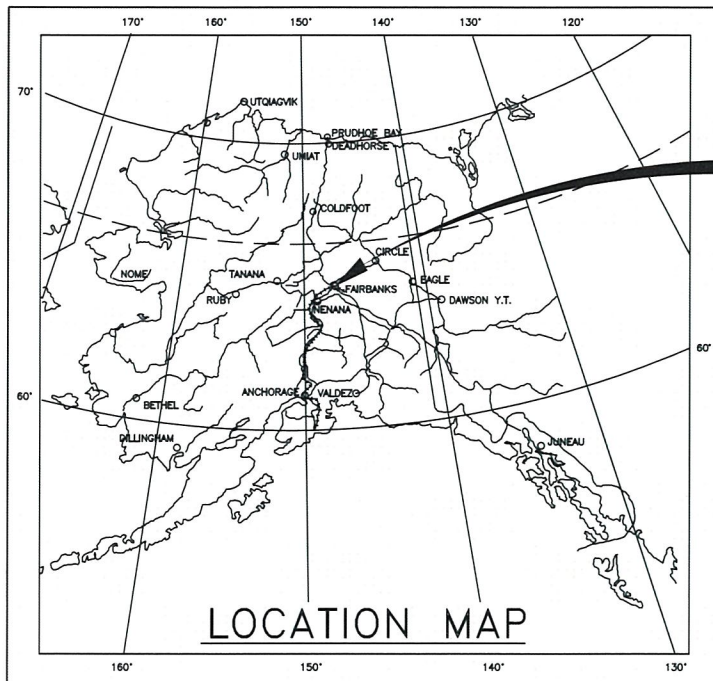


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWHY00124	2022	A1	78
CDS ROUTE: 150125		MILEPOINT: 0.108 TO 0.226		



PROJECT LOCATION

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
&  
PUBLIC FACILITIES

**CONFORMED COPY**  
THE UNDERSIGNED HEREBY CERTIFIES THAT THIS INSTRUMENT IS AN EXACT AND TRUE COPY OF THE ORIGINAL  
*Hildi Jorg*

PROPOSED HIGHWAY PROJECT  
0629001/NFHWHY00124 & NRMS00688  
AURORA DRIVE NOYES SLOUGH  
BRIDGE NO.0209 REPLACEMENT  
GRADING, DRAINAGE, PAVING, BRIDGE & UTILITIES

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	LEGEND
A3	ABBREVIATIONS
A4-A6	SURVEY CONTROL
A7	ALIGNMENT CONTROL PLAN
B1	TYPICAL SECTIONS
C1-C2	QUANTITIES
D1-D2	SUMMARY TABLES
E1-E6	DETAILS
F1-F2	PLAN & PROFILE
G1-G5	APPROACHES & GRADING
H1-H2	SIGNING AND STRIPING SUMMARY & NOTES
H3-H4	SIGNING & STRIPING PLANS
H5	SIGN DETAILS
N1-N24	BRIDGE PLANS
Q1	EROSION & SEDIMENT CONTROL NOTES
Q2	EROSION & SEDIMENT CONTROL PLAN
U1-U4	WATER & SEWER PLANS & PROFILE
V1-V18	STANDARD PLANS

THE FOLLOWING STANDARD PLANS APPLY TO THIS PROJECT:

- G-00.05, G-05.11S, G-10.20, G-20.12
- I-20.20, I-21.12, I-81.00
- S-00.12, S-01.02, S-05.02, S-20.11, S-31.02
- T-20.04, T-22.04

DESIGN DESIGNATIONS	
ADT (2017)	3,500
ADT (2040)	4,110
DHV (11.6%)	480
PERCENT TRUCKS (T)	(3.85%)
DIRECTIONAL SPLIT (D)	45%SB-55%NB
DESIGN SPEED (V)	35 MPH
DESIGN ESAL'S (20 YEARS)	311,938

PROJECT SUMMARY	
WIDTH OF PAVEMENT	12' LANES
LENGTH OF PAVING	625'
LENGTH OF PROJECT	625'



LAUREN LITTLE, P.E. PROJECT MANAGER

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
&  
PUBLIC FACILITIES  
APPROVED BY: *Sarah Schlacher* DATE 11/4/2022  
Sarah Schlacher, P.E.  
Preconstruction Engineer, Northern Region  
ACCEPTED FOR CONSTRUCTION: *Joseph P. Kemp* DATE 11/4/2022  
Joseph P. Kemp, P.E.  
Acting Regional Director, Northern Region

PLANS DEVELOPED BY: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES, NORTHERN REGION, 2301 PEGER ROAD, FAIRBANKS, AK 99709 (907) 451-2200  
N:\Projects\18185FB-AuroraDr\_Noyes\c0001cnat\18185fb-Title Fri, Sep/16/22 03:49pm

PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AEC0163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
 N:\Projects\18185FB-AuroraDr.-Noyes\C:\1001\cmst18185FB-HWYS Legend Fr. Sep/16/22 03:49pm

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	A2	A7

	RECOVERED	SET
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	"L" 48+97.23 POT BK= "O" 48+97.23 PC AHD	
PROJECT RIGHT-OF-WAY LINE		
EXISTING RIGHT-OF-WAY LINE		
EXISTING PROPERTY LINE		
CONTROLLED ACCESS LINE		
UTILITY EASEMENT LINE		
TEMPORARY EASEMENT LINE (TCP OR TCE)		
ACCESS OR SECTION LINE EASEMENT		
PROPOSED CUT SLOPE LIMIT		
PROPOSED FILL SLOPE LIMIT		
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
TOWNSHIP & RANGE LINE		

	EXISTING	PROPOSED
SANITARY SEWER (FLOW DIRECTION →)		
FUEL LINE		
GAS LINE		
WATER LINE		
METER, VALVE, FIRE HYDRANT		
EXISTING STORM DRAIN (FLOW DIRECTION →)		
PROPOSED STORM DRAIN		
FIBER OPTIC LINE		
DIRECT BURIAL TELEPHONE CABLE		
DIRECT BURIAL ELECTRIC CABLE		
ELECTRIC LINE (OVERHEAD)		
POWER POLE LINE		
JOINT USE POWER & TELEPHONE		
TELEPHONE POLE LINE		
POLE ANCHOR		
STUB POLE (POWER OR TELEPHONE)		
TELEPHONE DUCT		
TELEPHONE PEDESTAL		
BURIED CABLE MARKER		
PIPELINE MARKER OR VALVE		
CATCH BASIN OR DROP INLET		
MANHOLE		
SANITARY SEWER CLEAN OUT		

	EXISTING	PROPOSED
ROADWAY/PAVEMENT EDGE		
FENCE		
CURB AND GUTTER		
DETECTABLE WARNINGS		
GUARDRAIL		
CULVERT PIPE		
SIGN		
MAILBOX		
RAILROAD TRACKS		
RAILROAD DEVICES		
TREE LINE		
WATER BOUNDARY		
ORDINARY HIGH WATER LINE		
FLOW CENTERLINE		
FLOW DIRECTION		
WETLANDS		
EXISTING BUILDINGS		
POST OR BOLLARD		
WELL OR MONITORING WELL		
SEPTIC PIPE		
FUEL TANK FILL PIPE/VENT		
SATELLITE DISH		
TEST HOLE		
CONIFER TREE		
DECIDUOUS TREE		
GRAVE		
THERMOSIPHON		
PARKING METER		
VEHICLE PLUG-IN		
DELINEATOR/GUIDE MARKER		

