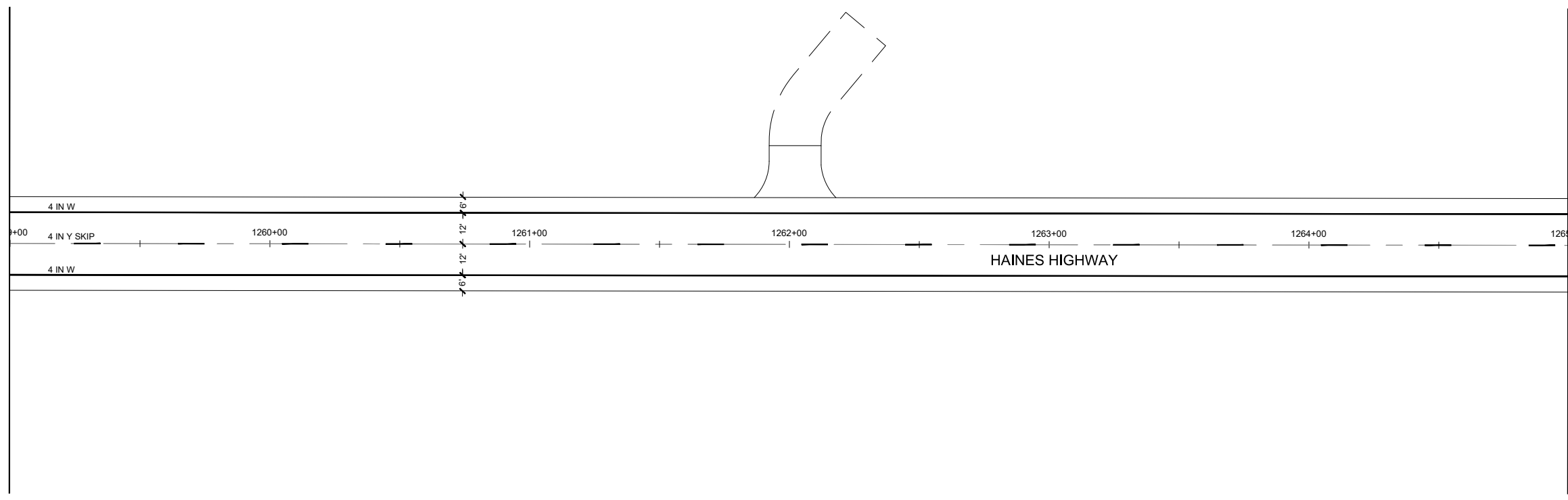
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H20	H25

FIRM DOWL
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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT H20
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 CERTIFICATE OF AUTH # AECL848
 DRAFTED LUHR



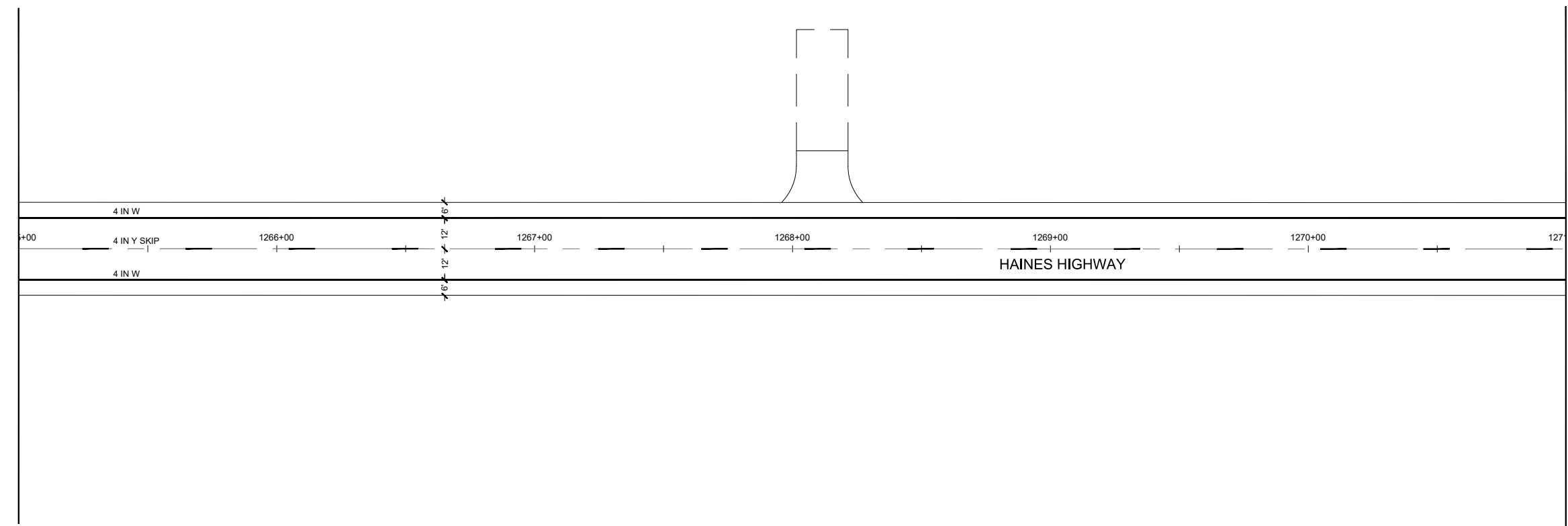
MATCH LINE STA 1259+00



MATCH LINE STA 1265+00



MATCH LINE STA 1265+00

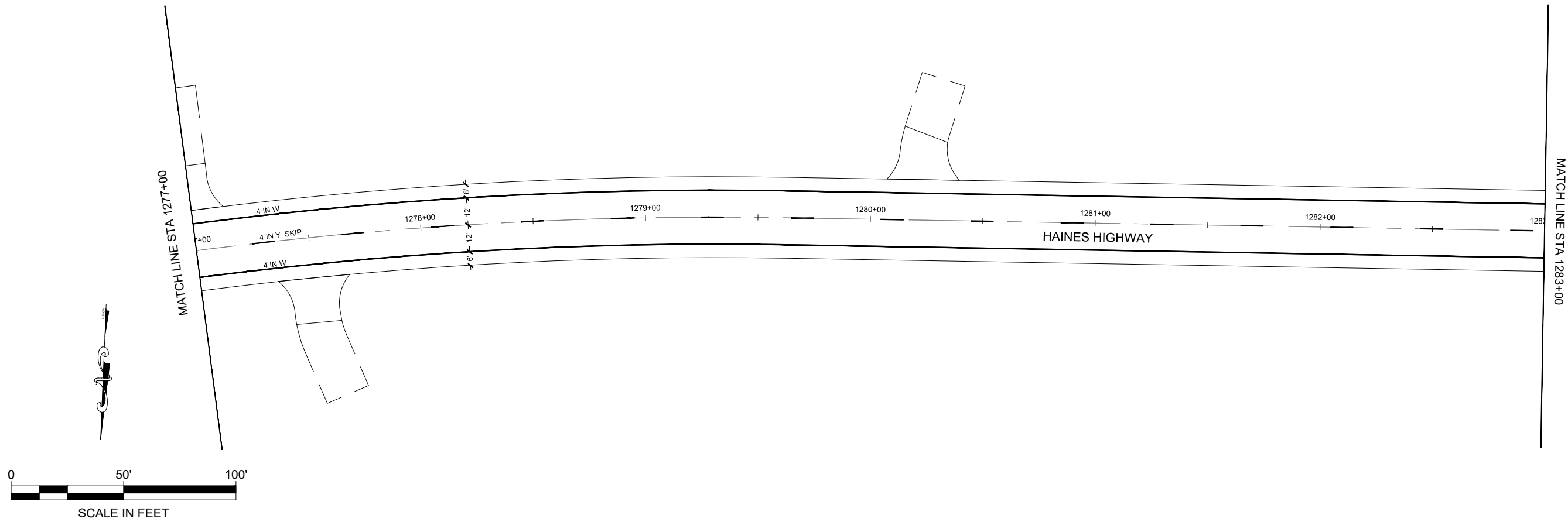
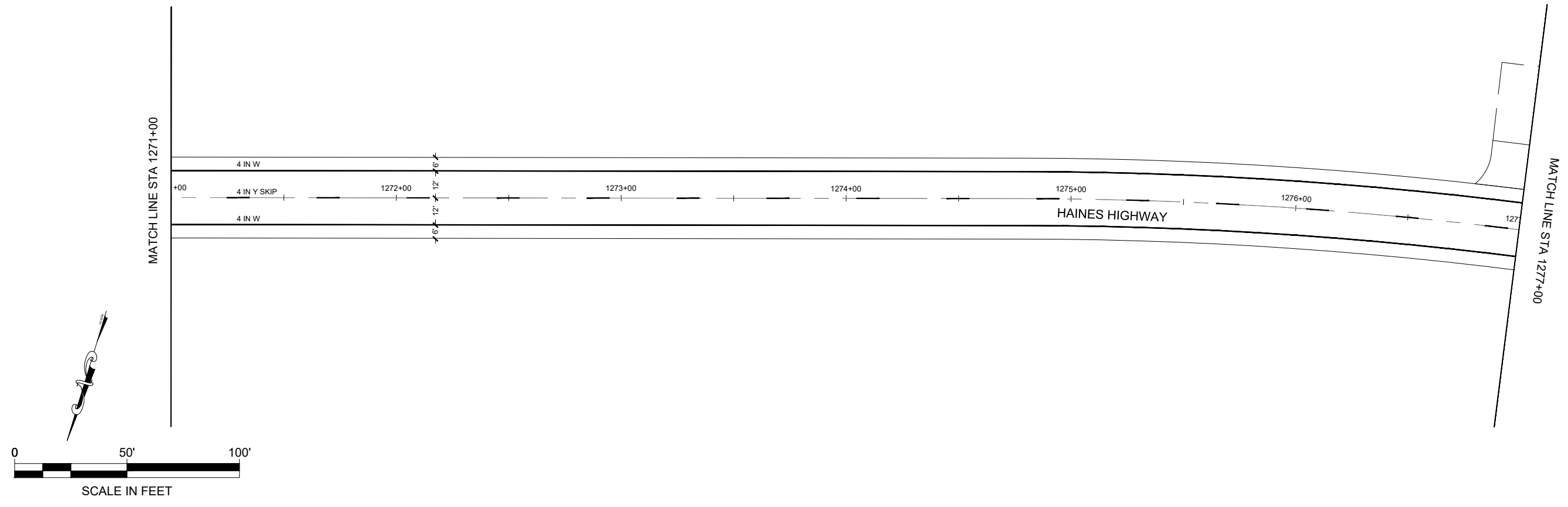


MATCH LINE STA 1271+00

DRAFT CONCURRENCE SET

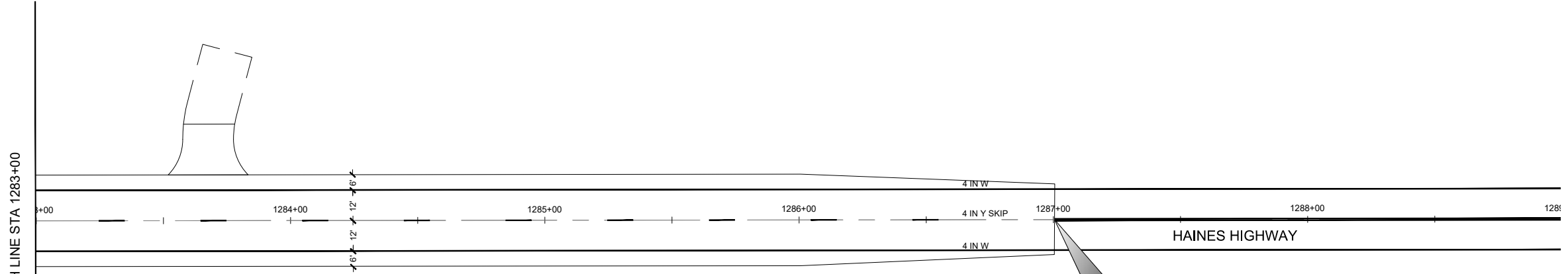
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			ALASKA	0956028/Z686060000	2023	H21	H25

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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT H21
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 CERTIFICATE OF AUTH # AECL848
 DRAFTED LUHR

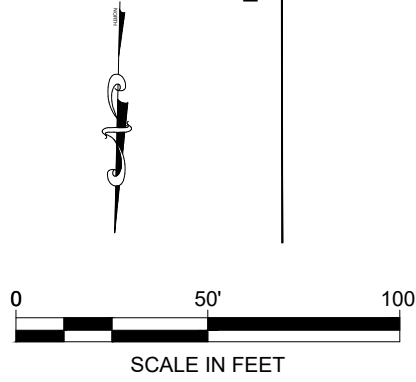
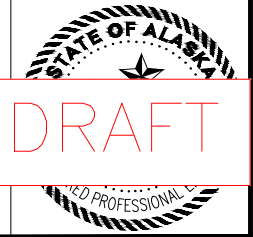


DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H22	H25













END HAINES HIGHWAY RECONSTRUCTION
 STA: 1287+00.64
 NORTHING: 546183.0819
 EASTING: 631529.5433
 MATCH EXISTING PAVEMENT



FIRM DOWL
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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 5/4/2020 LAYOUT H22
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR
 CERTIFICATE OF AUTH # AECL848

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	H24	H25

SHEET	POST NO.	STATION	CL OFFSET	CL REF	TYPE	LEGEND	SIZE (IN)		AREA (FT ²)	SIGN FACES	POSTS NO., SIZE, & TYPE	REMARKS
							WIDTH	HEIGHT				
H14	15	1189+36	30.5	RT	M1-5		24	24	4	SE	1, 2.5"x2.5"T	
	16	1189+39	30.5	LT	M1-5		24	24	4	NW	1, 2.5"x2.5"T	
	17	1190+47	30.5	RT	D10-102		12	36	6	SE/NW	1, 2.5"x2.5"PST	TWO SIGNS BACK TO BACK
	18	1192+36	30.5	RT	W16-101		36	36	9	SE	1, 2.5"x2.5"PST	
	19	1192+40	30.5	LT	W16-100		36	36	9	NW	1, 2.5"x2.5"PST	
H15	20	1205+50	30.5	RT	W1-2		30	30	6.25	SE	1, 2.5"x2.5"T	
					45W13-1P		18	18	2.25			
H17	21	1224+58	24.0	RT	I-3		30	18	3.75	NE	2, 2.5"x2.5"PST	WHITE LEGEND ON GREEN BACKGROUND
	22	1224+69	15.0	RT	OM-3R		12	36	3	NE	1, 2.5"x2.5"T	
	23	1224+69	15.0	LT	OM-3L		12	36	3	NE	1, 2.5"x2.5"T	

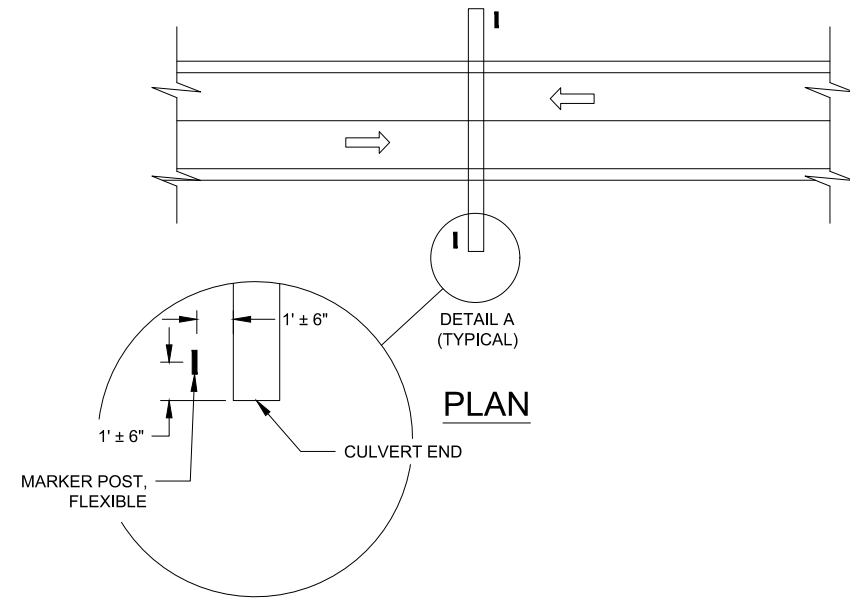
FIRM DOWL
 FILE C:\dowl_pw\40388515\SC-CT-SG-H-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # AECL848
 NOBLE
 CHECKED
 HOBBS
 DESIGNED
 LAYOUT H24
 DATE
 DRAFTED



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25

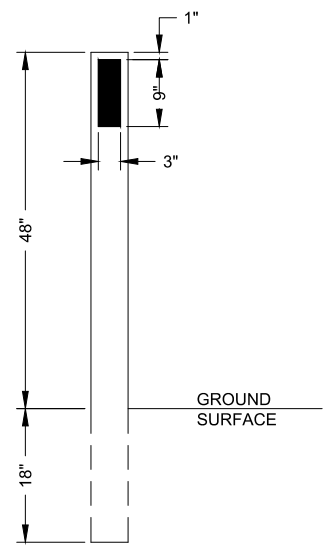
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	J1	J7



DETAIL A
(TYPICAL)

FLEXIBLE MARKER POST LOCATION



FLEXIBLE MARKER POST DETAIL

FLEXIBLE MARKER POST NOTES:

1. FLEXIBLE MARKER POSTS SHALL BE WHITE, FIBERGLASS COMPOSITE.
2. A 3" BY 9" STRIP OF BLACK 2-MIL GRAPHIC FILM SHALL BE AFFIXED TO EACH SIDE OF THE POST AS SHOWN IN THE FLEXIBLE MARKER POST DETAIL DRAWING. THE MATERIAL SHALL BE CENTERED WITHIN THE WIDTH OF THE POST. APPLY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION.

INSERT CULVERT OUTFALL DETAILS HERE

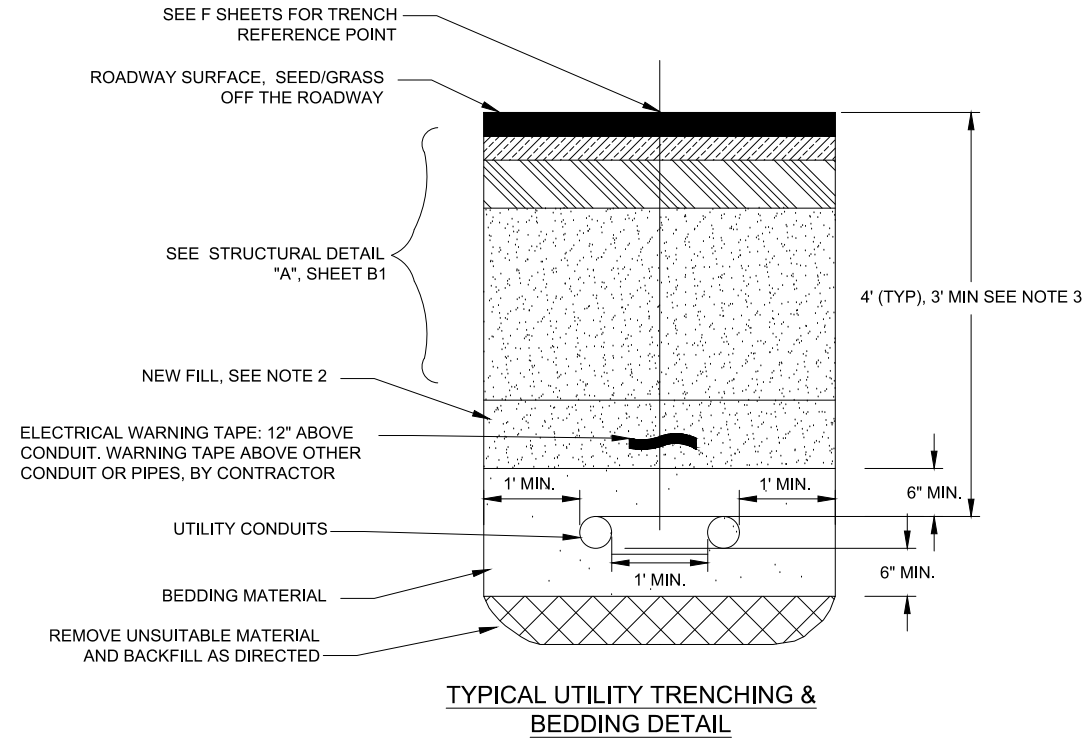
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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED
 CERTIFICATE OF AUTH # : AECL848



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25
**MISCELLANEOUS
 DETAILS**

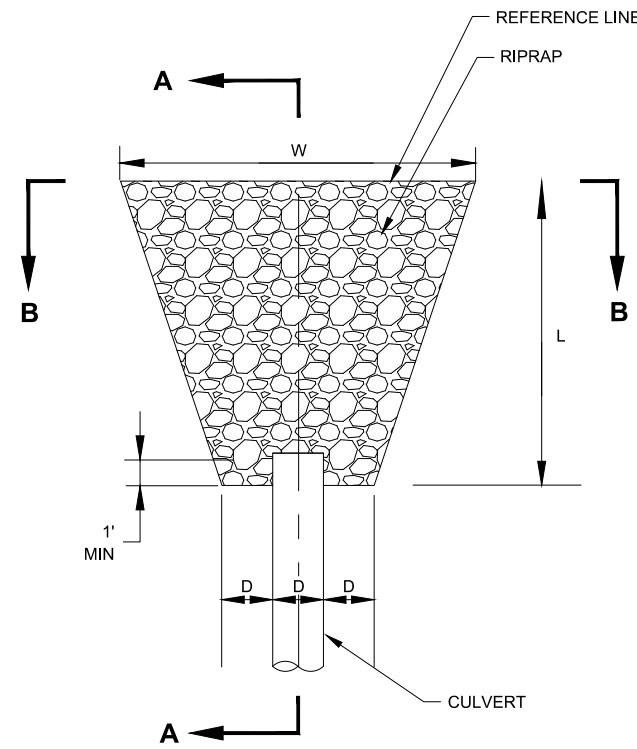
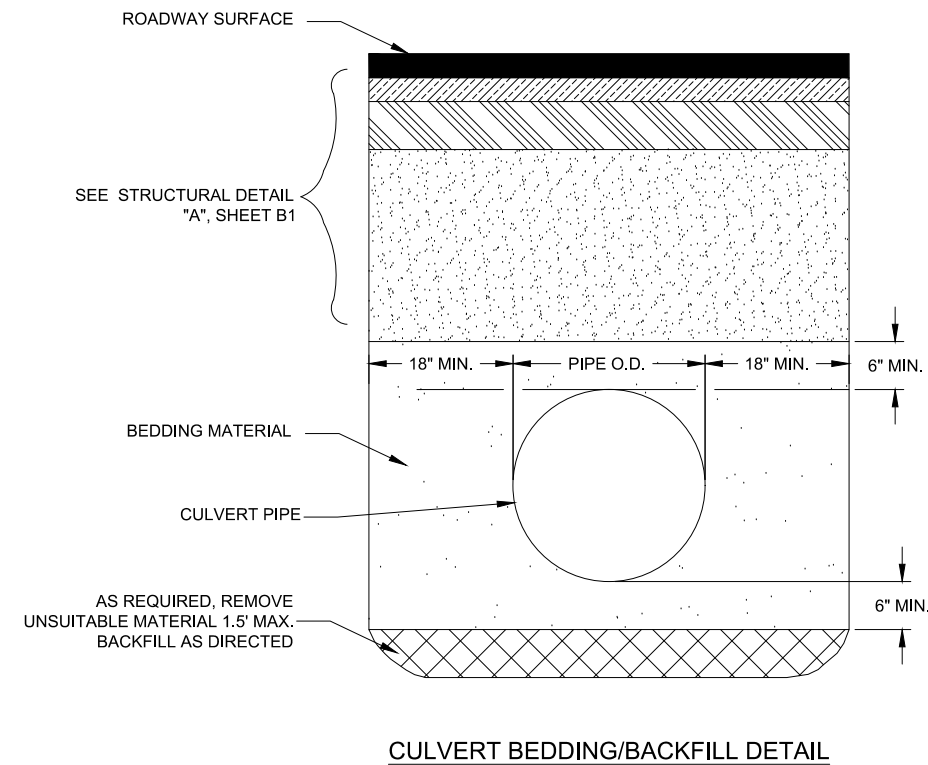
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	J2	J7



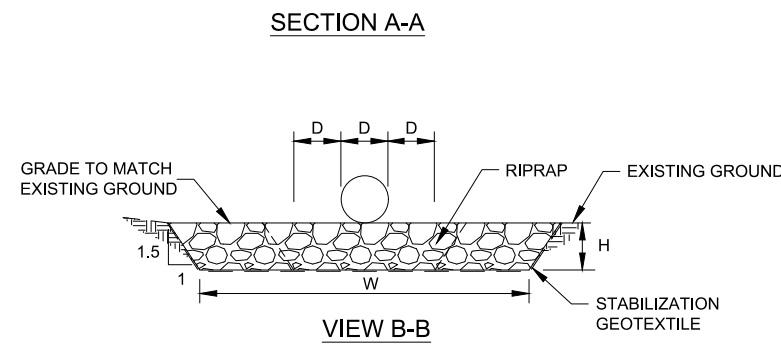
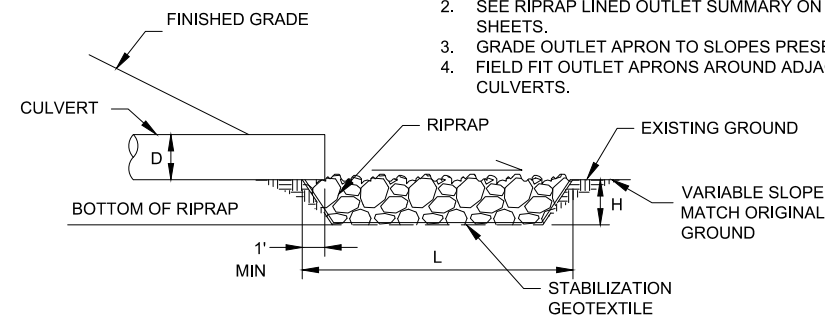
UTILITY TRENCHING AND BEDDING NOTES:

- ALL UTILITY TRENCH EXCAVATION, BEDDING AND BACKFILL WORK SHALL BE PERFORMED BY THE CONTRACTOR. UTILITY COMPANIES WILL FURNISH CONDUIT AND INSTALL CONDUCTORS. COORDINATE ALL TRENCH WORK AND CONDUIT INSTALLATION ACTIVITIES WITH THE UTILITY COMPANIES.
- EMBANKMENT, TYPE C MATERIAL WITHIN THE ROAD PRISM, USEABLE EXCAVATION OUTSIDE THE ROAD PRISM.
- WHEN UTILITY AND CULVERT ARE IN CONFLICT, UTILITY SHALL BE LOWERED 1 FOOT MINIMUM BELOW CULVERT. UTILITY MAY BE RAISED TO CLEAR CULVERT, BUT WILL REQUIRE UTILITY ENCASEMENT DETAIL IF COVER IS LESS THAN 3 FEET.



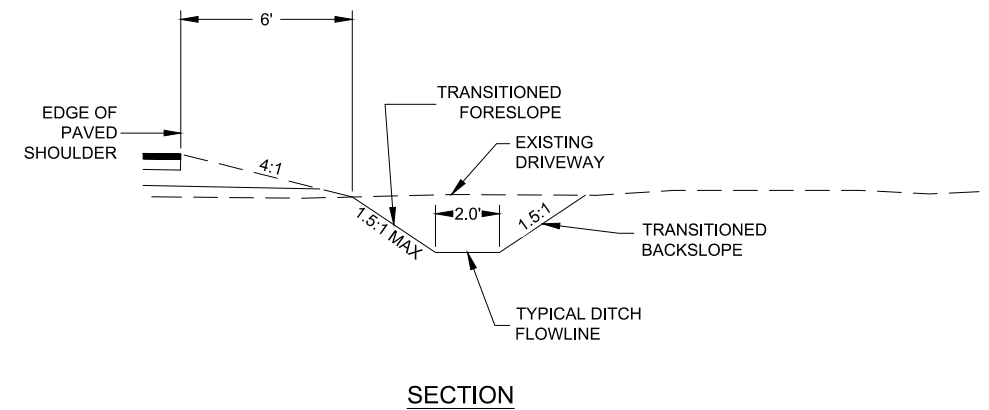
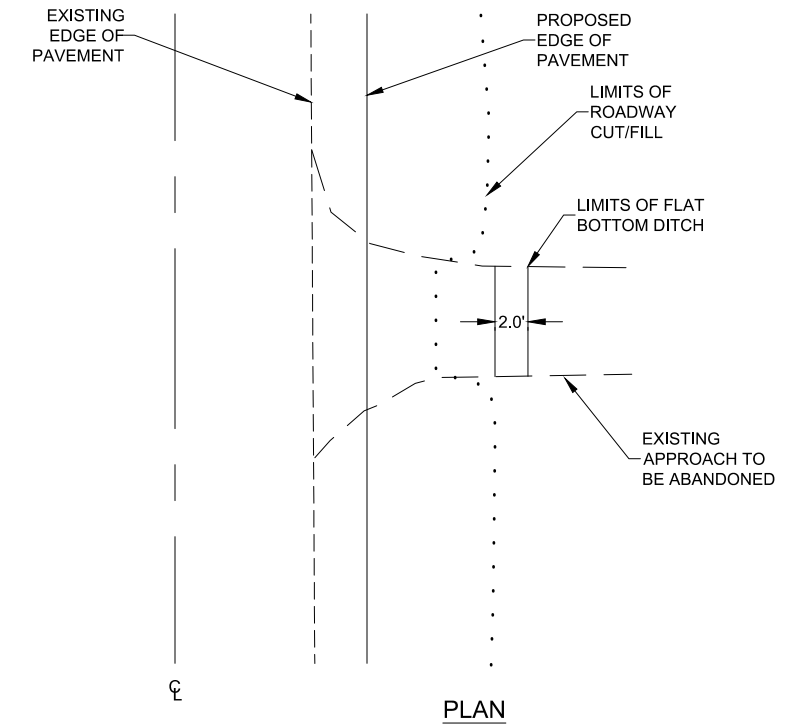
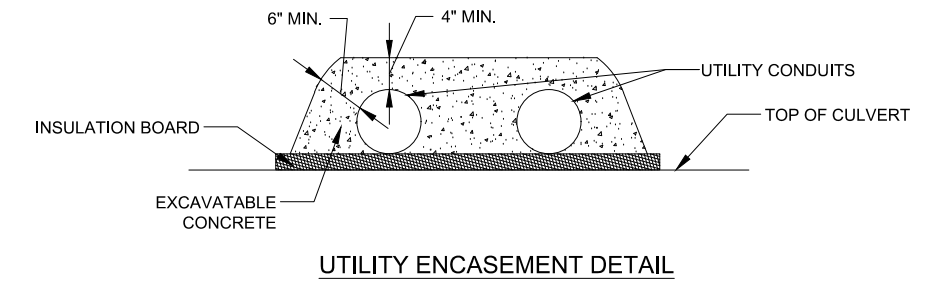
NOTES:

- FOR CULVERT LOCATIONS AND REPLACEMENT SEE D SHEETS.
- SEE RIPRAP LINED OUTLET SUMMARY ON THE D SHEETS.
- GRADE OUTLET APRON TO SLOPES PRESENT.
- FIELD FIT OUTLET APRONS AROUND ADJACENT CULVERTS.



RIPRAP LINED OUTLET APRON DETAIL

OUTLET APRON SUMMARY				
RIPRAP CLASS	D (IN)	L (FT)	W (FT)	H (FT)
I	18.0	9.0	10.0	2.0
I	24.0	12.0	14.0	2.0
I	36.0	18.0	21.0	2.0
II	60.0	30.0	35.0	3.0



DRIVEWAY OBLITERATION DETAIL



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

**HAINES HIGHWAY RECONSTRUCTION
MILEPOST 20 TO 25**

**MISCELLANEOUS
DETAILS**

CERTIFICATE OF AUTH # : AECL848
DRAFTED
NOBLE
CHECKED
HOBBS
DESIGNED
J2
PHONE (907) 780-3533
ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
DATE
FIRM DOWL
FILE C:\dowl_pw\40388515\SA-CT-DT-J-61850.dwg

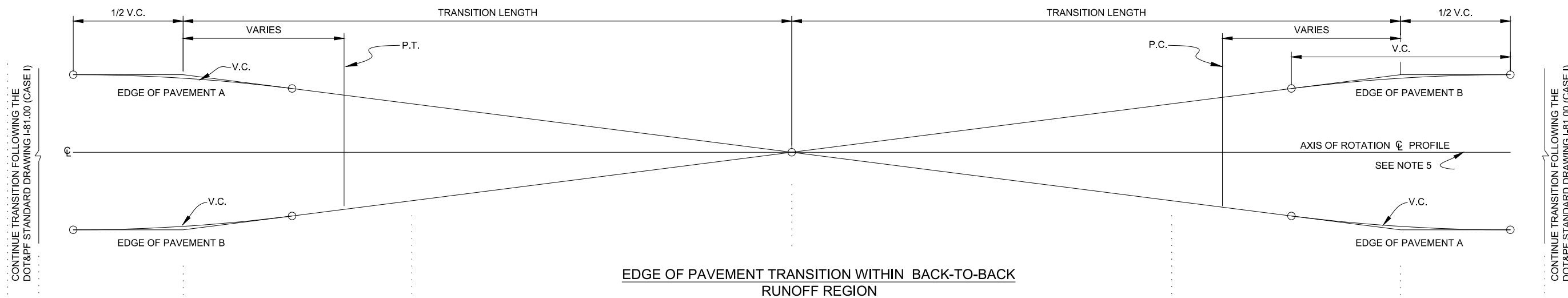
DRAFT CONCURRENCE SET

GENERAL NOTES

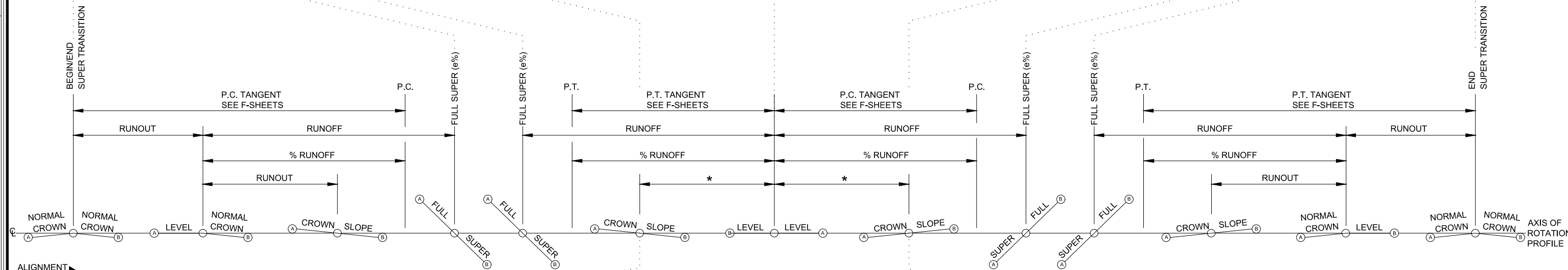
1. THE SUPERELEVATION DETAIL TRANSITION WITH BACK-TO-BACK RUNOFF TO BE USED WHERE TWO CONSECUTIVE P.T. AND P.C. TANGENTS HAVE RUNOUT LENGTHS OF "0" FEET AS SHOWN ON THE F-SHEETS.
2. WIDENING FOR GUARDRAIL, CURVATURE, OR PULLOUTS WILL NOT CHANGE THE LOCATION OF THE AXIS OF ROTATION.
3. SUPERELEVATION SHALL BE BUILT INTO THE SUBGRADE AND CARRIED THROUGH THE SHOULDERS.
4. MINIMUM VERTICAL CURVE (V.C.) LENGTH IN FEET SHALL BE THE NUMERICAL VALUE OF THE DESIGN SPEED IN M.P.H.

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	J3	J7

FIRM DOW: C:\dow\p\40388515\SA-CT-DT-J-61850.dwg
 FILE: C:\dow\p\40388515\SA-CT-DT-J-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 CERTIFICATE OF AUTH # : AECL848
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED:

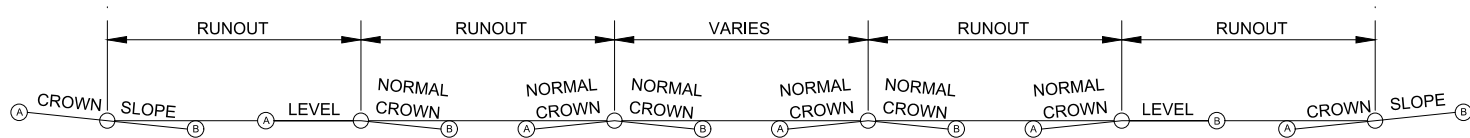


EDGE OF PAVEMENT TRANSITION WITHIN BACK-TO-BACK RUNOFF REGION



SUPERELEVATION TRANSITION WITH BACK-TO-BACK RUNOFF

* [P.C./P.T. RUNOFF LENGTH X (2% / e%)]



STANDARD SUPERELEVATION TRANSITION

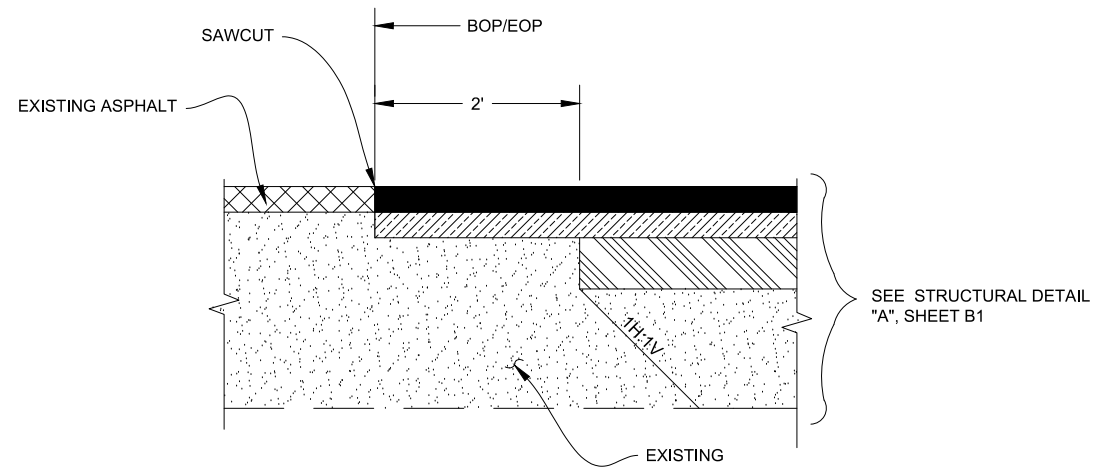
REFER TO THE DOT&PF STANDARD DRAWING I-81.00 (CASE I) FOR EDGE OF PAVEMENT TRANSITION



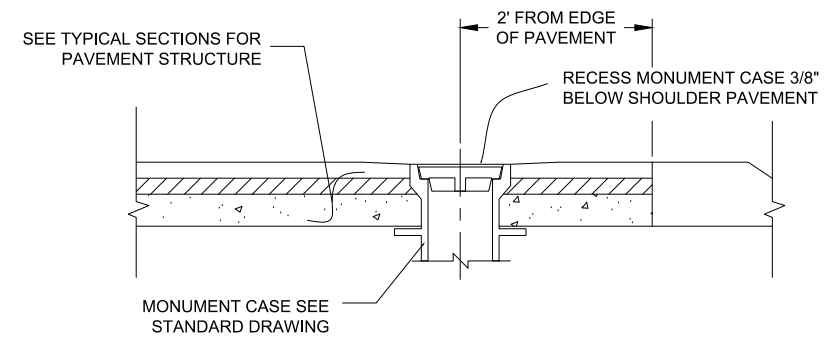
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25
MISCELLANEOUS
DETAILS

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	J4	J7



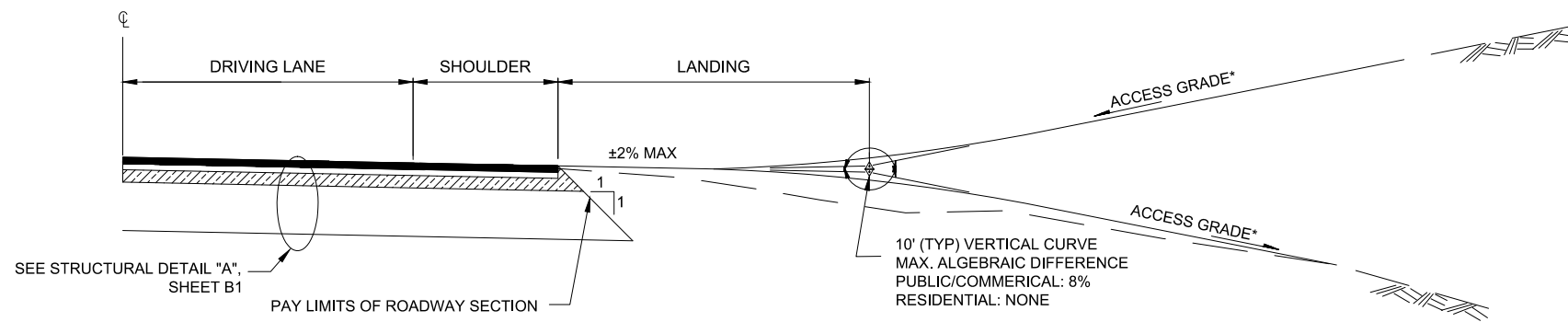
**PAVEMENT MATCH JOINT DETAIL
BEGIN/END OF PROJECT**



MONUMENT ENCASEMENT DETAIL

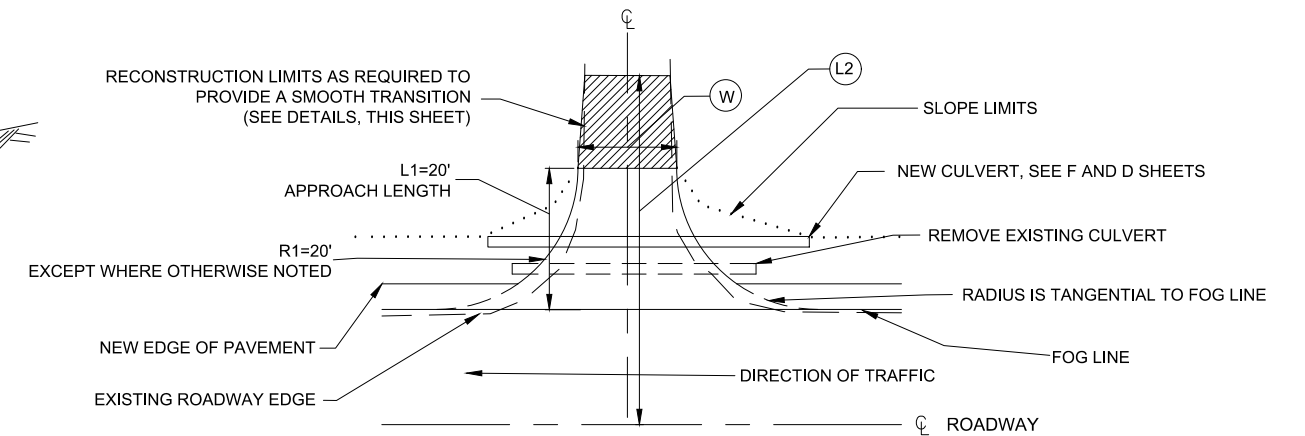
NOTE:

- SEE APPROACH SUMMARY TABLE ON D SHEETS FOR W AND L2



**APPROACH
TYPICAL PROFILE**

LANDING TABLE	
TYPE	LENGTH
RESIDENTIAL	10'
COMMERCIAL/PUBLIC	30'



**APPROACH / APRON
PLAN VIEW**

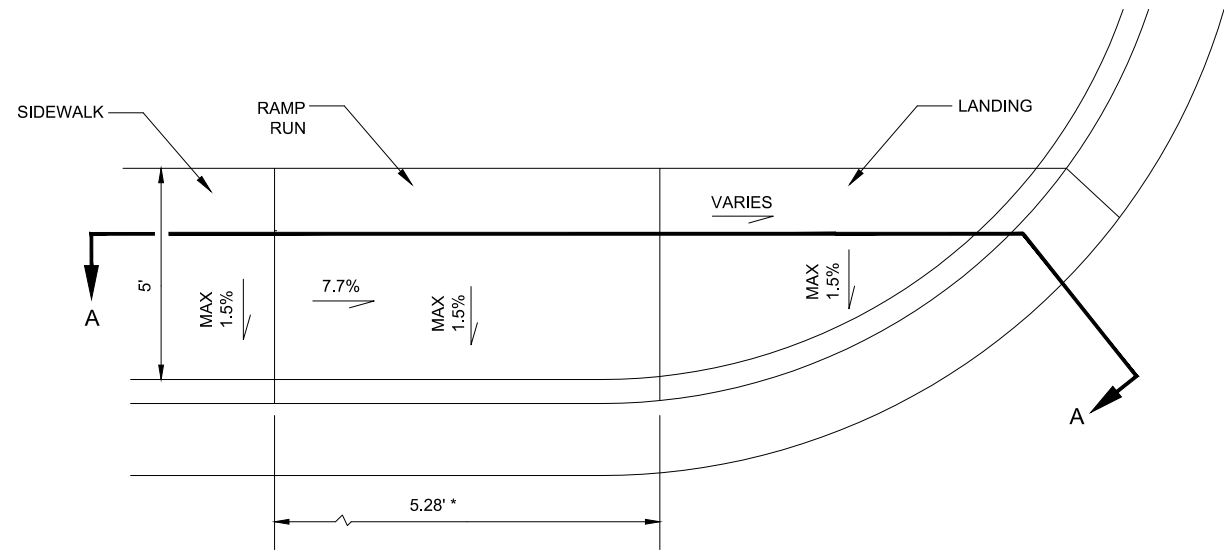
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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED
 CERTIFICATE OF AUTH # : AECL848
 LAYOUT J4



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
**HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25**
**MISCELLANEOUS
 DETAILS**

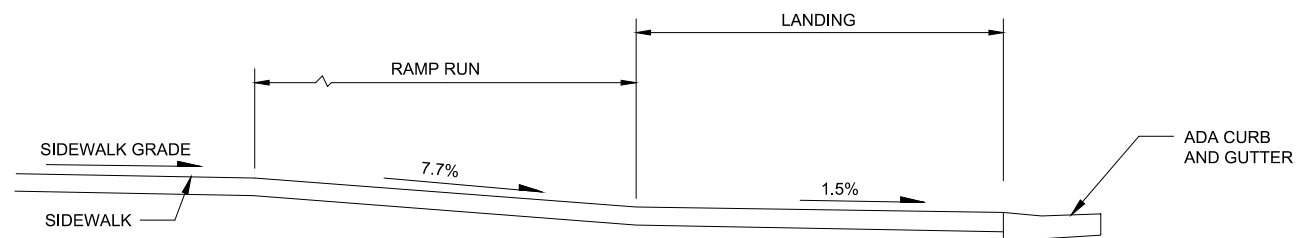
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	J5	J7

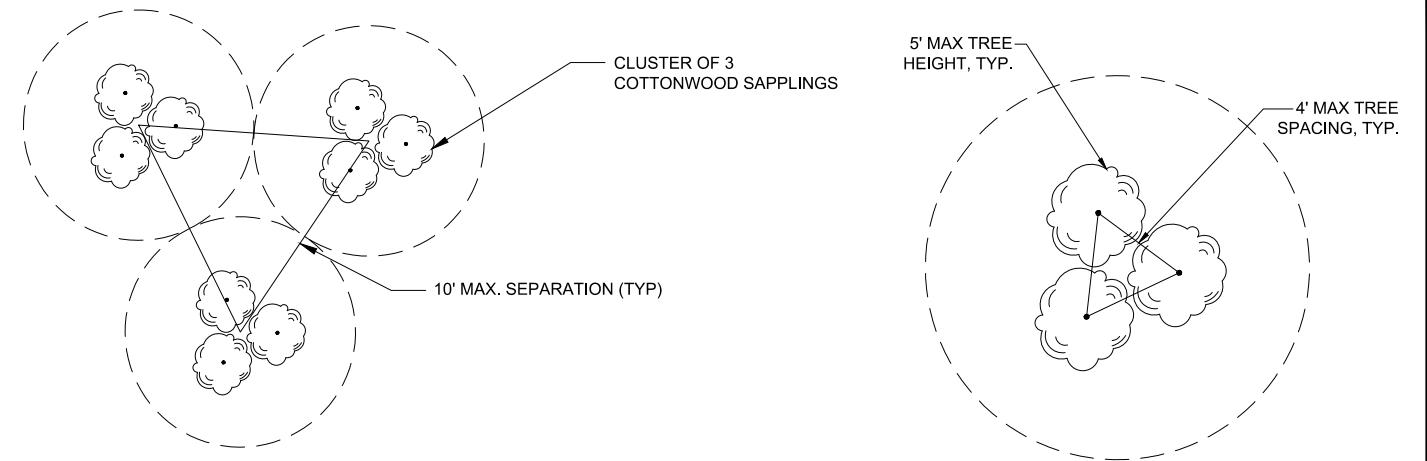


* SEE NOTE 5 ON ALASKA STANDARD PLAN I-21.11

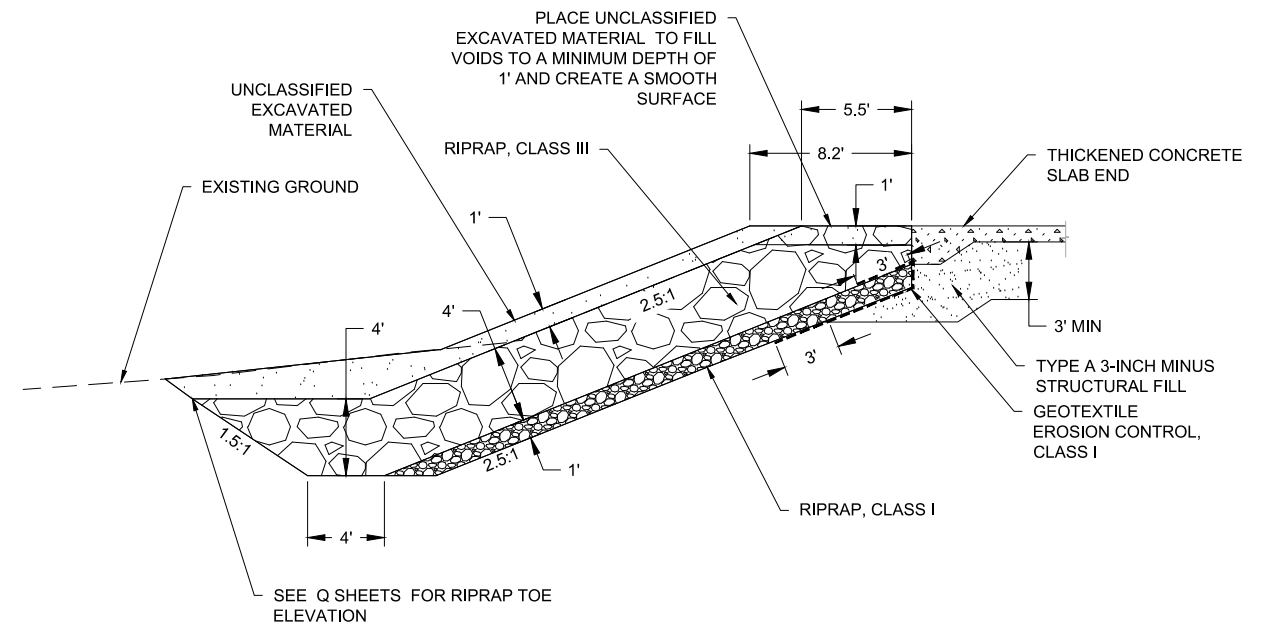
UNIDIRECTIONAL CURB RAMP
N.T.S.



SECTION A-A



TRANSPLANTED COTTONWOOD STOCK



LARGE DEBRIS CULVERT OUTLET APRON
N.T.S.

FIRM DOWL
 FILE C:\dowl_pw\0388515\SA-CT-DT-J-61850.dwg
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
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 CERTIFICATE OF AUTH # : AECL848

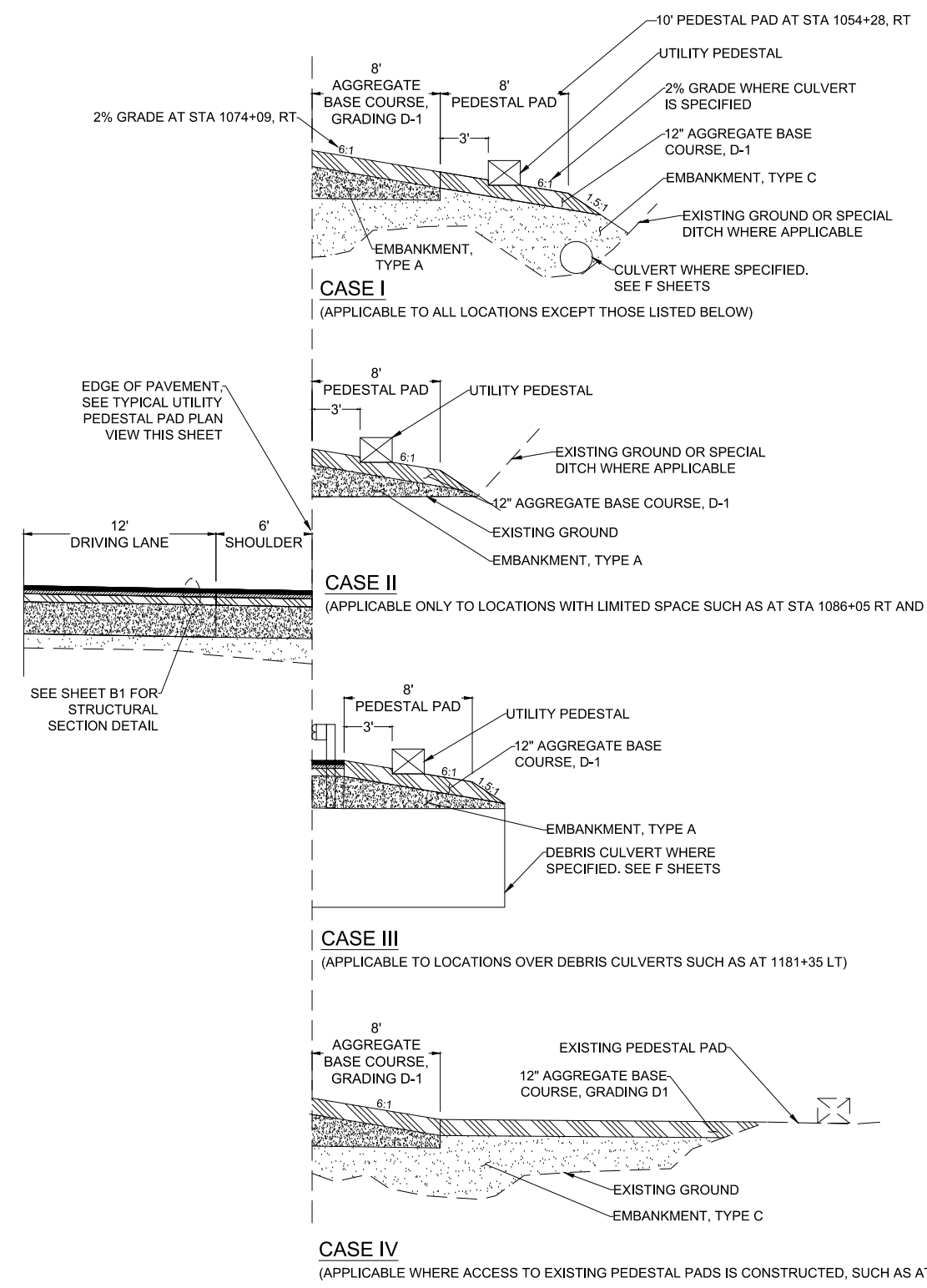
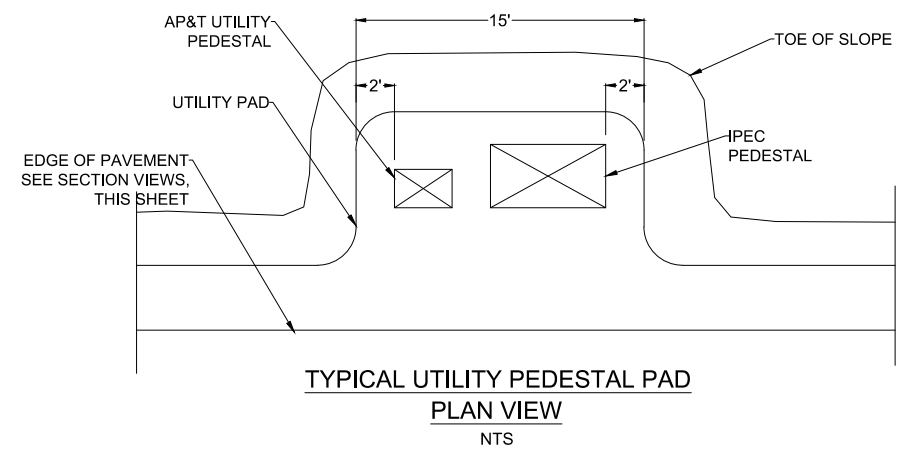


STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25
MISCELLANEOUS
DETAILS

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	J6	J7

FIRM DOWL
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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 LAYOUT J6
 CERTIFICATE OF AUTH # : AECL848
 DRAFTED

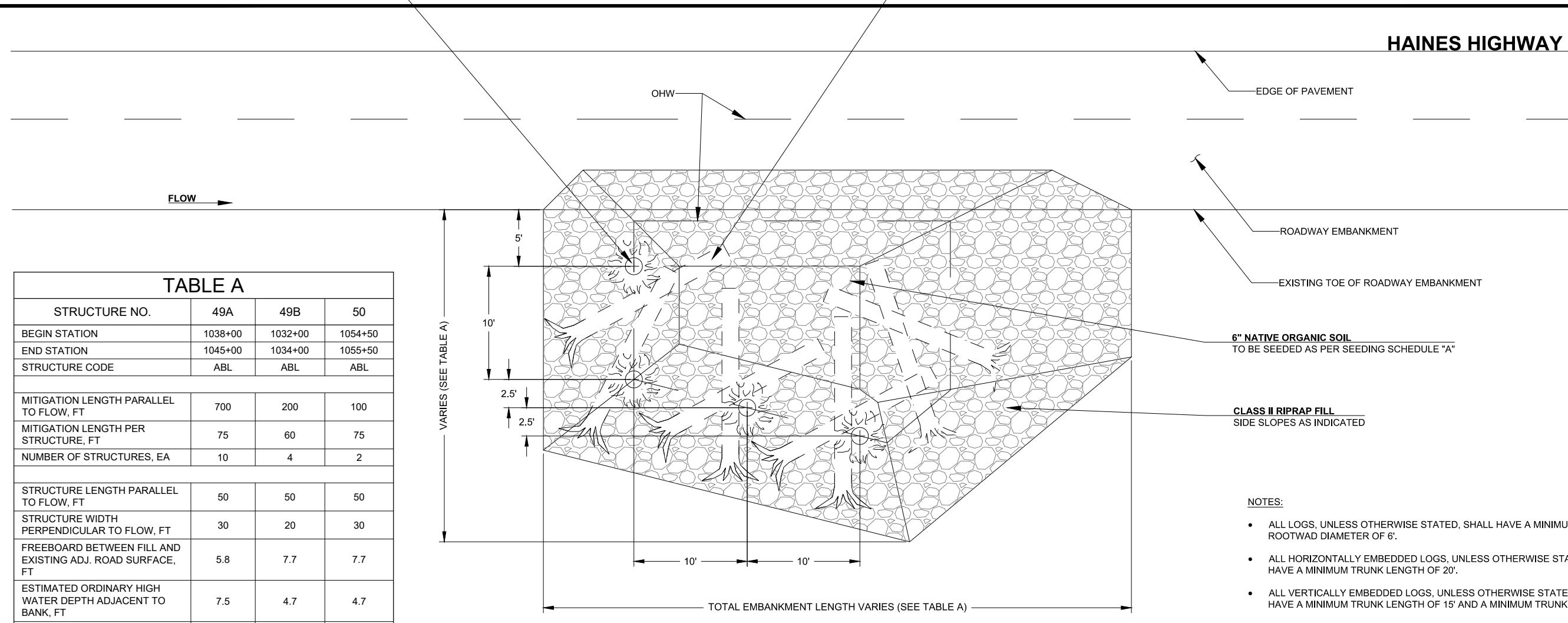
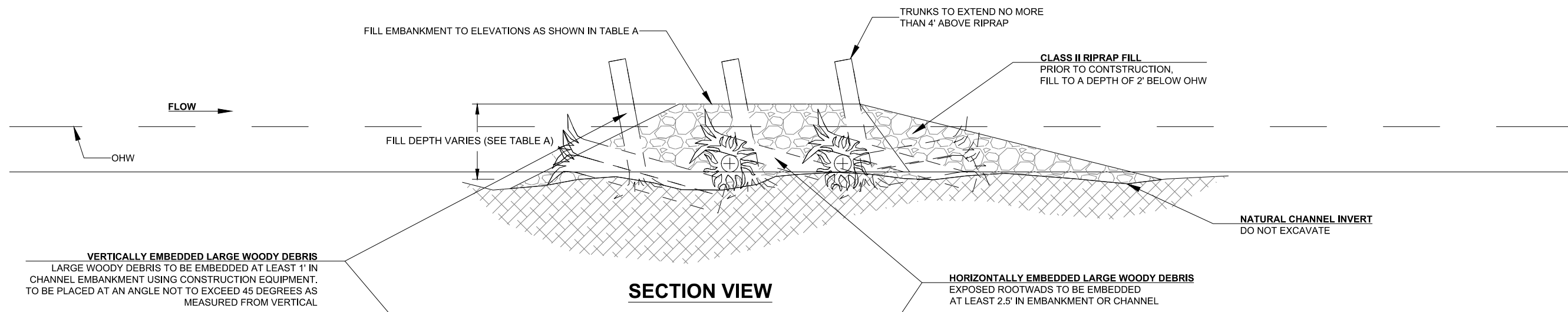


STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
**HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25**
**MISCELLANEOUS
 DETAILS**

DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	J7	J7

FIRM: DOWL
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 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: AECL848



STRUCTURE NO.	49A	49B	50
BEGIN STATION	1038+00	1032+00	1054+50
END STATION	1045+00	1034+00	1055+50
STRUCTURE CODE	ABL	ABL	ABL
MITIGATION LENGTH PARALLEL TO FLOW, FT	700	200	100
MITIGATION LENGTH PER STRUCTURE, FT	75	60	75
NUMBER OF STRUCTURES, EA	10	4	2
STRUCTURE LENGTH PARALLEL TO FLOW, FT	50	50	50
STRUCTURE WIDTH PERPENDICULAR TO FLOW, FT	30	20	30
FREEBOARD BETWEEN FILL AND EXISTING ADJ. ROAD SURFACE, FT	5.8	7.7	7.7
ESTIMATED ORDINARY HIGH WATER DEPTH ADJACENT TO BANK, FT	7.5	4.7	4.7
ESTIMATED ORDINARY HIGH WATER ELEVATION, FT	101.3	109.4	109.4
A. LARGE WOODY DEBRIS (MIN 15-FT), EA	100	40	20
B. ESTIMATED VOLUME OF CLASS II RIPRAP, CY	3658	848	424
C. NATIVE ORGANIC SOIL, CY	130	52	26

NOTES:

- ALL LOGS, UNLESS OTHERWISE STATED, SHALL HAVE A MINIMUM ROOTWAD DIAMETER OF 6".
- ALL HORIZONTALLY EMBEDDED LOGS, UNLESS OTHERWISE STATED, SHALL HAVE A MINIMUM TRUNK LENGTH OF 20'.
- ALL VERTICALLY EMBEDDED LOGS, UNLESS OTHERWISE STATED, SHALL HAVE A MINIMUM TRUNK LENGTH OF 15' AND A MINIMUM TRUNK DIA OF 28".

PLAN VIEW
APEX BAR LATTICE
 N.T.S.

ABL = APEX BAR LATTICE (SEE DETAILS THIS SHEET)

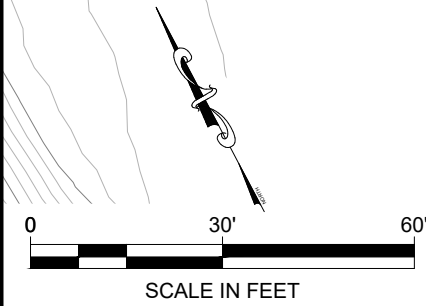
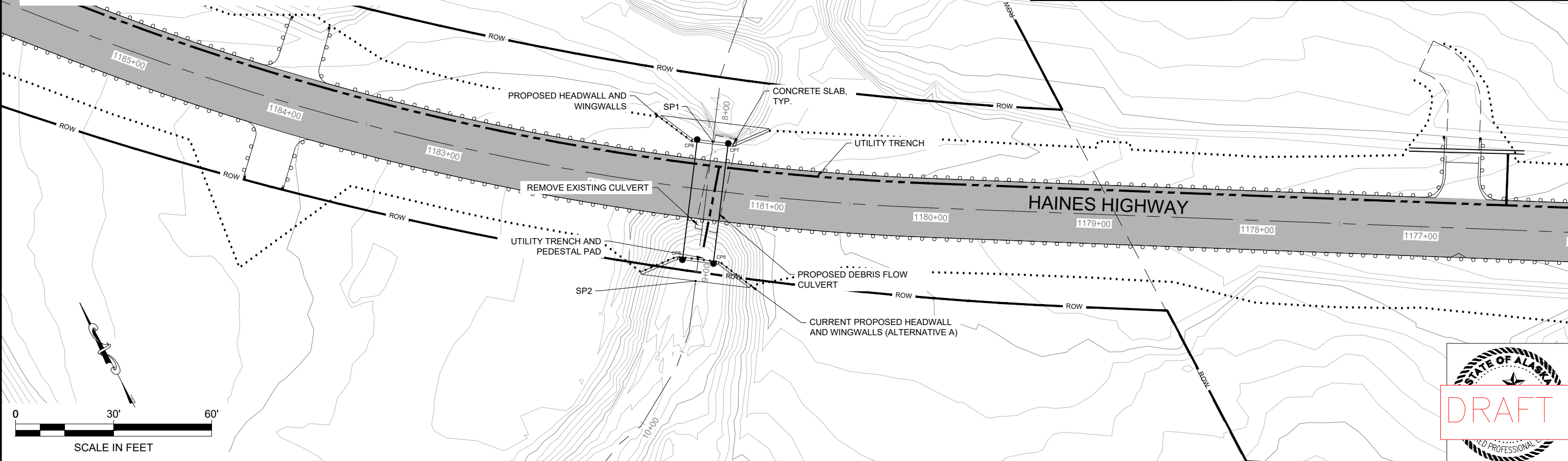


STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25
MISCELLANEOUS
DETAILS

DRAFT CONCURRENCE SET DEBRIS FLOW CULVERT DP13-2

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	Q1	Q6

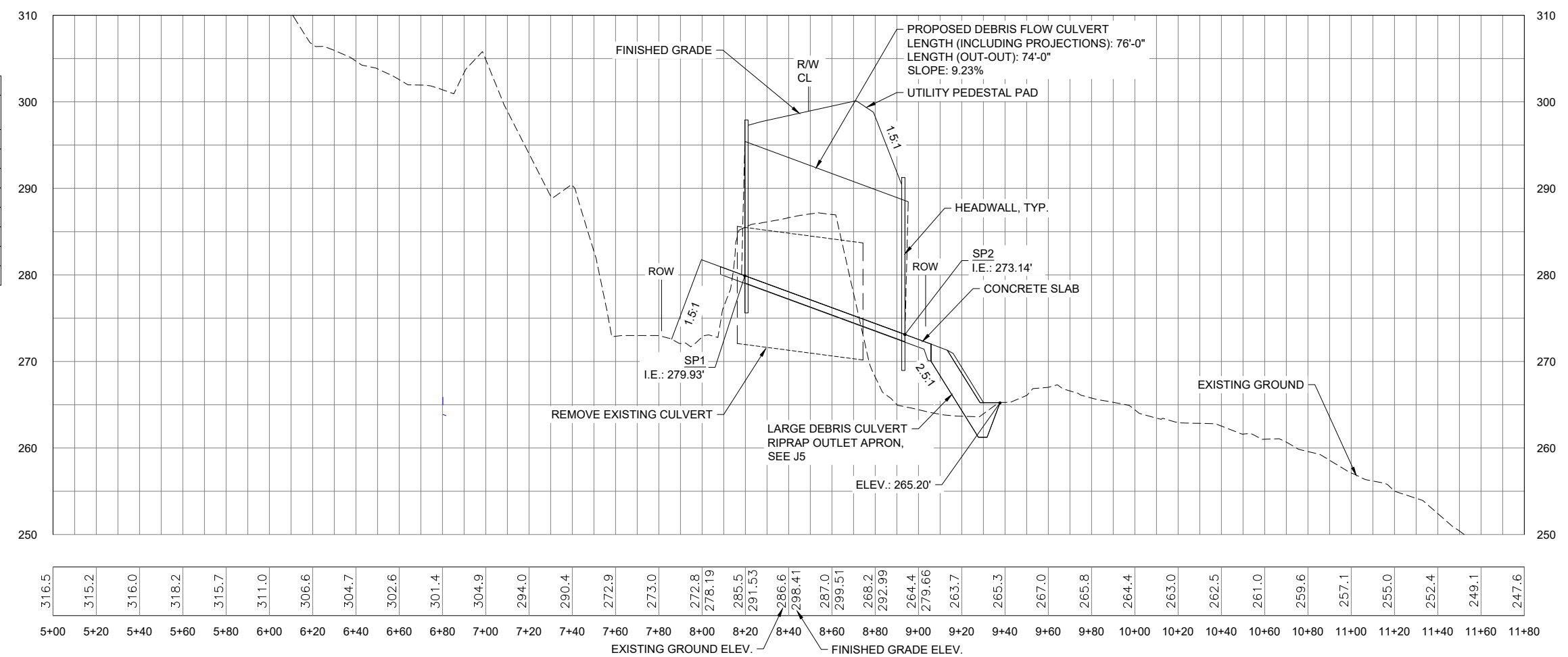
CERTIFICATE OF AUTH # : AECL848
 DRAFTED L UHR
 CHECKED NOBLE
 DESIGNED HOBBS
 PHONE (907) 780-3533
 5/4/2020 LAYOUT 01
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE
 DWG
 FILE C:\dowl_pw\0388515\SC-CT-RD-Q-61850.DWG



HYDROLOGIC & HYDRAULIC SUMMARY				
EXCEEDANCE PROBABILITY	RECURRENCE INTERVAL (YEAR)	Q (CFS)	HIGH WATER ELEVATION (FT)	HEADWATER/DEPTH RATIO
0.4x50%	Q2D2	61	280.16	0.07
50%	2	152	281.16	0.13
2%	50	479	283.65	0.28
1%	100	558	284.14	0.31

DRAINAGE AREA = 2.45 SQ MI (1,568 AC)
 ANTICIPATED ADDITIONAL BACKWATER = 0 FT
 ANTICIPATED ROADWAY OVERTOPPING AT 4,870 CFS

CULVERT TABLE	
SPAN	19'-2"
RISE	12'-10"
GAGE	8
SHAPE	UNDERPASS STRUCTURAL PLATE ON FOOTINGS
MATERIAL	CORRUGATED GALVANIZED STEEL

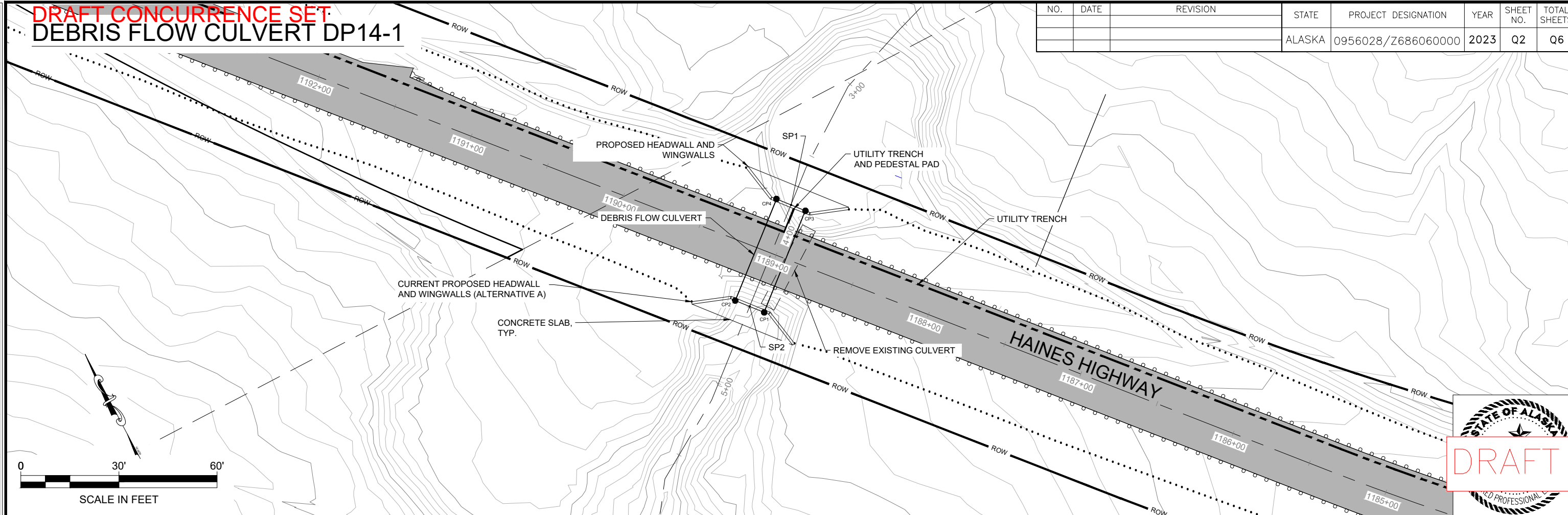


STATION	EXISTING GROUND ELEV.	FINISHED GRADE ELEV.
5+00	316.5	
5+20	315.2	
5+40	316.0	
5+60	318.2	
5+80	315.7	
6+00	311.0	
6+20	306.6	
6+40	304.7	
6+60	302.6	
6+80	301.4	
7+00	304.9	
7+20	294.0	
7+40	290.4	
7+60	272.9	
7+80	273.0	
8+00	272.8	
8+20	278.19	
8+40	285.5	
8+60	291.53	
8+80	286.6	
9+00	298.41	
9+20	287.0	
9+40	299.51	
9+60	268.2	
9+80	292.99	
10+00	264.4	
10+20	279.66	
10+40	263.7	
10+60	265.3	
10+80	267.0	
11+00	265.8	
11+20	264.4	
11+40	263.0	
11+60	262.5	
11+80	261.0	
12+00	259.6	
12+20	257.1	
12+40	255.0	
12+60	252.4	
12+80	249.1	
13+00	247.6	

DRAFT CONCURRENCE SET DEBRIS FLOW CULVERT DP14-1

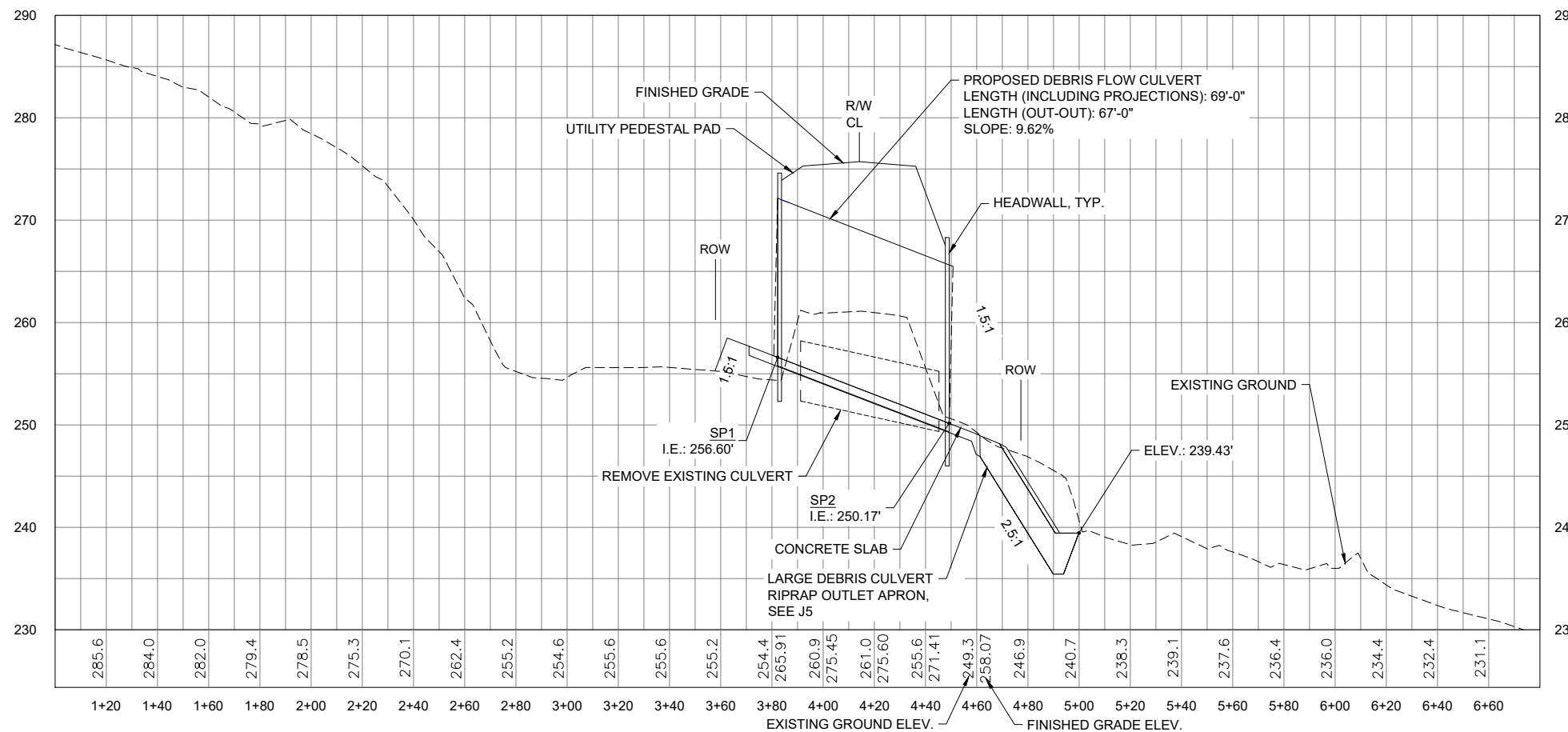
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	Q2	Q6

FIRM DOWL
 FILE C:\dowl_pw\0388515\SC-CT-RD-Q-61850.DWG
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED LUHR
 CERTIFICATE OF AUTH # : AECL848



HYDROLOGIC & HYDRAULIC SUMMARY				
EXCEEDANCE PROBABILITY	RECURRENCE INTERVAL (YEAR)	Q (CFS)	HIGH WATER ELEVATION (FT)	HEADWATER/DEPTH RATIO
0.4x50%	Q2D2	61	259.03	0.06
50%	2	152	259.99	0.12
2%	50	479	262.44	0.28
1%	100	558	262.91	0.31
DRAINAGE AREA = 2.45 SQ MI (1,568 AC)				
ANTICIPATED ADDITIONAL BACKWATER = 0 FT				
ANTICIPATED ROADWAY OVERTOPPING AT 4,554 CFS				

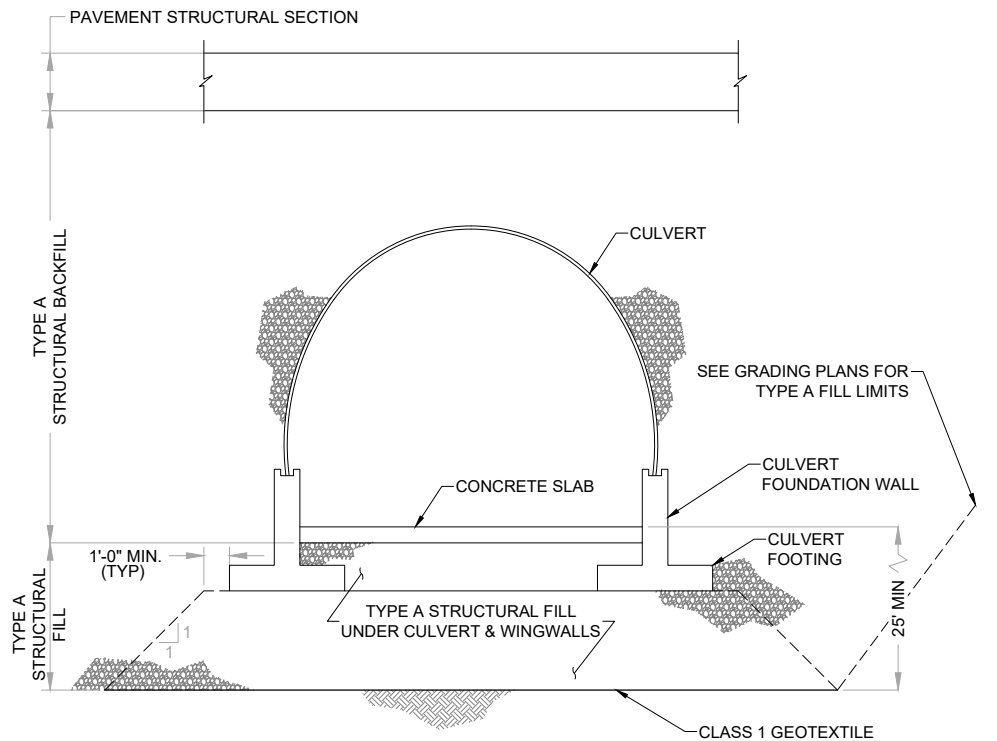
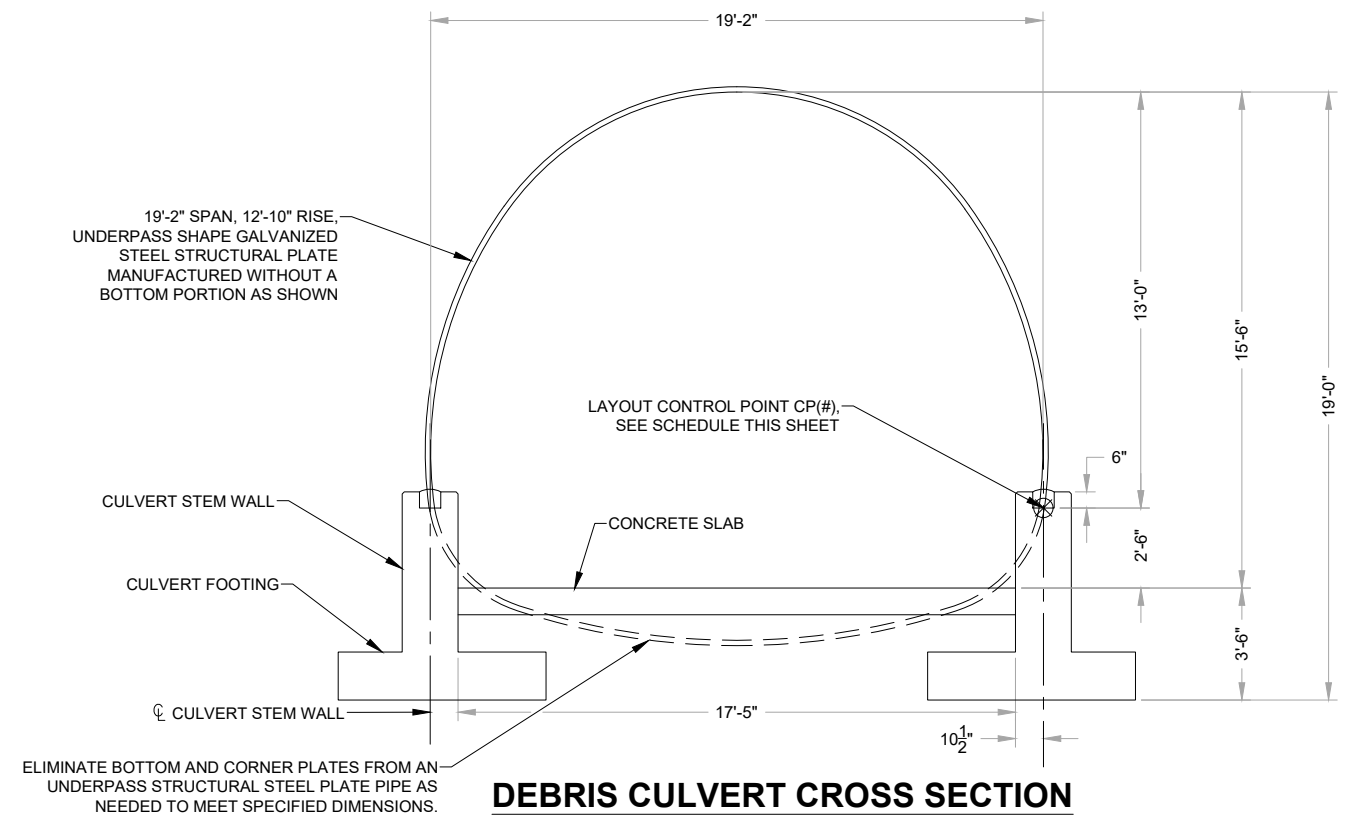
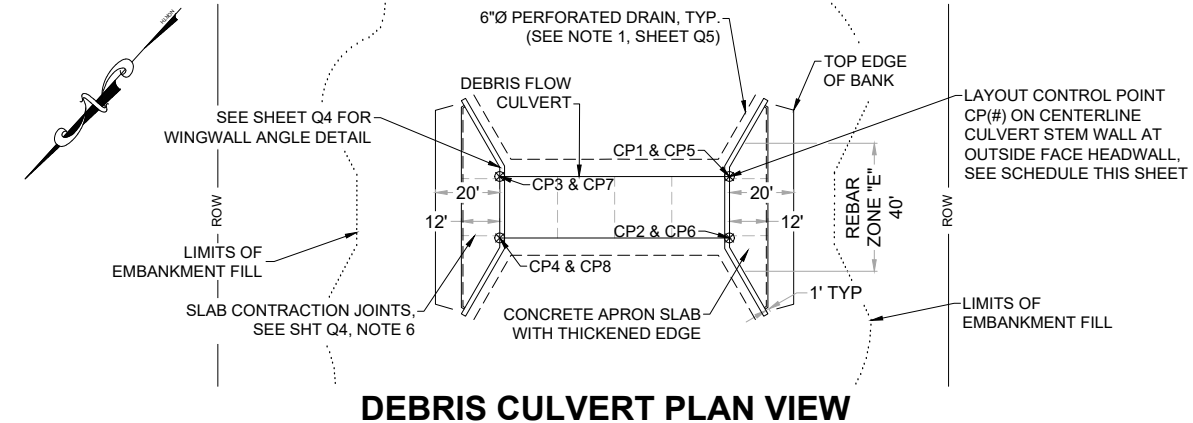
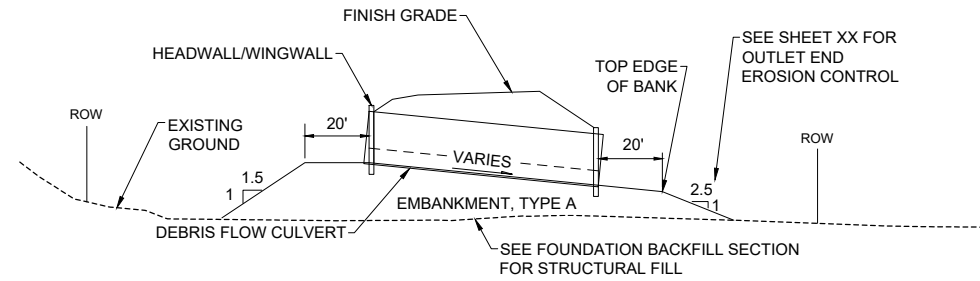
CULVERT TABLE	
SPAN	19'-2"
RISE	12'-10"
GAGE	8
SHAPE	UNDERPASS STRUCTURAL PLATE ON FOOTINGS
MATERIAL	CORRUGATED GALVANIZED STEEL



DRAFT CONCURRENCE SET

PS&E FOR REVIEW

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	Q3	Q6



DEBRIS CULVERT LAYOUT CONTROL SCHEDULE

MARK	CULVERT	NORTHING	EASTING	ELEVATION
CP1	DP 14-1	560516.67	627150.80	252.66
CP2	DP 14-1	560531.35	627138.48	252.66
CP3	DP 14-1	560559.76	627202.12	259.11
CP4	DP 14-1	560574.44	627189.79	259.11
CP5	DP 13-2	559961.09	627689.00	275.62
CP6	DP 13-2	559972.06	627673.28	275.62
CP7	DP 13-2	560021.78	627731.35	282.40
CP8	DP 13-2	560032.75	627715.64	282.40

SEE PLAN AND SECTIONS FOR LAYOUT CONTROL POINT LOCATION ON THE STRUCTURE

STRUCTURAL NOTES:

- DESIGN SPECIFICATION: AASHTO LRFD BRIDGE DESIGN SPECIFICATION, 2019 EDITION.
- KEY DESIGN PARAMETERS: RETAINED SOIL PHI OF 36° OR GREATER, UNIT WEIGHT OF 150 PCF, 2'-0" LIVE LOAD SURCHARGE INCLUDED, SEISMIC $A_s = 0.35g$. FACTORED FOOTING BEARING PRESSURE LIMIT OF 11,300 PSF CULVERT AND 16,300 PSF HEAD/WINGWALLS.
- SELECT, COMPACTED STRUCTURAL FILL REQUIRED UNDER FOOTINGS AND SLAB AS INDICATED.
- MATERIALS: CLASS A CONCRETE $f_c = 4,000$ psi; GRADE 60 REINFORCING STEEL (UN-COATED), $F_y = 60$ ksi.
- REFERENCE ALASKA STANDARD PLANS AS NOTED FOR DETAIL INFORMATION NOT INCLUDED HERE.
- EXTERIOR FACE OF WALL INTENDED TO BE NEAR VERTICAL AFTER COMPLETION OF BACKFILL MATERIAL. SEE ALASKA STANDARD PLAN B-07.10 FOR FORM OFFSET TO MITIGATE WALL MOVEMENT DURING BACKFILL OPERATIONS.
- CONCRETE COVER OVER REBAR IS 2", EXCEPT 3" IF CAST AGAINST GRADE (FOOTING BOTTOM).
- HOOKED ANCHOR BOLTS INTO HEADWALL TO BE ASTM F1554 GRADE 36, HOT-DIP GALVANIZED WITH "CULVERT NUTS" EACH SIDE OF STRUCTURAL PLATE.