	EXISTING	PROPOSED
JUNCTION BOX, TYPE IA		
JUNCTION BOX, TYPE II		
JUNCTION BOX, TYPE III		
SIGNAL FACE, VEHICULAR		
SIGNAL FACE, BACKPLATE		
SIGNAL FACE, LEFT TURN, BACKPLATE		
SIGNAL FACE, PEDESTRIAN		
LOOP DETECTOR		
VIDEO DETECTOR		
RADAR DETECTOR		
OPTICOM DETECTOR		
PEDESTRIAN PUSH BUTTON		
SIGNAL POST W/O MAST ARM		
SIGNAL POLE W/MAST ARM		
SIGNAL CONTROLLER		
LOAD CENTER		
LUMINAIRE		
RIGID METAL CONDUIT		

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

# LEGEND



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	A3	A7

### ABBREVIATIONS

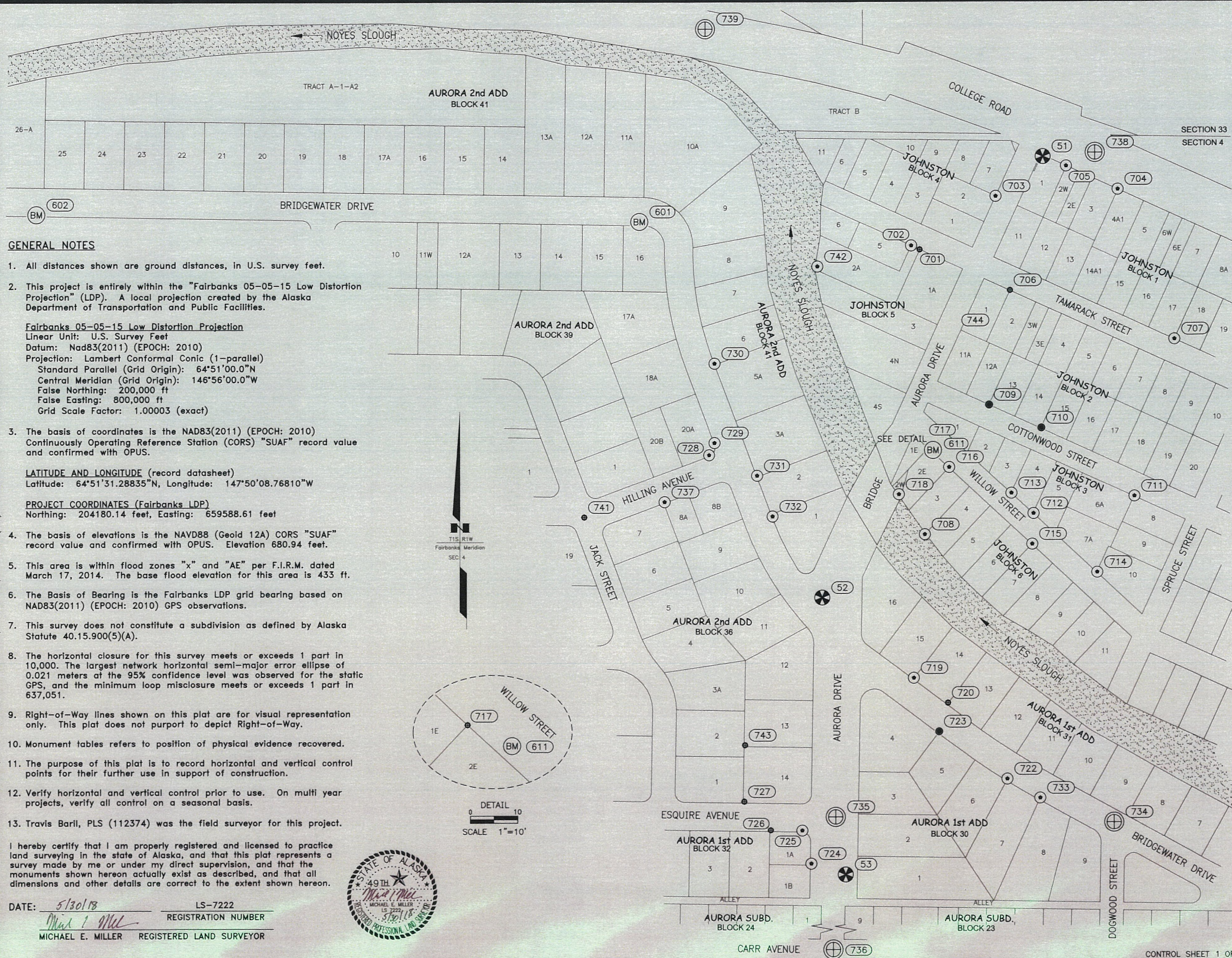
ADA	AMERICAN WITH DISABILITIES ACT	R	RADIUS
ADT	AVERAGE DAILY TRAFFIC	RES	RESIDENTIAL
AVE	AVENUE	REHAB	REHABILITATION
		RHF	RIGHT HAND FORWARD
BOP	BEGINNING OF PROJECT	RD	ROAD
BP	BEGIN POINT	ROW, R/W, R.O.W.	RIGHT OF WAY
		RP	RADIAL POINT
		RT	RIGHT
CL, CL	CENTERLINE	S	SOUTH
C&G	CURB AND GUTTER	S&S	SIGNING AND STRIPING
C	CENTER	SC	STRUCTURE CENTER
CB	CATCH BASIN	SD	STORM DRAIN
CGP	CONSTRUCTION GENERAL PERMIT	SDWK	SIDEWALK
CIPP	CURED IN PLACE PIPE	SF	SQUARE FOOT
CLR	CLEARANCE	SS	SANITARY SEWER, STAINLESS STEEL
CMP	CORRUGATED METAL PIPE	ST	STREET
COM	COMMERCIAL	STD	STANDARD
COMM	COMMUNICATIONS	STA	STATION
CON	CONCRETE	SW	SIDEWALK
CPM	CRITICAL PATH METHOD	SWR	SANITARY SEWER
CPP	CORRUGATED POLYETHYLENE PIPE	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
CSP	CORRUGATED STEEL PIPE	SY	SQUARE YARD
D	DEGREE OF CURVATURE, DISTRIBUTION OF TRAFFIC, DIAMETER	T	TANGENT
		TBC	TOP BACK OF CURB
Δ	DELTA ANGLE	TCE	TEMPORARY CONSTRUCTION EASEMENT
DEMO	DEMOLITION	TCP	TEMPORARY CONSTRUCTION PERMIT
DESC.	DESCRIPTION	THK	THICK
DHV	DAILY HOURLY VOLUME	TOC	TOP OF CASTING
DIA.	DIAMETER	TYP	TYPICAL
DNR	DEPARTMENT OF NATURAL RESOURCES	V	DESIGN SPEED
DR	DRIVE	VPC	VERTICAL POINT OF CURVATURE
DRWY	DRIVEWAY	VPI	VERTICAL POINT OF INTERSECTION
DWT	DETECTABLE WARNING TILE	VPT	VERTICAL POINT OF TANGENCY
		W	WEST
E	EASTING, EAST	W/	WITH
EA	EACH	W, WTR	WATER
EG	EXISTING GROUND	WWM	WELDED WIRE MESH
ELEV, EL	ELEVATION		
EOP	END OF PROJECT		
EP	END POINT, END OF PAVEMENT		
ESAL	EQUIVALENT SINGLE AXLE LOAD		
EXP	EXPANSION JOINT		
EX	EXISTING	+-	PLUS OR MINUS
FG	FINISHED GRADE		
FL	FLOW LINE		
FT	FEET, FOOT		
GALV	GALVANIZE		
GB	GRADE BREAK		
GDRL	GUARDRAIL		
HD	HIGH DENSITY		
HDPE	HIGH DENSITY POLYETHYLENE		
HMA	HOT MIX ASPHALT		
INT	INTERSECTION		
INV	INVERT		
L	LENGTH		
LF	LINEAR FOOT		
LHF	LEFT HAND FORWARD		
LN	LANE		
LOC	LIP OF CURB		
LP	LOW POINT		
LT	LEFT		
LVC	LENGTH OF VERTICAL CURVE		
MAX	MAXIMUM		
MH	MANHOLE		
MIN	MINIMUM		
MMA	METHYL METHACRYLATE		
NO./#	NUMBER		
N	NORTHING, NORTH		
NFL	NORMAL FLOW LINE		
NIC	NOT IN CONTRACT		
NTS	NOT TO SCALE		
OH	OVERHEAD		
PC	POINT OF CURVATURE		
PCC	PORTLAND CEMENT CONCRETE / POINT OF COMPOUND CURVE		
PRC	POINT OF REVERSE CURVE		
PI	POINT OF INTERSECTION		
PT	POINT OF TANGENCY		
PT#	POINT NUMBER		
PUE	PUBLIC UTILITY EASEMENT		
QTY	QUANTITY		