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HAINES HIGHWAY RECONSTRUCTION
MILEPOST 20 TO 25

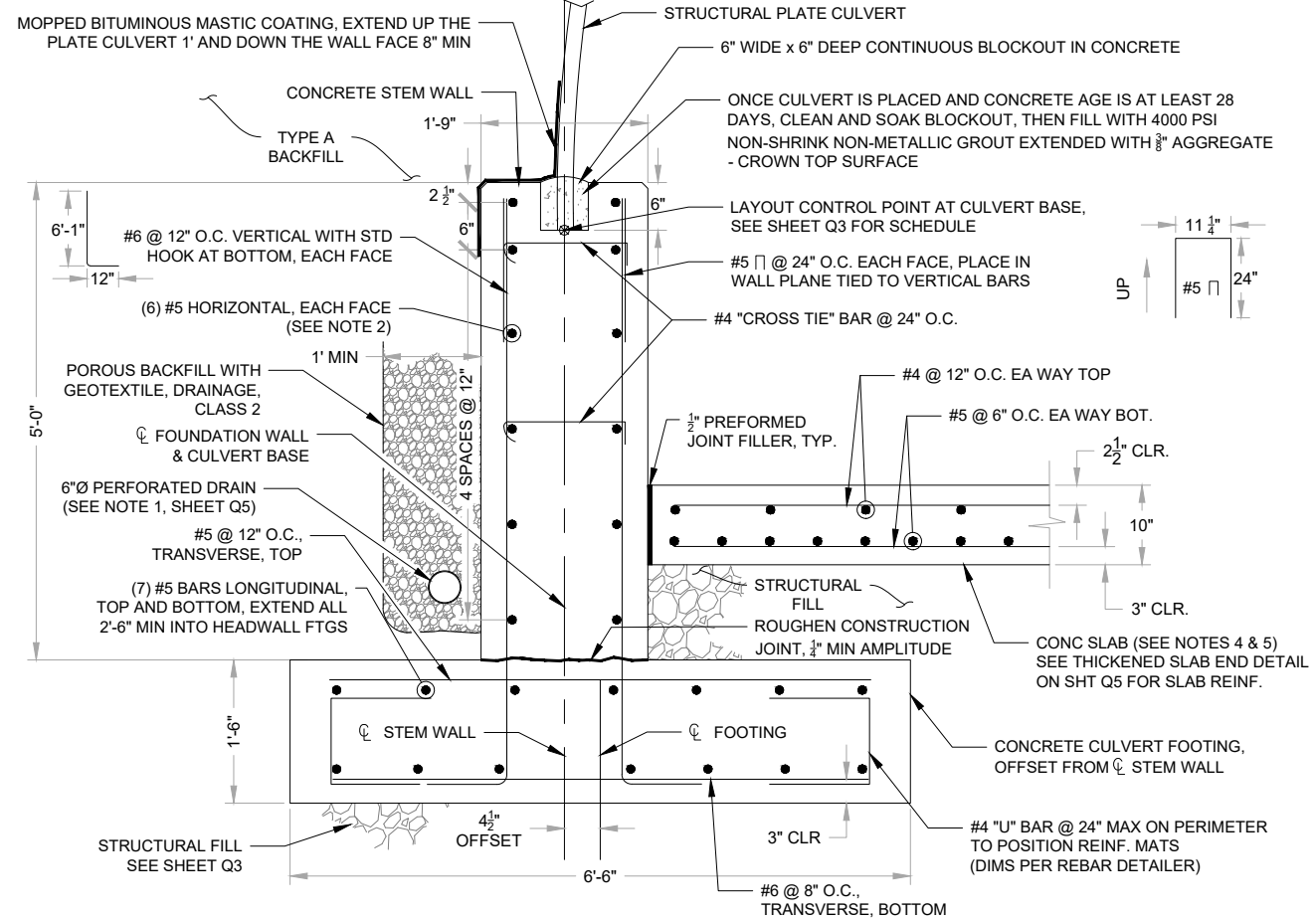
**DEBRIS CULVERT FOUNDATION,
HEADWALL & WINGWALL DETAILS**

CERTIFICATE OF AUTH # : AECL848
 DRAFTED | DRISCOLL
 CHECKED | WARDELL
 DESIGNED | METTLER
 PHONE (907) 780-3533
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 9/24/2023
 LAYOUT | 03
 FILE C:\dow\1_pw\40388515\SC-CT-RD-Q-61850.DWG
 FIRM DOWL

DRAFT CONCURRENCE SET

PS&E FOR REVIEW

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	Q4	Q6

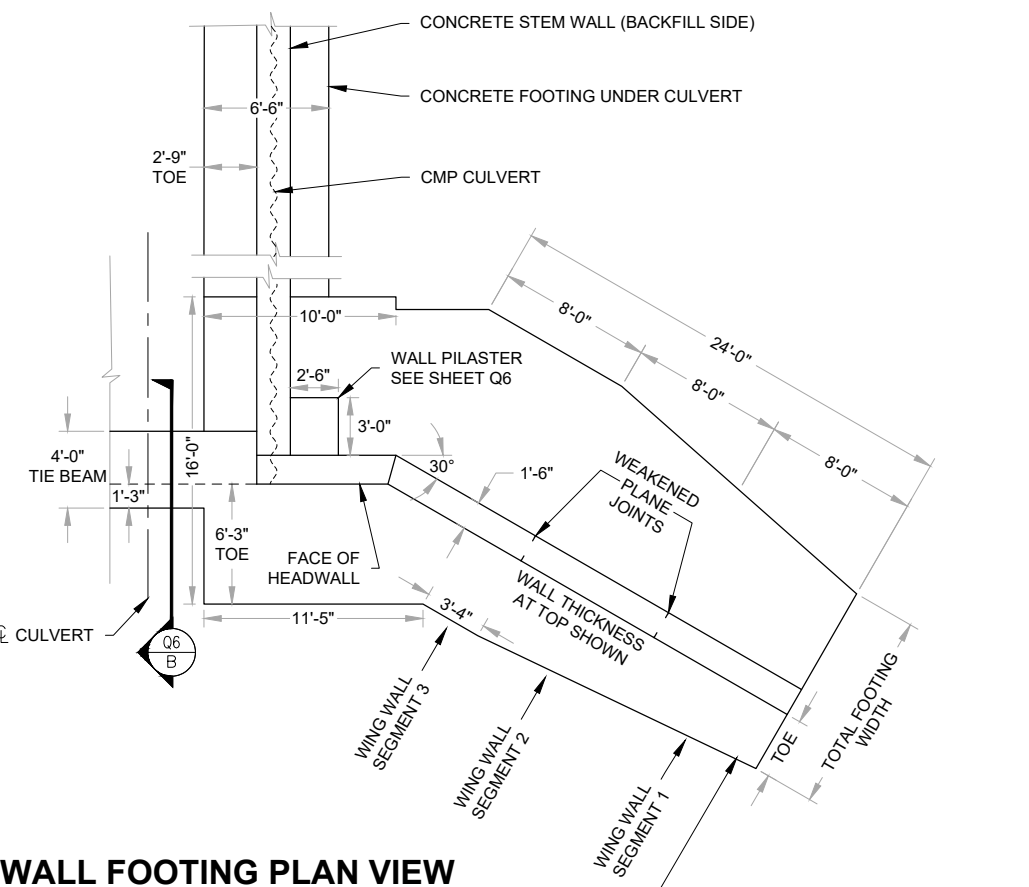


CULVERT FOOTING AND CONC SLAB SECTION

HEADWALL/WINGWALL DIMENSION TABLE

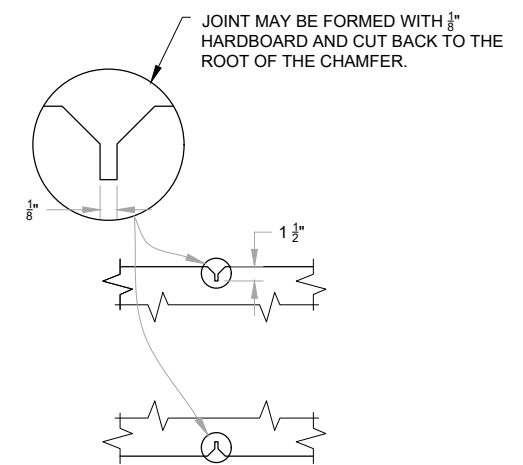
WALL SEGMENT ID	FOOTING THICKNESS	TOE WIDTH (MIN.)	TOTAL WIDTH (MIN.)
1	28"	3'-3"	10'-6"
2	28"	4'-0"	13'-0"
3	28"	4'-6"	15'-0"
HEADWALL	28"	6'-3"	16'-0"

NOTE: TOE/HEEL DIMENSIONS ARE REFERENCED FROM FACE OF HEADWALL OR WINGWALL

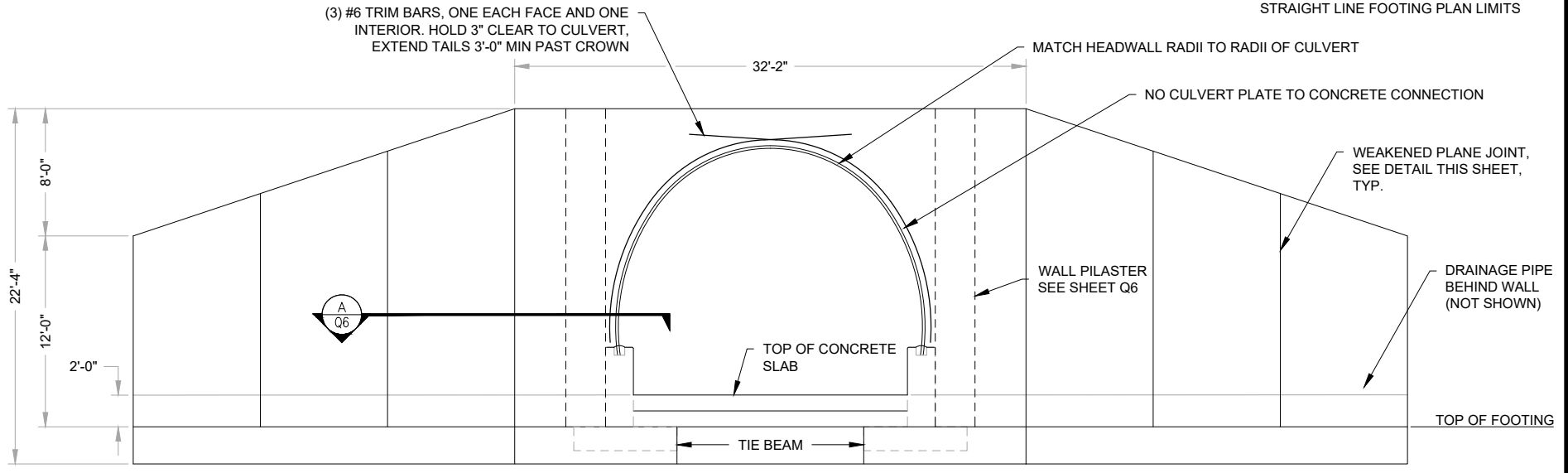


HEADWALL/WINGWALL FOOTING PLAN VIEW

(APRON SLAB NOT SHOWN)



WEAKENED PLANE WINGWALL JOINT



HEADWALL/WINGWALL FRONT ELEVATION

(FOOTING KEYWAY NOT SHOWN)

- NOTES**
1. THE CULVERT STEM WALL SHALL BE PLACED MONOLITHIC. TO FACILITATE CONCRETE PLACEMENT, THE WALL TOP BLOCK-OUT FORM MAY BE INSERTED AFTER THE LOWER LIFT(S) HAVE BEEN PLACED PROVIDED THE SPECIFIED DURATION FROM MIXING TO PLACEMENT CAN BE SATISFIED.
 2. EXTEND ALL HORIZONTAL STEM WALL REBAR 1'-2" BEYOND WALL ENDS INTO HEADWALLS, TERMINATE WITH STANDARD HOOK.
 3. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SHIMS WITHIN THE STEM WALL TOP GROUT KEY AS REQUIRED TO PROPERLY ALIGN CULVERT PLATES.
 4. REBAR SPlicing IN SLAB ON GRADE WITH REFERENCE TO SPECIFICATION SECTION 503-3.05, SPLICES ARE PERMITTED IN BARS 40 FEET IN LENGTH OR LESS. WHEN SPLICED, STAGGER ADJACENT SPLICES AT LEAST ONE LAP LENGTH.
 5. CONSTRUCTION SEQUENCE REQUIREMENT: PLACE THE SLAB AND ALLOW AT LEAST SEVEN DAYS CURE BEFORE BACKFILL PLACEMENT ABOVE THE STEM WALL.
 6. PROVIDE DOWELED TRANSVERSE CONSTRUCTION JOINTS AT FACE OF HEADWALLS, EACH END, AND CONTRACTION JOINTS 1'-1/2" DEEP AT A EQUAL SPACING NOT TO EXCEED 20 FT IN THE GRADE SUPPORTED CONCRETE SLAB.



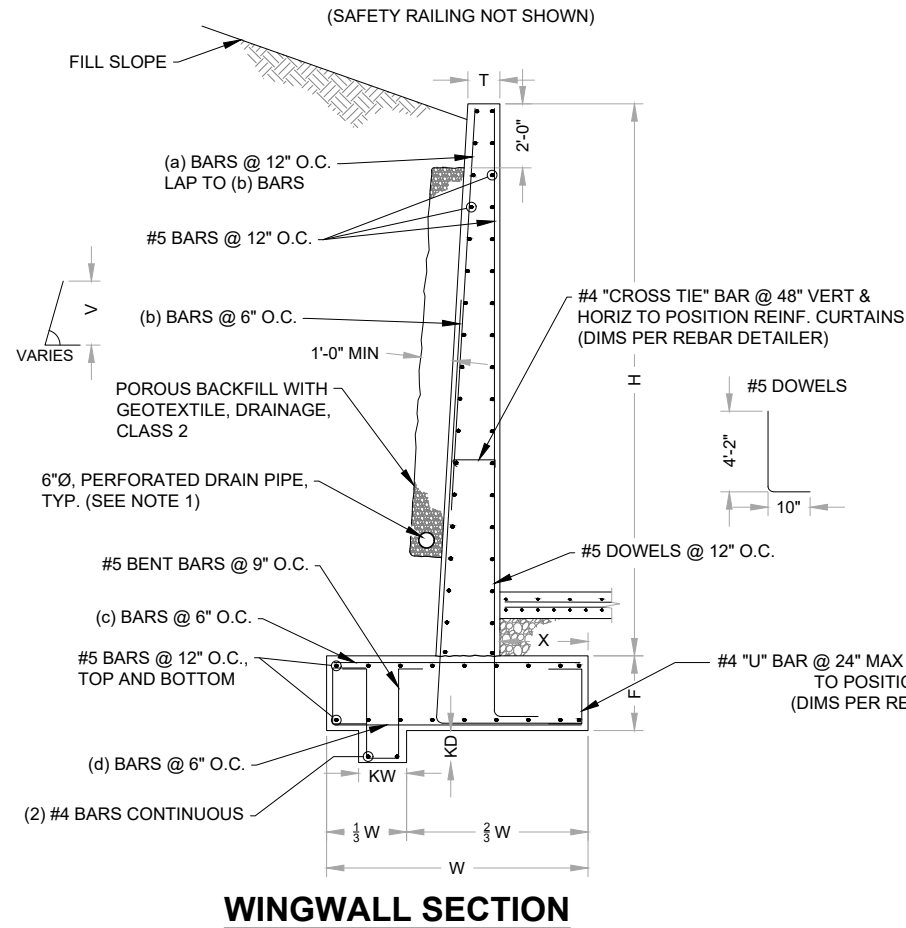
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
MILEPOST 20 TO 25
DEBRIS CULVERT FOUNDATION,
HEADWALL & WINGWALL DETAILS

CERTIFICATE OF AUTH # : AECL848
 DRAFTED : DRISCOLL
 CHECKED : WARDELL
 DESIGNED : METTLER
 LAYOUT : 04
 PHONE : (907) 780-3533
 ADDRESS : 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE : 9/24/2023
 FILE : C:\dow\l_pw\40388515\SC-CT-RD-Q-61850.DWG
 FIRM : DOWL

DRAFT CONCURRENCE SET

PS&E FOR REVIEW

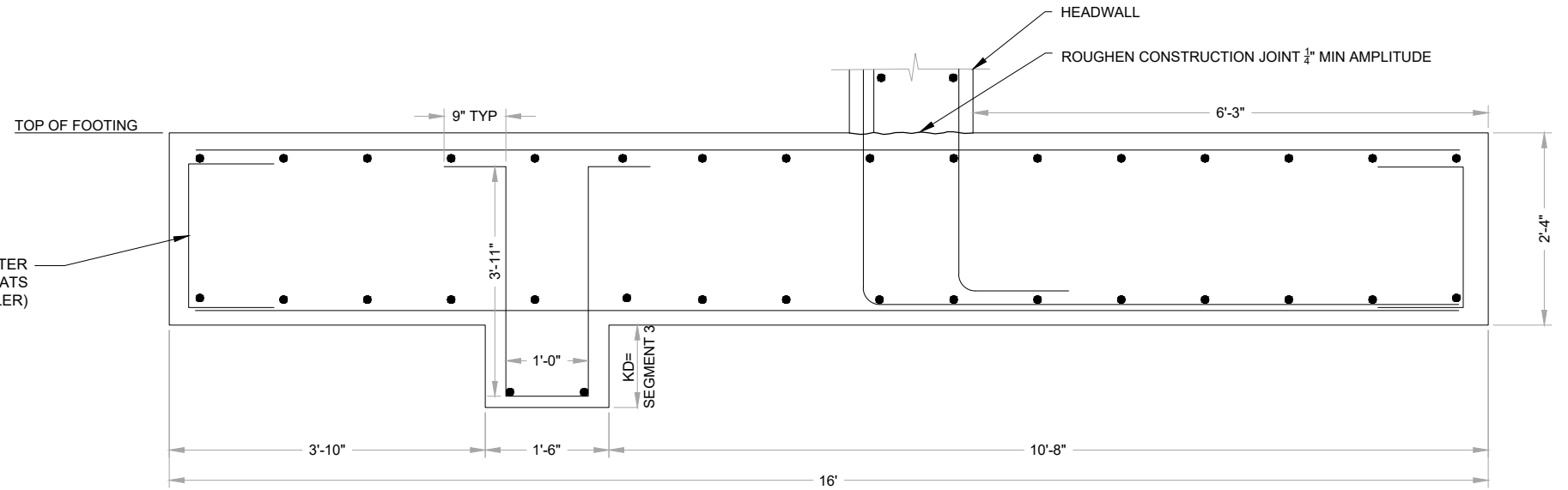
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	Q5	Q6



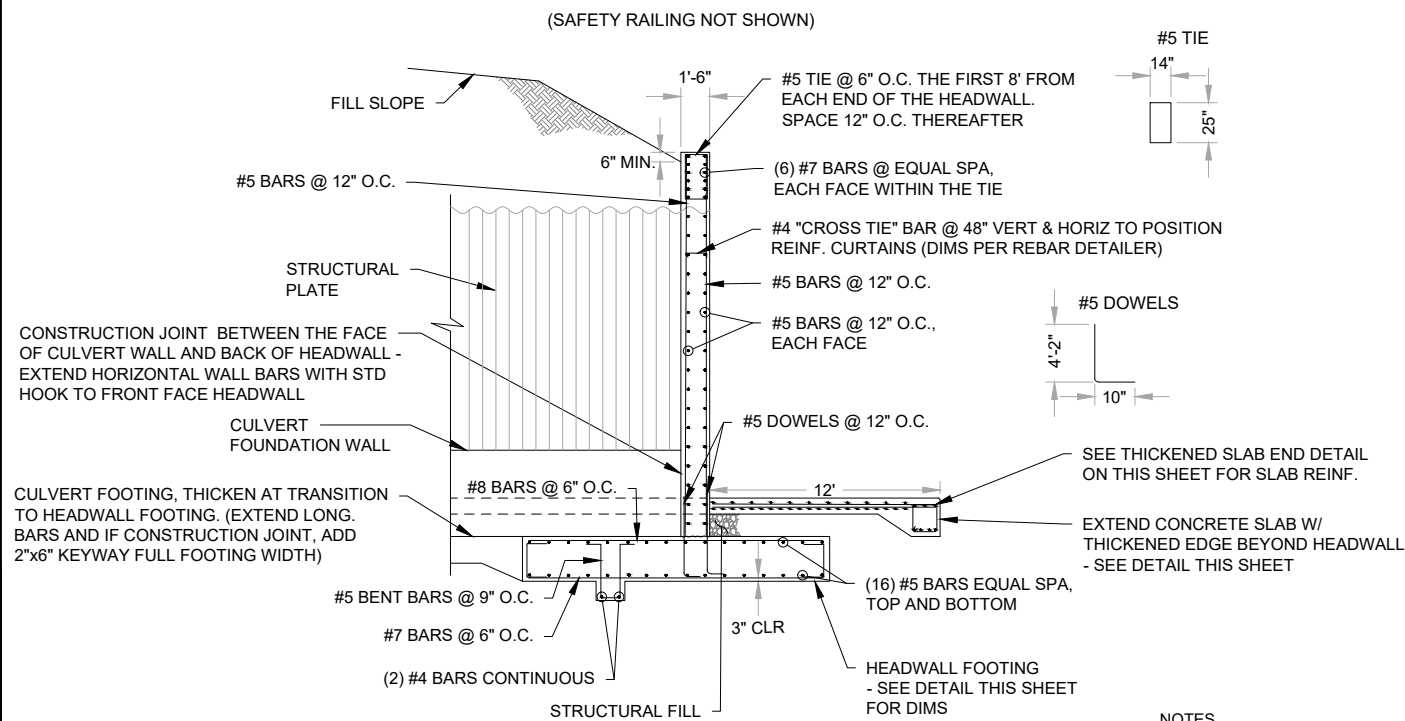
WINGWALL SECTION

WING WALL TABLE OF DIMENSIONS, REINFORCING STEEL, AND DATA

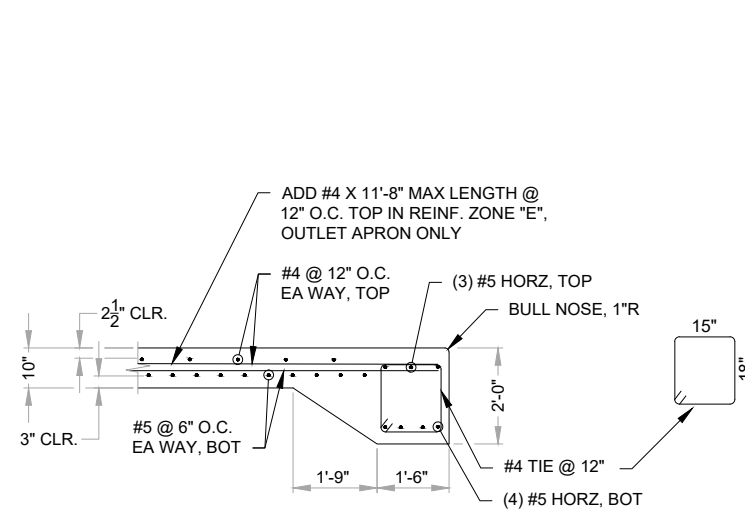
WALL SEGMENT I.D.	STEM TOP THICK. "T"	MINIMUM STEM BATTER	STEM WALL "H"		FOOTING THICK. "F"	MIN. FOOTING WIDTH "W"	MIN. TOE WIDTH "X"	KEY DEPTH "KD"	KEY WIDTH "KW"	(a) BARS	(b) BARS		(c) BARS	(d) BARS
			MINIMUM	MAXIMUM							SIZE	"V"		
1	1'-6"	5/8:12	12'-0"	14'-8"	2'-4"	10'-6"	3'-3"	1'-0"	1'-6"	#6	#6	11'-6"	#6	#5
2	1'-6"	5/8:12	14'-8"	17'-3"	2'-4"	13'-0"	4'-0"	1'-0"	1'-6"	#7	#7	14'-2"	#7	#5
3	1'-6"	5/8:12	17'-3"	20'-0"	2'-4"	15'-0"	4'-6"	2'-4"	1'-6"	#10	#10	17'-0"	#8	#5



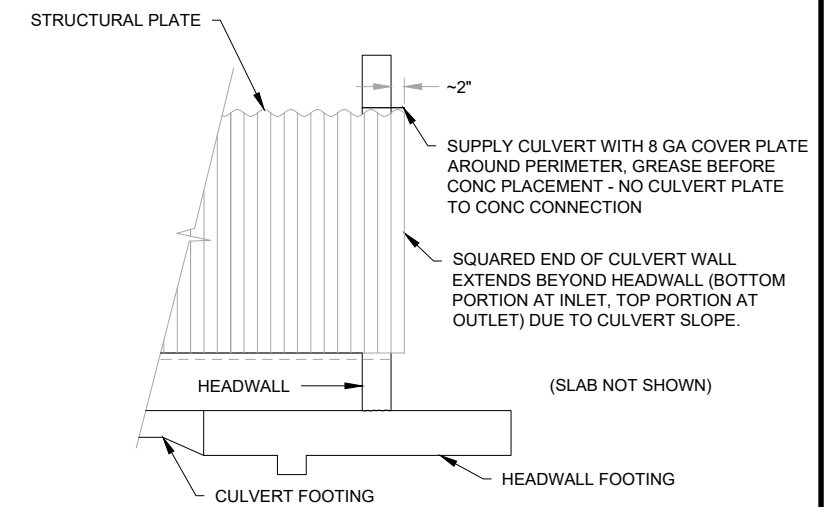
HEADWALL FOOTING DETAIL



HEADWALL SECTION



THICKENED SLAB END DETAIL



END TREATMENT DETAIL

NOTES

- PLACE CONTINUOUS PERFORATED DRAIN PIPES IN COARSE AGGREGATE WRAPPED IN GEOTEXTILE, DRAINAGE, CLASS 2, TYPE A, FABRIC AND SLOPE 1% MIN. AT WINGWALLS, MATCH CULVERT SLOPE ALONG CULVERT. RUN TO DAYLIGHT AND COVER OUTLET WITH GALVANIZED HARDWARE CLOTH.
- TIE DOWELS TO HORIZONTAL BARS IN HEADWALLS AND WINGWALLS.

CERTIFICATE OF AUTH # : AECL848
 DRAFTED | DRISCOLL
 CHECKED | WARDELL
 DESIGNED | METTLER
 LAYOUT | OS
 PHONE (907) 780-3533
 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE 9/24/2023
 FILE C:\dowl.pw\40388515\SC-CT-RD-Q-61850.DWG
 FIRM DOWL



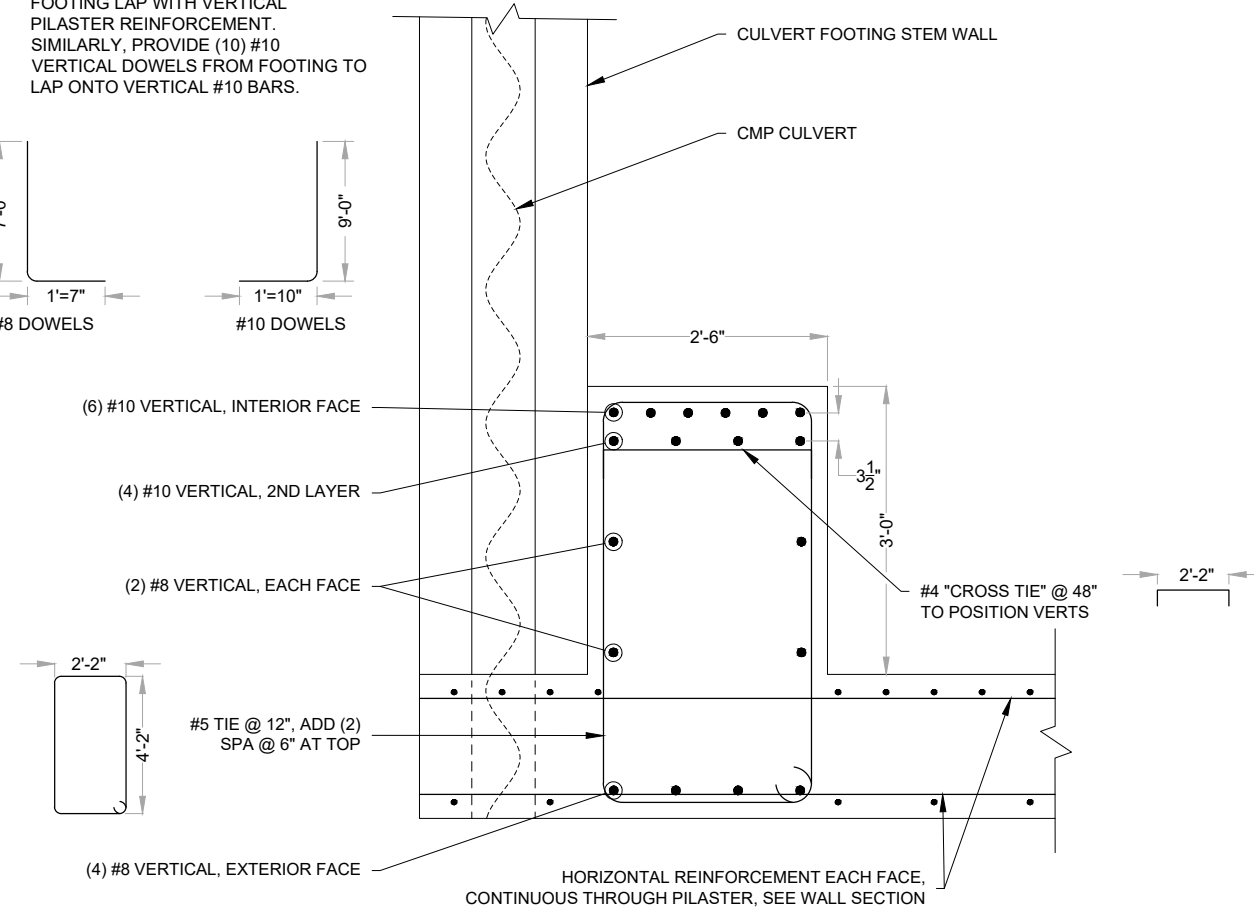
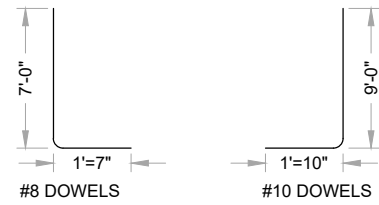
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25
DEBRIS CULVERT FOUNDATION,
HEADWALL & WINGWALL DETAILS

DRAFT CONCURRENCE SET

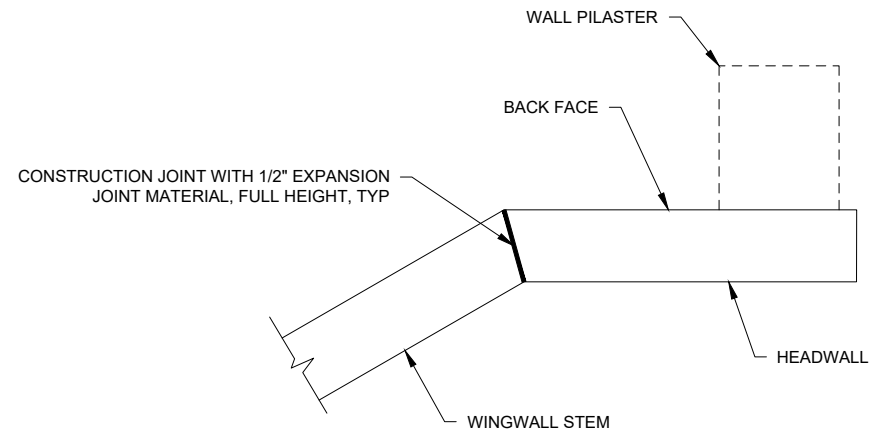
PS&E FOR REVIEW

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	Q6	Q6

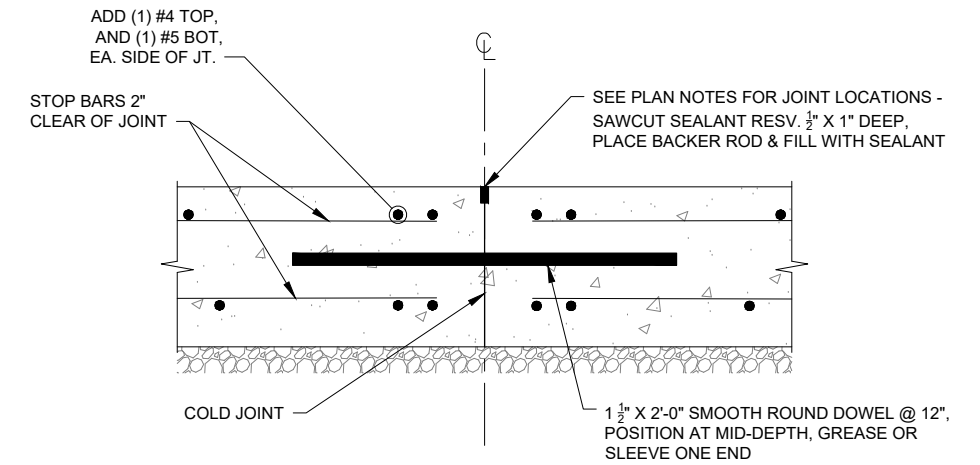
NOTE: (8) #8 VERTICAL DOWELS FROM FOOTING LAP WITH VERTICAL PILASTER REINFORCEMENT. SIMILARLY, PROVIDE (10) #10 VERTICAL DOWELS FROM FOOTING TO LAP ONTO VERTICAL #10 BARS.



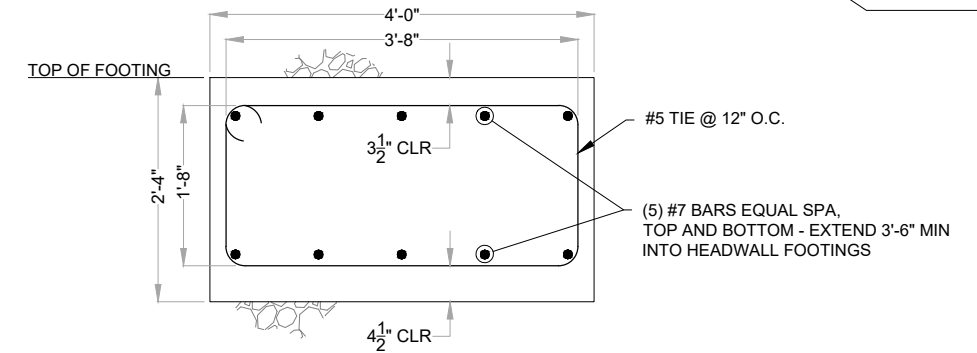
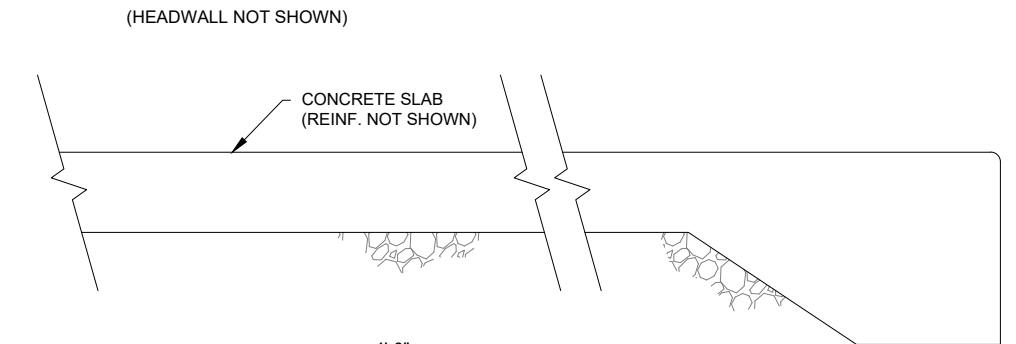
PILASTER DETAIL - PLAN VIEW



A SECTION
Q6 EXPANSION JOINT DETAILS BETWEEN HEADWALL AND WINGWALL



SLAB CONSTRUCTION JOINT



B SECTION
Q6 HEADWALL FOOTING TIE-BEAM

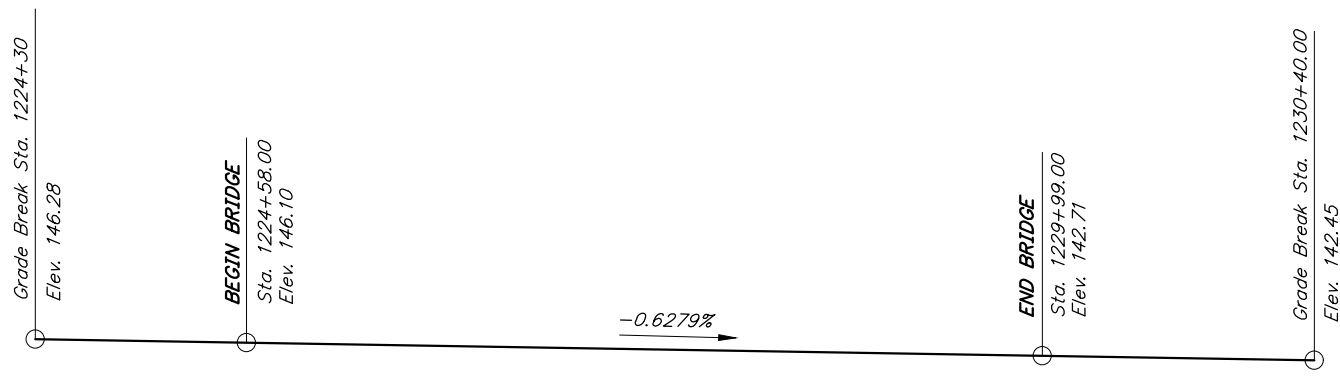


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
MILEPOST 20 TO 25
DEBRIS CULVERT
HEADWALL & WINGWALL DETAILS

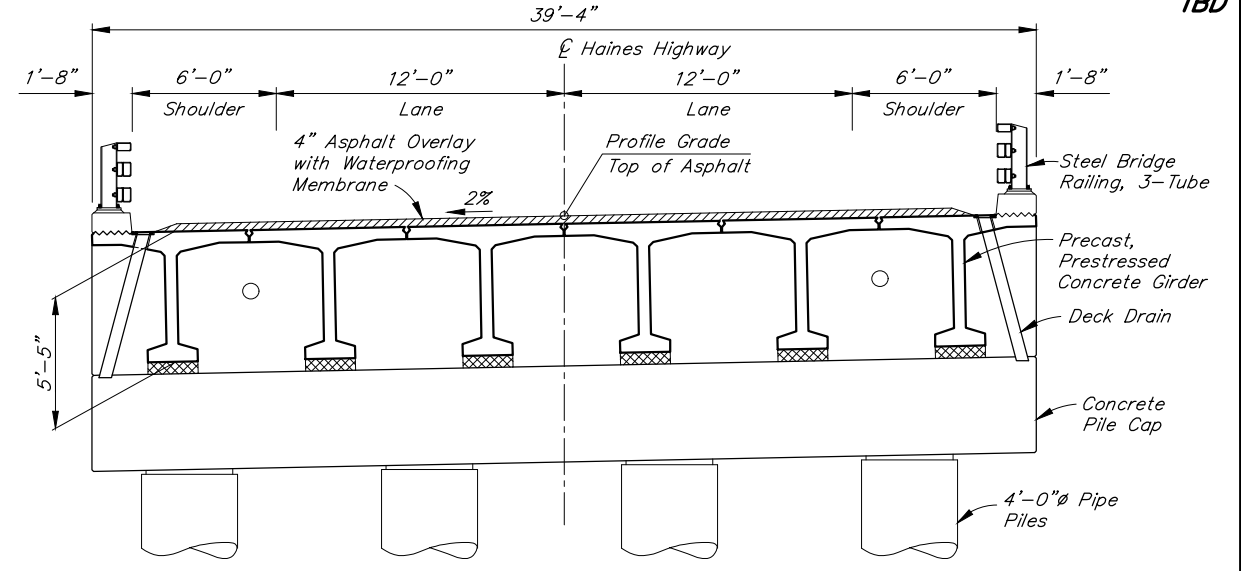
FIRM DOWL
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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE (907) 780-3533
 CERTIFICATE OF AUTH # : AECL848
 DATE 9/24/2023
 LAYOUT 06
 DESIGNED METTLER
 CHECKED WARDELL
 DRAFTED DRISCOLL

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N1	N25

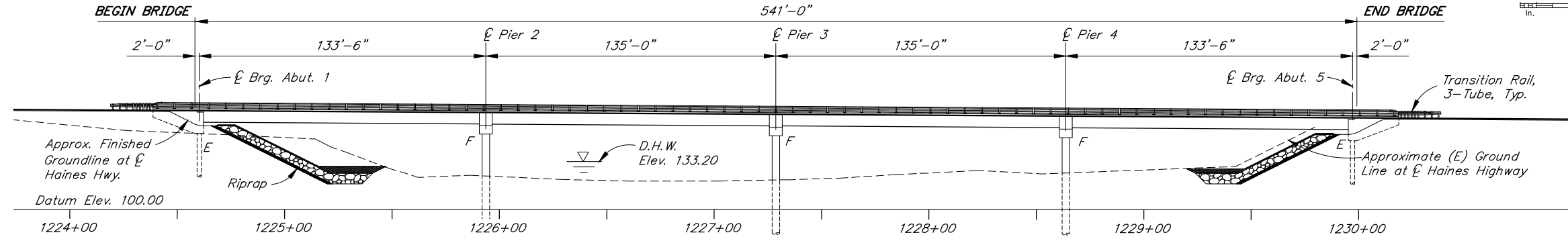
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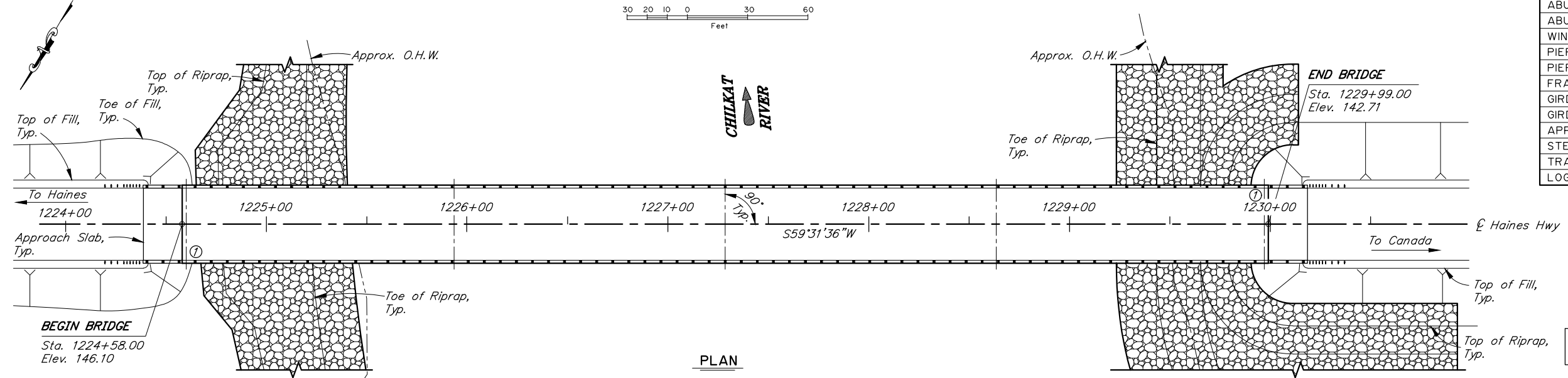
PROFILE GRADE DATA
No Scale



TYPICAL SECTION



ELEVATION



PLAN



BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	1
SITE PLAN	2
RIPRAP LAYOUT	3
RIPRAP SECTIONS 1	4
RIPRAP SECTIONS 2	5
ABUTMENT 1	6
ABUTMENT 5	7
ABUTMENT DETAILS	8
WINGWALLS	9
PIERS	10
PIER DETAILS	11
FRAMING PLAN AND TYPICAL SECTION	12
GIRDERS	13
GIRDER DETAILS	14
APPROACH SLABS	15
STEEL BRIDGE RAILING, 3-TUBE	16
TRANSITION RAIL, 3-TUBE	17
LOG OF TEST BORINGS	18-25

PRELIMINARY PLAN


① Approximate location of Bridge Number Plate.

C:\Users\uljperez\AppData\Local\Temp\AcPublish_9292\742-1 Mon, Nov/13/23 09:41am

DESIGNED BY: Jared Jones	CHECKED: Jesse Escamilla III	LAYOUT BY: Jared Jones	CHECKED BY: Jesse Escamilla III
DRAWN BY: Sam Sollie	CHECKED: Jared Jones	SPECIFICATIONS BY: Jared Jones	P S & E COMPARED: Jesse Escamilla III
QUANTITIES BY: Jared Jones	CHECKED: Jesse Escamilla III	APPROVAL RECOMMENDED BY: Leslie Daugherty	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

CHILKAT RIVER BRIDGE
HAINES HIGHWAY
GENERAL LAYOUT


BRIDGE NO. 742
DWG. NO. 1

DRAFT CONCURRENCE SET

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N2	N25

GENERAL NOTES

DESIGN:..... AASHTO LRFD Bridge Design Specifications, 2020 Edition, with latest interim specifications.

Seismic design per AASHTO Guide Specifications for LRFD Seismic Bridge Design, 2011 with latest interim revisions.

LIVE LOAD:..... HL-93 or "B-Train" whichever produce maximum demand.

DEAD LOAD:..... Includes 50 psf for all wearing surfaces.

SEISMIC PARAMETERS:.....
 PGA = 0.32
 S_s = 0.74
 S₁ = 0.29
 Site Class = D
 Liquefaction Potential = High
 AASHTO 7% probability of exceedance in 75 years.