### GENERAL NOTES

- EXCESS MATERIAL MUST BE DISPOSED OF OUTSIDE PROJECT LIMITS. THIS WORK WILL BE SUBSIDIARY TO 203.0003.0000.
- SAW CUT TRANSITION MATCH POINTS. APPLY STE-1 TACK COAT TO ALL SAW CUT FACES PRIOR TO PAVING. SAW CUTTING AND STE-1 TACK COAT WILL NOT BE MEASURED OR PAID FOR DIRECTLY BUT IS SUBSIDIARY TO OTHER 401 PAY ITEMS.
- LOCATE AND PROTECT EXISTING UTILITIES PRIOR TO BEGINNING GROUND DISTURBING WORK. DAMAGE TO UTILITIES AS A RESULT OF CONSTRUCTION ACTIVITIES MUST BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- SEEDING MAY REQUIRE SEVERAL MOBILIZATIONS. ALL MOBILIZATIONS REQUIRED ARE SUBSIDIARY TO PAY ITEM 618.0002.0000.
- TO MITIGATE POTENTIAL FOR CONSTRUCTION NOISE IMPACTS RESULTING FROM PILE/SHEET PILE DRIVING--NO PILE DRIVING WILL OCCUR FROM 11:00 PM TO 7:00 AM, PILE DRIVING NOISE LEVELS WILL BE MONITORED.
- NOISE DAMPING DEVICES WILL BE INSTALLED ON CONSTRUCTION EQUIPMENT AND/OR HEARING PROTECTION PROVIDED TO NEARBY RESIDENTS FOR THE DURATION OF PILE DRIVING WORK.

ABBREVIATIONS



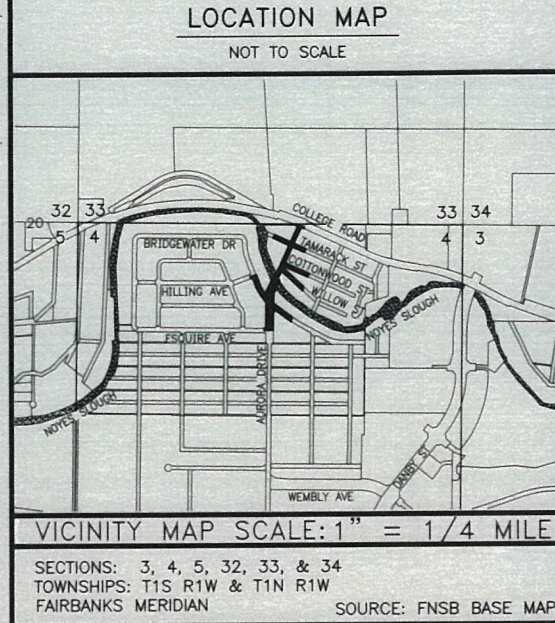
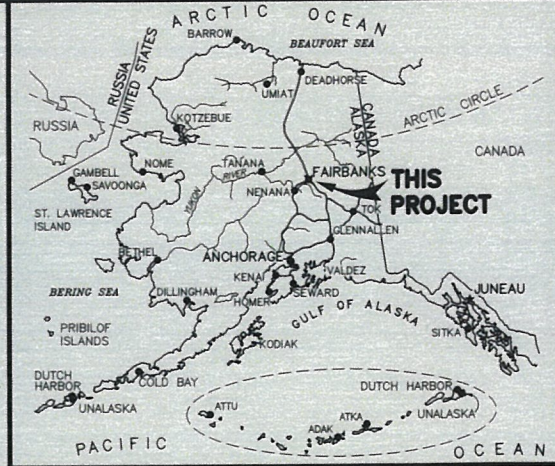
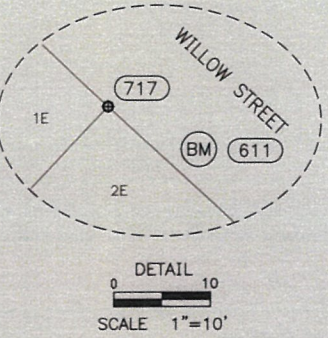


**GENERAL NOTES**

- All distances shown are ground distances, in U.S. survey feet.
- This project is entirely within the "Fairbanks 05-05-15 Low Distortion Projection" (LDP). A local projection created by the Alaska Department of Transportation and Public Facilities.  
**Fairbanks 05-05-15 Low Distortion Projection**  
Linear Unit: U.S. Survey Feet  
Datum: Nad83(2011) (EPOCH: 2010)  
Projection: Lambert Conformal Conic (1-parallel)  
Standard Parallel (Grid Origin): 64°51'00.0"N  
Central Meridian (Grid Origin): 146°56'00.0"W  
False Northing: 200,000 ft  
False Easting: 800,000 ft  
Grid Scale Factor: 1.00003 (exact)
- The basis of coordinates is the NAD83(2011) (EPOCH: 2010) Continuously Operating Reference Station (CORS) "SUAF" record value and confirmed with OPUS.  
**LATITUDE AND LONGITUDE** (record datasheet)  
Latitude: 64°51'31.28835"N, Longitude: 147°50'08.76810"W  
**PROJECT COORDINATES** (Fairbanks LDP)  
Northing: 204180.14 feet, Easting: 659588.61 feet
- The basis of elevations is the NAVD88 (Geoid 12A) CORS "SUAF" record value and confirmed with OPUS. Elevation 680.94 feet.
- This area is within flood zones "x" and "AE" per F.I.R.M. dated March 17, 2014. The base flood elevation for this area is 433 ft.
- The Basis of Bearing is the Fairbanks LDP grid bearing based on NAD83(2011) (EPOCH: 2010) GPS observations.
- This survey does not constitute a subdivision as defined by Alaska Statute 40.15.900(5)(A).
- The horizontal closure for this survey meets or exceeds 1 part in 10,000. The largest network horizontal semi-major error ellipse of 0.021 meters at the 95% confidence level was observed for the static GPS, and the minimum loop misclosure meets or exceeds 1 part in 637,051.
- Right-of-Way lines shown on this plat are for visual representation only. This plat does not purport to depict Right-of-Way.
- Monument tables refers to position of physical evidence recovered.
- The purpose of this plat is to record horizontal and vertical control points for their further use in support of construction.
- Verify horizontal and vertical control prior to use. On multi year projects, verify all control on a seasonal basis.
- Travis Baril, PLS (112374) was the field surveyor for this project.

I hereby certify that I am properly registered and licensed to practice land surveying in the state of Alaska, and that this plat represents a survey made by me or under my direct supervision, and that the monuments shown hereon actually exist as described, and that all dimensions and other details are correct to the extent shown hereon.

DATE: 5/30/18  
 Michael E. Miller  
 MICHAEL E. MILLER  
 REGISTERED LAND SURVEYOR  
 LS-7222  
 REGISTRATION NUMBER



**LEGEND**

PRIMARY MONUMENT SET	
CENTERLINE MONUMENT IN CASING	
REBAR AND CAP FOUND	
REBAR FOUND	
IRON PIPE FOUND	
TEMPORARY BENCHMARK FOUND	

0 100 200 300 400 500  
 SCALE 1"=100'

STATE BUSINESS - NO CHARGE DATE: 5/29/18

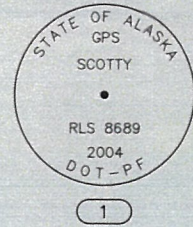
DATE OF SURVEY Beginning: 10/10/16 Ending: 10/20/16	NAME AND ADDRESS: Department of Transportation and Public Facilities (DOT&PF) 2301 Peger Road Fairbanks, Alaska 99709
---	---

**RECORD OF SURVEY**

SURVEY CONTROL DIAGRAM  
 AURORA DRIVE  
 NFHWY00124 / 0629001  
 within  
 SECTIONS 04  
 T1S R1W  
 FAIRBANKS MERIDIAN, ALASKA  
 FAIRBANKS RECORDING DISTRICT

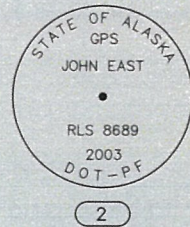
DRAWN BY: TB	SCALE: 1"=100'	CHECKED BY: MM	FILE NO.:
-----------------	-------------------	-------------------	-----------

C:\Users\lboard\Desktop\Misc\_upload\16-181-ROS 2018-05-29-ROS Cover 500 Wed, May 30/18 07:34am  
 PLANS DEVELOPED BY: MCCLINTOCK LAND ASSOCIATES, 16942 NORTH EAGLE RIVER LOOP, EAGLE RIVER, AK 99577 (907)694-4499



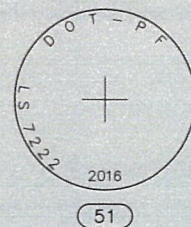
Recovered 3 1/4 in. alum. cap on a 2 1/2 in. alum. post, flush with ground. Orange carsonite post 1 ft. north of monument. Good condition.

1



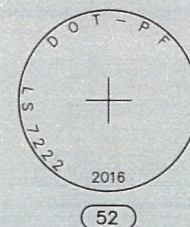
Recovered 3 1/4 in. alum. cap on a 2 1/2 in. alum. post, flush with ground. Orange carsonite post 1 ft. north of monument. Good condition.

2



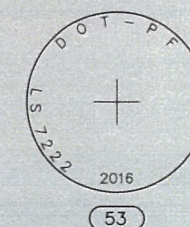
Set 2 in. brass tablet marked as shown, in concrete curb.

51



Set 2 in. brass tablet marked as shown, in concrete curb.

52



Set 2 in. brass tablet marked as shown, flush in concrete sidewalk.

53



Found Chiseled "x" on northeast bolt of fire hydrant.

601



Found Chiseled "x" on northeast bolt of fire hydrant.

602



Found Chiseled "x" on southeast bolt of fire hydrant.

611



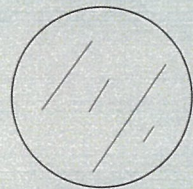
Recovered 5/8 in. rebar, 5 in. above ground. Slightly bent at top but has solid base. Ok condition.

701



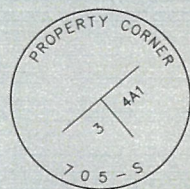
Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 4 in. above ground. Excellent condition.

702



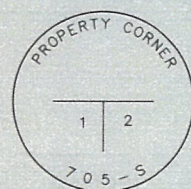
Recovered 1 1/2 in. alum. cap with no visible markings on a 5/8 in. rebar, flush with ground. Good condition.

703



Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 1 in. above ground. Excellent condition.

704



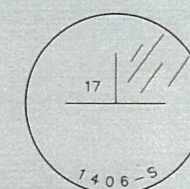
Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, flush in asphalt. Excellent condition.

705



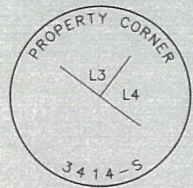
Recovered 5/8 in. rebar, 3 in. below ground. Top 6 in. bent northerly with solid vertical base. Ok condition.

706



Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 3 in. below ground. Excellent condition.

707



Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 3 in. above ground. Excellent condition.

708



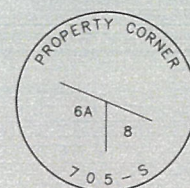
Recovered 3/4 in. iron pipe with threaded nut on top, approximately 4 ft. long with 3 in. above ground. Top slightly smashed. Good condition.

709



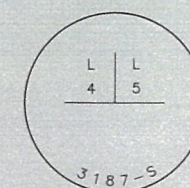
Recovered 3/4 in. iron pipe with flagging, 3 in. above ground. Great condition.

710



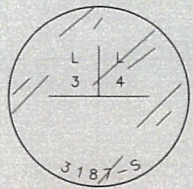
Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 5 in. above ground. Excellent condition.

711



Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 1 in. below ground. Excellent condition.

712



Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 3 in. below ground. Excellent condition.

713



Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 1 in. above ground. Excellent condition.

714



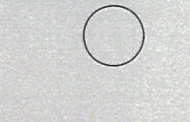
Recovered 1 1/2 in. alum. cap very worn on a 5/8 in. rebar, 1 in. above ground. Excellent condition.

715



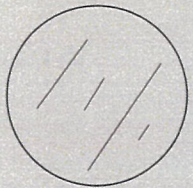
Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 1 in. above ground. Good condition.

716



Recovered 5/8 in. rebar, 3 in. below ground. Excellent condition.

717



Recovered 1 1/2 in. alum. cap with no visible markings on a 5/8 in. rebar, flush with ground. Excellent condition.

718



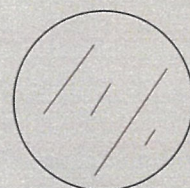
Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 1 in. above ground. Excellent condition.