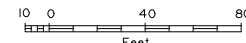
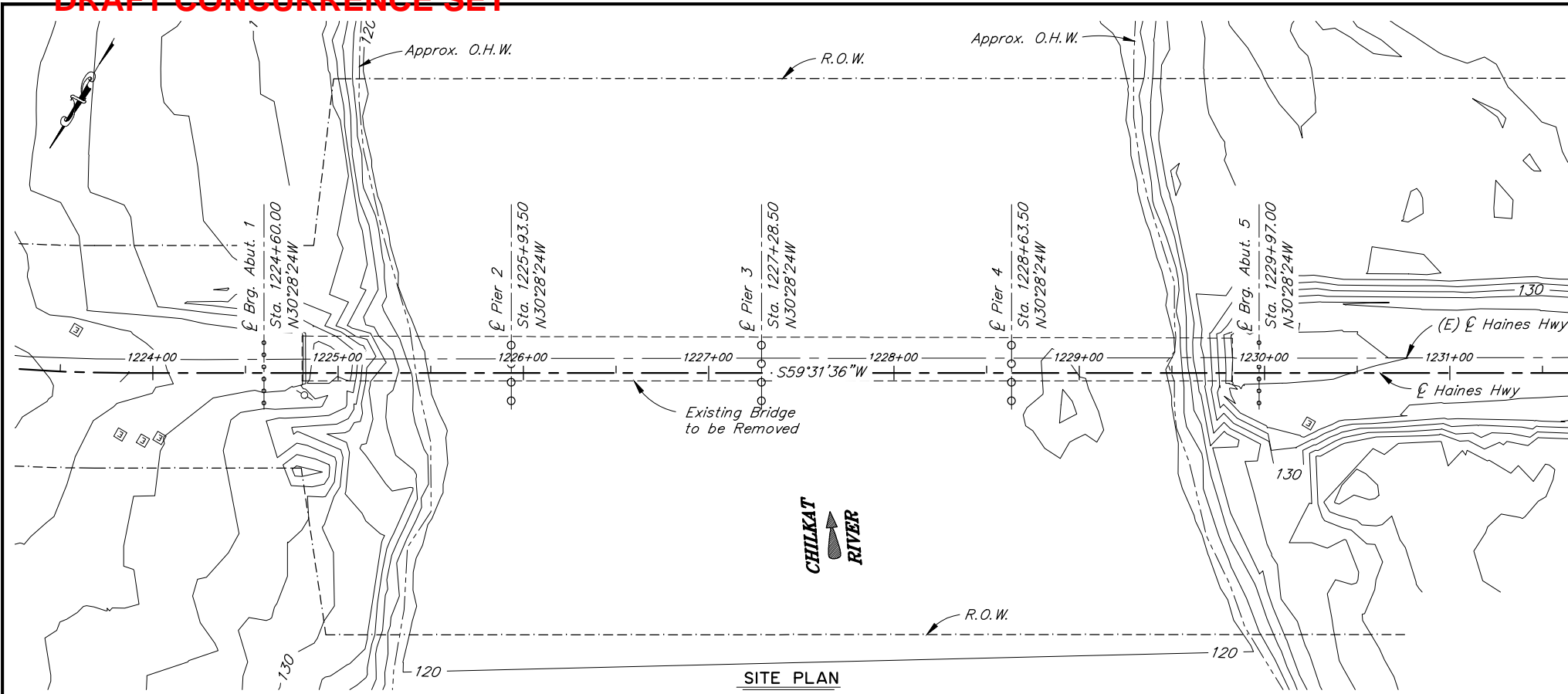
REINFORCEMENT:..... ASTM A706, Grade 60, F_y = 60,000 psi
 ASTM A970 Headed bars, Class HA.
 Space reinforcement evenly unless otherwise noted.

PRESTRESSED CONCRETE:..... See "GIRDERS" Dwg.

CONCRETE:..... Class A Concrete unless otherwise noted, f'_c = 4,000 psi

STRUCTURAL STEEL:..... ASTM A709, Grade 36T3, F_y = 36,000 psi
 Galvanize structural steel in accordance with AASHTO M111 unless noted otherwise.

STRUCTURAL STEEL PILING:..... API 5L X52 PSL2, F_y = 52,000 psi. or
 ASTM A709, GR50T3, F_y = 50,000 psi.
 Pile Tip reinforcing is required.

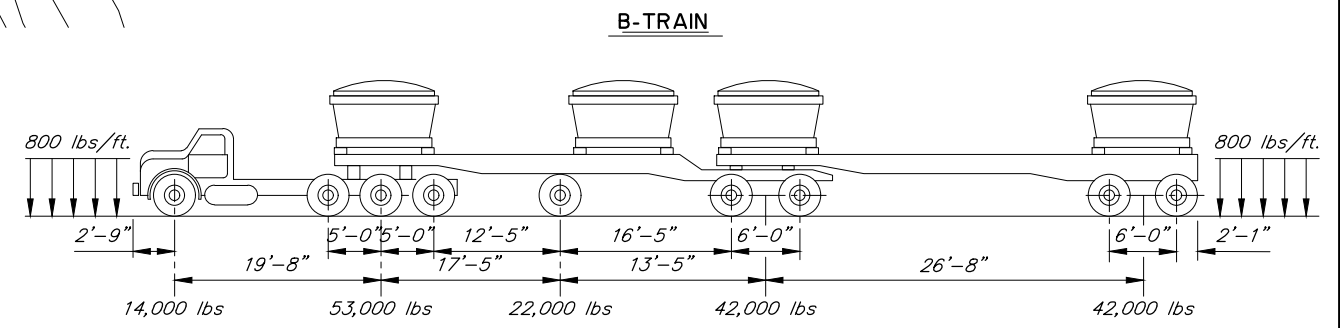


SITE PLAN

PILE DATA TABLE							
LOCATION	PILE TYPE	DRIVING CRITERIA			DESIGN DATA		
		MINIMUM PENETRATION (ft)	ESTIMATED PILE TIP ELEVATION (ft)	DRIVING RESISTANCE (K)	STRENGTH FACTORED LOAD (K)	NOMINAL RESISTANCE (K)	RESISTANCE FACTOR, φ
Abutment 1	2'-0"Øx1/2" Pipe		35	670	670	435	0.65
Pier 2	4'-0"Øx1" Pipe		4	1,610	1,610	1,045	0.65
Pier 3	4'-0"Øx1" Pipe		-4	1,610	1,610	1,045	0.65
Pier 4	4'-0"Øx1" Pipe		-2	1,610	1,610	1,045	0.65
Abutment 5	2'-0"Øx1/2" Pipe		19	670	670	435	0.65

ESTIMATE OF QUANTITIES						
ITEM NO.	ITEM	PAY UNIT	ESTIMATING UNIT	SUBST.	SUPERST.	TOTAL QUANTITY
202.0023.0000	Removal of Bridge No. 742	LS	SF	All Req'd	All Req'd	All Req'd
203.0003.0000	Unclassified Excavation	CY	CY			
205.0006.0000	Structural Fill	CY	CY	1,192	---	1,192
501.0001.0000	Class A Concrete	LS	CY	556	264.7	820.7
501.0007.0000	Precast Concrete Member, 133'-6" Decked Bulb-Tee	EA	EA	---	24	24
503.0001.0000	Reinforcing Steel	LS	LBS	103,650	---	103,650
503.0002.0000	Epoxy-Coated Reinforcing Steel	LS	LBS	19,470	16,610	36,080
505.0005.0000	Furnish Structural Steel Pipe Piles, 2'-0" Dia. x 1/2"	LF	LF	1,283	---	1,283
505.0005.0000	Furnish Structural Steel Pipe Piles, 4'-0" Dia. x 1"	LF	LF	1,614	---	1,614
505.0006.0000	Drive Structural Steel Pipe Piles, 2'-0" Dia. x 1/2"	EA	EA	12	---	12
505.0006.0000	Drive Structural Steel Pipe Piles, 4'-0" Dia. x 1"	EA	EA	12	---	12
507.0001.0003	Steel Bridge Railing, 3-Tube	LF	LF	---	1,162	1,162
508.0001.0000	Waterproofing Membrane, Spray-Applied	LS	SF	---	20,916	20,916
520.0001.0000	Temporary Crossings	LS	SF	---	All Req'd	All Req'd
606.0016.0000	Transition Rail	EA	EA	---	4	4
611.0001.0001	Riprap, Class I	CY	CY			
611.0001.0003	Riprap, Class III	CY	CY			
631.0002.0001	Geotextile, Erosion Control, Class 1	SY	SY			

Item numbers are for reference only. Quantities shown are not necessarily the pay quantities nor the total quantity of the particular item.



ABBREVIATIONS:

- ℄ = centerline
- ℄ = plate
- & = and
- @ = at
- ∅ = diameter
- ± = approximate
- Abut. = abutment
- Approx. = approximate
- b.f. = back/dirt face
- bot. = bottom
- Br. = bridge
- btwn. = between
- Brg. = bearings
- C.G. = center of gravity
- C.I.P. = cast in place
- CJP = complete joint penetration
- Clr. = clear, clearance
- CMP = corrugated metal pipe
- CY = cubic yard
- Dia. = diameter
- D.H.W. = design high water
- Dwg. = drawing
- E = expansion
- (E) = existing
- EA = each
- Elev. = elevation
- e.a. = each face
- e.w. = each way
- Ext. = exterior
- F = fixed
- f.f. = front/air face
- f'_c = specified concrete compressive strength
- f'_{ci} = specified concrete compressive strength at release
- Ft. = feet
- F_y = yield stress
- Galv. = galvanize
- H.A. = high strength
- Hwy. = highway
- ID = internal diameter
- in = inch
- Int. = interior
- Jt. = joint
- K = kips
- ksf = 1000 pounds per square foot
- ksi = 1000 pounds per square inch
- LBS or lb = pounds
- LF = linear foot
- LS = lump sum
- LT. = left
- max. = maximum
- min. = minimum
- MSE = mechanically stabilized earth
- n.f. = near face
- No. = number
- o.c. = on center
- O.H.W. = ordinary high water
- pcf = pounds per cubic foot
- psf = pounds per square foot
- psi = pounds per square inch
- R = radius
- R.O.W. = right of way
- RT. = right
- Rd. = road
- spcs. = space, spaces
- Sta. = station
- SF = square feet
- SY = square yard
- Std. = standard
- subst. = substructure
- superst. = superstructure
- Symm. = symmetric
- Typ. = typical
- UT = ultrasonic testing
- V.P.C. = point of vertical curve
- V.P.I. = point of vertical intersection
- V.P.T. = point of vertical tangent
- w/ = with

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DESIGNED BY: Jared Jones	CHECKED: Jesse Escamilla III	FOUNDATIONS REVIEWED BY: Dave Hemstreet
DRAWN BY: Sam Sollie	CHECKED: Jared Jones	
QUANTITIES BY: Jared Jones	CHECKED: Jesse Escamilla III	

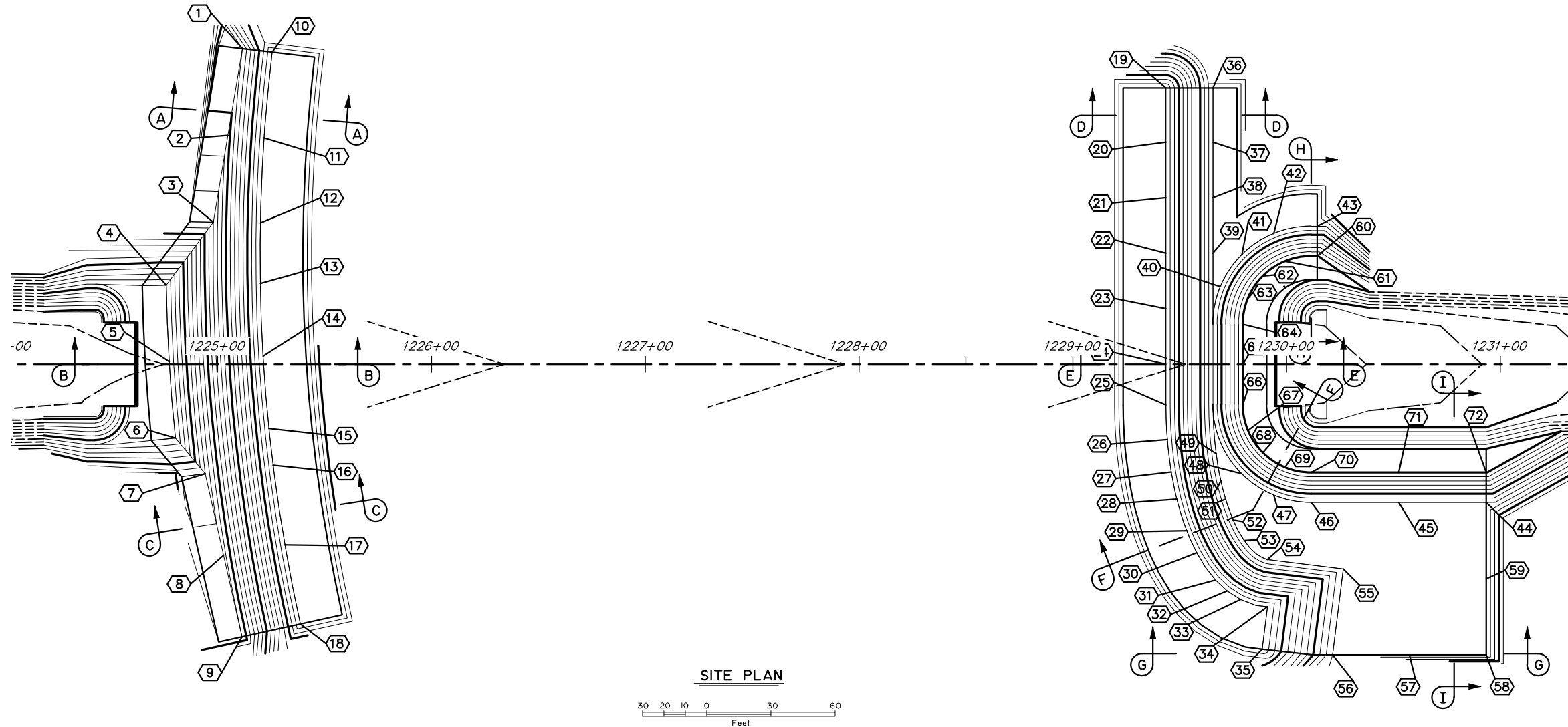
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION
 3132 Channel Drive
 Juneau, Alaska 99801
 907-465-2975

CHILKAT RIVER BRIDGE
 HAINES HIGHWAY
SITE PLAN

BRIDGE NO. 742
 DWG. NO. 2

PRELIMINARY PLAN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N3	N25



POINT	STATION	OFFSET	ELEVATION	POINT	STATION	OFFSET	ELEVATION	POINT	STATION	OFFSET	ELEVATION	POINT	STATION	OFFSET	ELEVATION
1				19				37				55			
2				20				38				56			
3				21				39				57			
4				22				40				58			
5				23				41				59			
6				24				42				60			
7				25				43				61			
8				26				44				62			
9				27				45				63			
10				28				46				64			
11				29				47				65			
12				30				48				66			
13				31				49				67			
14				32				50				68			
15				33				51				69			
16				34				52				70			
17				35				53				71			
18				36				54				72			

	50	100	500
Flood Frequency (Yr.)	50	100	500
Exceedance Probability (%)	2	1	0.2
Discharge (cfs)	33,400	36,600	43,900
Water Surface Elevation (ft)	133.1	133.2	134.6
Anticipated Add'l Backwater (ft)		0	
Contraction Scour (ft)		4.3	5.7
Pier Scour (ft)		NA	NA
Abutment Scour (ft)		12.1	12.6
Long-Term Degradation (ft)		0.3	0.3

Drainage Area: XX square miles
 The hydraulic capacity is roughly XX cfs in an ice-free channel condition.

DESIGNED BY: Michael Knapp	CHECKED:
DRAWN BY: Sam Sollie	CHECKED: Michael Knapp
QUANTITIES BY: Michael Knapp	CHECKED:

PRELIMINARY PLAN

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION
 3132 Channel Drive
 Juneau, Alaska 99801
 907-465-2975

CHILKAT RIVER BRIDGE
 HAINES HIGHWAY
RIPRAP LAYOUT

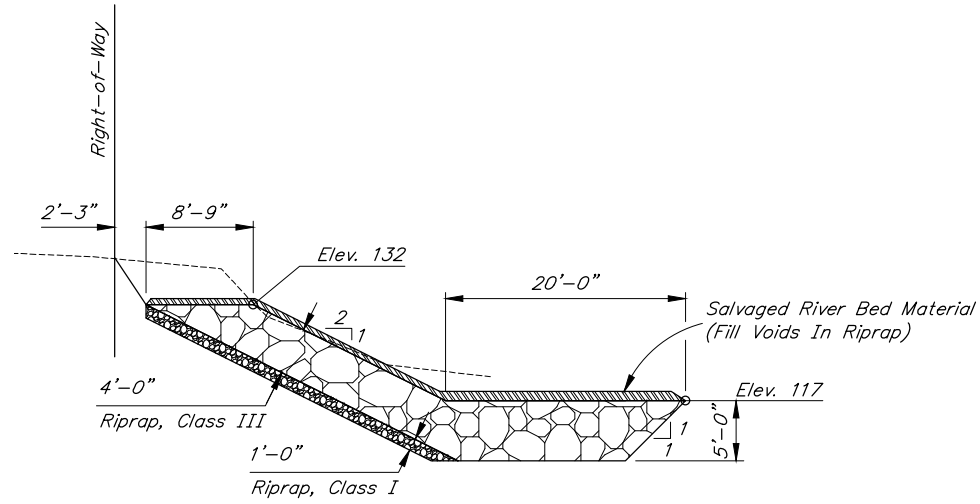


BRIDGE NO. 742
 DWG. NO. 3

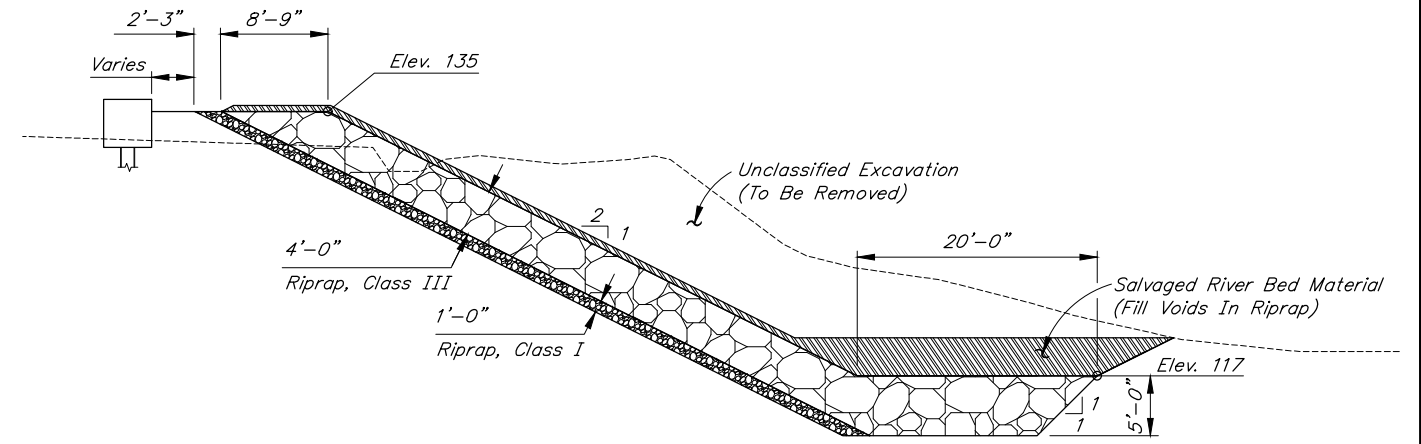
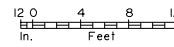
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DRAFT CONCURRENCE SET

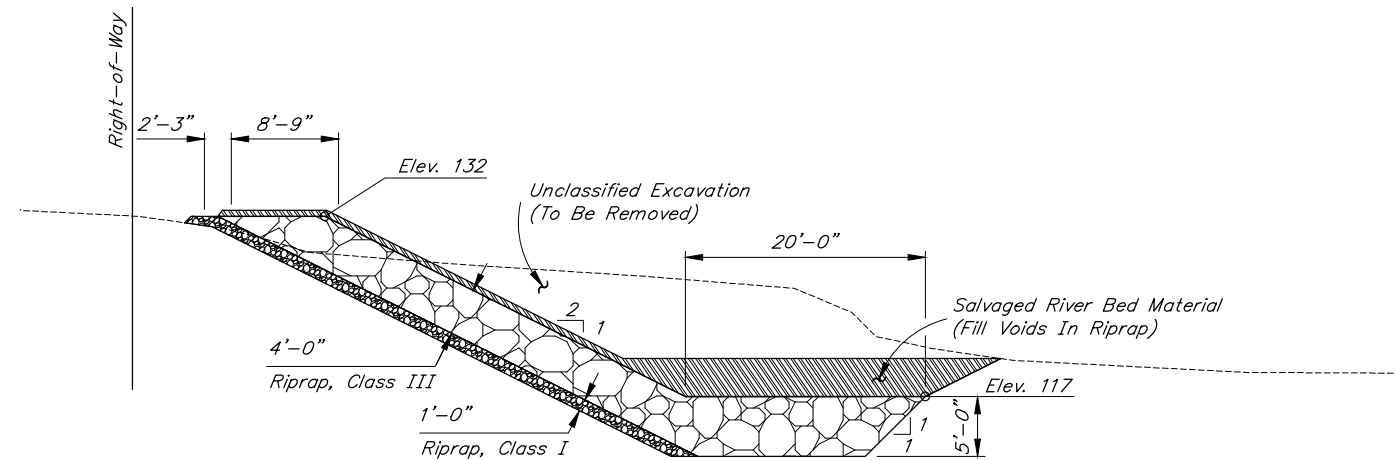
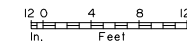
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N4	N25



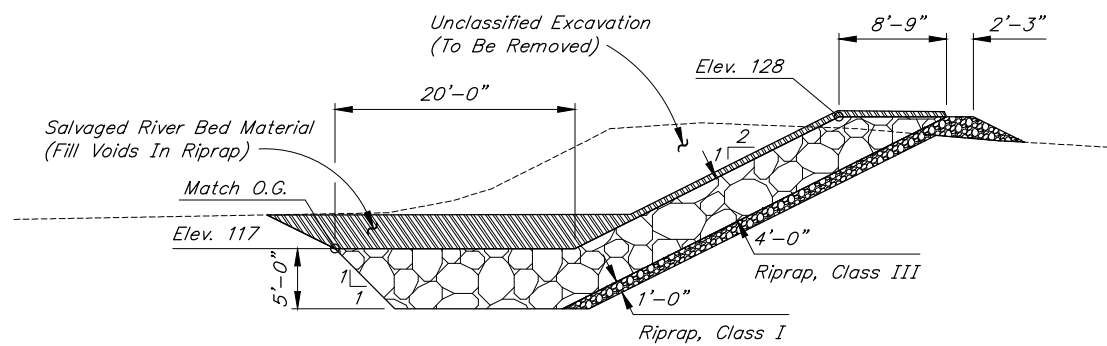
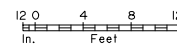
SECTION A-A



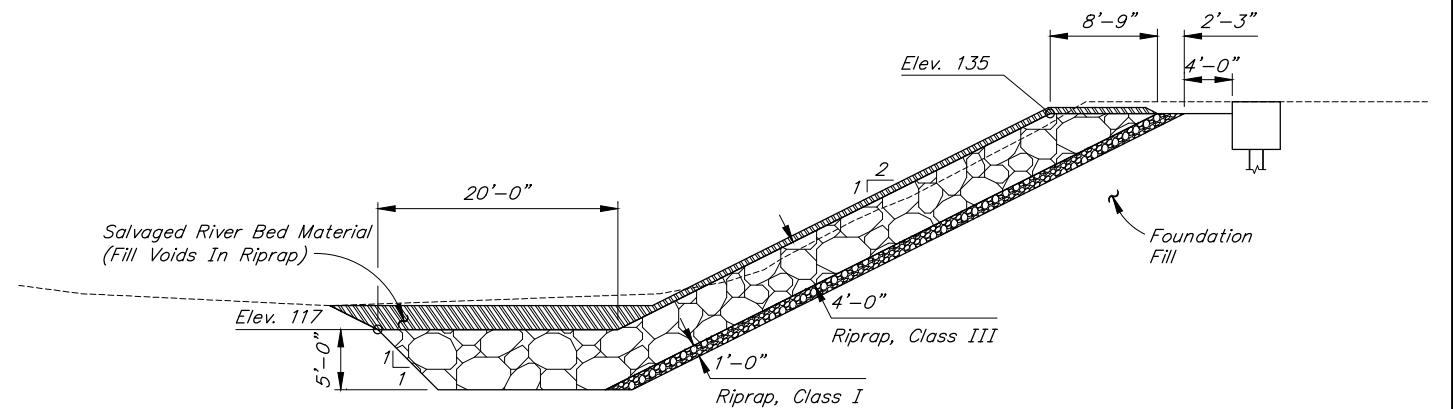
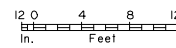
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E



DESIGNED BY: Michael Knapp	CHECKED:
DRAWN BY: Sam Sollie	CHECKED: Michael Knapp
QUANTITIES BY: Michael Knapp	CHECKED:

PRELIMINARY PLAN

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION
 3132 Channel Drive
 Juneau, Alaska 99801
 907-465-2975

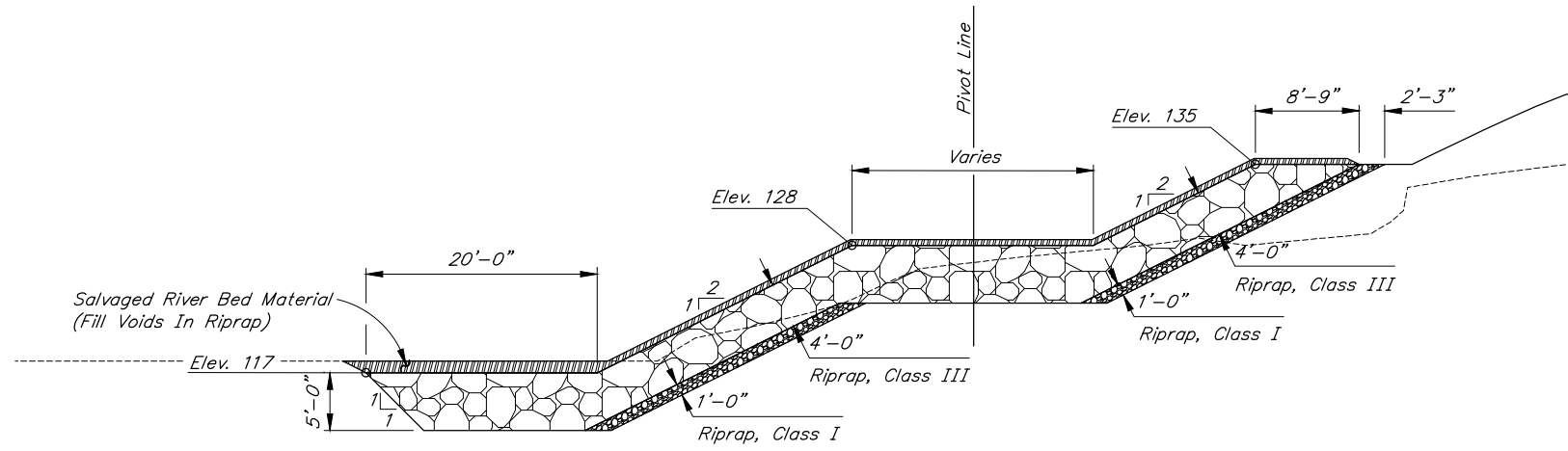
CHILKAT RIVER BRIDGE
 HAINES HIGHWAY
RIPRAP SECTIONS 1



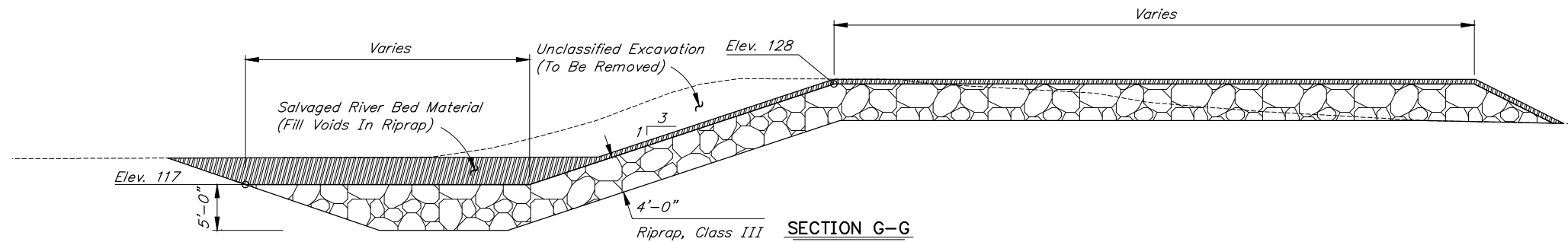
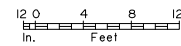
BRIDGE NO. 742
 DWG. NO. 4

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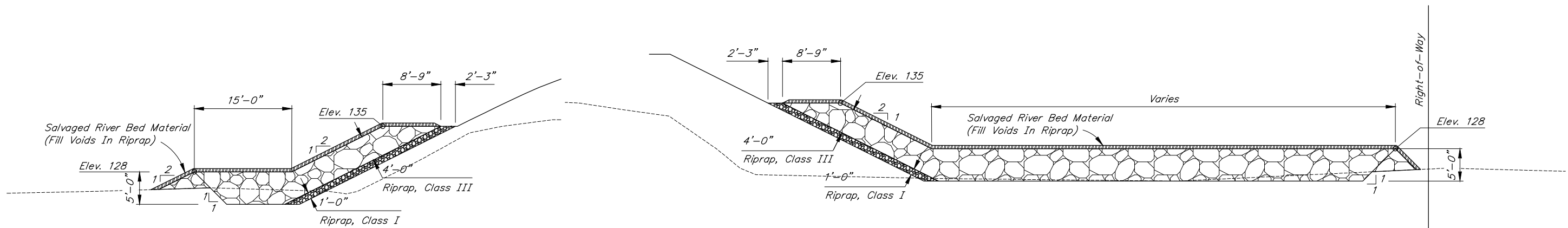
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N5	N25



SECTION F-F



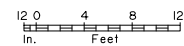
SECTION G-G



SECTION H-H



SECTION I-I



DESIGNED BY: Michael Knapp	CHECKED:
DRAWN BY: Sam Sollie	CHECKED: Michael Knapp
QUANTITIES BY: Michael Knapp	CHECKED:

PRELIMINARY PLAN

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION
 3132 Channel Drive
 Juneau, Alaska 99801
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CHILKAT RIVER BRIDGE
 HAINES HIGHWAY
RIPRAP SECTIONS 2



BRIDGE NO. 742
 DWG. NO. 5

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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N6	N25

REINFORCING STEEL - ABUTMENT I

MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
A401	S	4	6	342'-5"	SPIRAL	
A402		4	130	13'-5"	STIRRUP	
A403		4	30	6'-0"	HOOP	
A404		4	60	4'-8"	BENT	
A501	E	5	44	18'-1"	STIRRUP	
A601		6	10	39'-0"	---	
A602	E,M	6	12	35'-6"	---	
A603	E,M	6	7	39'-0"	---	
A604	E,M	6	5	4'-1"	---	
A701	E	7	8	3'-0"	BENT	
A801		8	48		---	
A1001	H,M	10	14	39'-0"	HEADED	

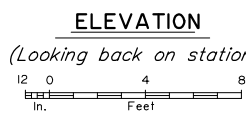
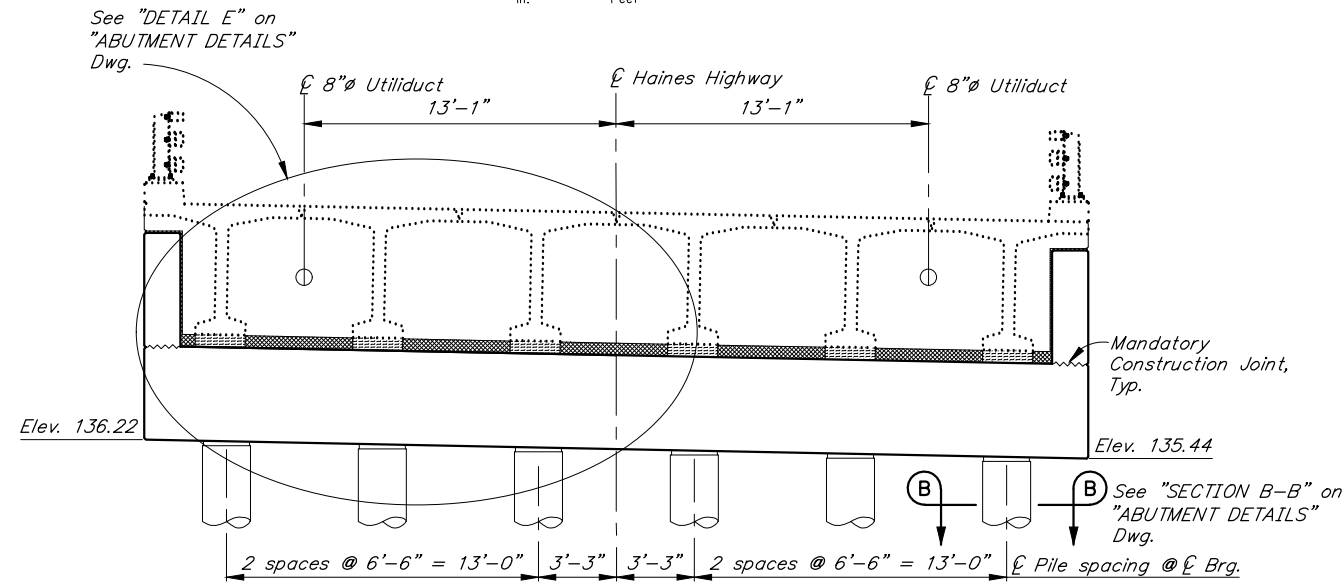
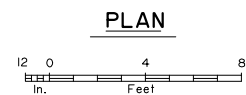
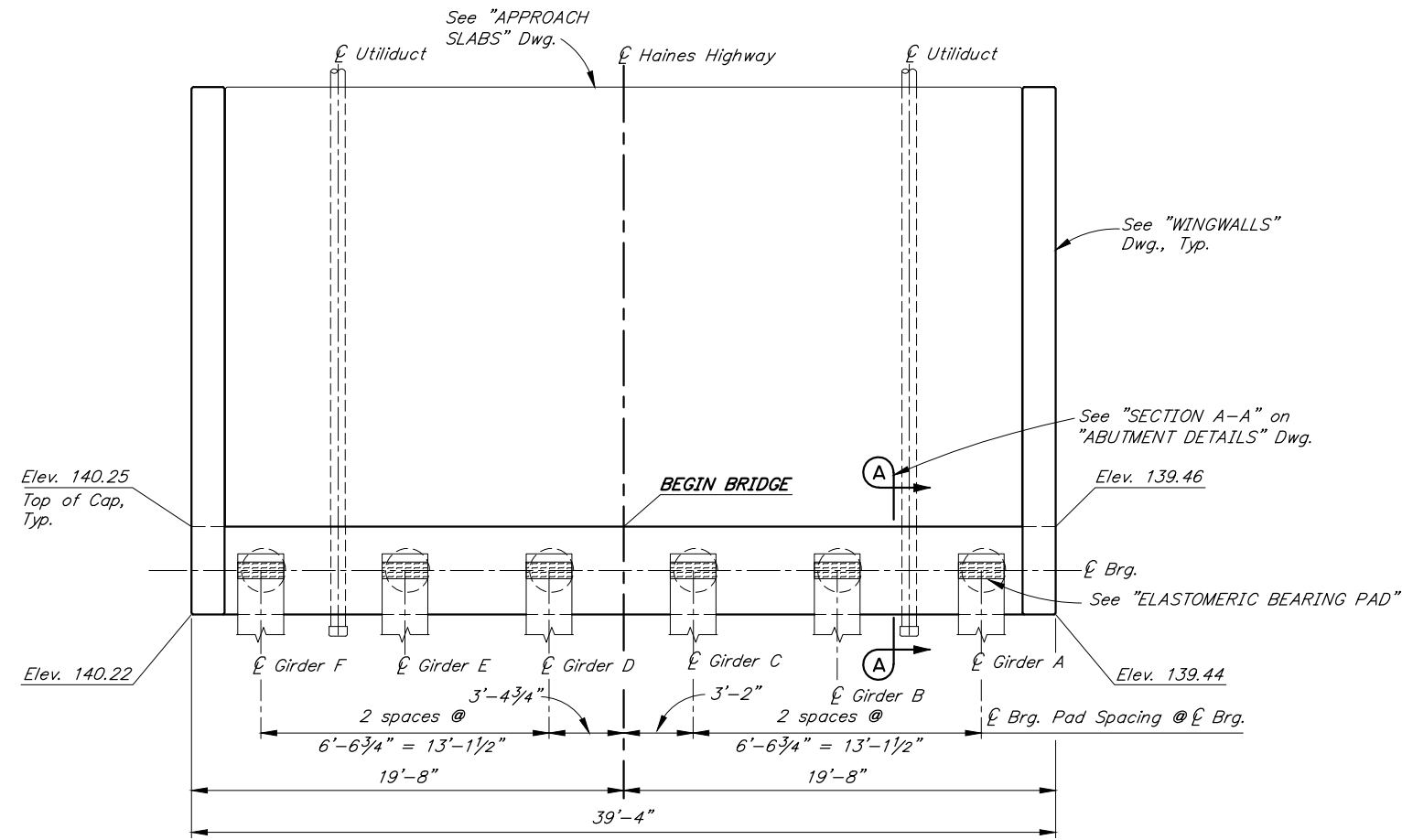
E - Epoxy-Coated
H - Headed reinforcing steel
M - Field adjust to match cross slope
S - Length does not include splices

ELASTOMERIC BEARING PAD

Grade 5
 Dead Load = 103 k
 Live Load = 165 k
 Shear Modulus = 115 psi

PLAN
 1'-0" x 2'-1" dimensions, 1'-0 1/2" girder spacing, 1/4" cover.

ELEVATION
 6" height, 1/4" cover, 8-10 Gage Steel Laminations.



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DESIGNED BY:	Jared Jones	CHECKED:	Jesse Escamilla III
DRAWN BY:	Sara Solie	CHECKED:	Jared Jones
QUANTITIES BY:	Jared Jones	CHECKED:	Jesse Escamilla III

PRELIMINARY PLAN

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION
 3132 Channel Drive
 Juneau, Alaska 99801
 907-465-2975

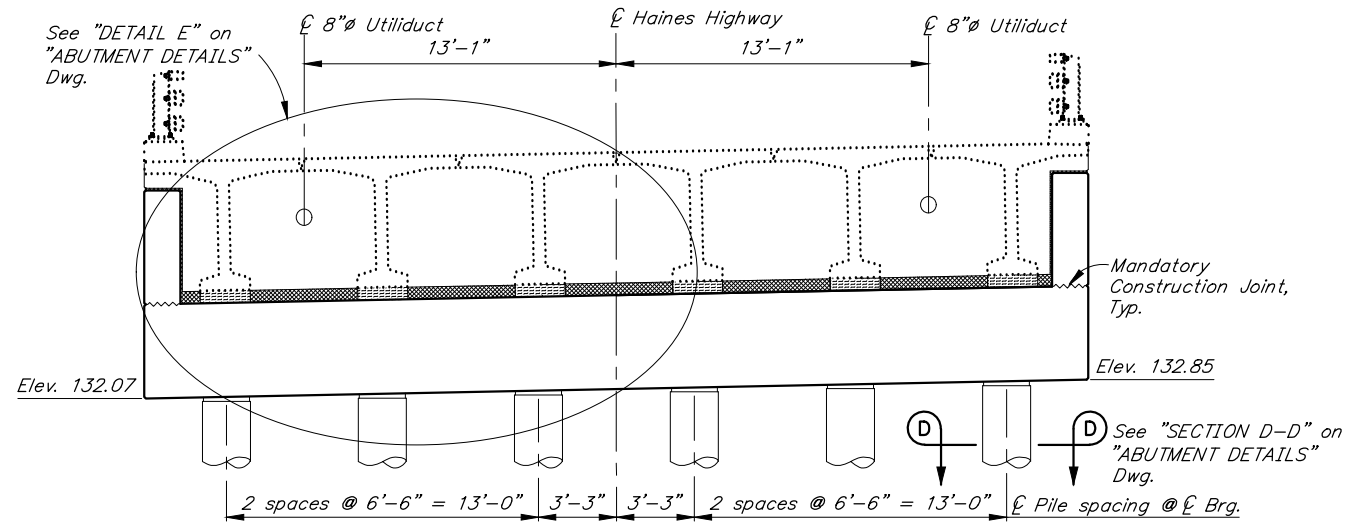
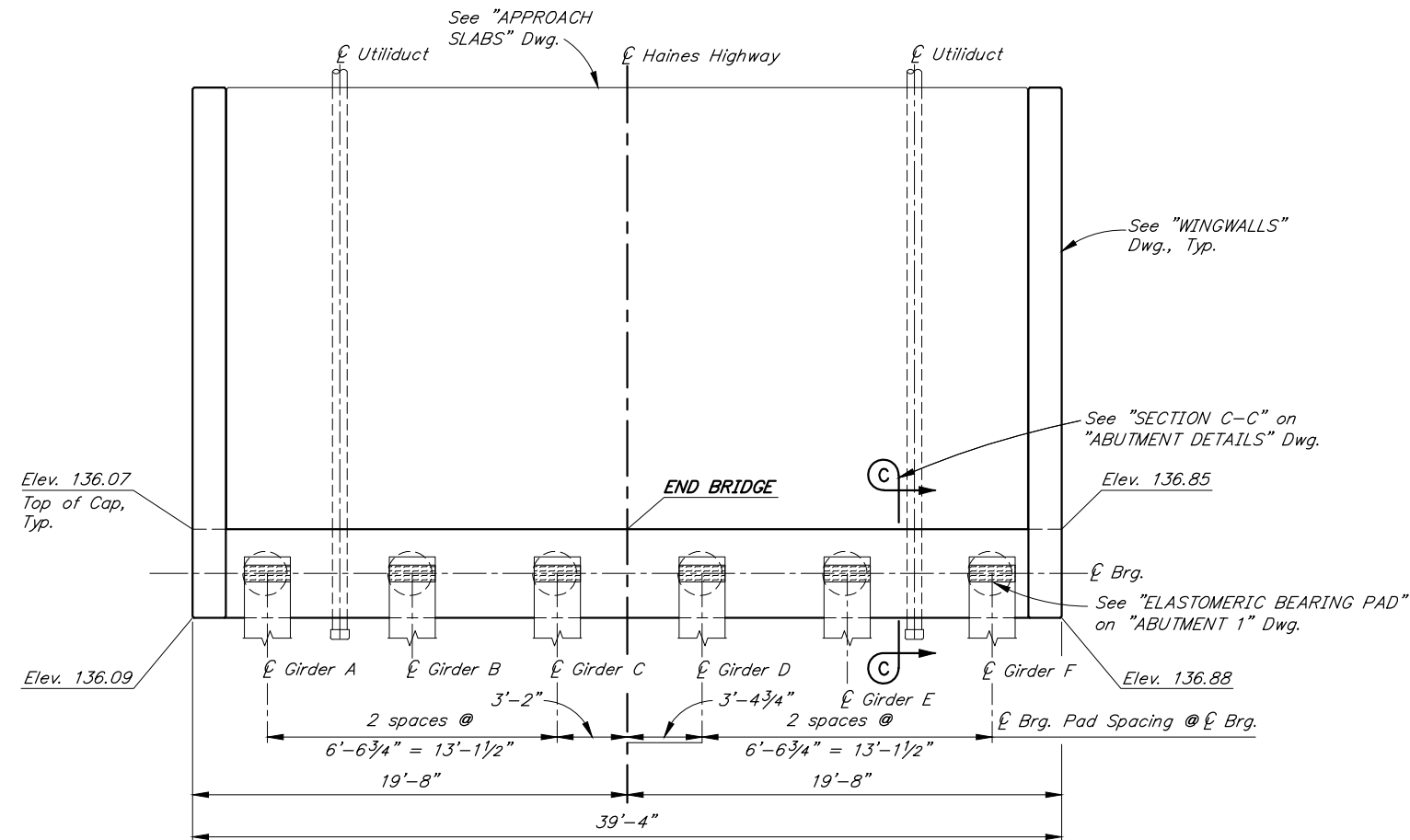
CHILKAT RIVER BRIDGE
 HAINES HIGHWAY
ABUTMENT 1

BRIDGE NO. 742
 DWG. NO. 6

REINFORCING STEEL - ABUTMENT 5

MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
A401	S	4	6	342'-5"	SPIRAL	
A402		4	130	13'-5"	STIRRUP	
A403		4	30	6'-0"	HOOP	
A404		4	60	4'-8"	BENT	
A501	E	5	44	18'-1"	STIRRUP	
A601		6	10	39'-0"	---	
A602	E,M	6	12	35'-6"	---	
A603	E,M	6	7	39'-0"	---	
A604	E,M	6	5	4'-1"	---	
A701	E	7	8	3'-0"	BENT	
A801		8	48		---	
A1001	H,M	10	14	39'-0"	HEADED	

E - Epoxy-Coated
H - Headed reinforcing steel
M - Field adjust to match cross slope
S - Length does not include splices




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DESIGNED BY:	Jared Jones	CHECKED:	Jesse Escamilla III
DRAWN BY:	Sam Sollie	CHECKED:	Jared Jones
QUANTITIES BY:	Jared Jones	CHECKED:	Jesse Escamilla III

PRELIMINARY PLAN

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION
 3132 Channel Drive
 Juneau, Alaska 99801
 907-465-2975

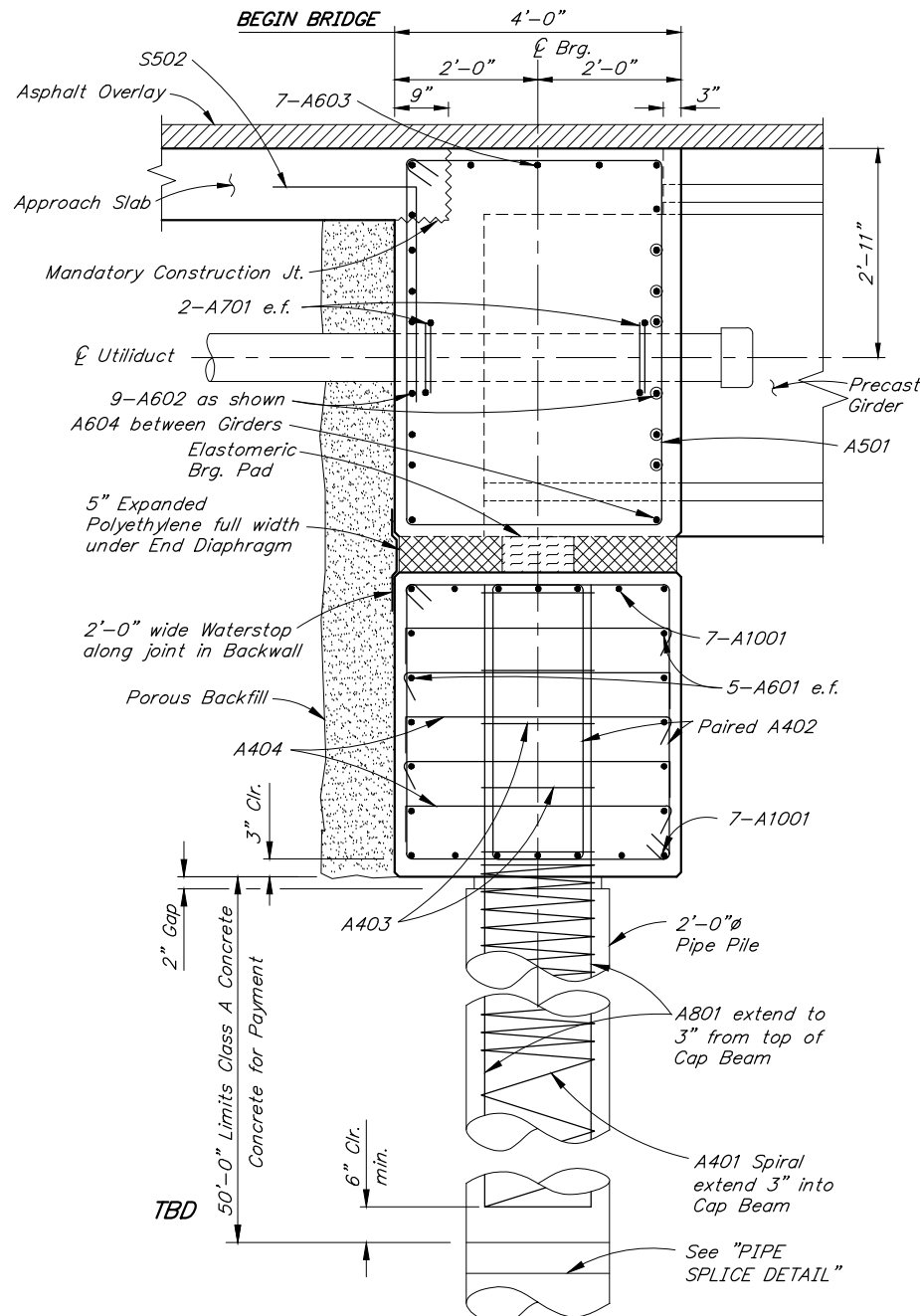
CHILKAT RIVER BRIDGE
 HAINES HIGHWAY
ABUTMENT 5



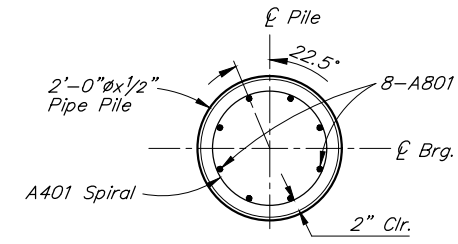
BRIDGE NO. 742
 DWG. NO. 7

DRAFT CONCURRENCE SET

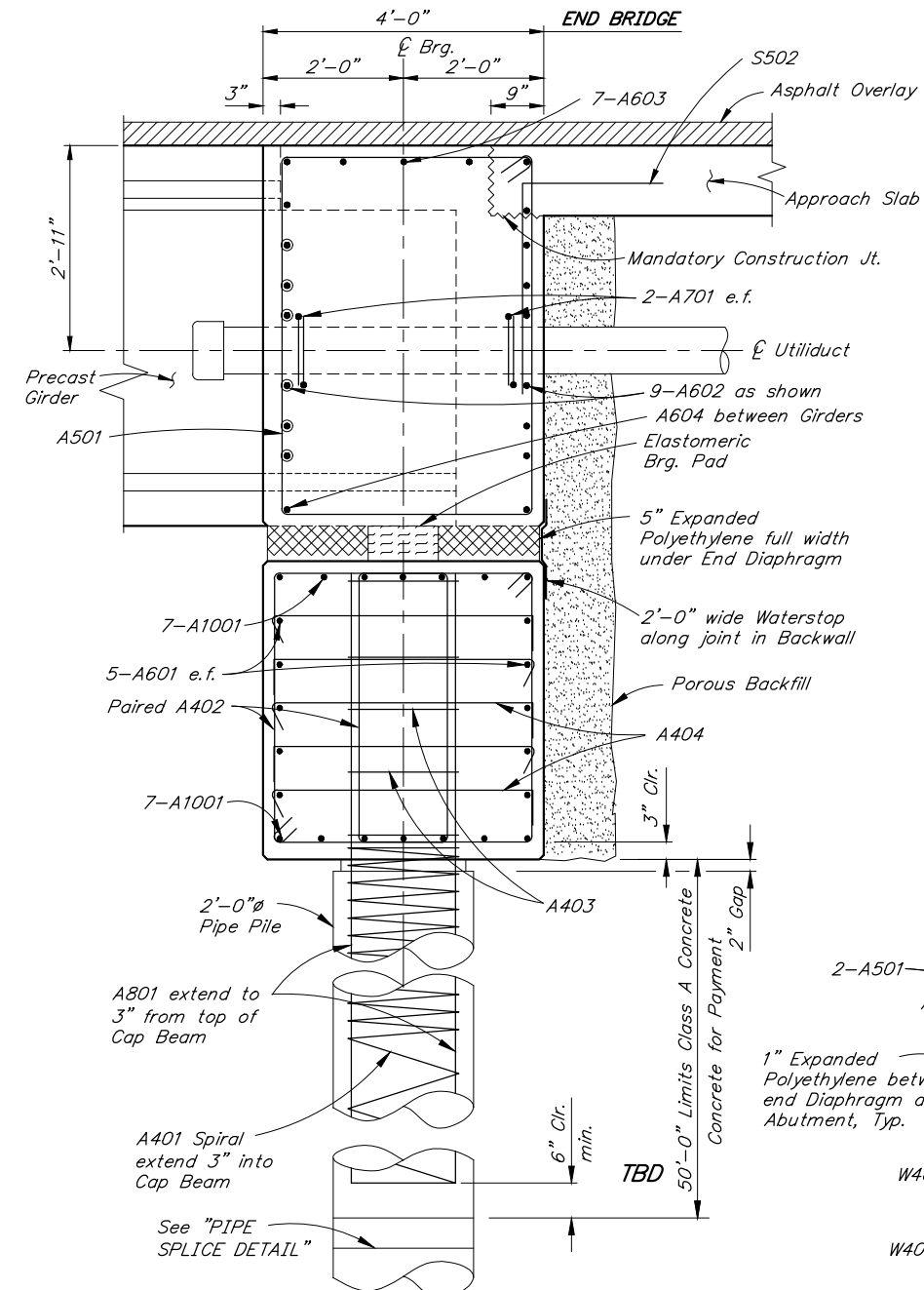
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N8	N25



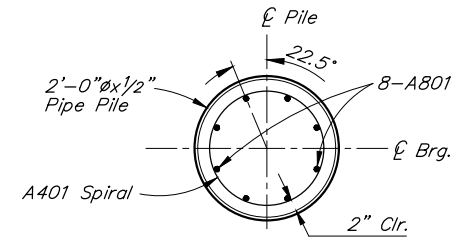
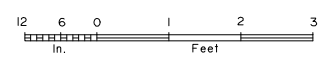
SECTION A-A



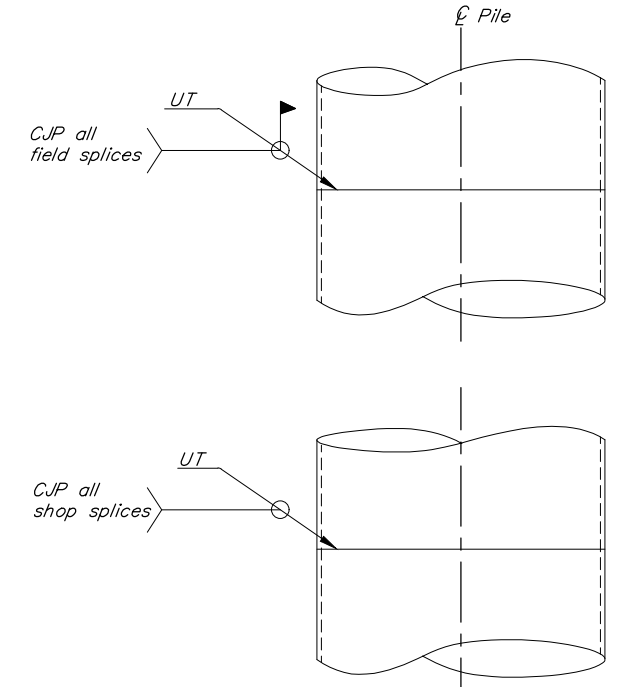
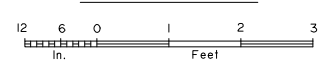
SECTION B-B



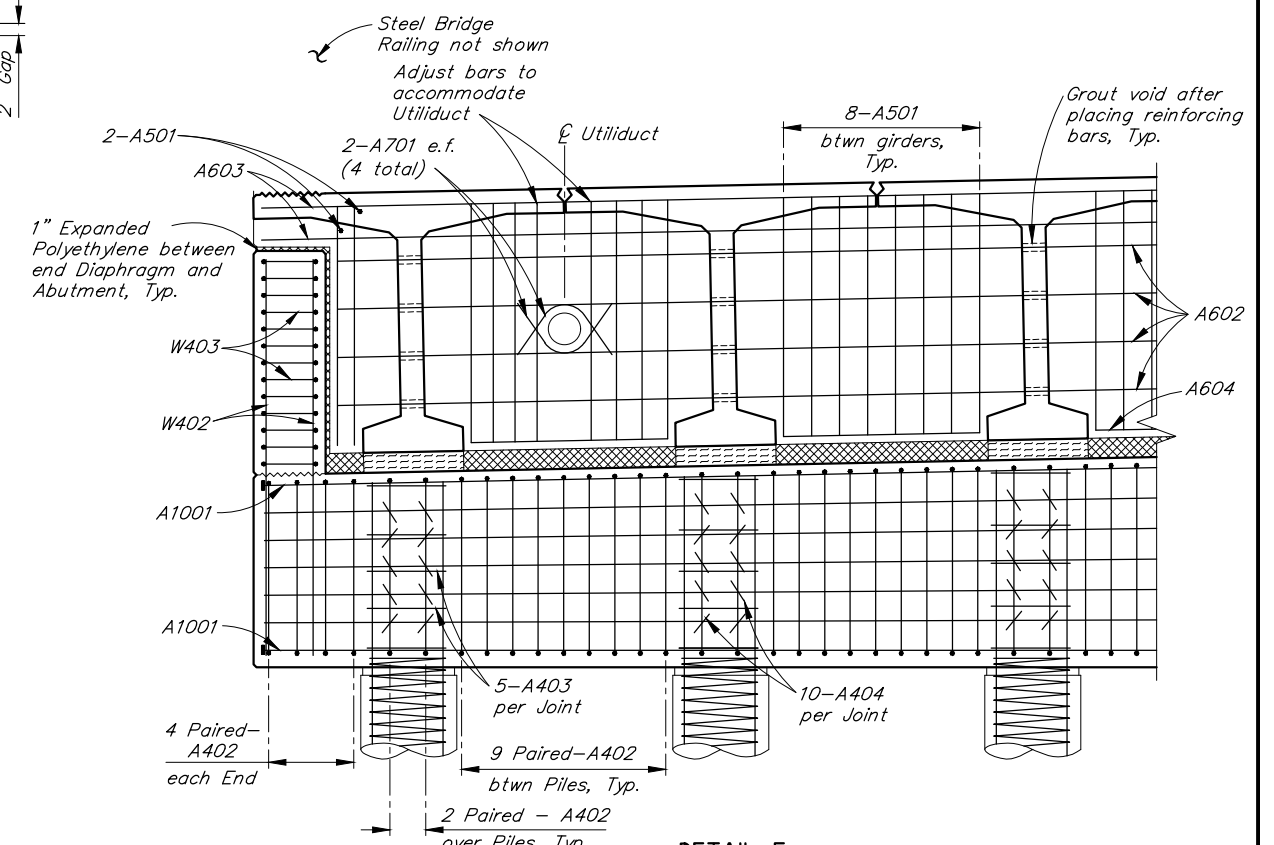
SECTION C-C



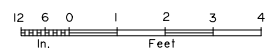
SECTION D-D



PIPE SPLICE DETAIL
No Scale



DETAIL E



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DESIGNED BY:	Jared Jones	CHECKED:	Jesse Escamilla III
DRAWN BY:	Sam Sollie	CHECKED:	Jared Jones
QUANTITIES BY:	Jared Jones	CHECKED:	Jesse Escamilla III

PRELIMINARY PLAN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

CHILKAT RIVER BRIDGE
HAINES HIGHWAY
ABUTMENT DETAILS

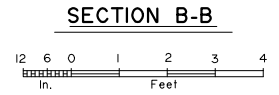
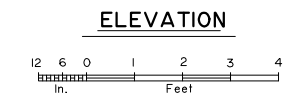
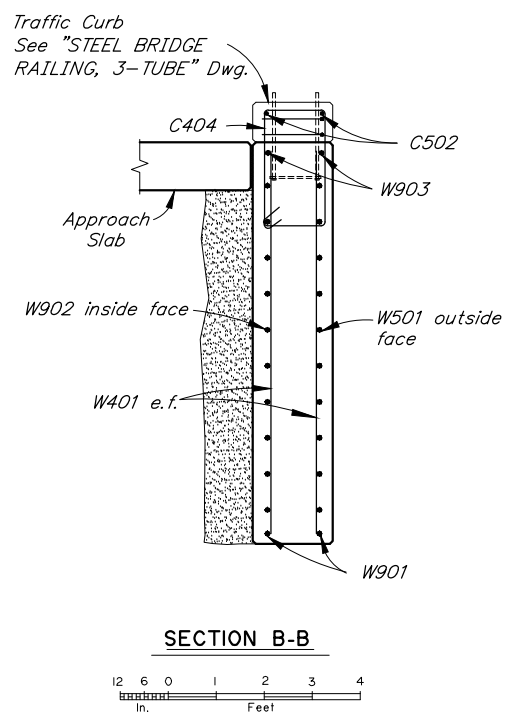
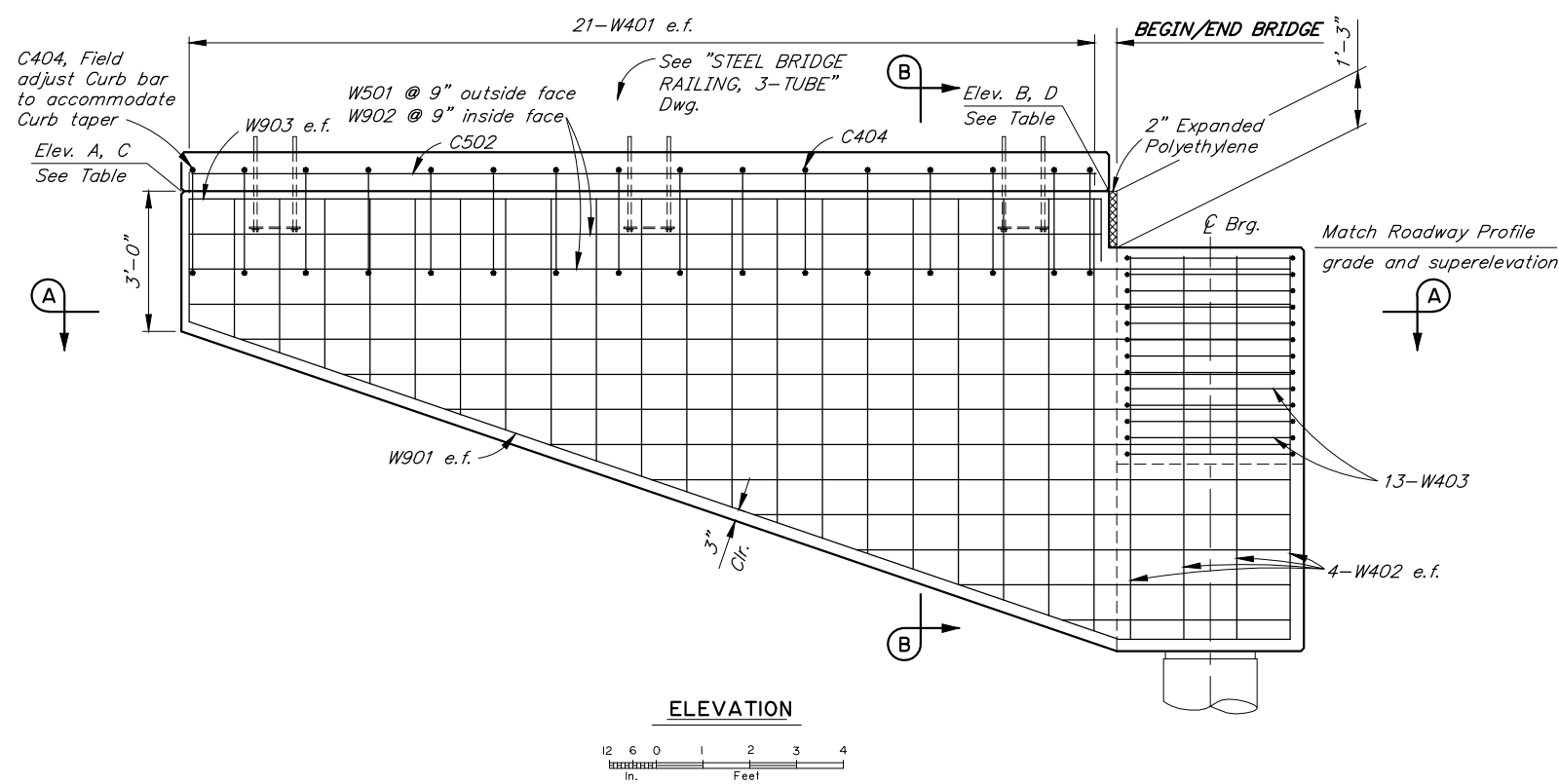


BRIDGE NO. 742
DWG. NO. 8

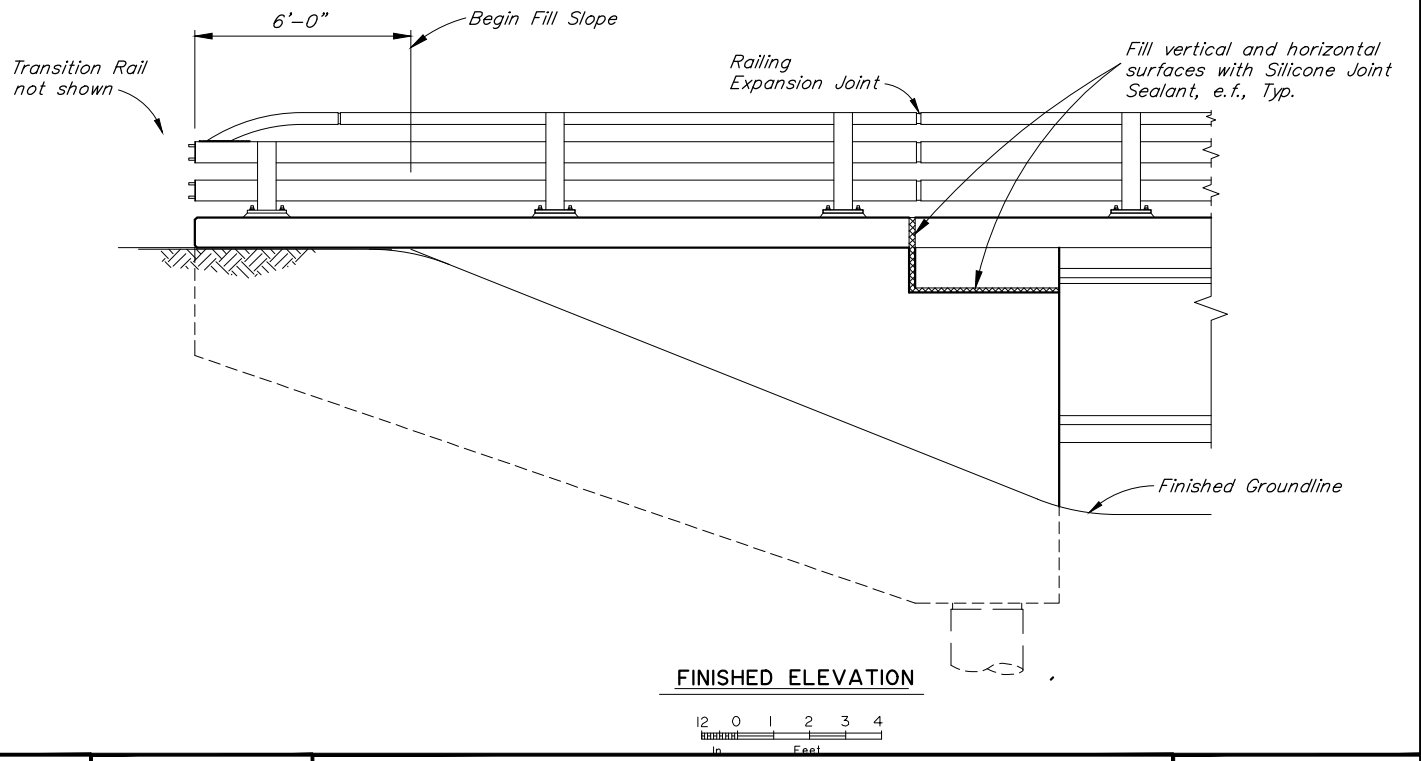
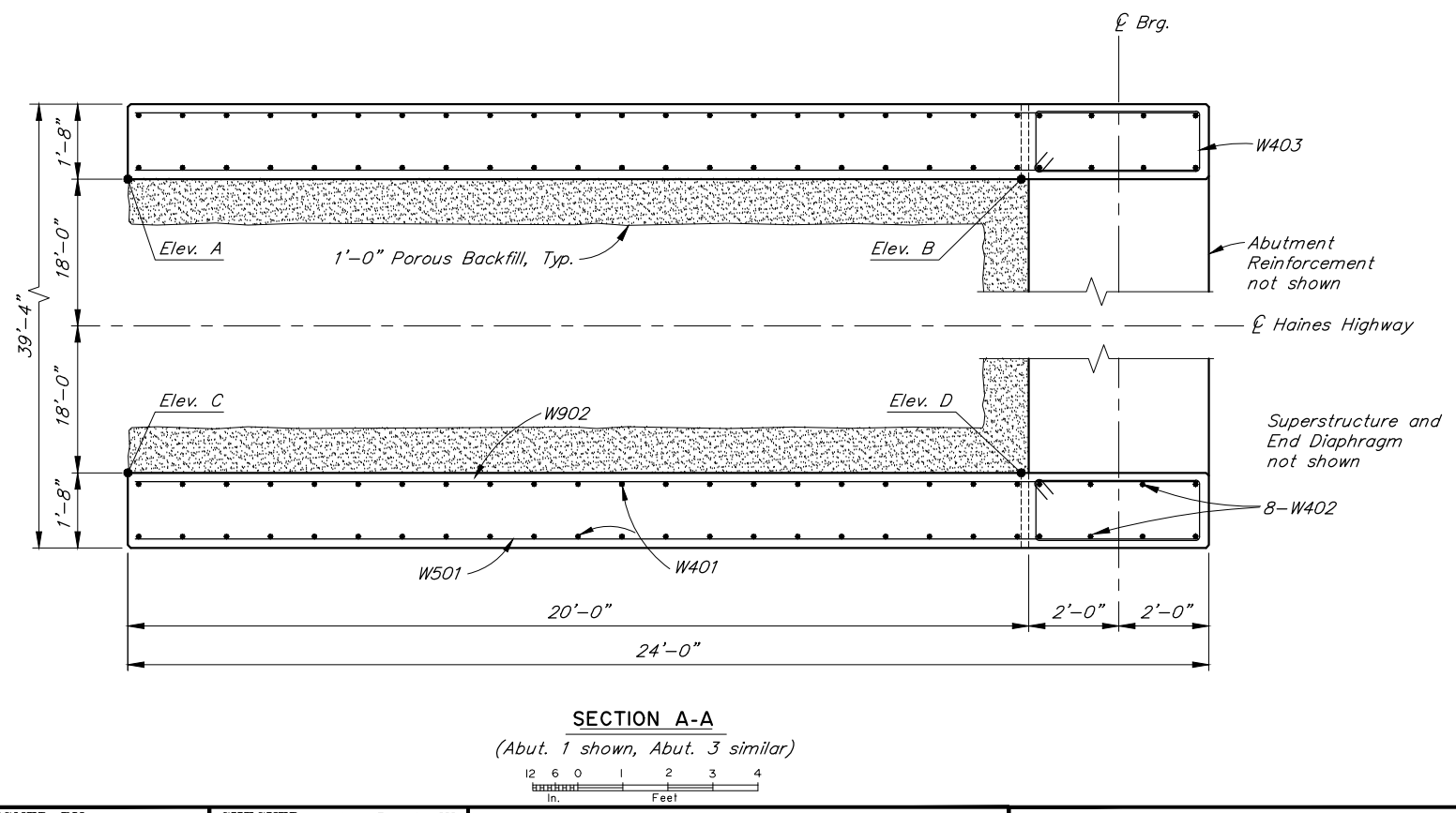
DRAFT CONCURRENCE SET

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N9	N25

REINFORCING STEEL - ONE ABUTMENT						
MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
W401		4	84	VARIABLES	---	
W402		4	16	8'-2"	---	
W403		4	26	10'-5"	STIRRUP	
W501		5	24	VARIABLES	---	
W901		9	4	24'-10"	BENT	
W902		9	24	VARIABLES	---	
W903		9	4	21'-6"	BENT	
C404	E	4	32	7'-9"	STIRRUP	
C502	E	5	4	19'-6"	---	



TOP OF WINGWALL ELEVATION TABLE (FT)				
LOCATION	A DOWNSTREAM	B DOWNSTREAM	C UPSTREAM	D UPSTREAM
ABUTMENT 1	145.54	145.41	146.26	146.13
ABUTMENT 5	141.89	142.01	142.61	142.73



SECTION A-A
(Abut. 1 shown, Abut. 3 similar)

FINISHED ELEVATION


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DESIGNED BY:	Jared Jones	CHECKED:	Jesse Escamilla III
DRAWN BY:	Sam Sollie	CHECKED:	Jared Jones
QUANTITIES BY:	Jared Jones	CHECKED:	Jesse Escamilla III

PRELIMINARY PLAN

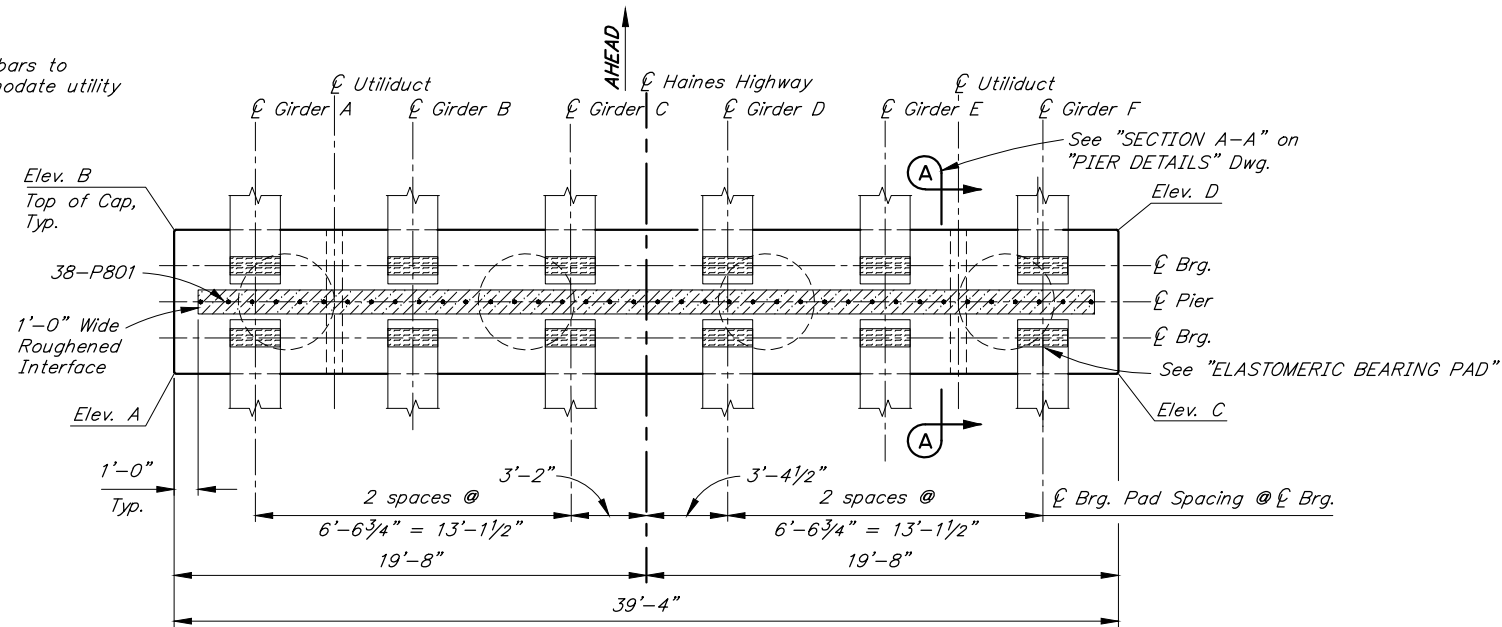
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

CHILKAT RIVER BRIDGE
HAINES HIGHWAY
WINGWALLS

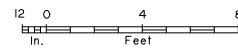

BRIDGE NO. 742
DWG. NO. 9

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N10	N25

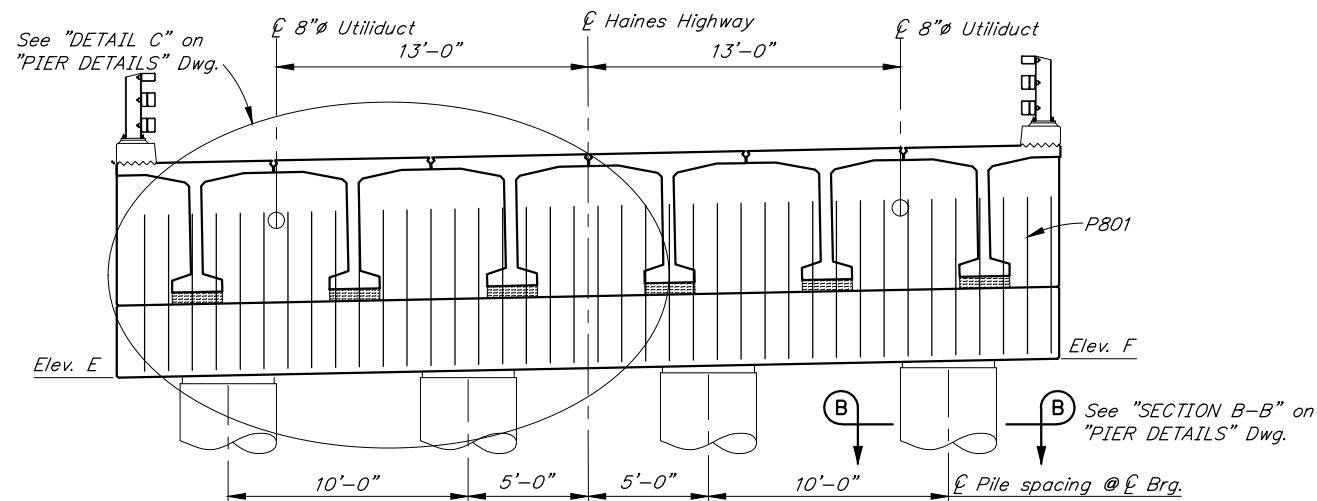
Note:
Adjust bars to
accommodate utility
holes.



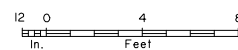
PLAN



LOCATION	A	B	C	D	E	F
PIER 2	138.63	138.59	139.42	139.38	134.59	135.38
PIER 3	137.78	137.74	138.57	138.53	133.74	134.53
PIER 4	136.93	136.90	137.72	137.68	132.90	133.68



ELEVATION



DESIGNED BY:	Jared Jones	CHECKED:	Jesse Escamilla III
DRAWN BY:	Sam Sollie	CHECKED:	Jared Jones
QUANTITIES BY:	Jared Jones	CHECKED:	Jesse Escamilla III

PRELIMINARY PLAN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

CHILKAT RIVER BRIDGE
HAINES HIGHWAY
PIERS



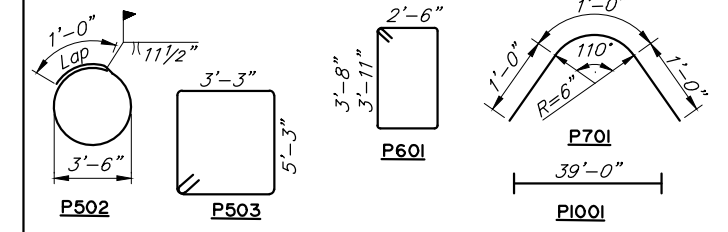
BRIDGE NO. 742
DWG. NO. 10

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N11	N25

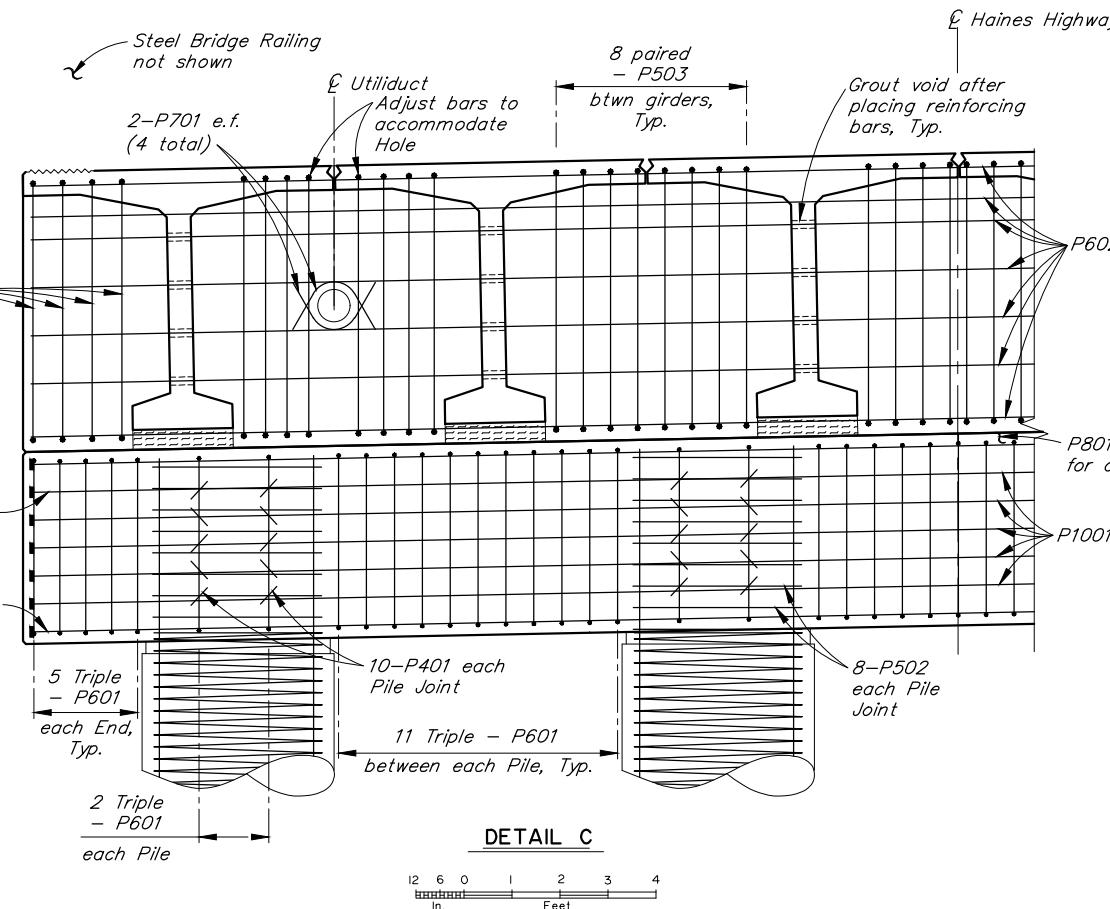
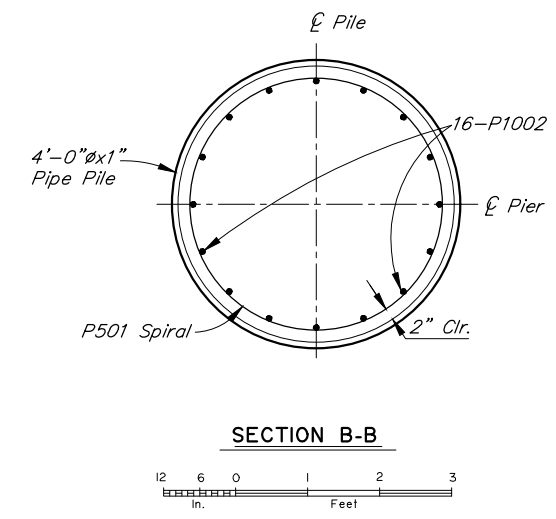
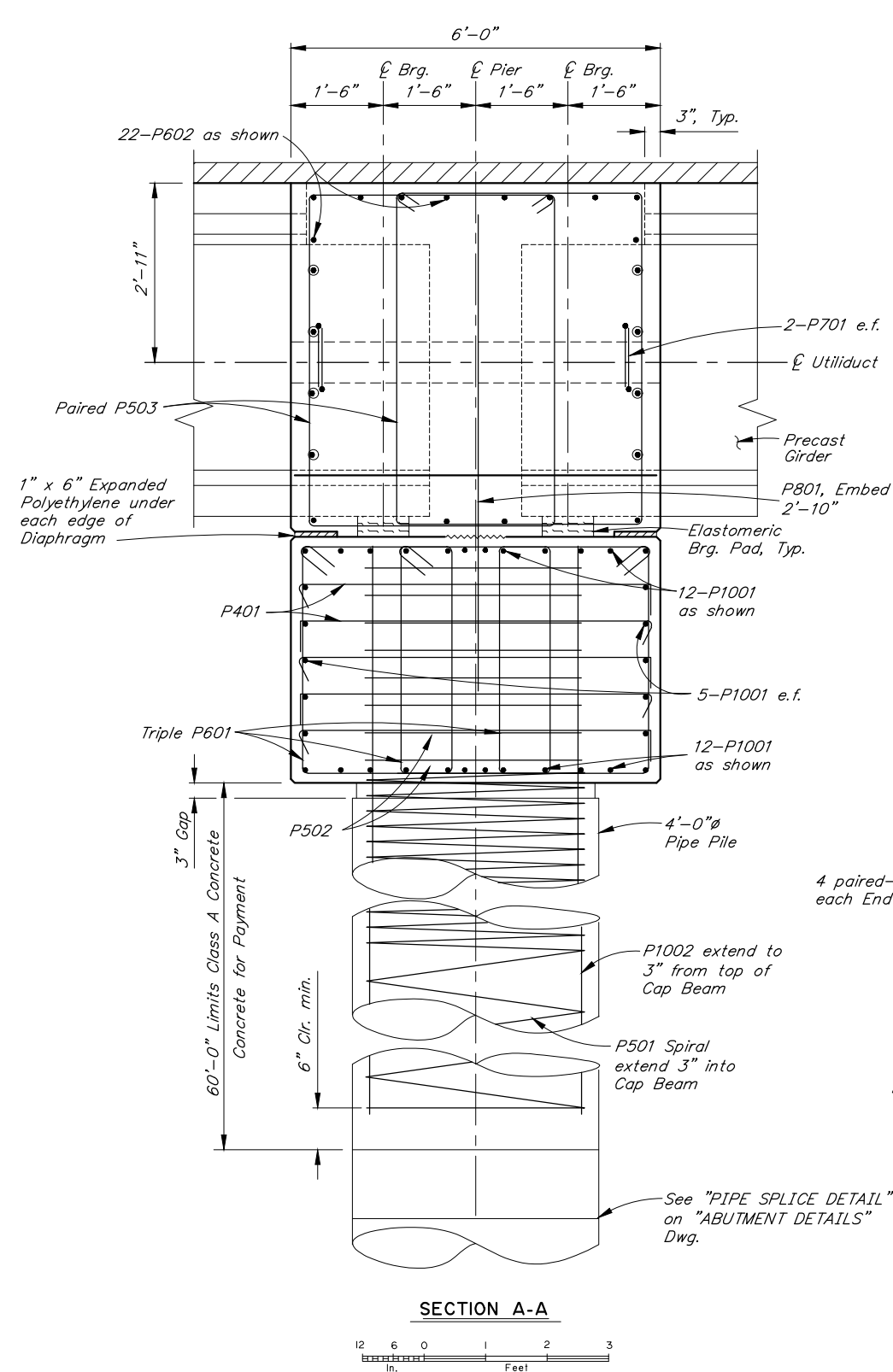
REINFORCING STEEL - ONE PIER

MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
P401		4	40	6'-8"	BENT	
P501	S	5	4		SPIRAL	
P502	S	5	32	12'-0"	HOOP	
P503	E	5	96	17'-11"	STIRRUP	
P601		6	153	13'-8"	STIRRUP	
P602	E	6	22	39'-0"	---	
P701	E	7	8	3'-0"	BENT	
P801		8	38	7'-0"	---	
P1001	H,M	10	34	39'-0"	HEADED	
P1002		10	64	63'-4"	---	

1/2 Turns Top & Bottom



E - Epoxy-Coated
H - Headed reinforcing steel
M - Field adjust to match crown
S - Length does not include splices




C:\Users\uliperez\AppData\Local\Temp\AcPublish_9292\742-1-11 Mon, Nov/13/23 09:42am

DESIGNED BY:	Jared Jones	CHECKED:	Jesse Escamilla III
DRAWN BY:	Sam Sollie	CHECKED:	Jared Jones
QUANTITIES BY:	Jared Jones	CHECKED:	Jesse Escamilla III

PRELIMINARY PLAN

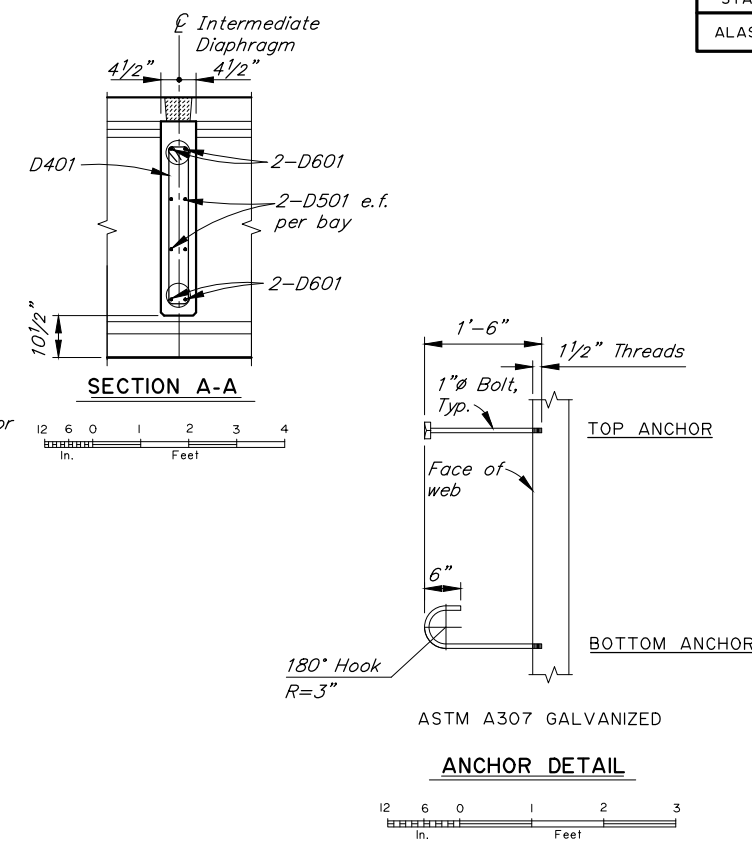
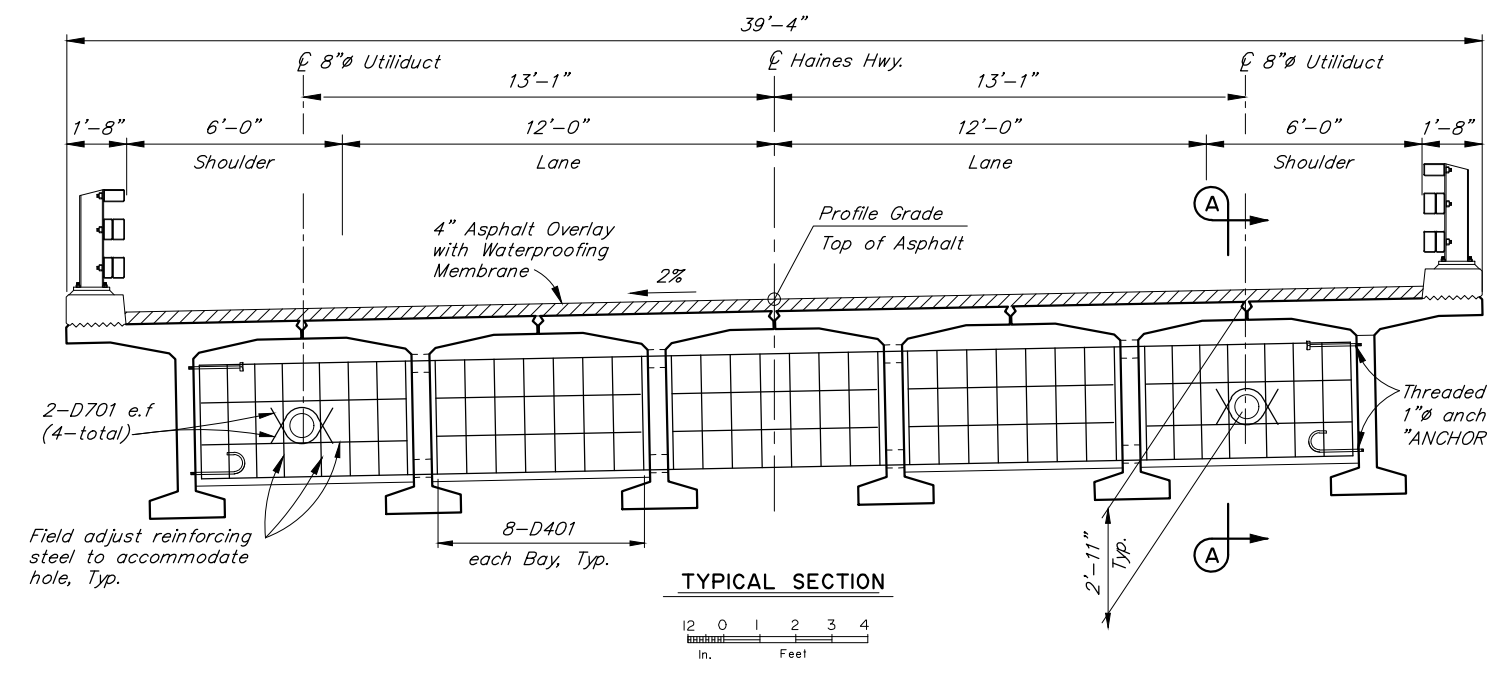
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