719



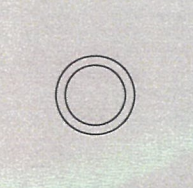
Recovered 5/8 in. rebar, 1 in. below ground. Top 5 in. bent northerly with solid vertical base. Ok condition.

720



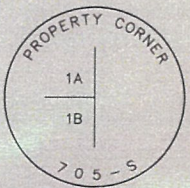
Recovered 1 1/2 in. alum. cap with no visible markings on a 5/8 in. rebar, 8 in. below ground. Excellent condition.

722



Recovered 1 1/2 in. iron pipe with flagging, 6 in. below ground. Great condition.

723



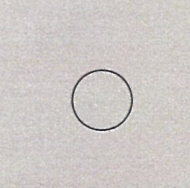
Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 4 in. below ground. Excellent condition.

724



Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 4 in. below ground. Excellent condition.

725



Recovered 5/8 in. rebar with flagging, flush with ground. Excellent condition.

726



DATE: 5/29/18

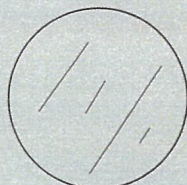
DATE OF SURVEY Beginning: 10/10/16 Ending: 10/20/16		NAME AND ADDRESS: Department of Transportation and Public Facilities (DOT&PF) 2301 Peger Road Fairbanks, Alaska 99709	
<b>RECORD OF SURVEY</b>			
SURVEY CONTROL DIAGRAM <b>AURORA DRIVE</b> NFHWY00124 / 0629001 within SECTIONS 04 T 1 S, R 1 W FAIRBANKS MERIDIAN, ALASKA FAIRBANKS RECORDING DISTRICT			
DRAWN BY: TB	SCALE: NA	CHECKED BY: MM	FILE NO.:

C:\Users\tbarri\Desktop\Misc upload\16-181 ROS 2018-05-29-ROS 2 Monuments Wed, May/30/18 07:39am  
PLANS DEVELOPED BY: MCCLINTOCK LAND ASSOCIATES, 16942 NORTH EAGLE RIVER LOOP, EAGLE RIVER, AK 99577 (907)864-4499



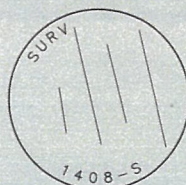
Recovered 5/8 in. rebar with flagging, 2 in. above ground. Top 2 in. bent with solid vertical base. Good condition.

727



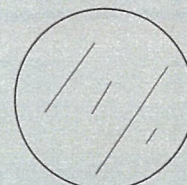
Recovered 1 in. alum. cap with no visible markings on a 5/8 in. rebar, flush with ground. Excellent condition.

728



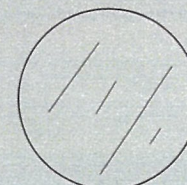
Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, flush with ground. Excellent condition.

729



Recovered 1 in. alum. cap with no visible markings on a 5/8 in. rebar, flush with ground. Excellent condition.

730



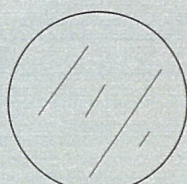
Recovered 1 in. alum. cap with no visible markings on a 5/8 in. rebar, flush with ground. Excellent condition.

731



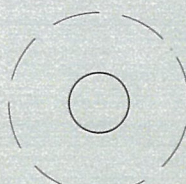
Recovered 1 in. alum. cap with no visible markings on a 5/8 in. rebar, 2 in. below ground. Excellent condition.

732



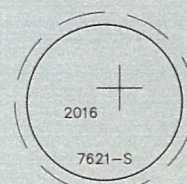
Recovered 1 1/2 in. alum. cap with no visible markings on a 5/8 in. rebar, flush with ground. Good condition.

733



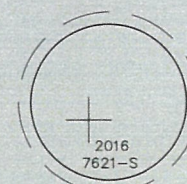
Recovered 5/8 in. rebar in standard monument box (set flush), 5 in. below road. Excellent condition.

734



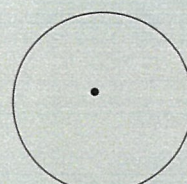
Recovered 2 in. alum. cap on 2 in. alum. post in standard monument box (set flush), 3 in. below road. Excellent condition.

735



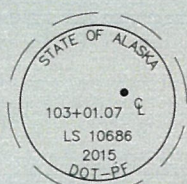
Recovered 2 in. alum. cap on 2 in. alum. post in standard monument box (set flush), 3 in. below road. Excellent condition.

736



Recovered 2 in. alum. cap on 2 in. alum. post, flush with ground. Excellent condition.

737



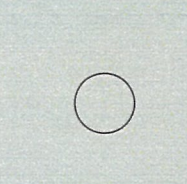
Recovered 2 in. alum. cap on a 2 in. alum. post in standard monument box (set flush), 4 in. below road. Excellent condition.

738



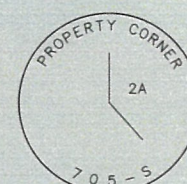
Recovered 2 in. alum. cap on a 2 in. alum. post in standard monument box (set flush), 4 in. below road. Excellent condition.

739



Recovered 5/8 in. rebar with flagging, 9 in. below ground. Top 3 in. bent northerly with solid vertical base. Good condition.

741



Recovered 1 1/2 in. alum. cap on a 5/8 in. rebar, 5 in. above ground. Excellent condition.

742

MONUMENTS				
POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	191649.17	667982.02	441.64	FOUND PRIMARY MON
2	203871.87	684295.15	449.50	FOUND PRIMARY MON
51	205713.52	671545.90	441.02	SET BRASS TABLET
52	204776.68	671076.98	439.58	SET BRASS TABLET
53	204187.38	671126.45	437.79	SET BRASS TABLET
701	205516.54	671284.48	435.02	FOUND REBAR
702	205524.87	671266.43	436.38	FOUND ALUMINUM CAP ON REBAR
703	205629.43	671446.24	438.41	FOUND ALUMINUM CAP ON REBAR
704	205643.93	671704.69	442.00	FOUND ALUMINUM CAP ON REBAR
705	205693.55	671595.45	441.74	FOUND ALUMINUM CAP ON REBAR
706	205429.87	671476.08	435.13	FOUND REBAR
707	205325.88	671824.43	436.48	FOUND ALUMINUM CAP ON REBAR
708	204910.64	671294.33	432.74	FOUND ALUMINUM CAP ON REBAR
709	205186.16	671431.25	435.39	FOUND IRON PIPE
710	205137.40	671541.35	0.00	FOUND IRON PIPE
711	204991.76	671738.64	436.59	FOUND ALUMINUM CAP ON REBAR
712	204955.16	671524.45	436.32	FOUND ALUMINUM CAP ON REBAR
713	204998.41	671478.13	435.45	FOUND ALUMINUM CAP ON REBAR
714	204829.65	671659.69	436.28	FOUND ALUMINUM CAP ON REBAR
715	204889.86	671521.80	435.43	FOUND ALUMINUM CAP ON REBAR
716	205054.00	671346.20	433.83	FOUND ALUMINUM CAP ON REBAR
717	205094.67	671302.43	433.38	FOUND REBAR
718	204996.00	671239.36	432.88	FOUND ALUMINUM CAP ON REBAR
719	204604.77	671270.64	438.44	FOUND ALUMINUM CAP ON REBAR
720	204551.76	671343.13	437.90	FOUND REBAR
722	204390.06	671469.14	437.37	FOUND ALUMINUM CAP ON REBAR
723	204491.06	671324.30	437.20	FOUND IRON PIPE