CHILKAT RIVER BRIDGE
HAINES HIGHWAY
PIER DETAILS


BRIDGE NO. 742
DWG. NO. 11

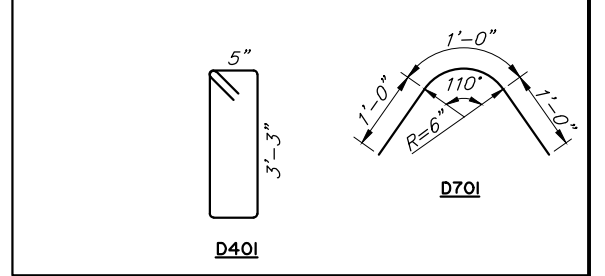
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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N12	N25

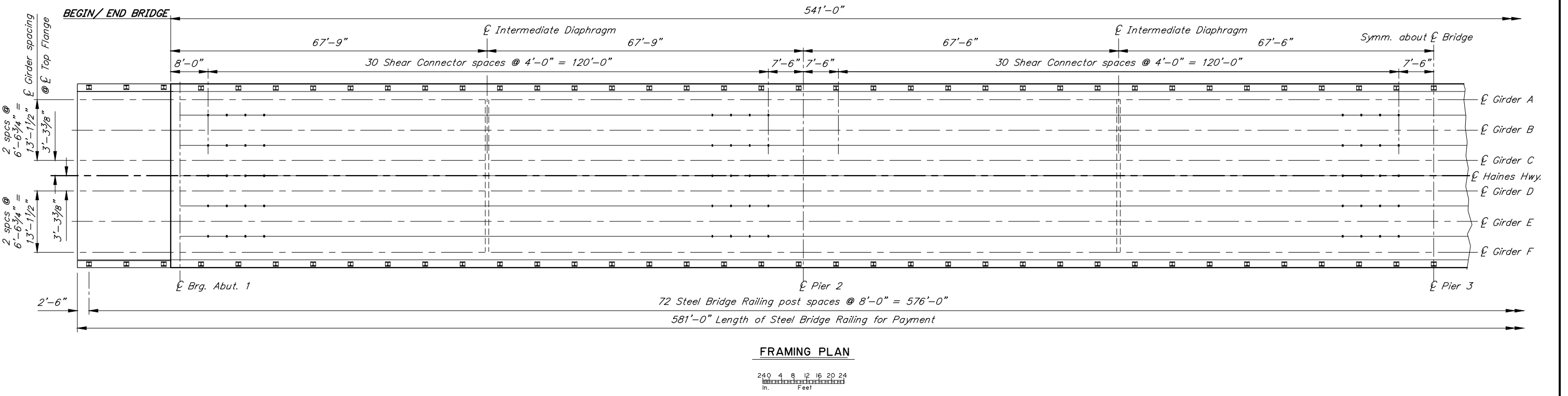


REINFORCING STEEL - ONE DIAPHRAGM

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D401	E	4	40	8'-1"	STIRRUP
D501	E	5	20	5'-8"	---
D601	E,M,S	6	4	31'-7"	---
D701	E	7	8	3'-0"	BENT



E - Epoxy-Coated
M - Field adjust to match crown
S - Length does not include splices



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DESIGNED BY:	Jared Jones	CHECKED:	Jesse Escamilla III
DRAWN BY:	Sam Sollie	CHECKED:	Jared Jones
QUANTITIES BY:	Jared Jones	CHECKED:	Jesse Escamilla III

PRELIMINARY PLAN

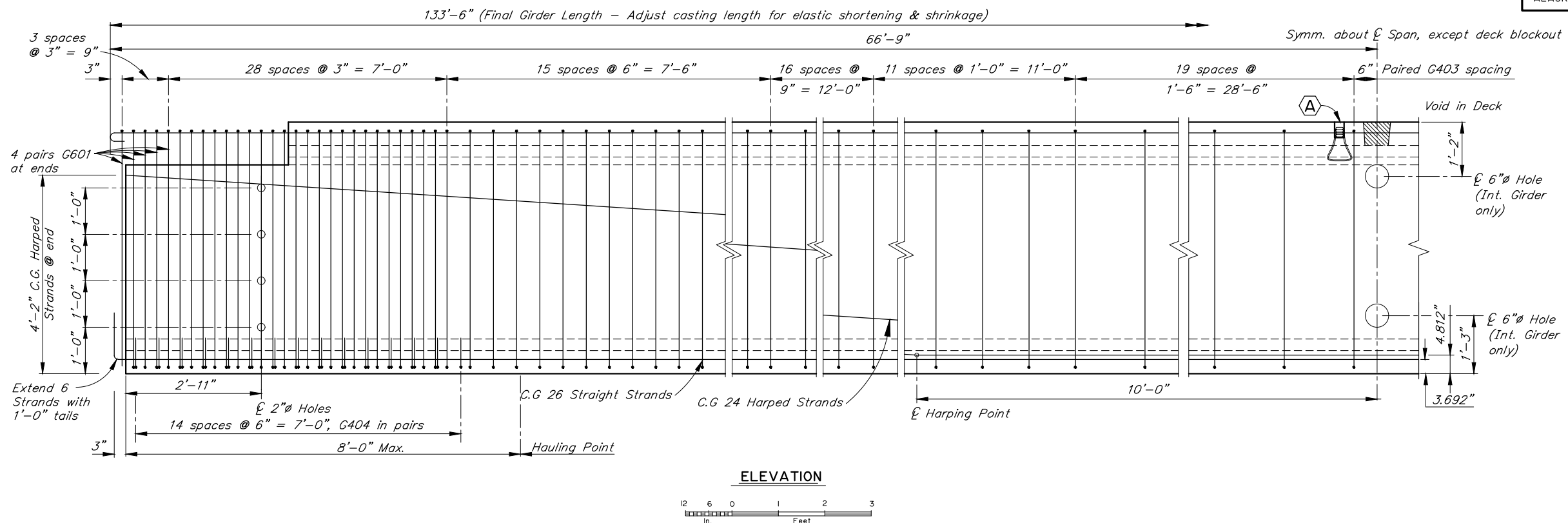
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

CHILKAT RIVER BRIDGE
HAINES HIGHWAY
FRAMING PLAN AND TYPICAL SECTION

BRIDGE NO. 742
DWG. NO. 12

DRAFT CONCURRENCE SET

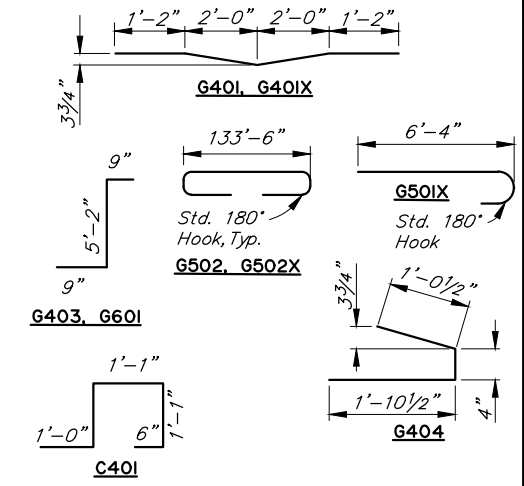
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N13	N25



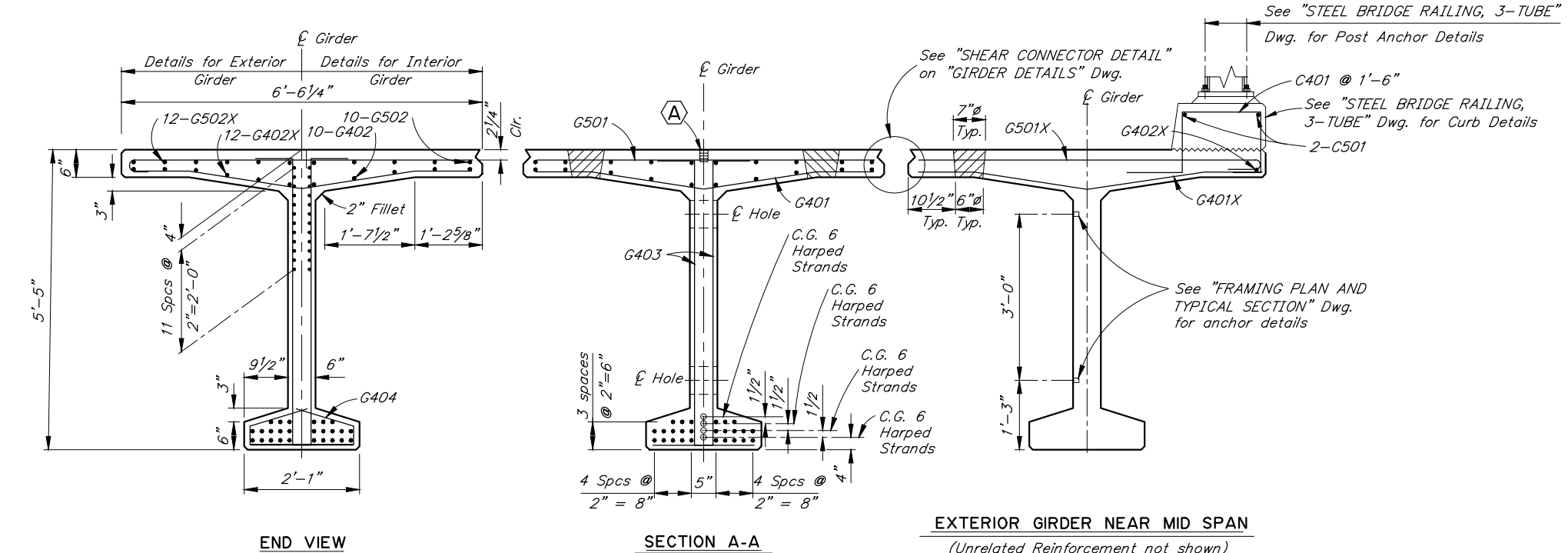
REINFORCING STEEL SCHEDULE - ONE GIRDER

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
G401	E	4	239	6'-4"	BENT
G401X	E,X	4	282/283	6'-4"	BENT
G402	E,S	4	10	128'-4"/192'-2"	---
G402X	E,S,X	4	12	128'-4"/192'-2"	---
G403	E	4	538	6'-8"	STIRRUP
G404	E	4	60	3'-3"	STIRRUP
G501	E	5	239	6'-4"	---
G501X	E,X	5	282/283	6'-11"	BENT
G502	E,S	5	10	134'-8"	BENT
G502X	E,S,X	5	12	134'-8"	BENT
G601	E	6	16	6'-8"	BENT
C401	E,L,X	4	360	4'-9"	BENT
C501	E,S,X	5	2	540'-8"	---

BENDING DIAGRAM



- E - Epoxy-Coated
- L - Ship 6 bars loose
- S - Length does not include splices. Minimum lap splice length for splices shall be: 2'-0" for #4 bars, 2'-6" for #5 bars.
- X - Exterior Girders only



GIRDER NOTES

- Use Class P concrete with the following strengths:
At Stress Transfer $f_{ci} = 7,500$ psi
At 28 days $f_c = 9,500$ psi
Maximum bottom flange tension stress for service III load combination:
B-Train - $< 0.19 \sqrt{f_c}$
HL-93 - < 0 ksi
- Use 0.6" round low relaxation strands with an ultimate strength of 270 ksi and a cross section area of 0.217 in².
- Design is based on the following steel stresses:
Pretensioning - Jacking Stress 189 ksi
After initial losses - 164 ksi
After all losses - 136 ksi
- Deflect forms to compensate for camber and roadway grade.
- Galvanize all steel embedded in girders except for shear connectors.
- 1" clear on all reinforcing except as noted.
- Finish top flange surface with light broom finish. Roughen the surface under the barrier.
- Omit Shear Key, Shear Connector, and Deck Voids on outside of exterior girders.
- Cast Girder ends plumb with respect to roadway grade. Install web holes and web anchor inserts parallel to bearing.
- A** 1"x1'-0" Coil Anchor Insert for vertical adjustment of girders. Recess 2". Prevent concrete from filling hole.
- See "FRAMING PLAN AND TYPICAL SECTION" Dwg. for shear connector spacing.


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DESIGNED BY:	Jared Jones	CHECKED:	Jesse Escamilla III
DRAWN BY:	Sam Sollie	CHECKED:	Jared Jones
QUANTITIES BY:	Jared Jones	CHECKED:	Jesse Escamilla III

PRELIMINARY PLAN

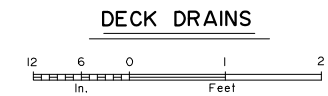
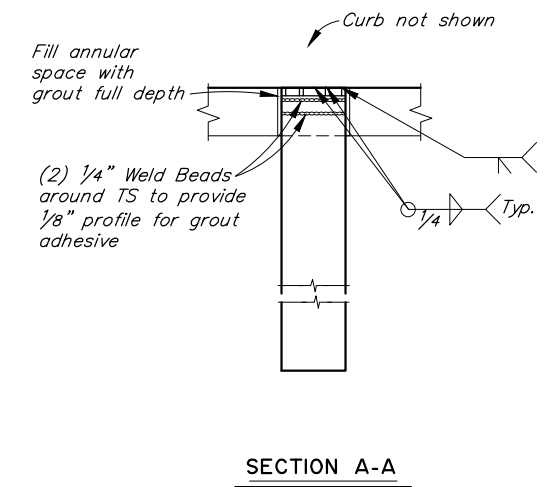
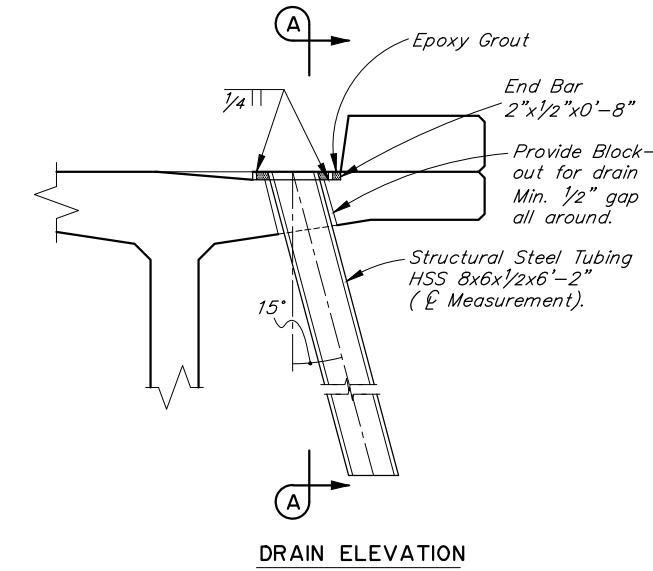
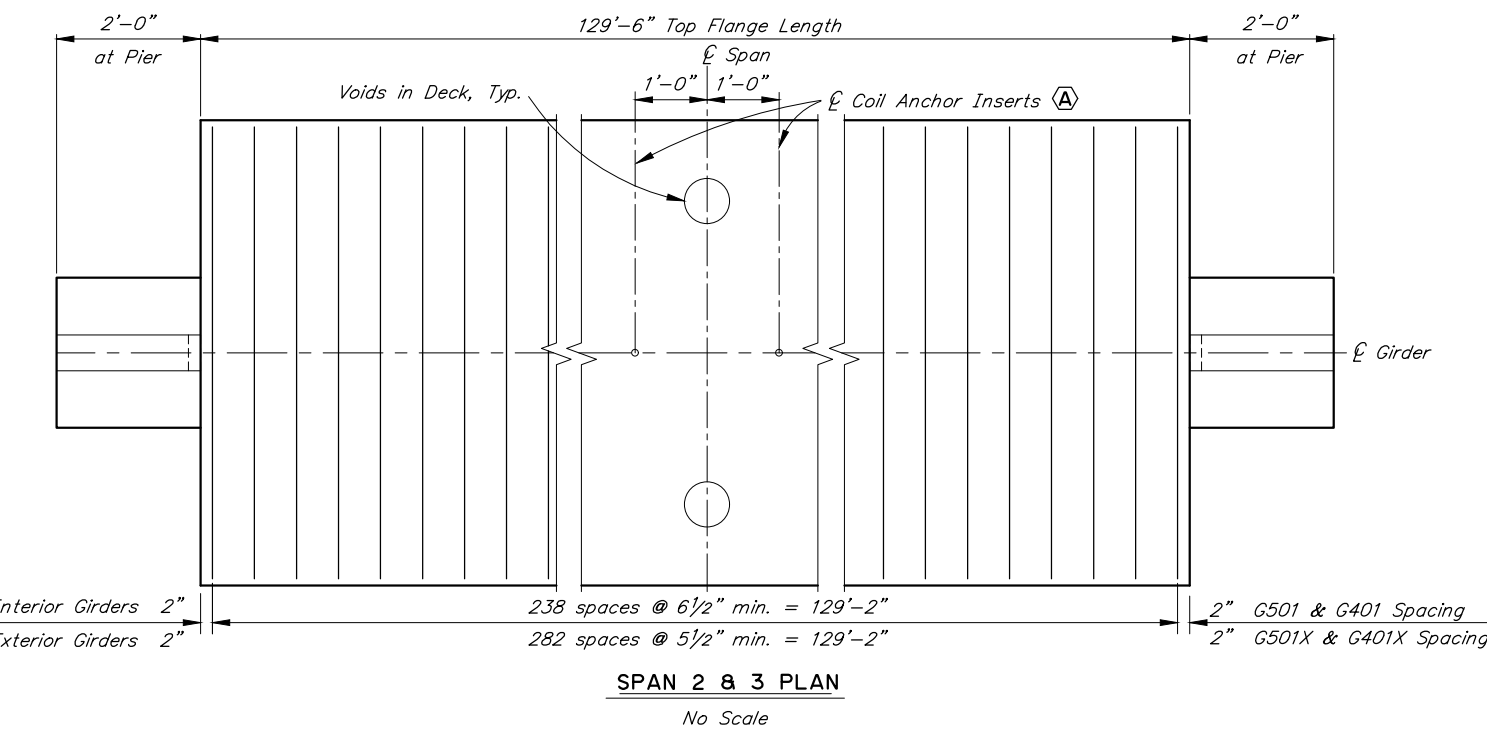
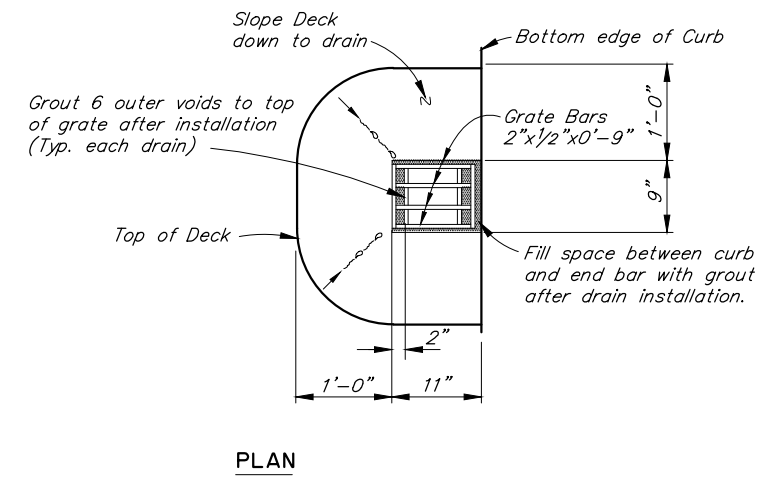
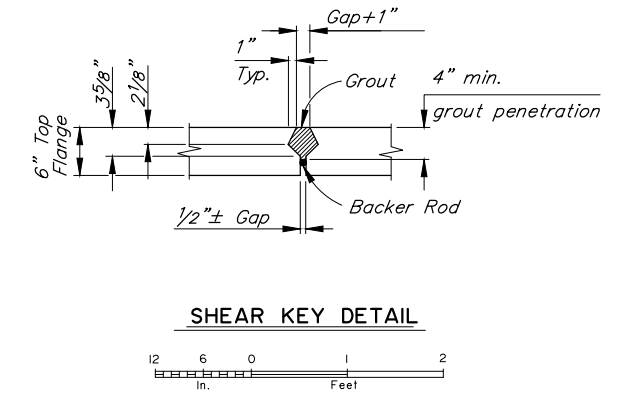
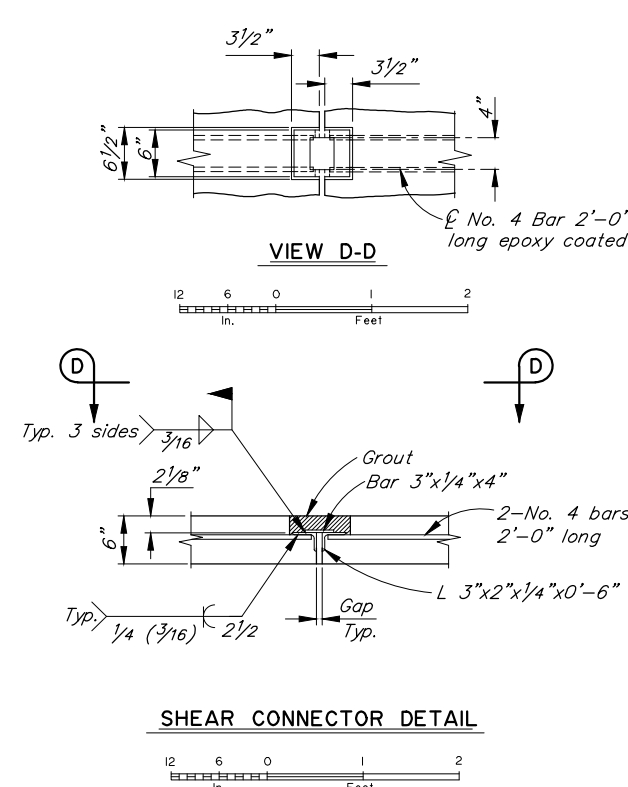
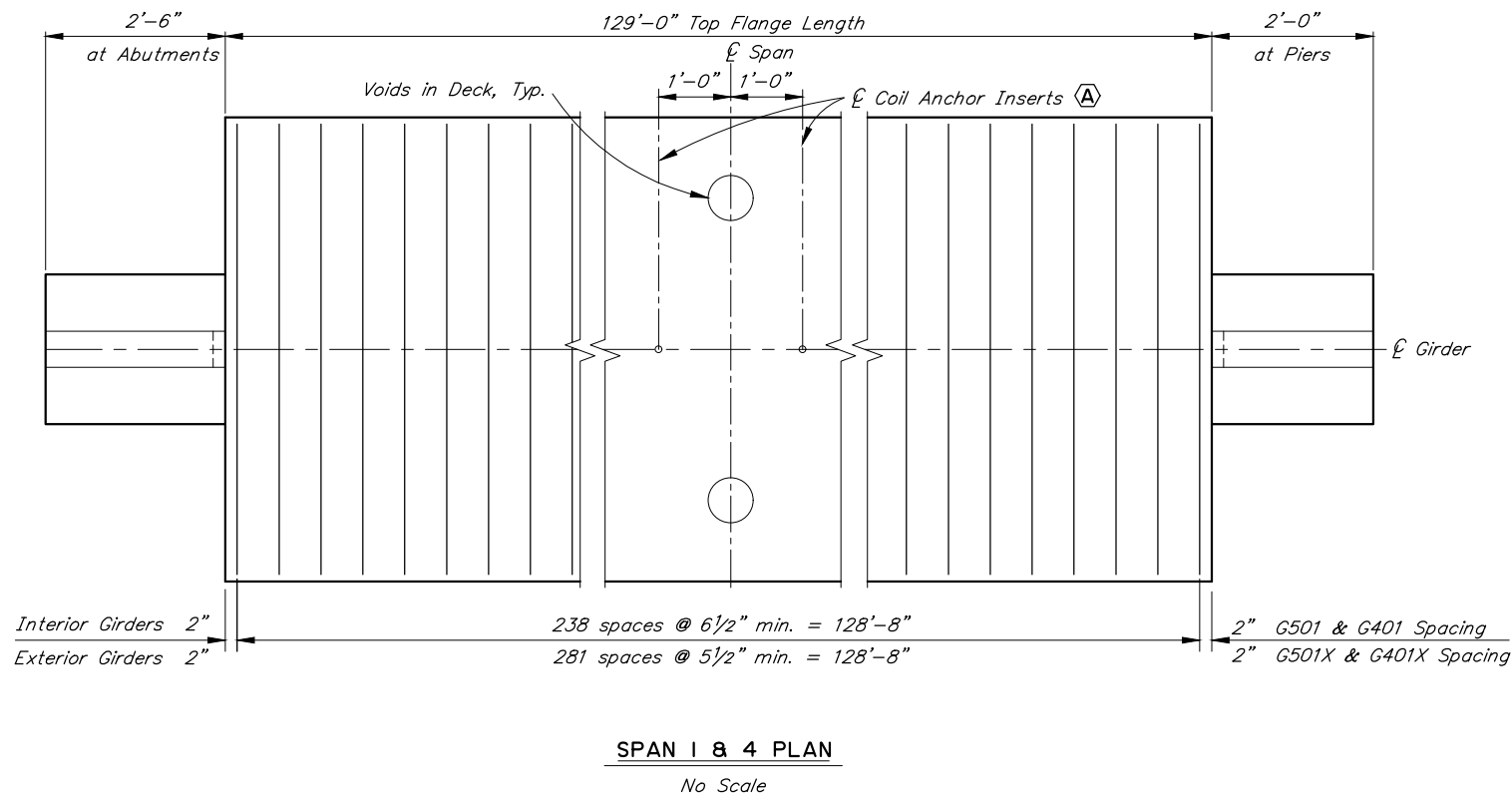
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

CHILKAT RIVER BRIDGE HAINES HIGHWAY GIRDERS


BRIDGE NO. 742
DWG. NO. 13

DRAFT CONCURRENCE SET

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N14	N25




C:\Users\uliperez\AppData\Local\Temp\AcPublish_9292742-1-14 Mon, Nov/13/23 09:42am

DESIGNED BY:	Jared Jones	CHECKED:	Jesse Escamilla III
DRAWN BY:	Sam Sollie	CHECKED:	Jared Jones
QUANTITIES BY:	Jared Jones	CHECKED:	Jesse Escamilla III

PRELIMINARY PLAN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

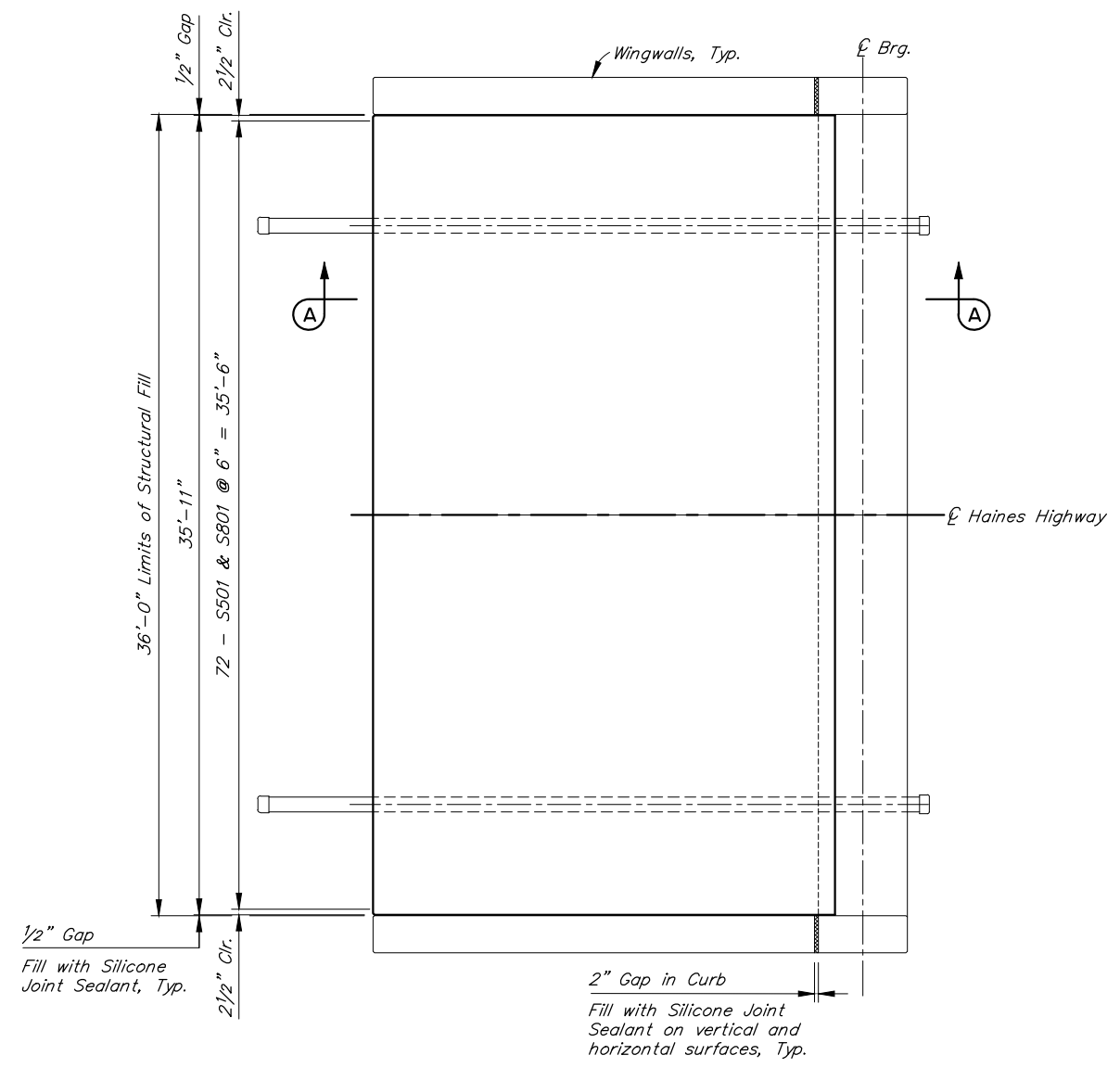
CHILKAT RIVER BRIDGE
HAINES HIGHWAY
GIRDER DETAILS


BRIDGE NO. 742
DWG. NO. 14

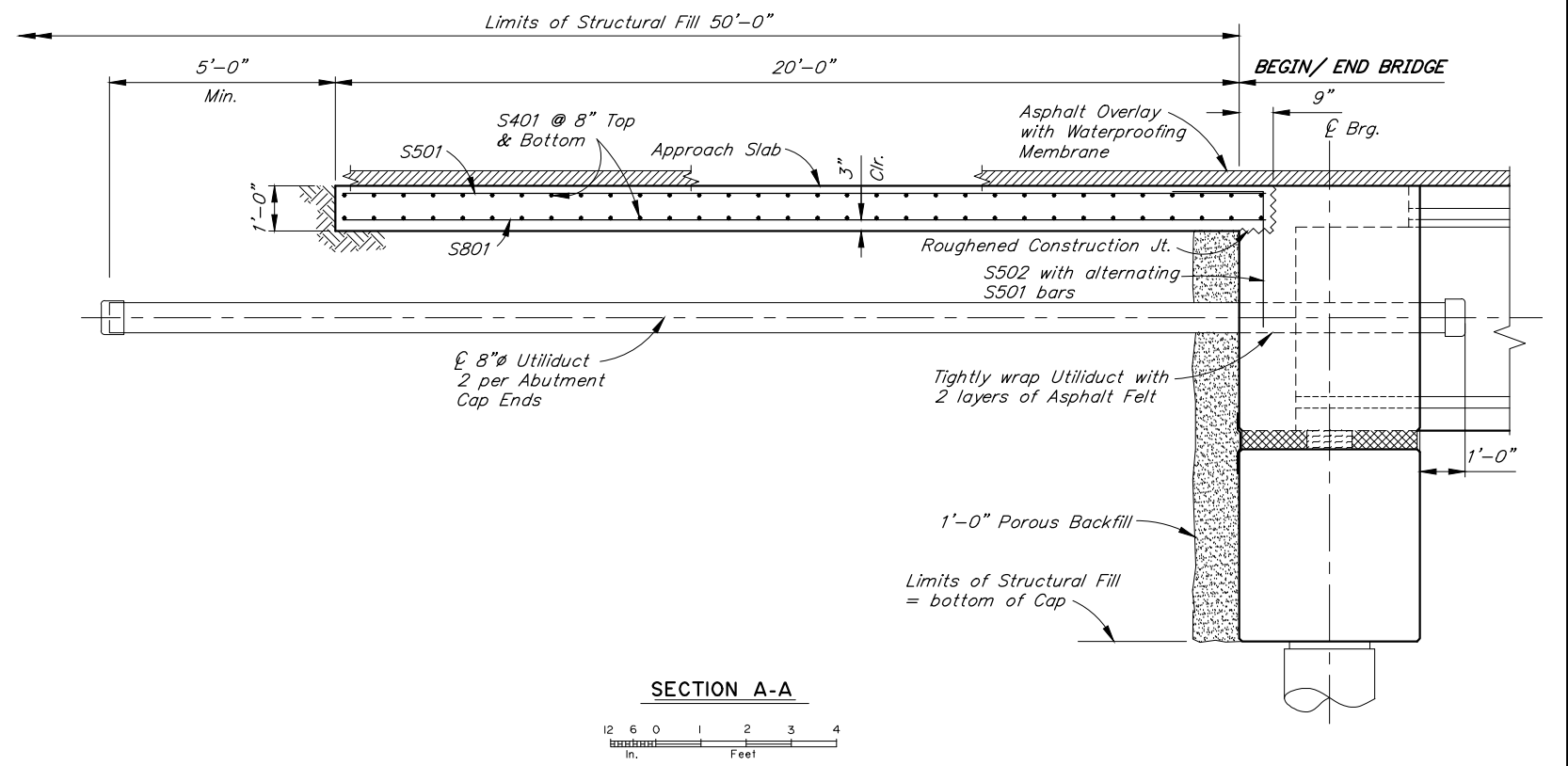
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N15	N25

REINFORCING STEEL - ONE APPROACH SLAB						
MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
S401	E	4	64	35'-6"	---	
S501	E	5	72	20'-5"	---	
S502	E	5	36	5'-0"	BENT	
S801	E	8	72	20'-5"	---	

E - Epoxy-Coated



PLAN
(Abutment 1 shown Abutment 5 similar)



SECTION A-A

C:\Users\uliperez\AppData\Local\Temp\AcPublish_9292\742-1-15 Mon, Nov/13/23 09:42am

DESIGNED BY:	Jared Jones	CHECKED:	Jesse Escamilla III
DRAWN BY:	Sam Sollie	CHECKED:	Jared Jones
QUANTITIES BY:	Jared Jones	CHECKED:	Jesse Escamilla III

PRELIMINARY PLAN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

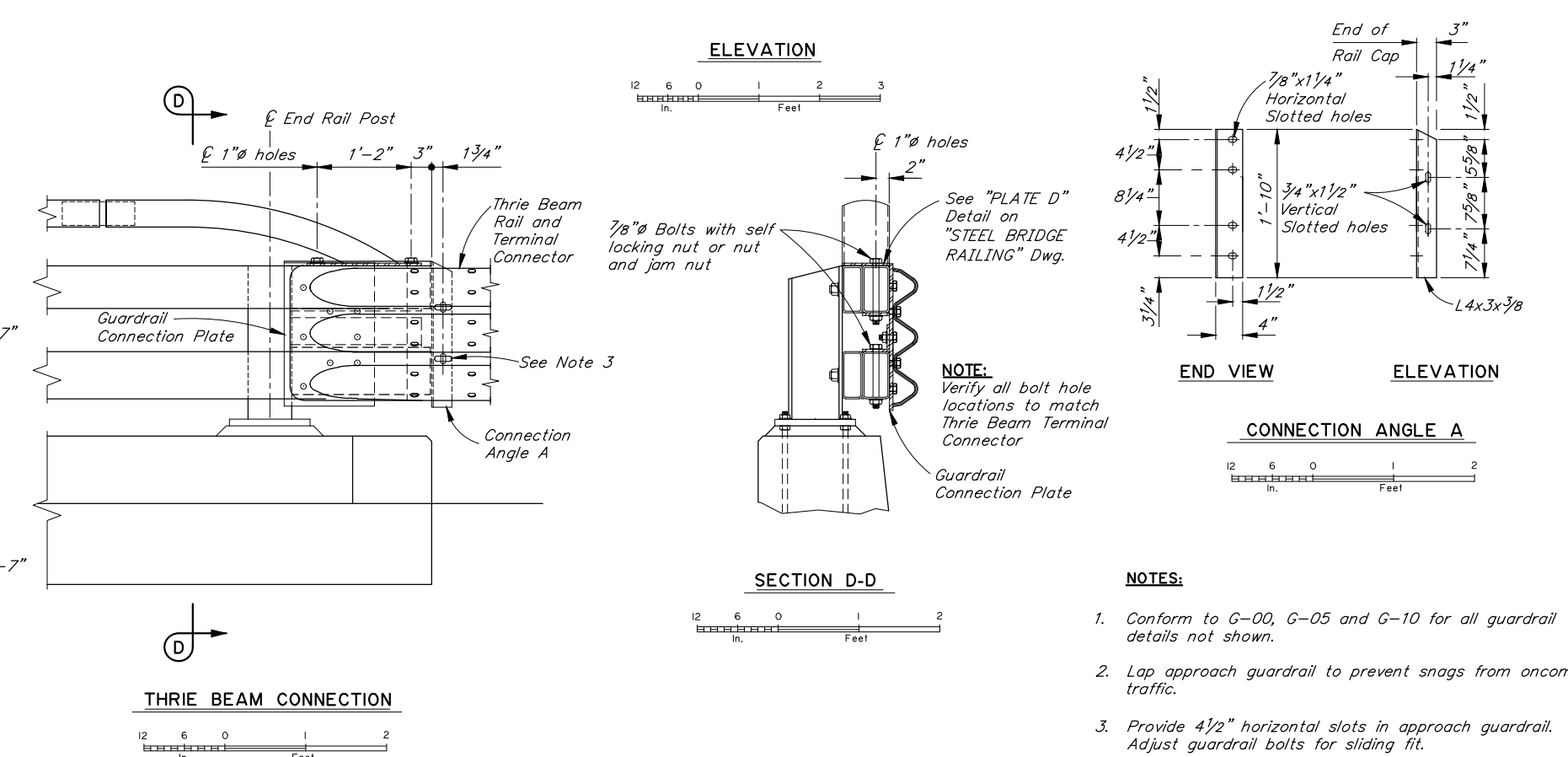
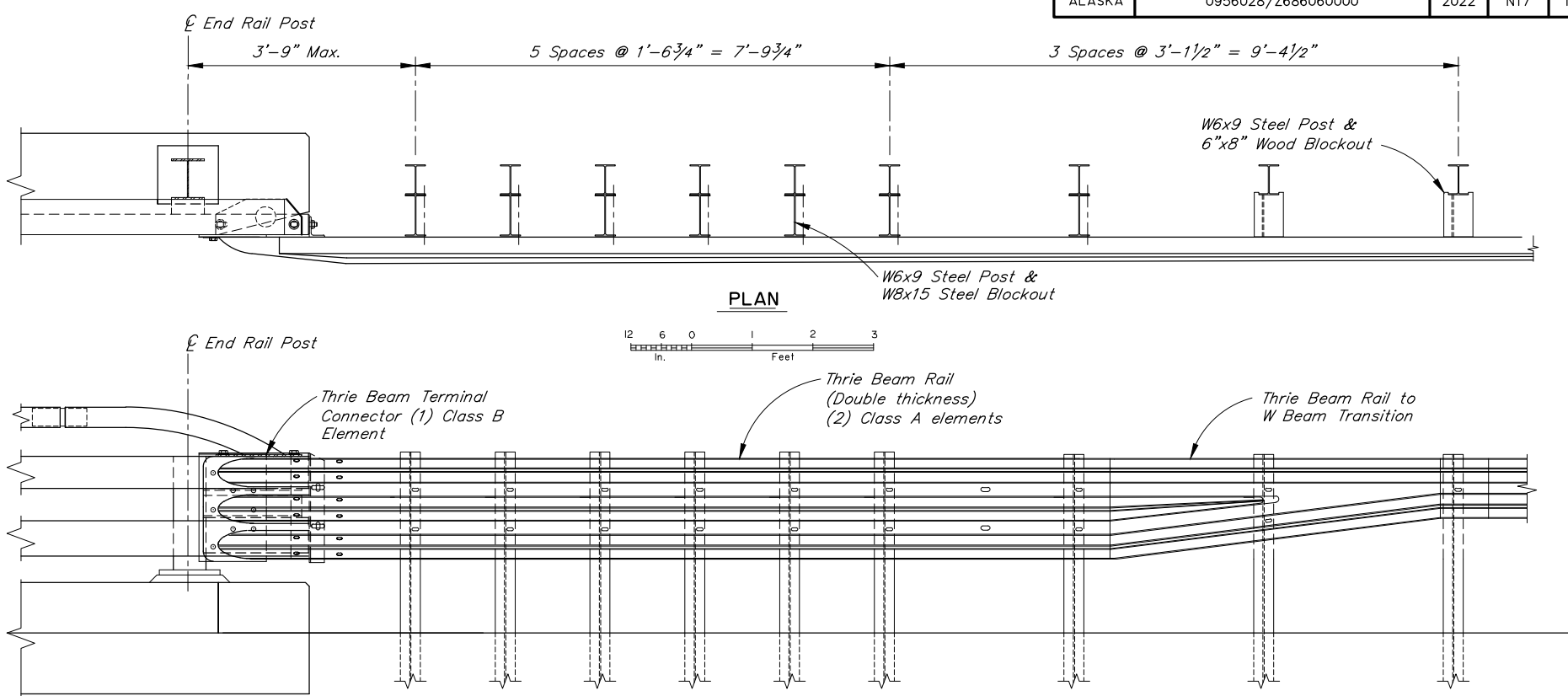
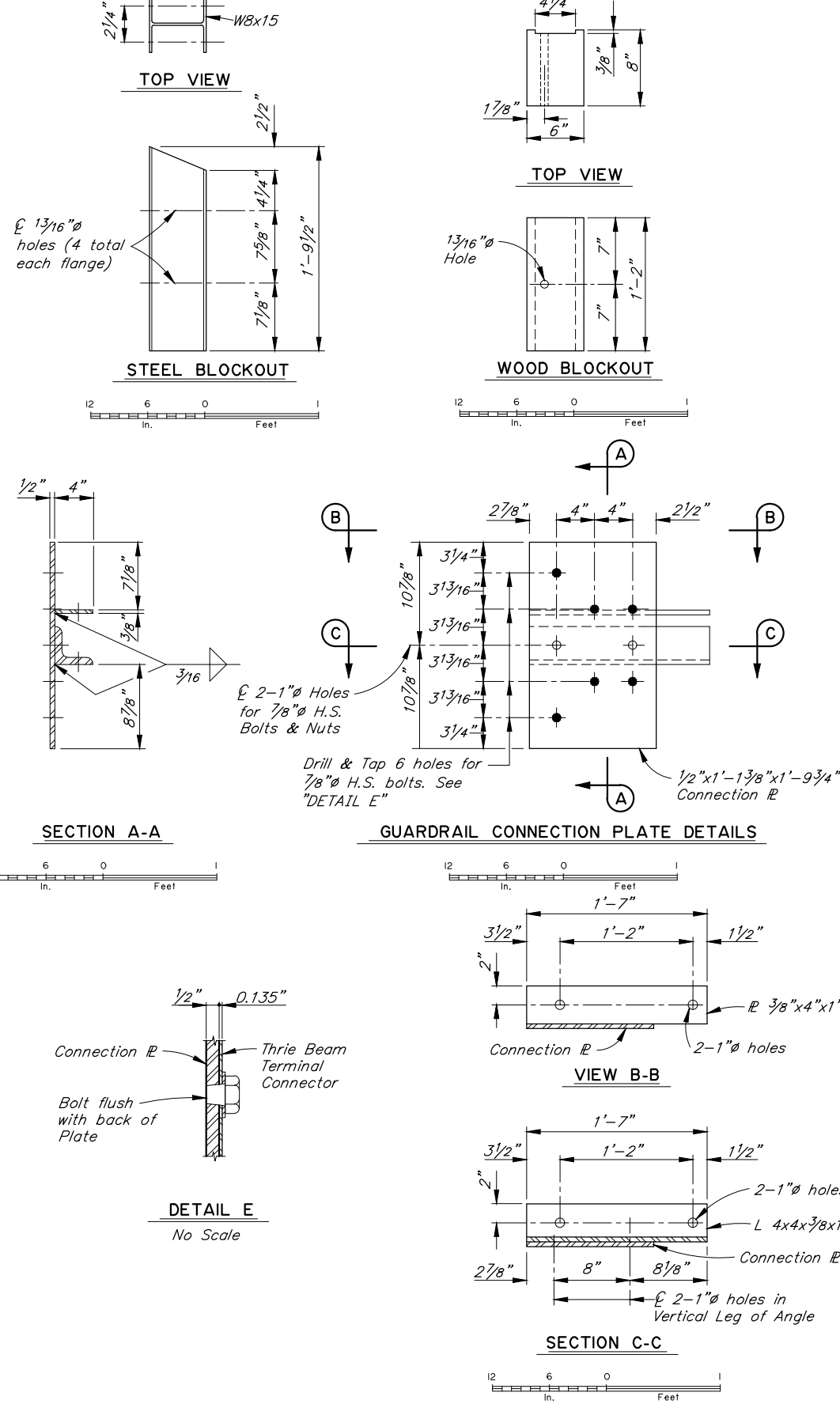
CHILKAT RIVER BRIDGE
HAINES HIGHWAY
APPROACH SLABS



BRIDGE NO. 742
DWG. NO. 15

DRAFT CONCURRENCE SET

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0956028/Z686060000	2022	N17	N25




C:\Users\uljperz\AppData\Local\Temp\AcPublish_9292\742-1-17 Mon, Nov/13/23 09:42am

DESIGNED BY:	Jared Jones	CHECKED:	Jesse Escamilla III
DRAWN BY:	Sam Sollie	CHECKED:	Jared Jones
QUANTITIES BY:	Jared Jones	CHECKED:	Jesse Escamilla III

PRELIMINARY PLAN

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 BRIDGE SECTION
 3132 Channel Drive
 Juneau, Alaska 99801
 907-465-2975

CHILKAT RIVER BRIDGE
 HAINES HIGHWAY
TRANSITION RAIL, 3-TUBE


 BRIDGE NO. 742
 DWG. NO. 17

DRAFT CONCURRENCE SET

TRAFFIC CONTROL NOTES

- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. THE FINAL TCP ADDRESSING IN DEPTH THE VARIETY OF SITUATIONS THAT MAY OCCUR ONCE CONSTRUCTION HAS STARTED SHALL BE COMPLETED BY THE CONTRACTOR AND SUBMITTED FOR REVIEW BY THE ENGINEER.
- ALL TRAFFIC CONTROL PLANS SUBMITTED BY THE CONTRACTOR SHALL BE NUMBERED. ALL TRAFFIC CONTROL PLANS THAT USE A TYPICAL APPLICATION AS DESCRIBED IN THE LATEST EDITION OF THE ALASKA TRAFFIC MANUAL (ATM) SHALL REFERENCE THE TYPICAL APPLICATION.
- TWO LANES SHALL BE MAINTAINED AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORKING HOURS. FLAGGERS MUST BE PRESENT FOR ANY LANE CLOSURES.
- THE LENGTH OF WORK AREA SHALL BE MINIMIZED TO AVOID EXCESSIVE TRAFFIC DELAYS AS DIRECTED BY THE ENGINEER. IN NO CASE WILL THE ENGINEER ALLOW A WORK AREA GREATER THAN TWO (2) MILES.
- KEEP THE PUBLIC INFORMED OF CONSTRUCTION ACTIVITIES. SEE SECTION 643-3.03 OF THE SPECIAL PROVISIONS.
- EXPECT HIGHER TRAFFIC VOLUMES ASSOCIATED WITH THE ARRIVAL & DEPARTURE OF FERRIES AT THE ALASKA MARINE HIGHWAY TERMINAL IN HAINES.
- SEE SECTION 201-3.05 OF THE SPECIAL PROVISIONS FOR LIMITATIONS ON PAVEMENT REMOVAL AND REPAVING. REPAVED SECTIONS REQUIRE INTERIM PAVEMENT MARKINGS PER SECTION 643-3.09 OF THE SPECIFICATIONS.
- A WORK ZONE SPEED LIMIT OF 45 MPH (10 MPH LESS THAN THE POSTED SPEED) IS RECOMMENDED DURING CONSTRUCTION. HOWEVER, IN SOME SITUATIONS, A LOWER WORK ZONE SPEED LIMIT MAYBE NECESSARY. IN THESE SITUATIONS, THE CONTRACTOR SHALL DETERMINE THE NEED FOR A LOWER WORK ZONE SPEED LIMIT IN ACCORDANCE WITH THE AK DOT&PF POLICY AND PROCEDURE 05.05.020 AND SUBMIT FOR APPROVAL BY THE ENGINEER.
- LOCATION OF DOUBLE TRAFFIC SIGNS SHALL BE ESTABLISHED IN ACCORDANCE WITH THE AK DOT&PF STANDARD DRAWING C-04.12.
- CHANGEABLE MESSAGE BOARD SHALL BE USED FOR ADVANCED NOTIFICATION. LOCATION OF CHANGEABLE MESSAGE BOARDS SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER.
- IF A CLOSURE IS COMPLETELY WITHIN THE LIMITS OF THE CONSTRUCTION ZONE, ELIMINATE THE "END ROAD WORK" (G-20-2) SIGNS.

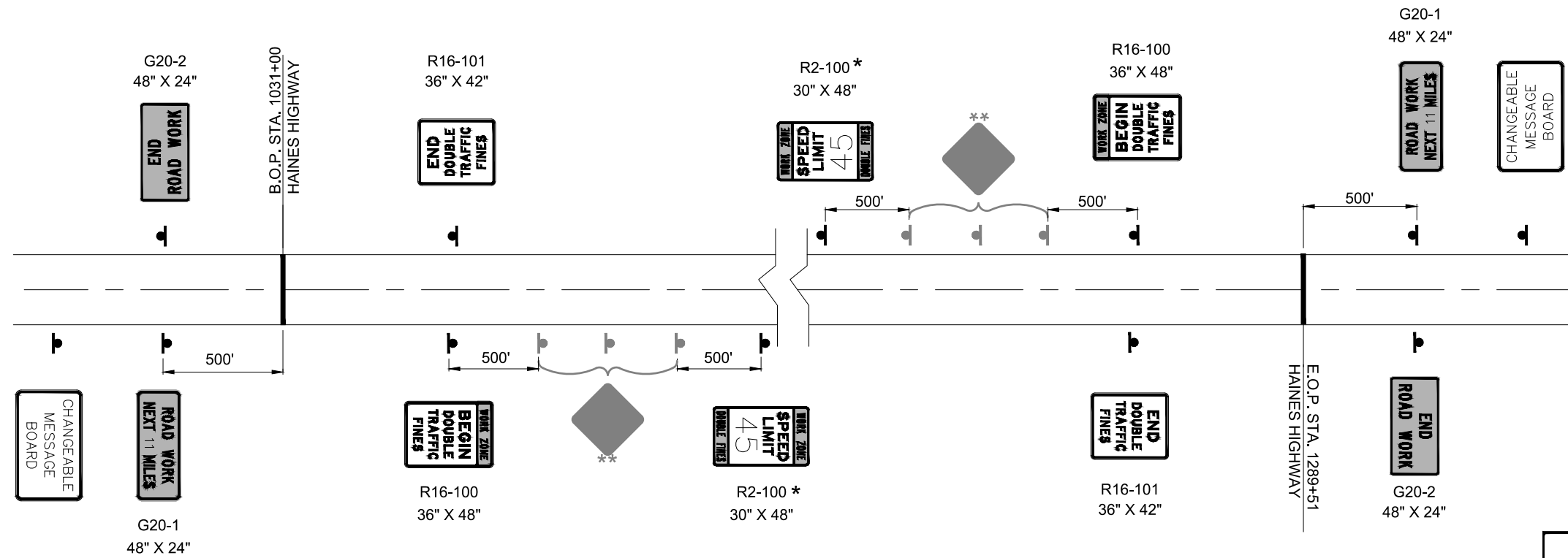
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	S1	S4

TCP LEGEND

- SIGN
- CONE
- DRUM
- FLAGGING STATION
- HI-LEVEL WARNING DEVICE
- ONE LANE TWO WAY TRAFFIC

TCP SETUP TABLE

SPEED (MPH)	MIN MERGING TAPER LENGTH (L) IN FEET WIDTH OF OFFSET (W) IN FEET			MIN NUMBER OF DEVICES WIDTH OF OFFSET (W) IN FEET			MAX DEVICE SPACING IN FEET		BUFFER SPACE IN FEET
	10'	11'	12'	10'	11'	12'	ALONG TAPER	ALONG TANGENT	
25 OR BELOW	105	115	125	6	6	6	25	50	155
30	150	165	180	6	7	7	30	60	200
35	205	225	245	7	8	8	35	70	250
40	270	295	320	8	9	9	40	80	305
45	450	495	540	11	12	13	45	90	360
50	500	550	600	11	12	13	50	100	425
55	550	605	660	11	12	13	55	110	495
60	600	660	720	11	12	13	60	120	570



PERMANENT CONSTRUCTION SIGNING

- * WHERE DOUBLE FINE ZONE LENGTH IS LONGER THAN 2 MILES, INTERIM WORK ZONE SPEED LIMIT SIGNS SHALL BE INSTALLED AT A SPACING NOT TO EXCEED 2 MILES.
- ** ADVANCE WARNING SIGNS ARE NOT PART OF PERMANENT CONSTRUCTION SIGNING. THEIR NUMBER AND SPACING VARIES PER THE IMPLEMENTED TCP

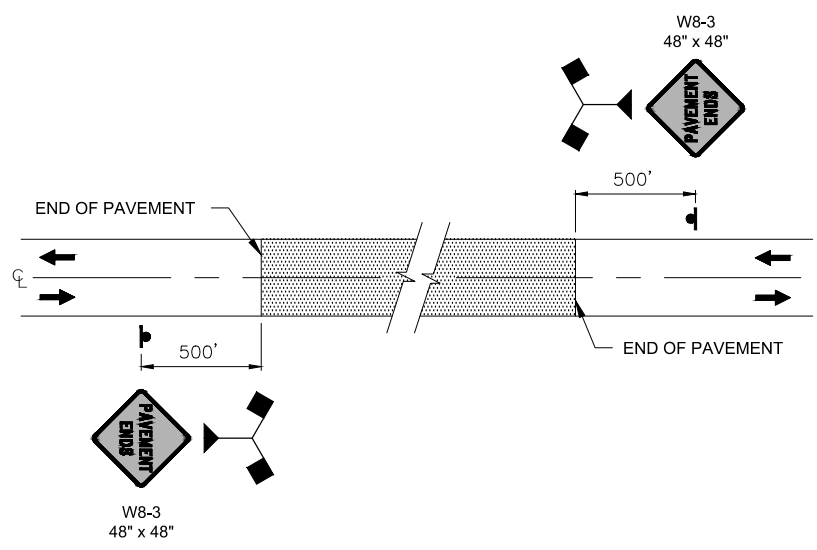
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
HAINES HIGHWAY RECONSTRUCTION
MILEPOST 20 TO 25

TRAFFIC CONTROL PLAN

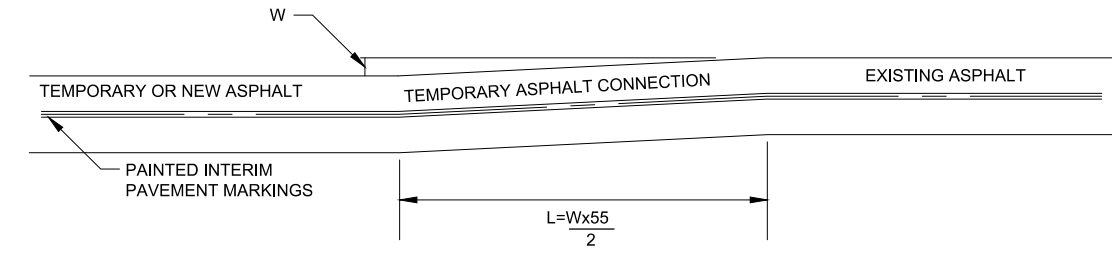
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 PHONE (907) 780-3533
 DESIGNED HOBBS
 CHECKED NOBLE
 DRAFTED
 CERTIFICATE OF AUTH # : AECL848

DRAFT CONCURRENCE SET

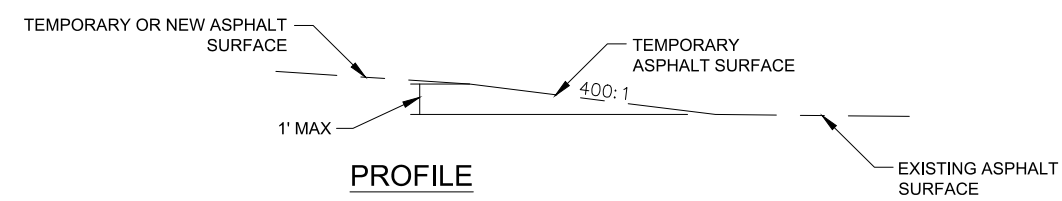
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	S2	S4



SIGNING FOR UNPAVED AREA



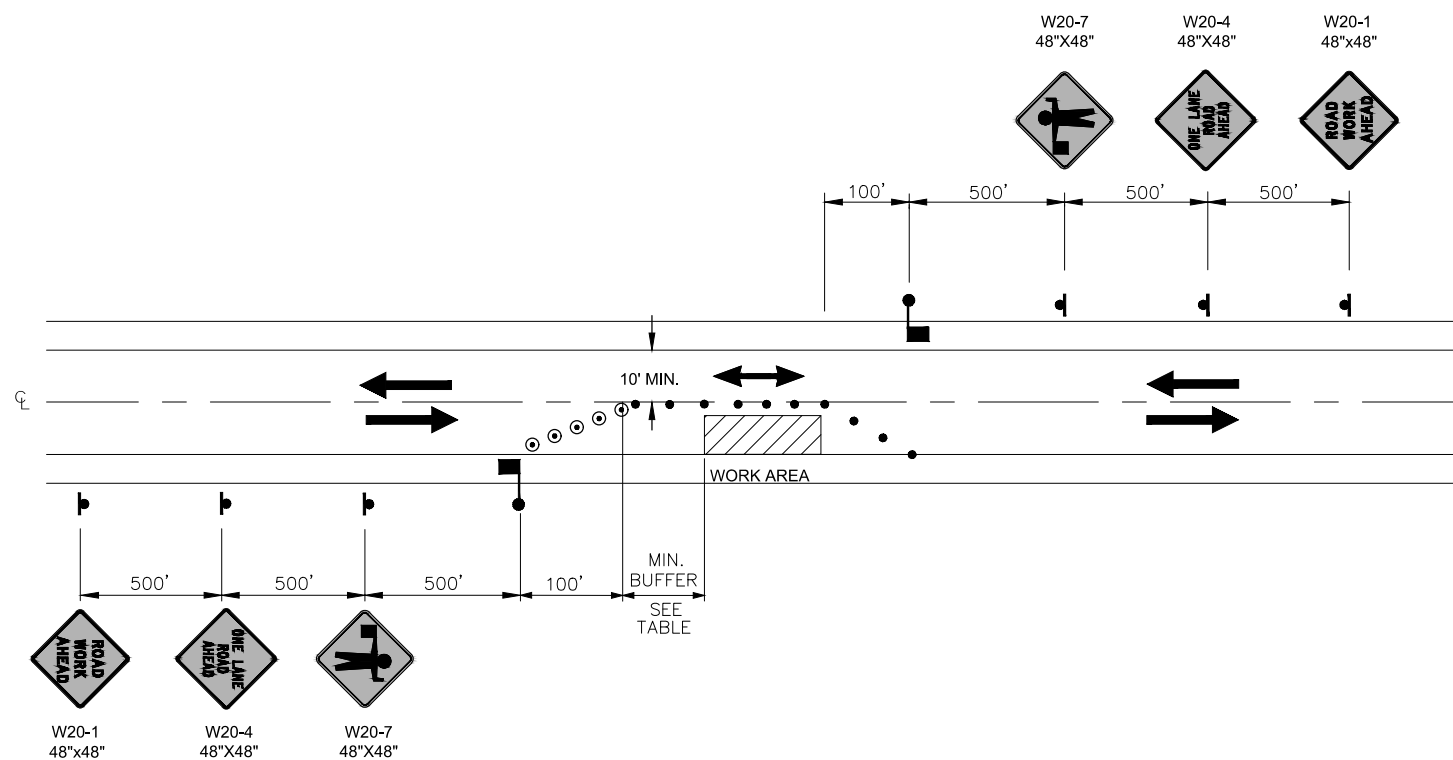
PLAN



PROFILE

NOTE:
DO NOT LOCATE THE TEMPORARY ASPHALT CONNECTION ON A CURVE.

TEMPORARY ASPHALT CONNECTION FOR SEASONAL SUSPENSION OF WORK



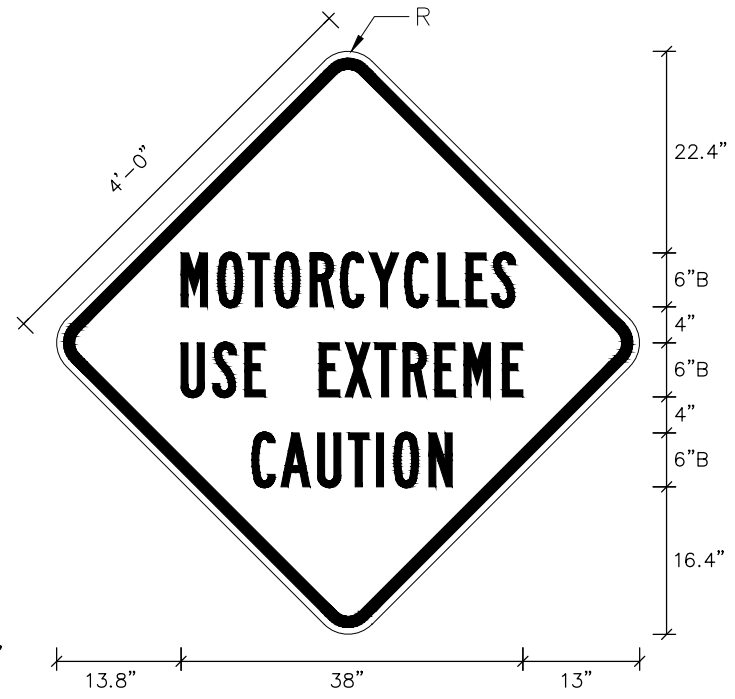
**TWO LANE ROAD - SINGLE LANE CLOSURE
DOUBLE FLAGGER**

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
**HAINES HIGHWAY RECONSTRUCTION
MILEPOST 20 TO 25**
TRAFFIC CONTROL PLAN

FIRM: DOWL
 FILE: C:\dowl_pw\0388515\SA-CT-DT-S-61850.dwg
 ADDRESS: 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 PHONE: (907) 780-3533
 DESIGNED: HOBBS
 CHECKED: NOBLE
 DRAFTED: NOBLE
 CERTIFICATE OF AUTH #: AECL848
 LAYOUT: S2

DRAFT CONCURRENCE SET

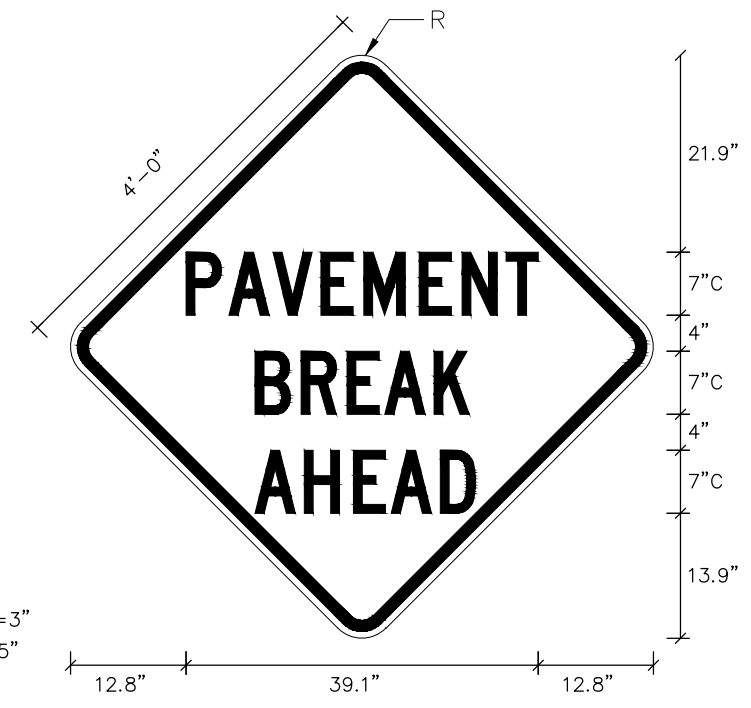
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	S3	S4



BORDER
 OUTER RADIUS=3"
 THICKNESS=1.25"
 INSERT=0.75"

PROJECT SIGN DETAIL

PROVIDE 4 EACH ON WINDMASTER STANDS AS MOVEABLE CONSTRUCTION SIGNS AT LOCATIONS DETERMINED BY THE ENGINEER.



BORDER
 OUTER RADIUS=3"
 THICKNESS=1.25"
 INSERT=0.75"

PROJECT SIGN DETAIL

PROVIDE 4 EACH ON WINDMASTER STANDS AS MOVEABLE CONSTRUCTION SIGNS AT LOCATIONS DETERMINED BY THE ENGINEER.

SIGNS SHALL BE ORANGE BACKGROUND WITH BLACK BORDER AND TEXT. SIGNS SHALL INCLUDE THE DAY OF CLOSURE, BEGINNING TIME OF CLOSURE, AND EXPECTED TIME THE ROAD WILL REOPEN. SIGNS SHALL BE IN PLACE A MINIMUM OF 48 HOURS PRIOR TO ROAD CLOSURE. REMOVABLE PANELS MAY BE USED TO CHANGE THE DAY AND TIME. SIGN LETTERING IS DESIGNATED BY SIZE AND FHWA "SERIES 2000" LETTER SERIES. (EG "6C" MEANS A LETTER HEIGHT OF 6 INCHES WITH A SERIES C WIDTH)

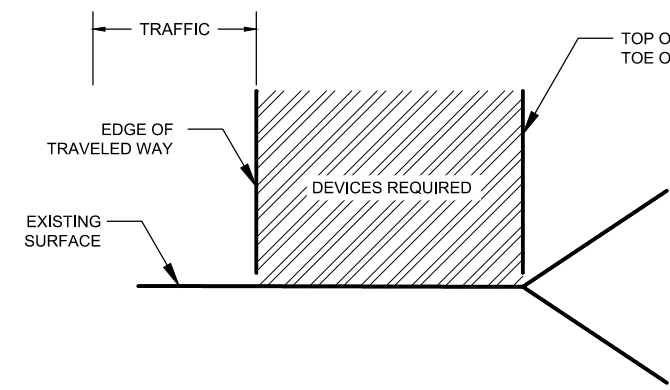
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 ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
 DATE
 LAYOUT S3
 DESIGNED HOBBS
 PHONE (907) 780-3533
 CHECKED NOBLE
 CERTIFICATE OF AUTH # : AECL848
 DRAFTED

	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES HAINES HIGHWAY RECONSTRUCTION MILEPOST 20 TO 25 TRAFFIC CONTROL SPECIAL SIGNS
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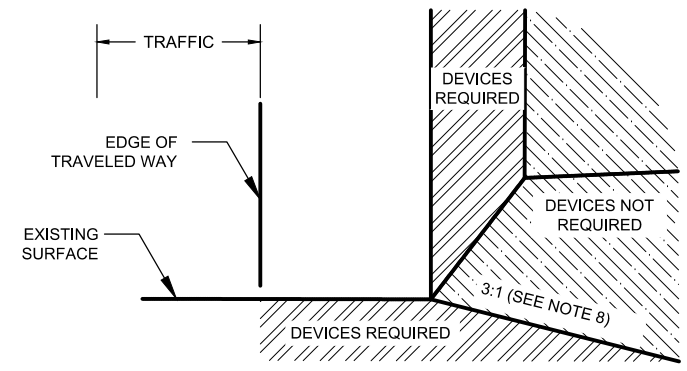
DRAFT CONCURRENCE SET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	S4	S4

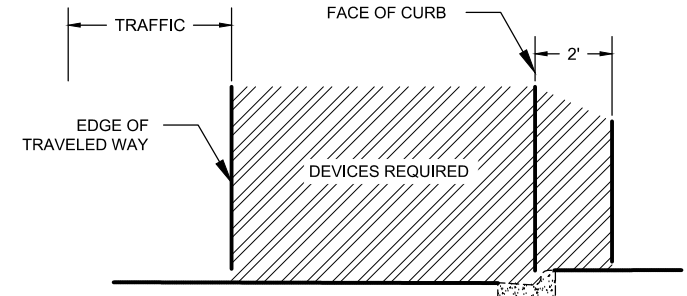
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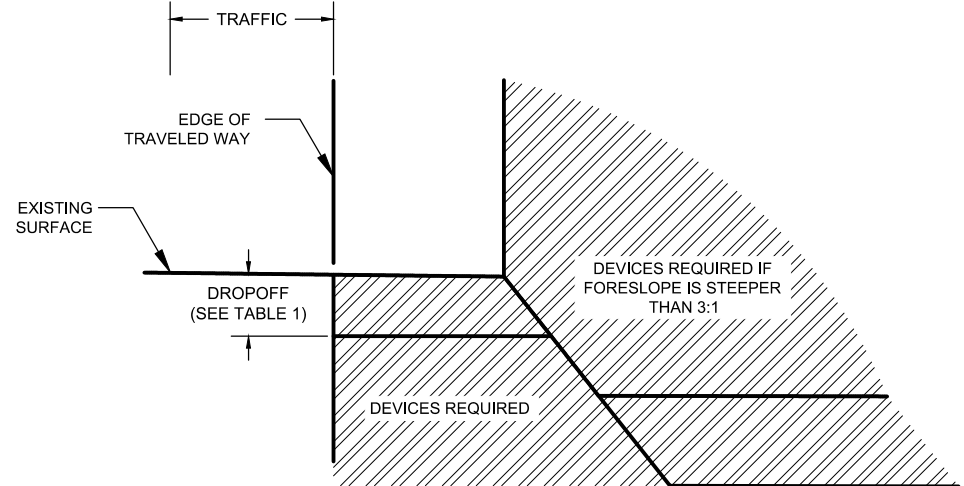
EMBAKMENT SECTION



BACKSLOPE SECTION



CURB AND GUTTER SECTION



FORESLOPE SECTION

**TABLE 1
TRAFFIC CONTROL DEVICES REQUIRED FOR DROPOFFS ≤ 5 FEET
FROM THE TRAVELED WAY ***

ROADWAY TYPE	DROPOFF ≤ 2"	2" < DROPOFF < 12"	DROPOFF ≥ 12"
AVERAGE DAILY TRAFFIC > 4000 OR SPEED > 40 MPH	TAPER ASPHALT AT 1:1 (45°)	TYPE II BARRICADES OR DRUMS	TEMPORARY PORTABLE CONCRETE BARRIER OR TEMPORARY GUARDRAIL
ALL OTHER ROADWAYS	NONE REQUIRED	TUBULAR CANDLES OR DELINEATORS	TYPE II BARRICADES OR DRUMS

* SPACE THE DEVICES IN ACCORDANCE WITH REQUIREMENTS FOR SPACING TYPE II BARRICADES AND DRUMS SET FORTH IN THE ALASKA TRAFFIC MANUAL.

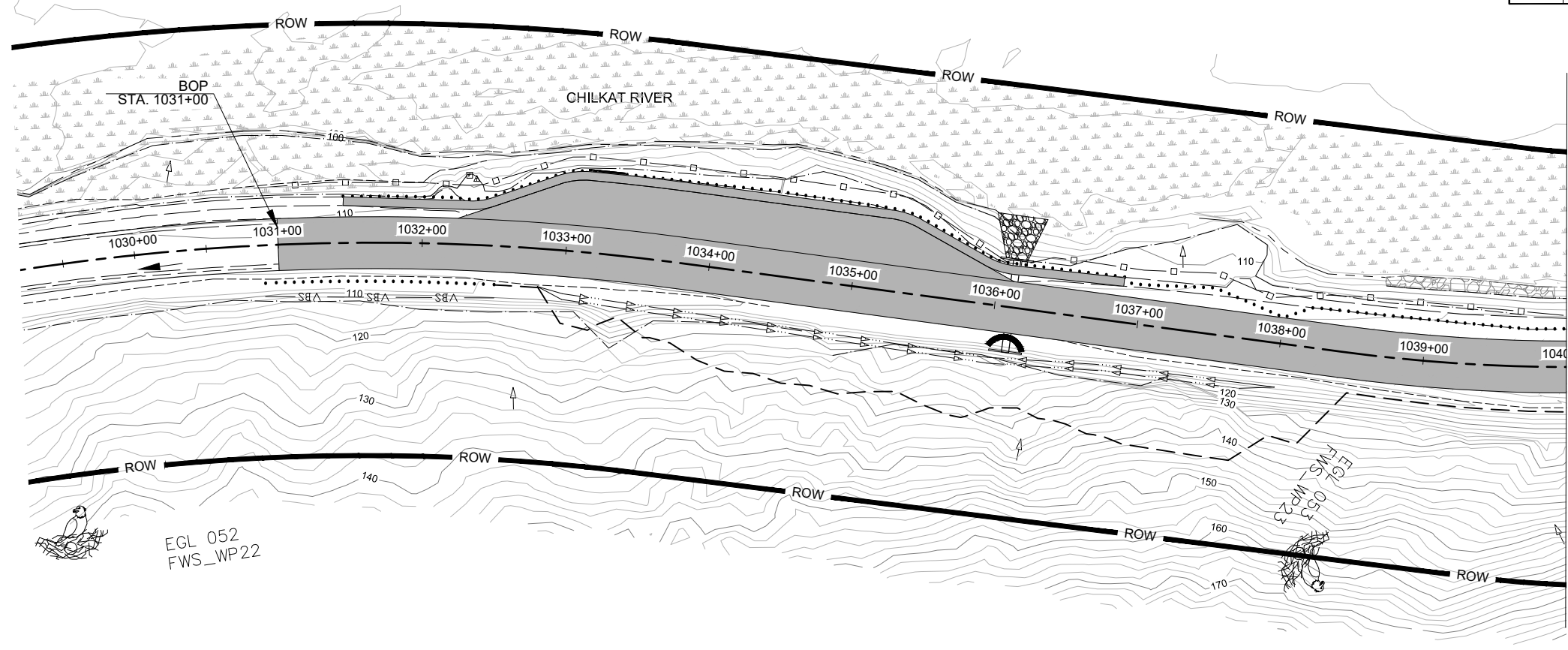
NOTES:

- TRAFFIC CONTROL DEVICES REQUIRED BY THE GUIDELINES ON THIS SHEET ARE INTENDED FOR CONDITIONS WHICH WILL BE IN PLACE LONGER THAN ONE CONTINUOUS WORK SHIFT. AN APPROVED TRAFFIC CONTROL PLAN IS REQUIRED PRIOR TO BEGINNING WORK.
- THE EXISTING GROUND SURFACE AT A LOCATION DETERMINES WHETHER TRAFFIC CONTROL DEVICES ARE NEEDED AT THE SAME LOCATION DURING CONSTRUCTION.
- GUARDRAIL EXISTING AT A LOCATION BEFORE CONSTRUCTION SHALL REMAIN IN PLACE DURING CONSTRUCTION OR APPROVED ALTERNATE DEVICES SHALL BE INSTALLED.
- INSTALL TRAFFIC CONTROL DEVICES BETWEEN THE EDGE OF TRAVELED WAY AND THE WORK AREA ON ANY ROADWAY OPENED TO TRAFFIC WHEN REQUIRED BY THIS DRAWING.
- FOR EXISTING ROADWAY ALIGNMENTS INSTALL TRAFFIC CONTROL DEVICES WHEN WORK OCCURS IN THE "DEVICES REQUIRED" AREAS SHOWN ON THIS DRAWING.
- FOR DETOURS, TEMPORARY ROADWAYS, OR NEW ROADWAYS NOT YET COMPLETE, INSTALL TRAFFIC CONTROL DEVICES WHEN ANY OF THE FOLLOWING CONDITIONS EXIST:
 - THE PROPOSED HORIZONTAL OR VERTICAL CURVATURE IS STEEPER THAN THE EXISTING.
 - THE ROADWAY OR SHOULDER WIDTH IS LESS THAN THE EXISTING.
 - THE PROPOSED BACKSLOPE OR FORESLOPE IS STEEPER THAN THE EXISTING.
- FOR DROPOFFS, INSTALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE FORESLOPE SECTION DETAIL AND TABLE 1. DROPOFF IS DEFINED AS ASPHALT HAVING A VERTICAL DROP OF MORE THAN 2", WALLS AND SLOPES STEEPER THAN 1.5H:1V.
- ON ANY NEWLY CONSTRUCTED SLOPE STEEPER THAN 4:1 BUT FLATTER THAN 3:1, PROVIDE A TEN FOOT FLAT RECOVERY AREA AT THE TOE OF SLOPE OR INSTALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE FORESLOPE SECTION DETAIL.
- TRAFFIC CONTROL DEVICE REQUIREMENTS:
 - ON ROADWAYS WITH A SPEED LIMIT GREATER THAN 40 MILES PER HOUR OR AVERAGE DAILY TRAFFIC VOLUME GREATER THAN 4000 VEHICLES PER DAY, INSTALL PORTABLE CONCRETE BARRIER WITH ANCHOR PINS PER STANDARD DRAWING G-47.00. AT LOCATIONS WHERE ROAD CURVE RADIUS EXCEEDS 770' TEMPORARY GUARDRAIL SHALL BE INSTALLED IN PLACE OF CONCRETE BARRIERS PER STANDARD DRAWINGS G-00.05, G5-11S AND G10-20.
 - TERMINATE RUNS OF TEMPORARY PORTABLE CONCRETE BARRIER USING ONE OF THE FOLLOWING THREE METHODS:
 - TEMPORARY CRASH ATTENUATOR
 - RIGID TO SEMI-RIGID GUARDRAIL TRANSITION WITH SLOTTED RAIL TERMINAL OR OTHER APPROVED CRASHWORTHY END TREATMENT
 - FLARE THE ENDS OF THE TEMPORARY BARRIER AWAY FROM THE ROADWAY AT A RATE OF 15:1 ON A TRANSVERSE SLOPE OF 10:1 OR FLATTER TO THE OUTSIDE EDGE OF THE CLEAR ZONE AND INSTALL A SLOPING END TREATMENT, PER STANDARD DRAWING G-47.00.
 - TERMINATE RUNS OF TEMPORARY GUARDRAIL USING EITHER OF THE FOLLOWING TWO METHODS:
 - SLOTTED RAIL TERMINAL OR OTHER APPROVED CRASHWORTHY END TREATMENT
 - FLARE THE ENDS OF THE TEMPORARY GUARDRAIL AWAY FROM THE ROADWAY AT A RATE OF 15:1 ON A TRANSVERSE SLOPE OF 10:1 OR FLATTER TO THE OUTSIDE EDGE OF THE CLEAR ZONE
 - ON ALL OTHER ROADWAYS, INSTALL TYPE II BARRICADES, DRUMS OR DELINEATORS WHEN DEVICES ARE REQUIRED. SPACE THE DEVICES IN ACCORDANCE WITH THE REQUIREMENTS FOR SPACING TYPE II BARRICADES AND DRUMS SET FORTH IN THE ALASKA TRAFFIC MANUAL.
- DO NOT CONSTRUCT VERTICAL DROPOFFS GREATER THAN 1.5" WITHIN THE TRAFFIC LANE OR ACTIVE WHEEL TRACK. PROVIDE 2' OF SHY DISTANCE FROM EDGE OF ALL TRAFFIC CONTROL DEVICES TO THE EDGE OF THE TRAVELED WAY.
- TEMPORARY UNSUPPORTED VERTICAL CUTS REQUIRED FOR RIPRAP SLOPE WORK SHALL NOT BE ALLOWED WITHOUT SLOPE STABILITY ANALYSIS APPROVED BY ENGINEER. IF TEMPORARY VERTICAL CUTS ARE UNAVOIDABLE CLOSE THE LANE CLOSEST TO THE WORK AREA AND PROVIDE A 24-HOUR FLAGGER OR PILOT CAR OPERATION WHICH WILL BE INCIDENTAL TO RIPRAP WORK ITEMS.

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
**HAINES HIGHWAY RECONSTRUCTION
 MILEPOST 20 TO 25
 TRAFFIC CONTROL DEVICES
 FOR ROADSIDE**

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0956028/Z686060000	2023	T1	T12

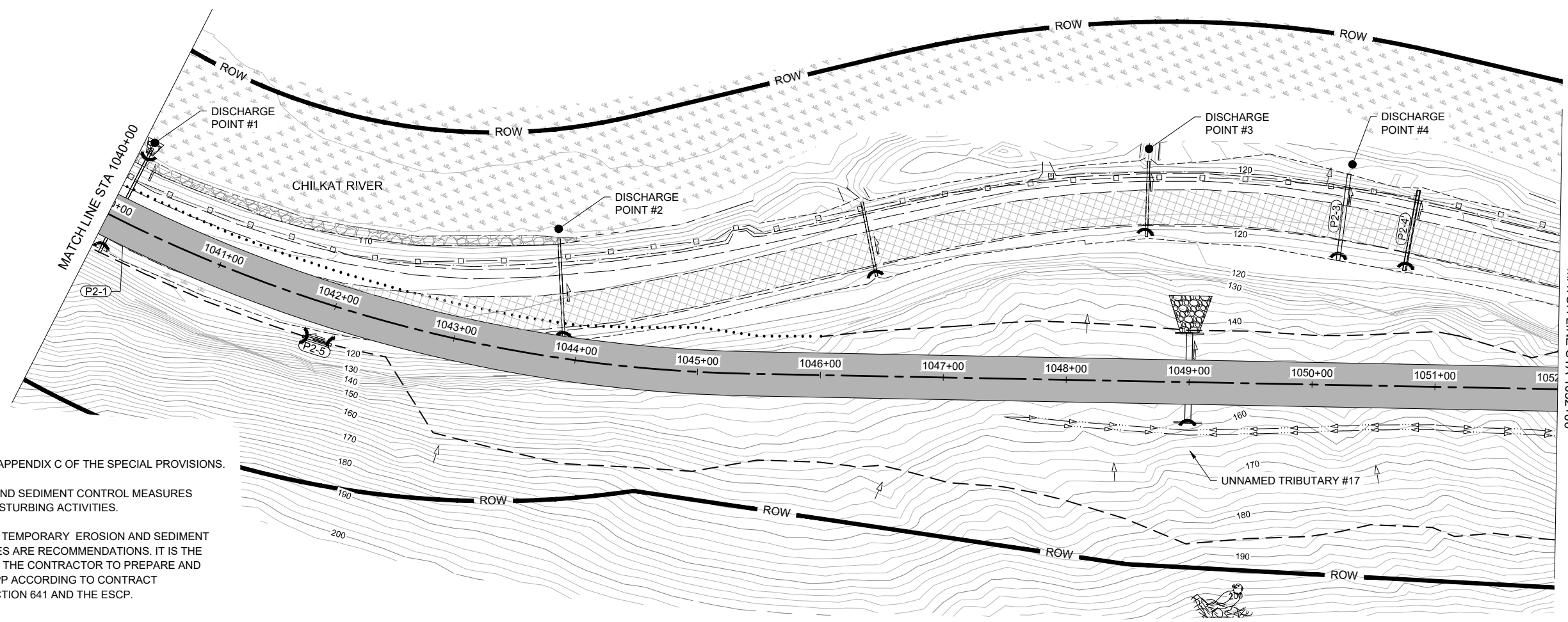


ESCP LEGEND

	TEMPORARY SEDIMENT BARRIER		VEGETATIVE BUFFER STRIP
	INLET PROTECTION		WETLANDS
	CUT LIMITS		CULVERT STORMWATER FLOW
	FILL LIMITS		PROFILE STORMWATER FLOW
	RIGHT-OF-WAY		SURFACE STORMWATER FLOW
	STORM DRAIN INLET PROTECTION		TOP OF BANK
	RIPRAP EMBANKMENT		DISCHARGE POINT
	OUTLET PROTECTION		STORMWATER OUTFALL
	EDGE OF WATER		DITCHLINE



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ESCP NOTES:

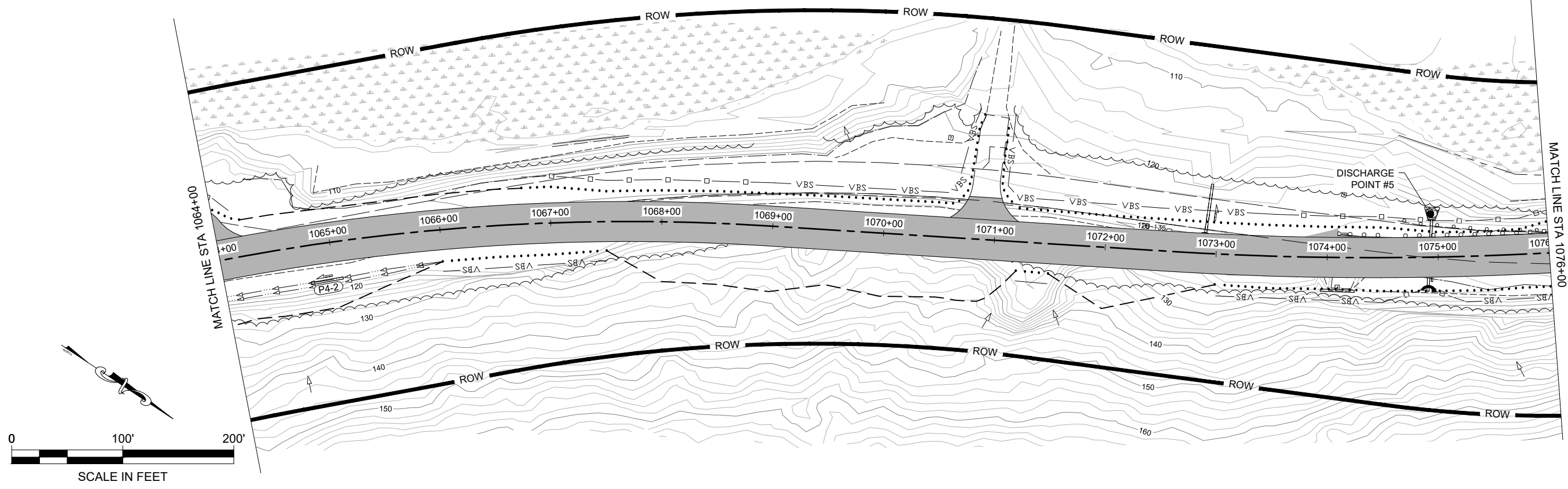
1. REFER TO ESCP IN APPENDIX C OF THE SPECIAL PROVISIONS.
2. INSTALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO EARTH DISTURBING ACTIVITIES.
3. THE LOCATIONS OF TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE RECOMMENDATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PREPARE AND IMPLEMENT A SWPPP ACCORDING TO CONTRACT SPECIFICATION SECTION 641 AND THE ESCP.