MONUMENTS				
POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
724	204210.54	671053.77	439.35	FOUND ALUMINUM CAP ON REBAR
725	204280.91	671034.73	438.18	FOUND ALUMINUM CAP ON REBAR
726	204281.79	670967.26	437.39	FOUND REBAR
727	204342.70	670911.04	436.73	FOUND REBAR
728	205080.42	670836.53	437.24	FOUND ALUMINUM CAP ON REBAR
729	205106.30	670848.22	437.18	FOUND ALUMINUM CAP ON REBAR
730	205275.10	670848.62	438.16	FOUND ALUMINUM CAP ON REBAR
731	205036.46	670938.65	437.68	FOUND ALUMINUM CAP ON REBAR
732	204949.48	670971.46	437.89	FOUND ALUMINUM CAP ON REBAR
733	204349.63	671538.34	438.18	FOUND ALUMINUM CAP ON REBAR
734	204297.56	671695.21	438.74	FOUND REBAR
735	204309.90	671105.29	436.90	FOUND PRIMARY MON
736	203966.87	671100.53	436.78	FOUND PRIMARY MON
737	204980.51	670742.10	436.98	FOUND ALUMINUM CAP ON REBAR
738	205721.80	671656.70	440.98	FOUND ALUMINUM CAP ON REBAR
739	205984.74	670830.22	439.92	FOUND ALUMINUM CAP ON REBAR
741	204948.12	670571.31	435.19	FOUND REBAR
742	205481.09	671067.99	0.00	FOUND ALUMINUM CAP ON REBAR
743	204462.79	670912.65	436.89	FOUND REBAR
744	205344.80	671371.18	434.91	FOUND GROUND ROD

TBMs				
POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
601	205577	670690	440.29	NE BOLT TOP RING HYDRANT
602	205593	669408	435.85	NE BOLT TOP RING HYDRANT
611	205090	671312	436.39	SE BOLT TOP RING HYDRANT



Recovered 5/8 in. rebar, 5 in. above ground. Excellent condition.

743



Recovered 5/8 in. grounding rod, 1.5 ft. above ground. Top 10 in. bent with vertical base. OK condition.

No current use for grounding rod in area and seems to be deliberately set to mark corner position.

744

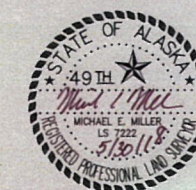
DATE: 5/29/18

DATE OF SURVEY Beginning: 10/10/16 Ending: 10/20/16	NAME AND ADDRESS: Department of Transportation and Public Facilities (DOT&PF) 2301 Peger Road Fairbanks, Alaska 99709
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RECORD OF SURVEY

SURVEY CONTROL DIAGRAM  
AURORA DRIVE  
NFHWY00124 / 0629001  
within  
SECTIONS 04  
T 1 S, R 1 W  
FAIRBANKS MERIDIAN, ALASKA  
FAIRBANKS RECORDING DISTRICT

DRAWN BY: TB	SCALE: NA	CHECKED BY: MM	FILE NO.:
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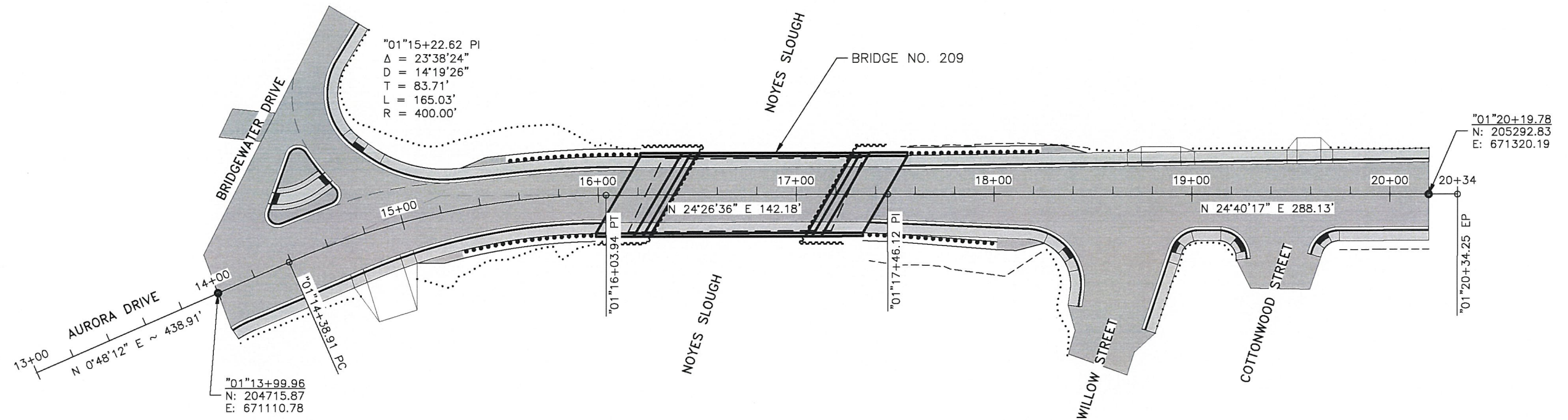


C:\Users\lbarri\Desktop\Misc upload\16-181 ROS 2018-05-29-ROS 3 Monuments Wed, May/30/18 07:42am  
PLANS DEVELOPED BY: MCCLINTOCK LAND ASSOCIATES, 16942 NORTH EAGLE RIVER LOOP, EAGLE RIVER, AK 99577 (907)694-4499

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWHY00124	2022	A7	A7

**PROJECT CONTROL NOTES:**

1. SURVEY CONTROL FOR THIS PROJECT IS AS LISTED ON THE SURVEY CONTROL DIAGRAM FOR PROJECT 0629001 / NFHWHY00124 AURORA DRIVE, SIGNED 5/30/18 AND RECORDED AS PLAT 2018-94, FAIRBANKS RECORDING DISTRICT.

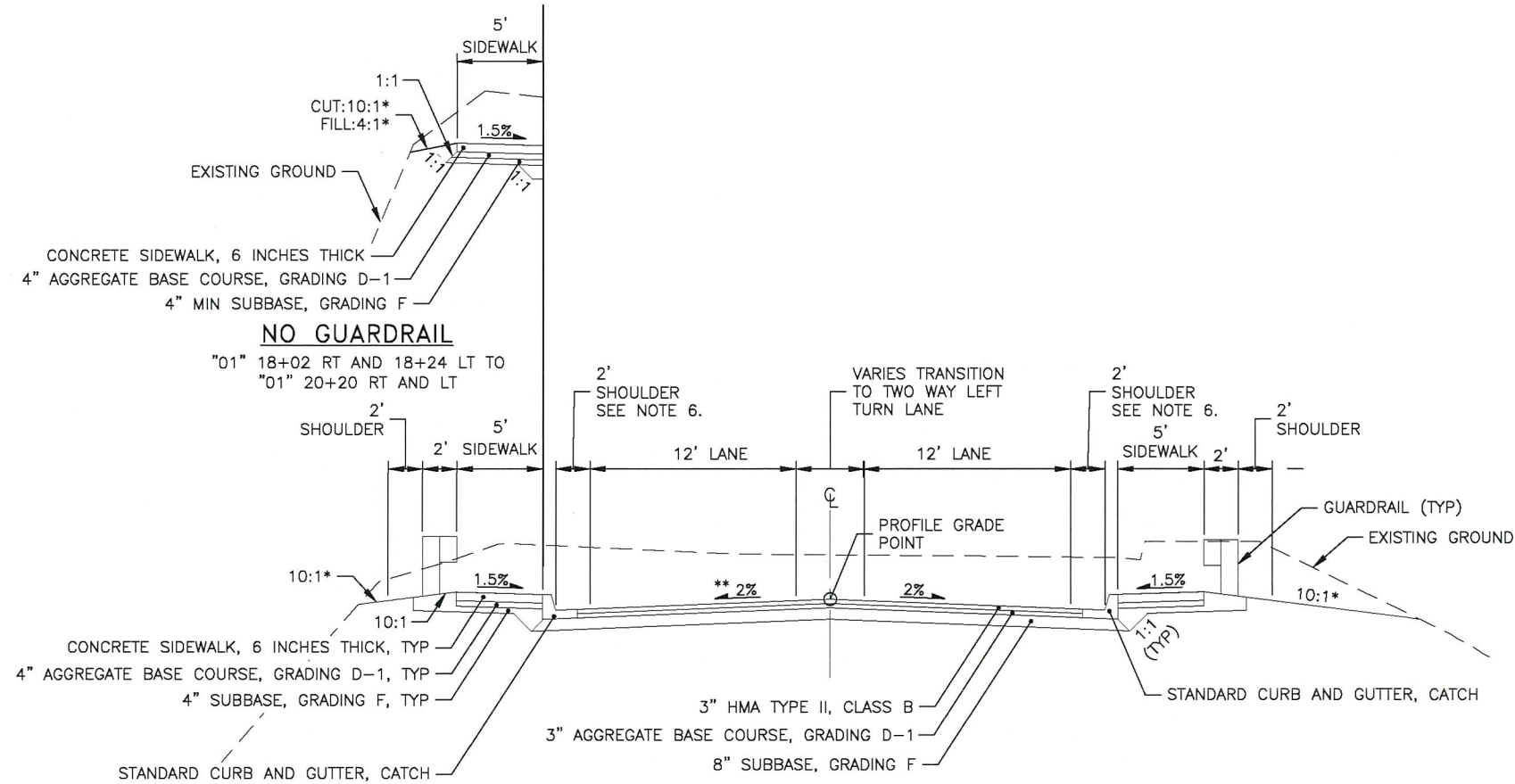


PLANS DEVELOPED BY: RESPEC COMPANY, LLC. CERT. OF AUTHORIZATION NO.: AEC0163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
 N:\Projects\18185FB-AuroraDr\_Noyes\C:\3001\inst\18185FB-A7 Fri, Sep/16/22 03:49pm

ALIGNMENT  
CONTROL PLAN



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWHY00124	2022	B1	B1

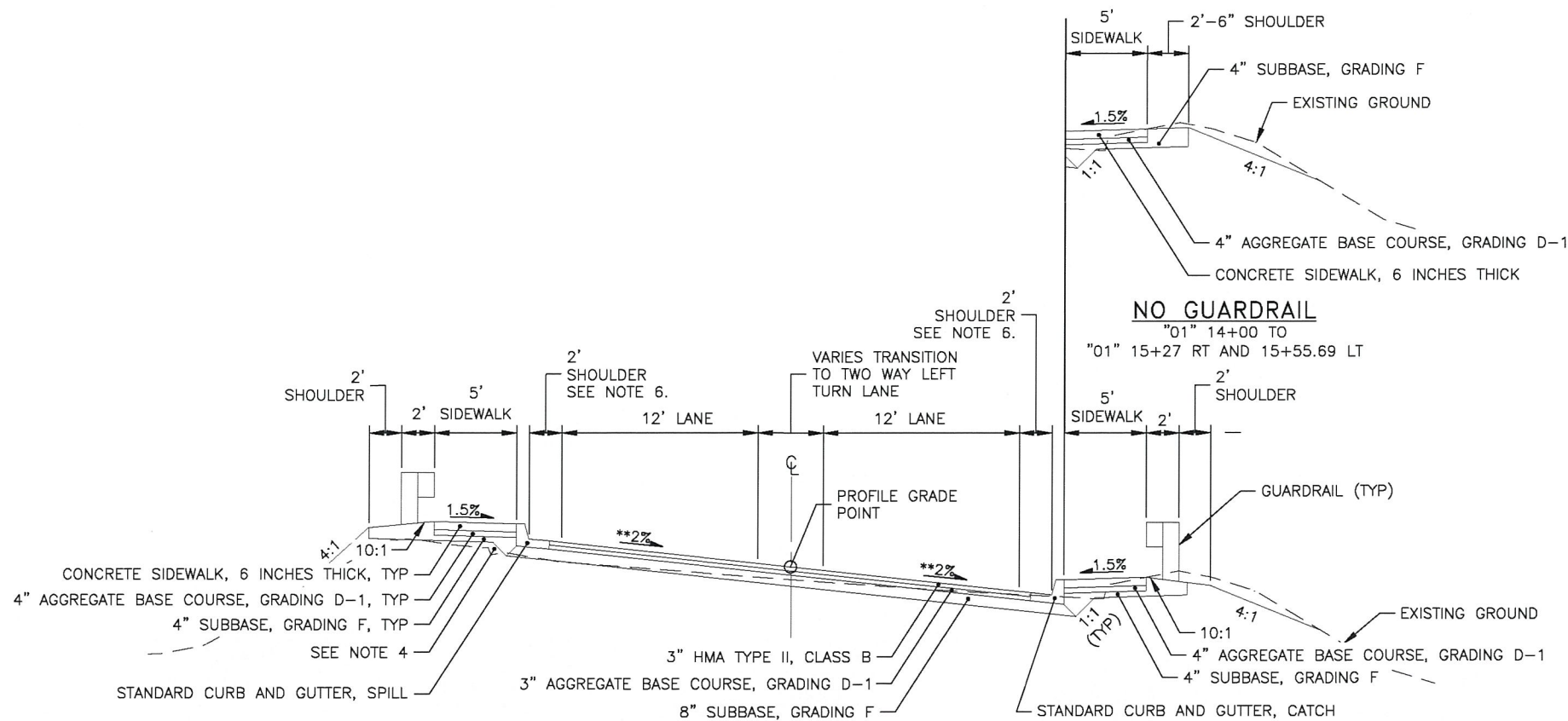


**AURORA DRIVE NORMAL CROWN TYPICAL SECTION**

"01" 17+45 TO "01" 20+20  
 \*WARP SLOPE TO CATCH WITHIN ROW. DO NOT FILL WITHIN THE SLOUGH.  
 \*\*REFER TO SHEET D2 FOR SUPERELEVATION TRANSITION.