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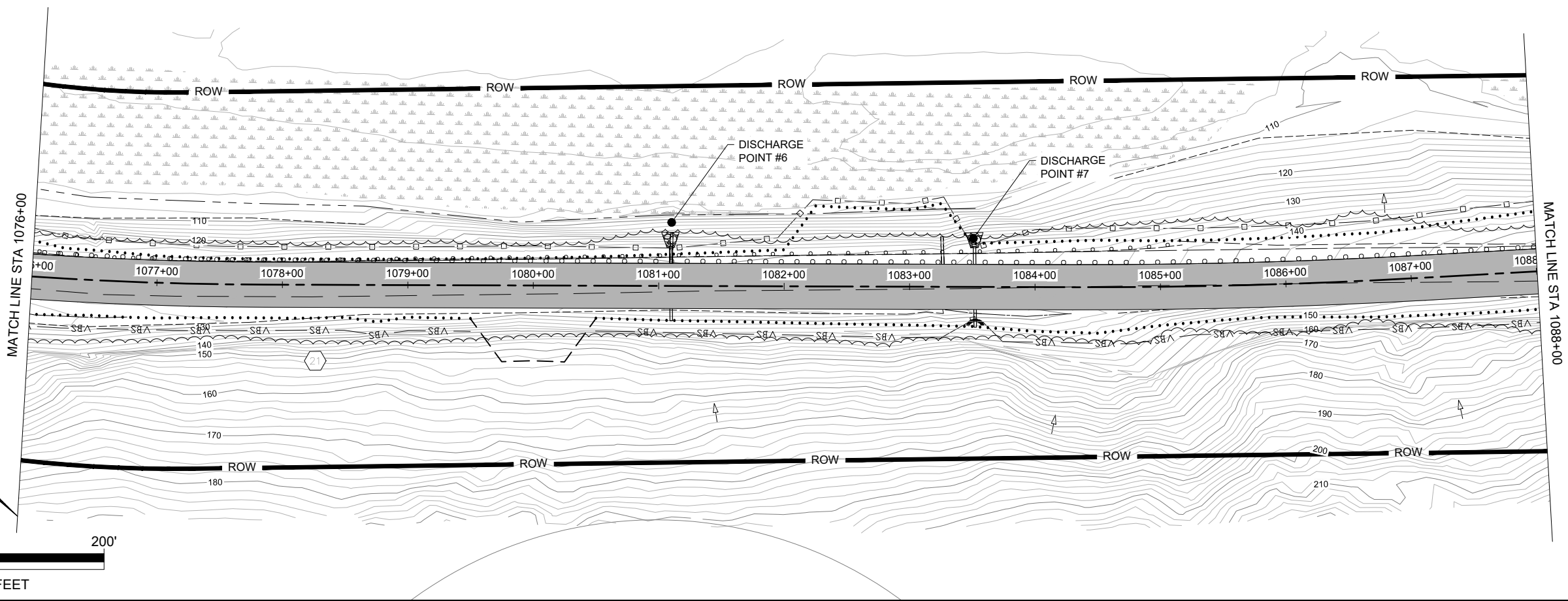
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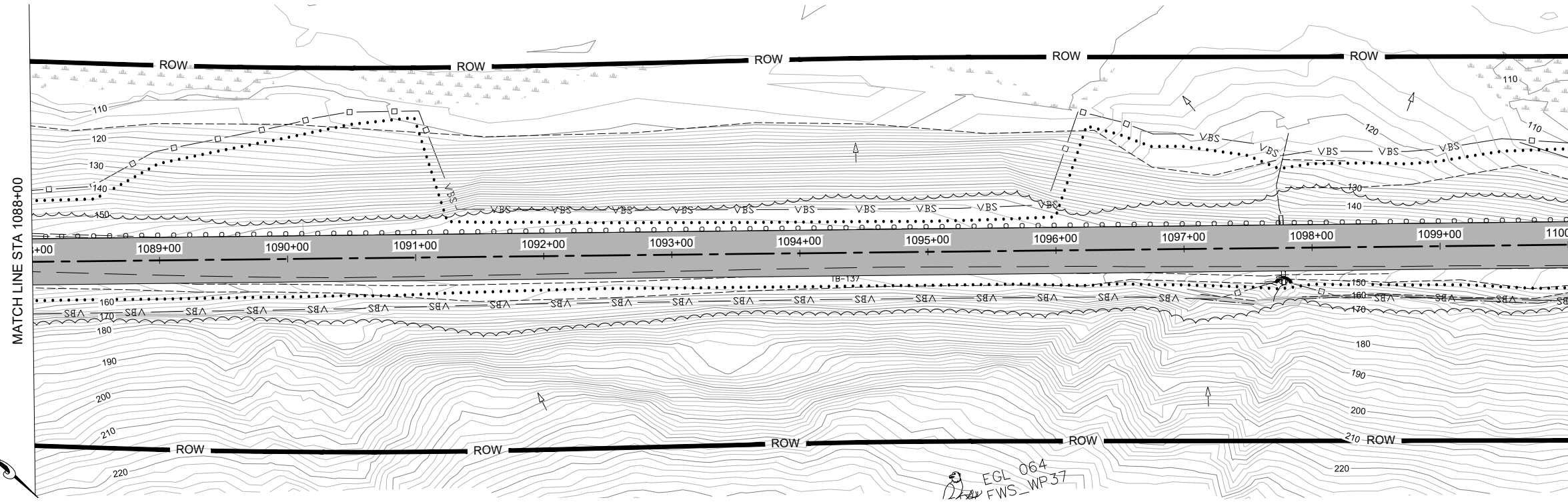
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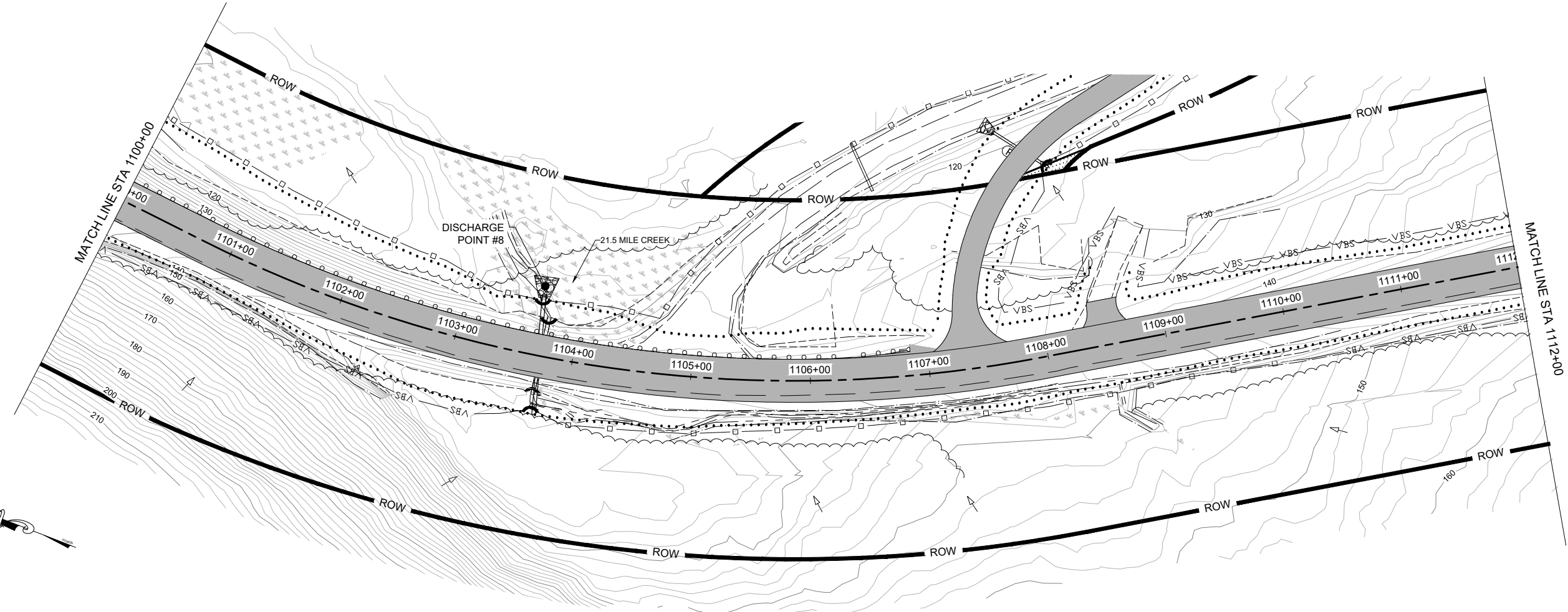
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 LAYOUT T4
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 DRAFTED LUHRJAN



MATCH LINE STA 1100+00

MATCH LINE STA 1088+00

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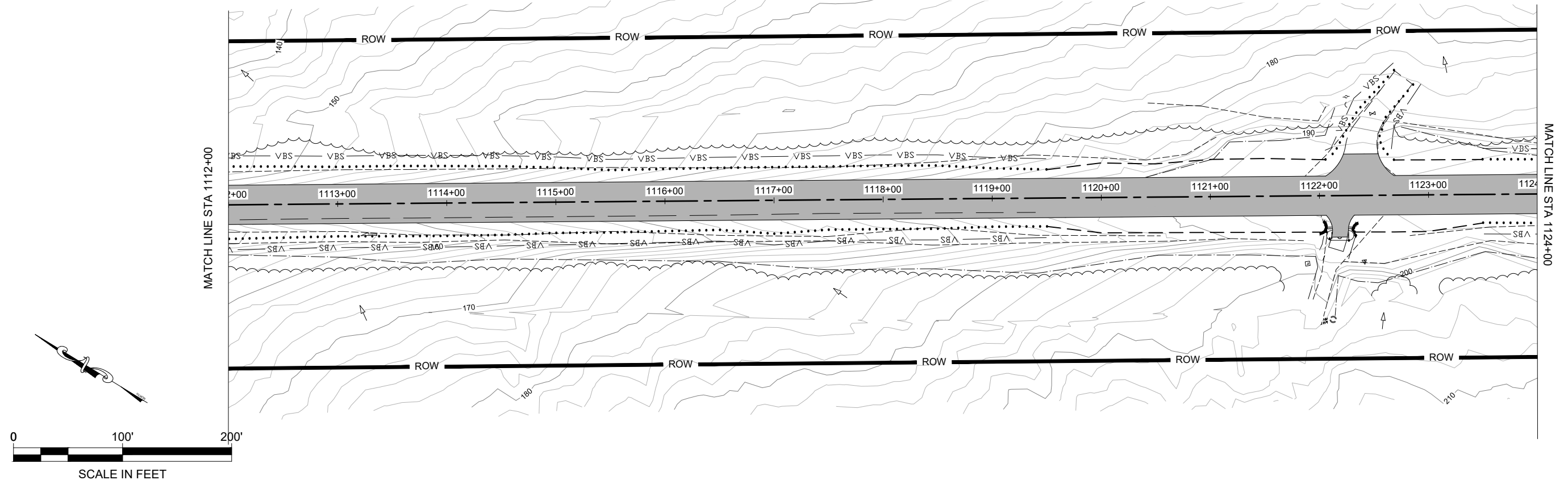
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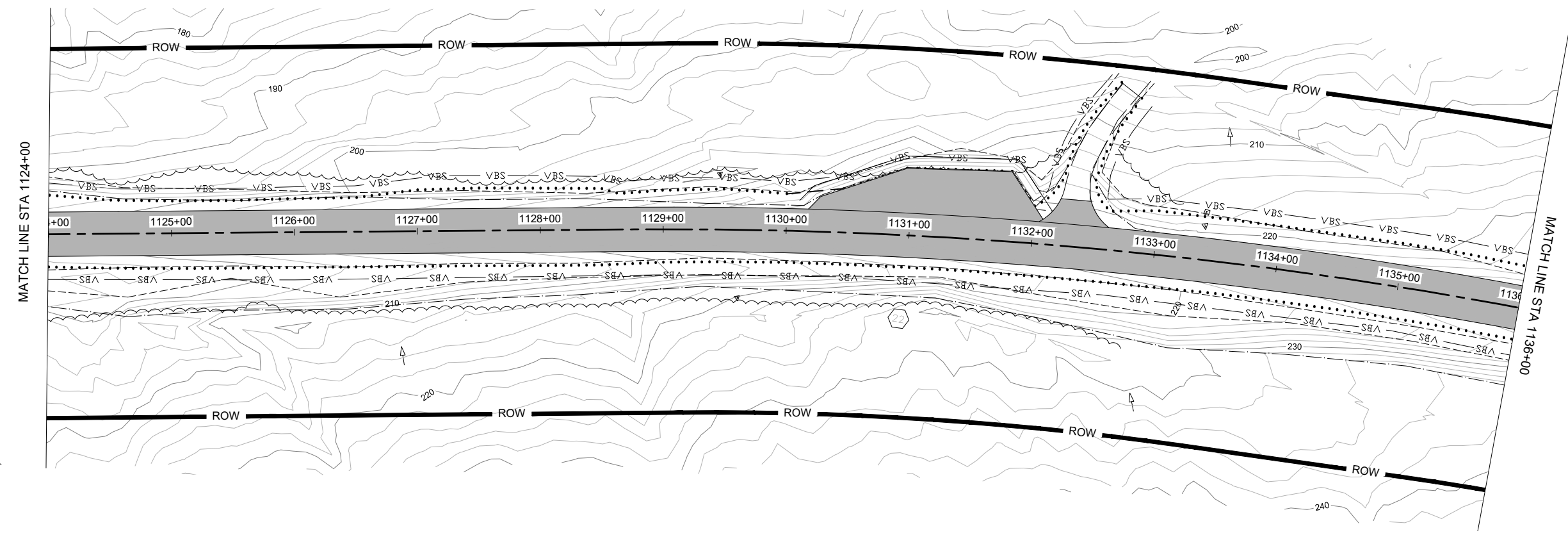
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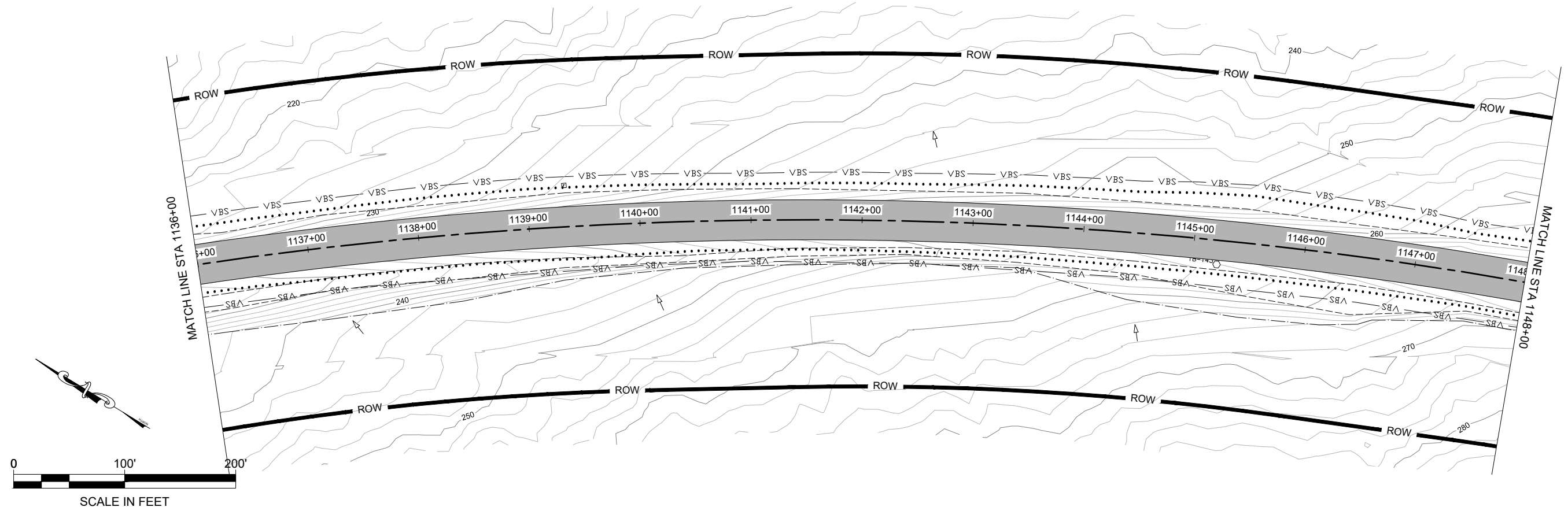
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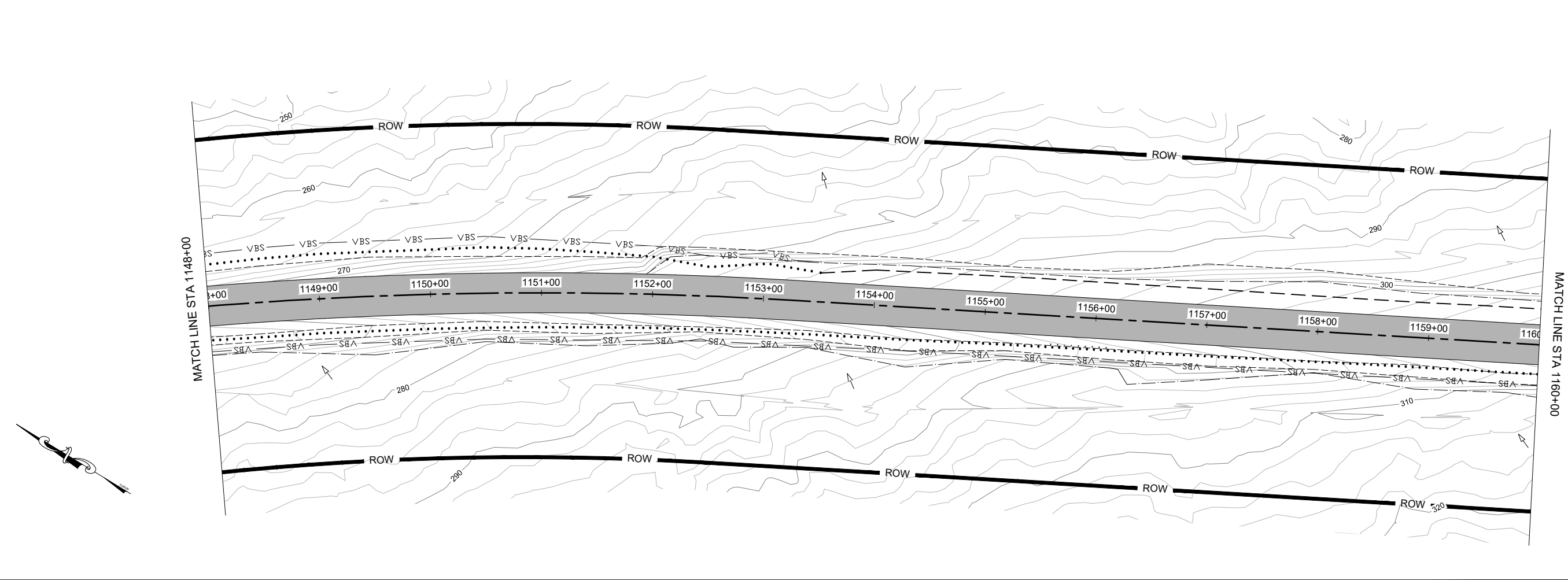
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 DATE: 5/4/2020
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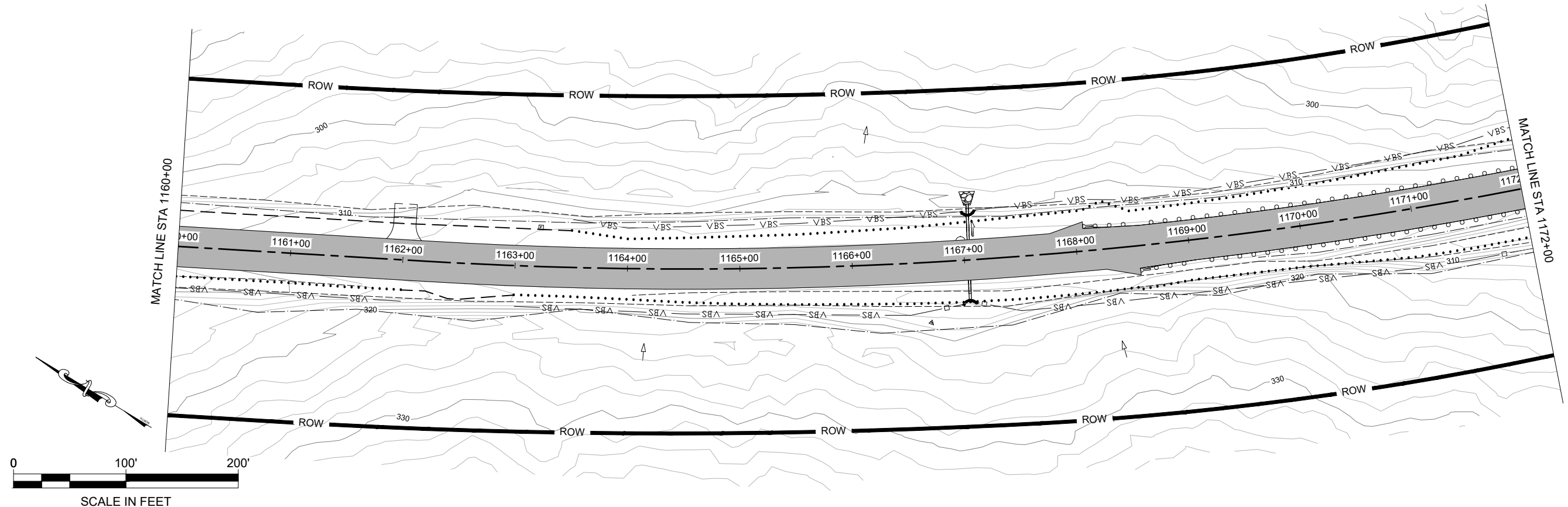
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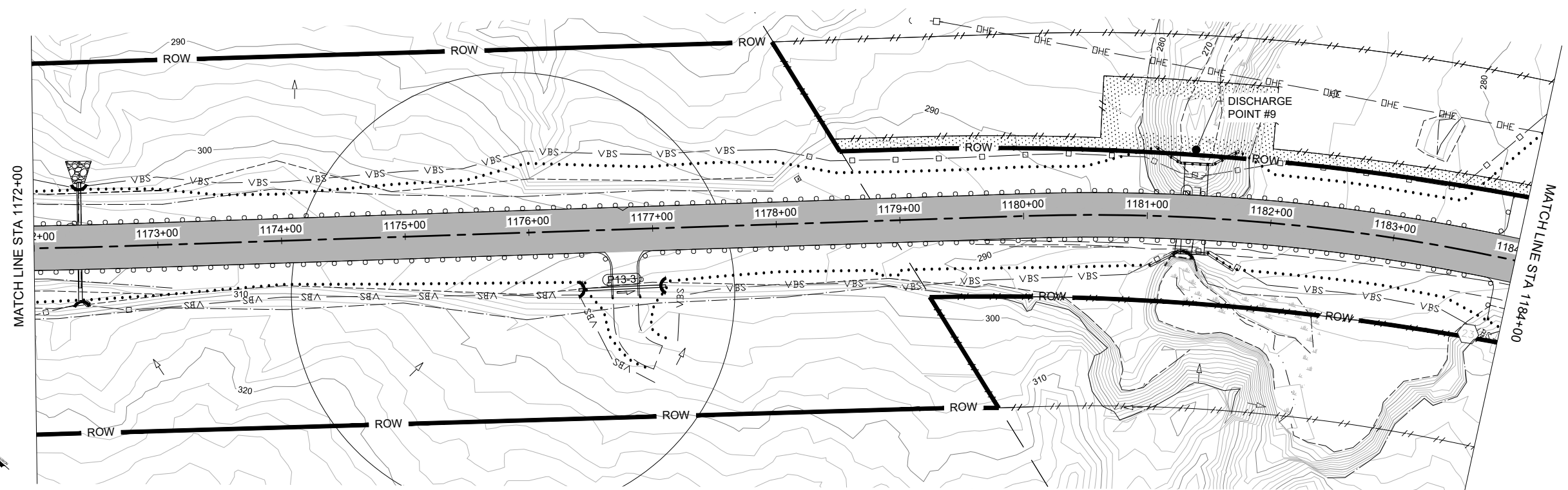
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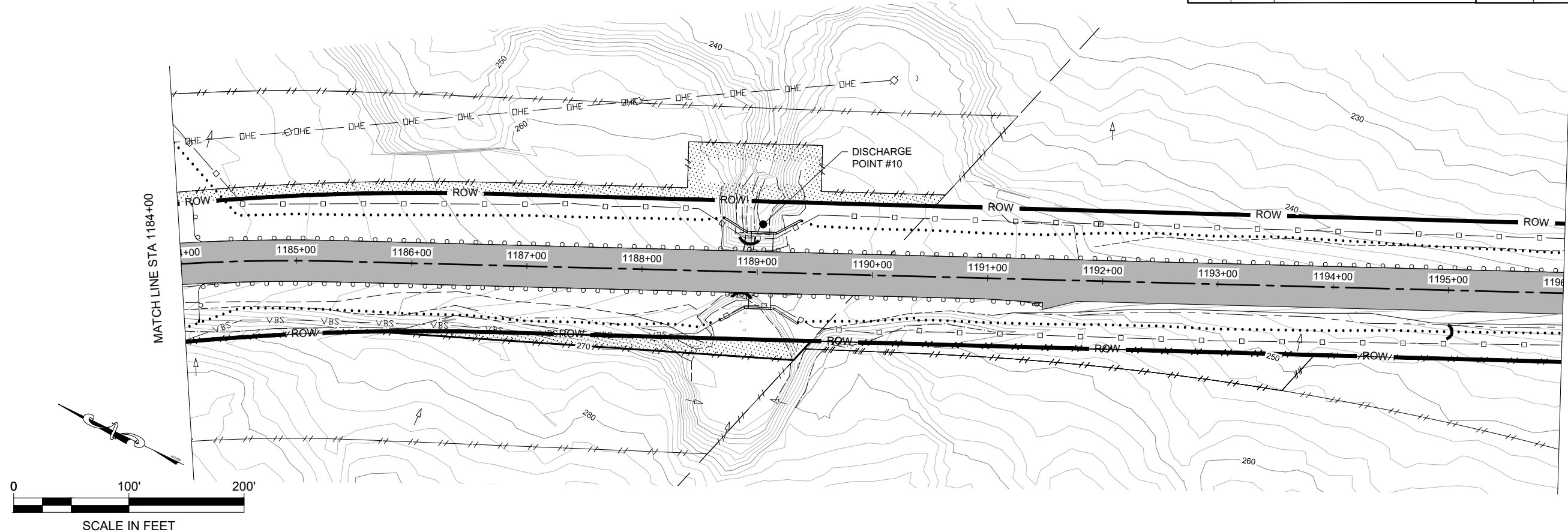
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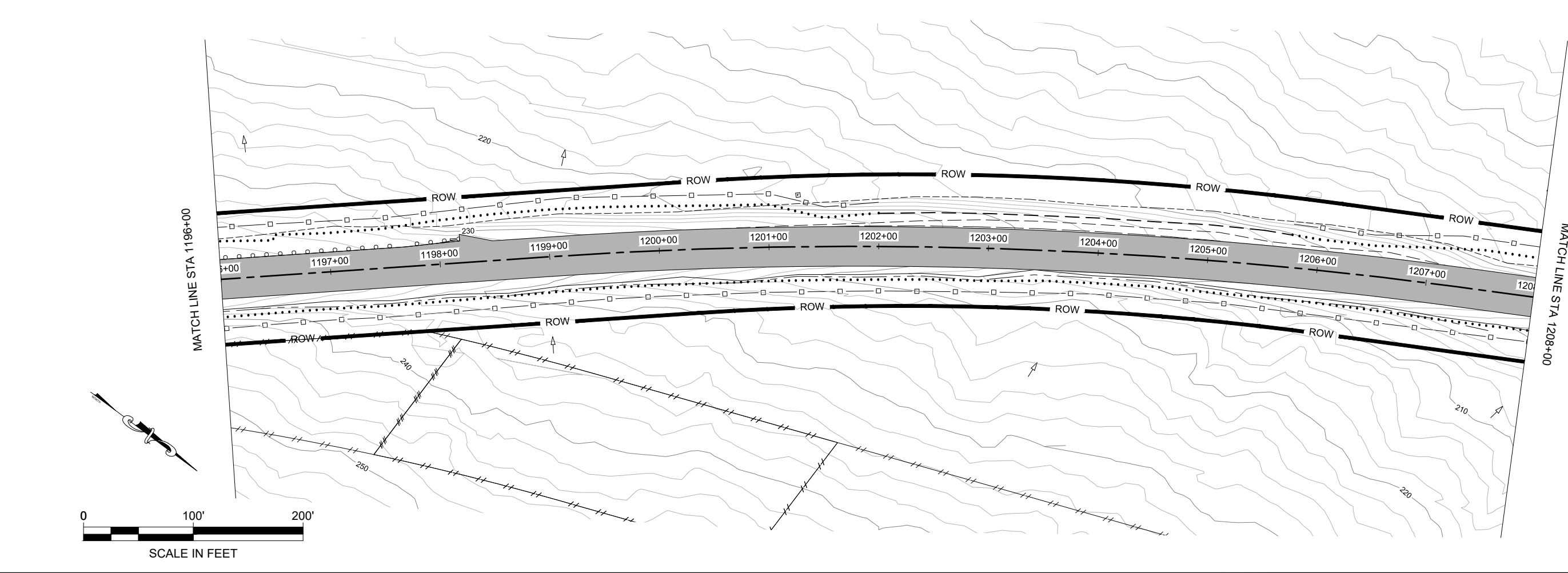
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 CERTIFICATE OF AUTH # : AECL848
 DATE: 5/4/2020
 LAYOUT: T8



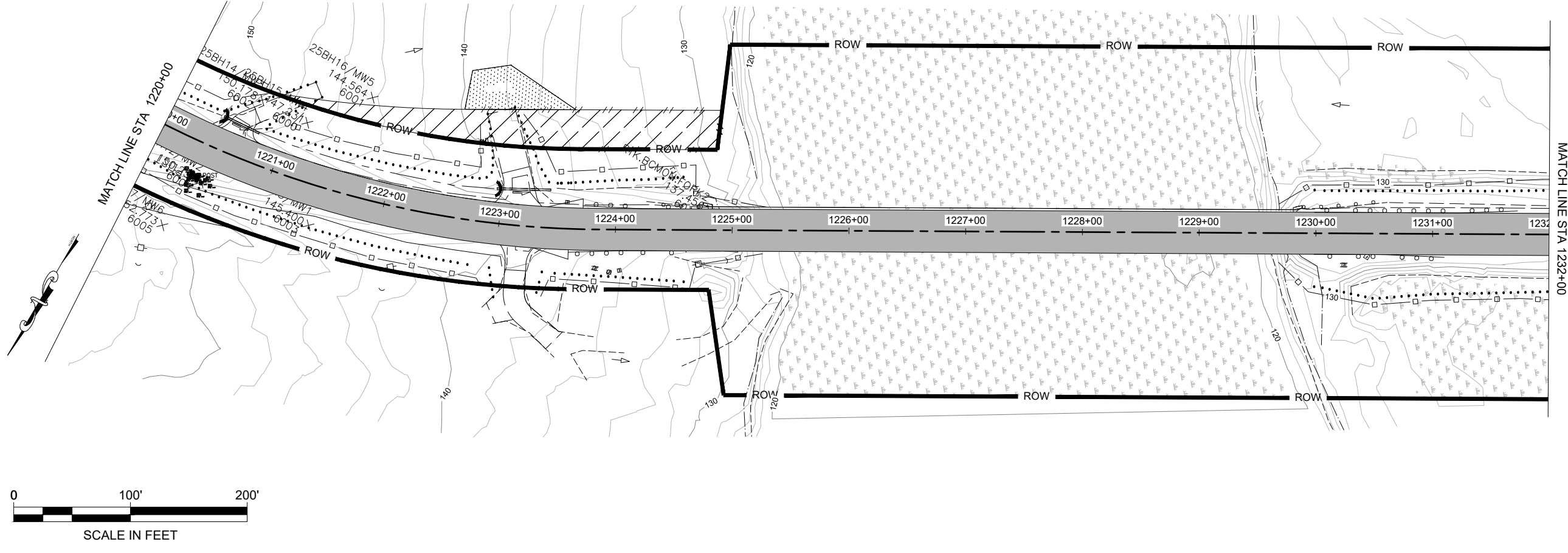
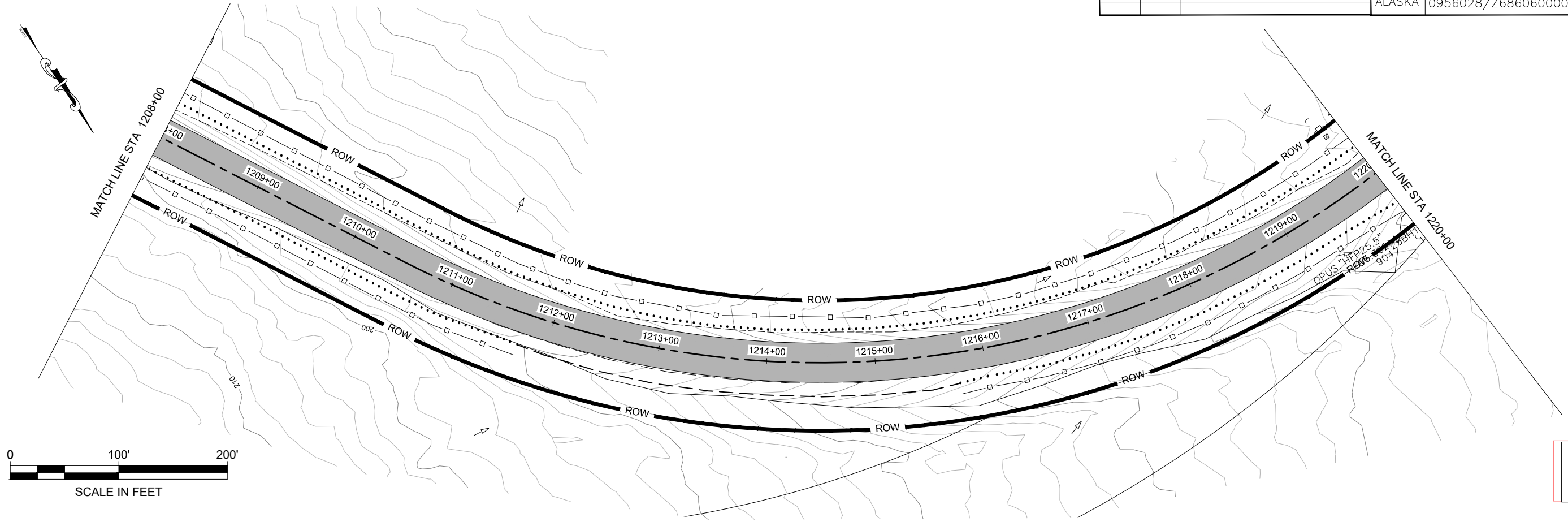
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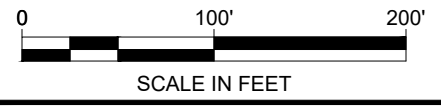
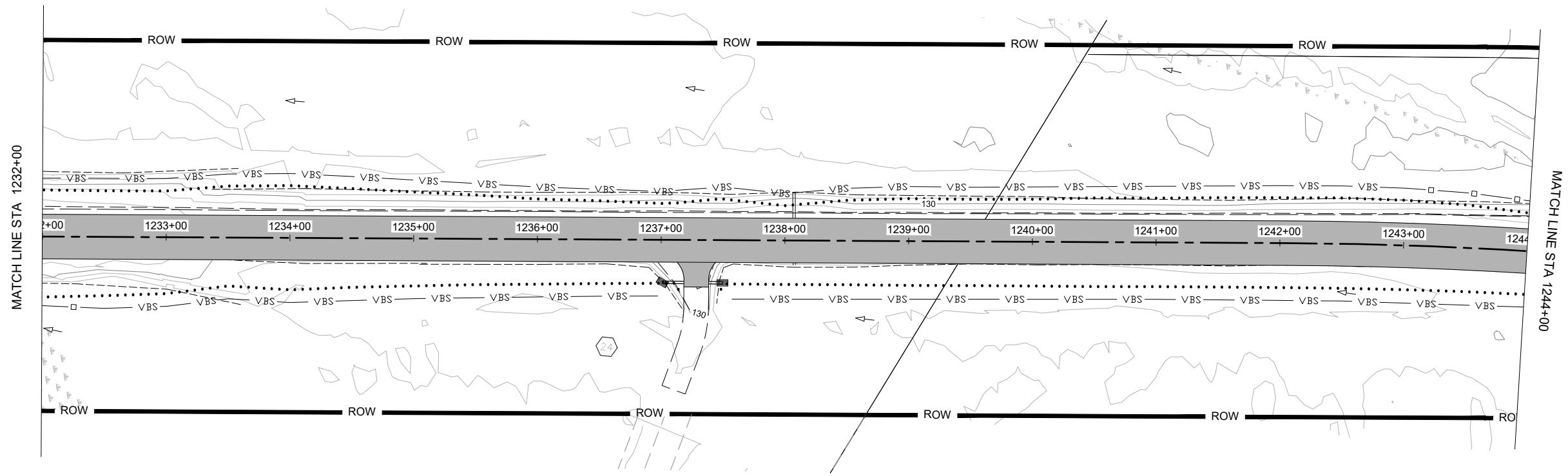
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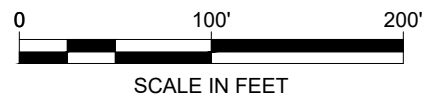
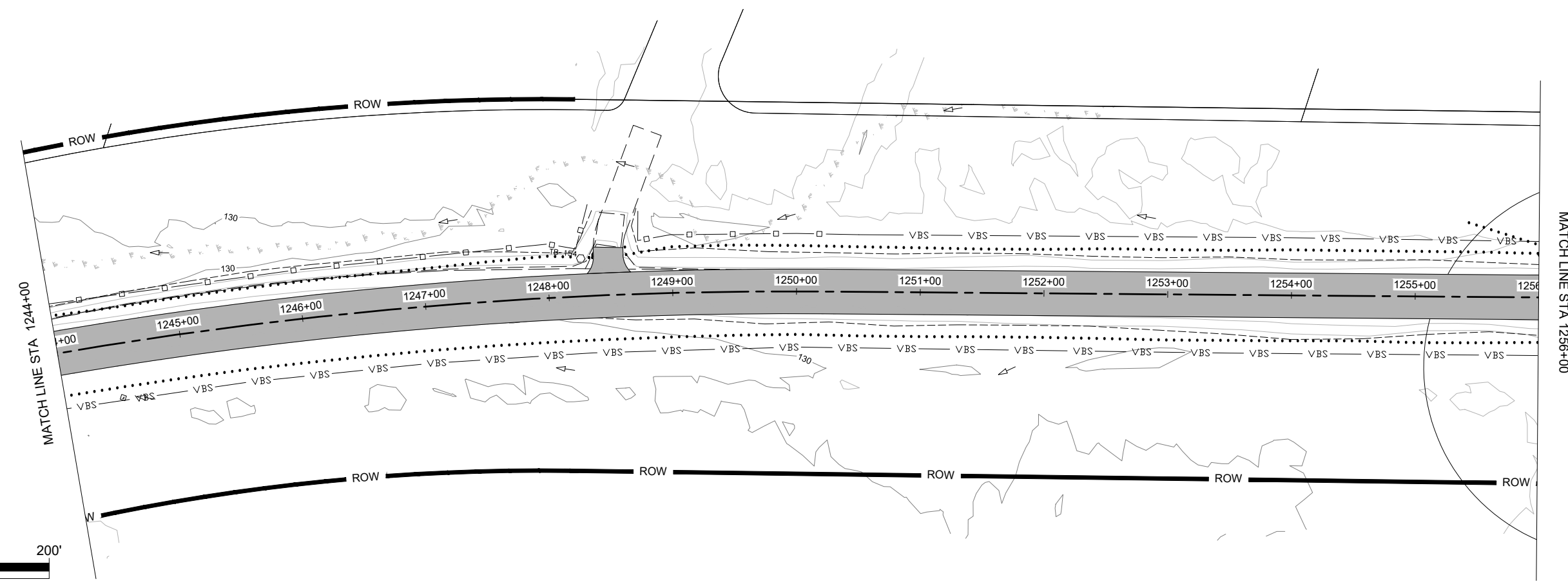
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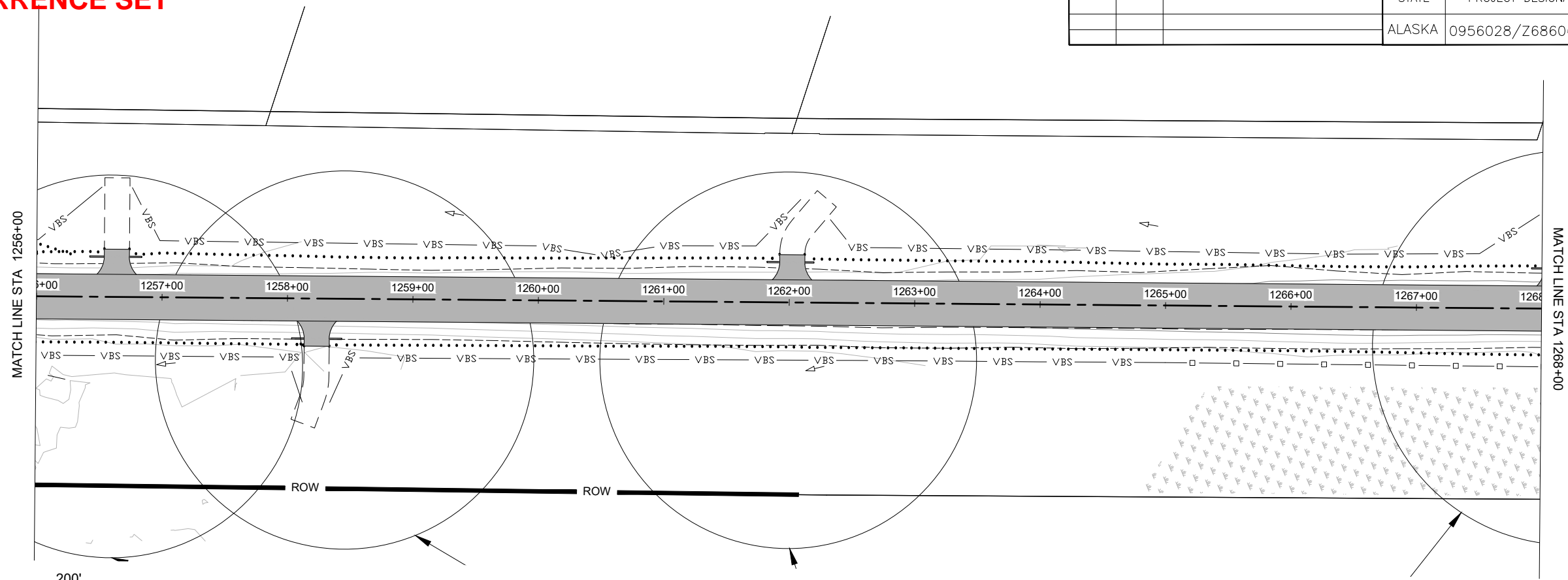
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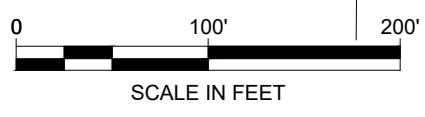
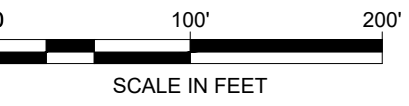
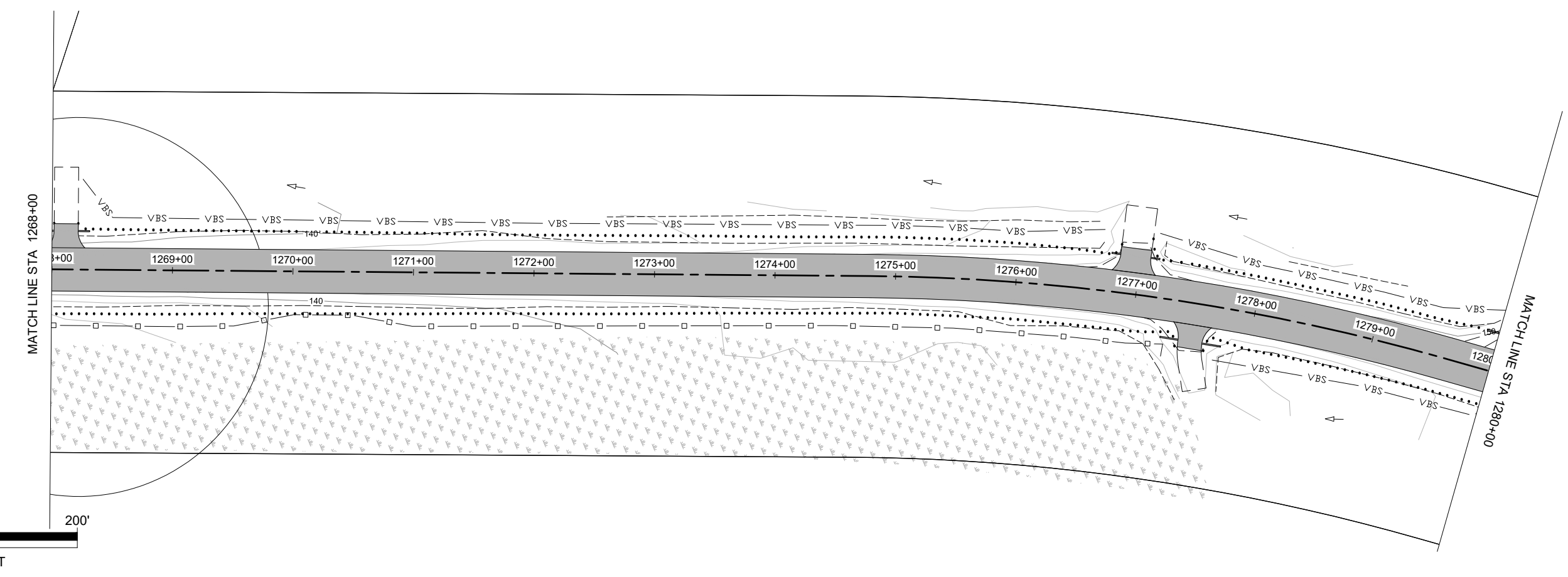
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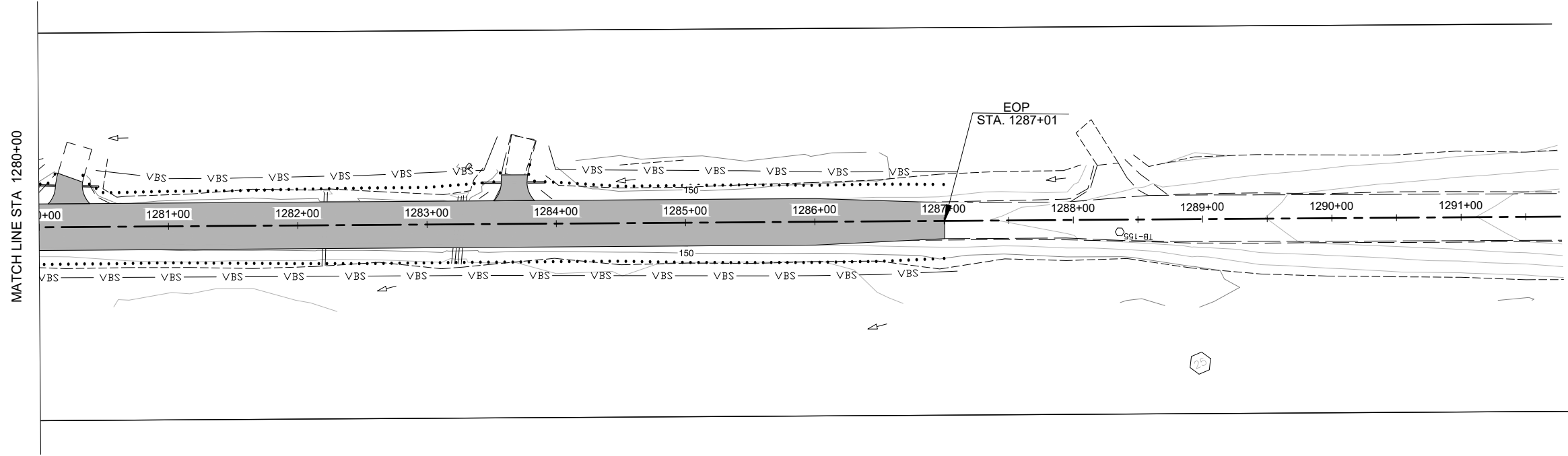
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