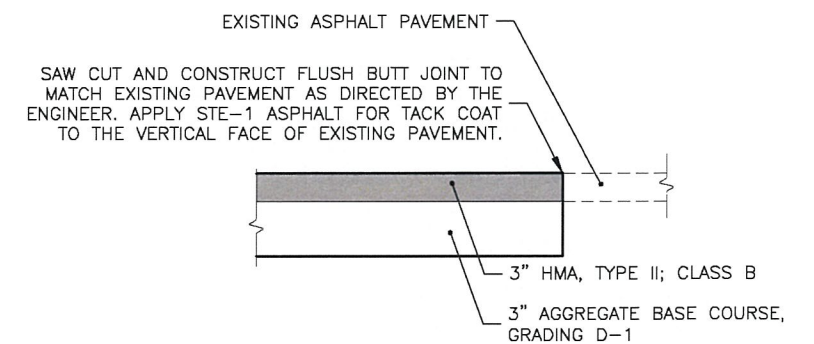
**NOTES:**

- SEE GRADING SHEETS G1-G2 FOR LAYOUT FROM "01" 14+00 LT TO "01" 15+22 LT AND "01" 18+17.03 RT TO 19+74.80 RT.
- CENTER TWO-WAY LEFT TURN LANE WIDTH VARIES BUT, CROWN POINT IS ALWAYS ON THE PROFILE POINT.
- REFER TO SHEET D2 FOR CURB AND GUTTER TYPE.
- MATERIAL EXCAVATED FROM THE EMBANKMENT MAY BE USED AS FILL MATERIAL BELOW THE SUBBASE, GRADING F LAYER, AS APPROVED BY THE ENGINEER.
- 2% CROSS SLOPE ACROSS BOTH LANES IS MAINTAINED FROM STATION 16+17.85 TO 17+37.09.
- WIDTH VARIES, SEE STRIPING PLANS FOR LANE MARKING LOCATIONS.
- PLACE 4" TOPSOIL AND SEED ALL DISTURBED AREAS FROM THE BACK OF SIDEWALK TO THE ROW LINE.



**AURORA DRIVE SUPERELEVATION TYPICAL SECTION**

"01" 14+00 TO "01" 16+10  
 \*\*REFER TO SHEET D2 FOR SUPERELEVATION TABLE. SEE NOTE 5.



**MATCH EXISTING PAVEMENT DETAIL**

AURORA DRIVE BOP AND EOP, WILLOW ST, COTTONWOOD ST, BRIDGEWATER DR AND AT PAVED APPROACHES.

**TYPICAL SECTIONS**



PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AECC163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
 N:\Projects\18185FB-AuroraDr.-Noyes\CA-4001\cmt\18185FB-B1\_Thu, Dec /29/22 10:56am



ADDENDUM NO. 2, ATTACHMENT NO. 2

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
1	01/19/23	ADDENDUM 2	ALASKA	0629001/NFHWY00124	2022	C1	C2

ESTIMATE OF QUANTITIES

ITEM NO	DESCRIPTION	PAY UNIT	QUANTITY
201.0009.0000	CLEARING AND GRUBBING	LUMP SUM	ALL REQUIRED
202.0002.0000	REMOVAL OF PAVEMENT	SQUARE YARD	3,000
202.0003.0000	REMOVAL OF SIDEWALK	SQUARE YARD	600
202.0009.0000	REMOVAL OF CURB AND GUTTER	LINEAR FOOT	1,100
202.0023.0000	REMOVAL OF BRIDGE, NO. 209	LUMP SUM	ALL REQUIRED
202.2022.0000	REMOVAL OF FENCE	LINEAR FOOT	104
202.2029.0000	RESOLUTION OF CONFLICTS	CONTINGENT SUM	ALL REQUIRED
203.0003.0000	UNCLASSIFIED EXCAVATION	CUBIC YARD	1,900
203.0006.0000	BORROW	TON	300
204.0001.0000	STRUCTURE EXCAVATION	CUBIC YARD	650
205.0006.0000	STRUCTURAL FILL	CUBIC YARD	1,010
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	TON	600
304.0001.000F	SUBBASE, GRADING F	TON	1,700
401.0001.002B	HMA, TYPE II; CLASS B	TON	468
501.0001.0000	CLASS A CONCRETE	LUMP SUM	ALL REQUIRED
501.0007.0000	PRECAST CONCRETE MEMBER, 92'-0" DECKED BULB-TEE	EACH	7
503.0001.0000	REINFORCING STEEL	LUMP SUM	ALL REQUIRED
503.0002.0000	EPOXY-COATED REINFORCING STEEL	LUMP SUM	ALL REQUIRED
505.0005.0000	FURNISH STRUCTURAL STEEL PIPE PILES, 2'-0" DIA. X 1/2"	LINEAR FOOT	1,290
505.0006.0000	DRIVE STRUCTURAL STEEL PIPE PILES, 2'-0" DIA. X 1/2"	EACH	12
505.0009.0000	STRUCTURAL STEEL SHEET PILES	SQUARE FOOT	6,335
507.0001.0003	STEEL BRIDGE RAILING, 3-TUBE	LINEAR FOOT	270
507.0006.0000	CABLE SAFETY RAILING	LINEAR FOOT	215
525.2001.0000	POLYESTER CONCRETE OVERLAY	LUMP SUM	ALL REQUIRED
604.0004.0000	ADJUST EXISTING MANHOLE	EACH	5
604.0016.0000	ADJUST INLET FRAME AND GRATE	EACH	5
606.0006.0000	REMOVING AND DISPOSING OF GUARDRAIL	LINEAR FOOT	319
606.0013.0000	PARALLEL GUARDRAIL TERMINAL	EACH	4
606.0016.0000	TRANSITION RAIL	EACH	4
608.0001.0006	CONCRETE SIDEWALK, 6 INCHES THICK	SQUARE YARD	650
608.0006.0000	CURB RAMP	EACH	7
609.0002.0001	CURB AND GUTTER, TYPE 1	LINEAR FOOT	1,100
611.0001.0002	RIPRAP, CLASS II	CUBIC YARD	130
615.0001.0000	STANDARD SIGN	SQUARE FOOT	68.25
615.0002.0000	REMOVE AND RELOCATE SIGN	EACH	8

ESTIMATE OF QUANTITIES

ITEM NO	DESCRIPTION	PAY UNIT	QUANTITY
618.0002.0000	SEEDING	POUND	20
620.0001.0000	TOPSOIL	SQUARE YARD	1,200
626.0001.0012	SANITARY SEWER CONDUIT, 12 INCH	LINEAR FOOT	254
626.2020.0000	SANITARY SEWER LIFT STATION BYPASS	LUMP SUM	ALL REQUIRED
627.0001.0012	DUCTILE IRON WATER CONDUIT, 12 INCHES, CLASS 350	LINEAR FOOT	140
627.2012.0014	HDPE WATER CONDUIT, 14 INCH, SDR 11, CLASS 350	LINEAR FOOT	340
627.2000.0000	WATER MAIN RELOCATION	LUMP SUM	ALL REQUIRED
631.0002.0001	GEOTEXTILE, EROSION CONTROL, CLASS 1	SQUARE YARDS	230
639.2000.0000	APPROACH	EACH	3
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
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
641.0004.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL ADDITIVES	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	hour	30
643.0002.0000	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
643.0023.0000	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED
643.0025.0000	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQUIRED
643.2005.0000	PUBLIC INFORMATION PROGRAM	LUMP SUM	ALL REQUIRED
643.2016.0000	ROAD CLOSURE	LUMP SUM	ALL REQUIRED
644.0001.0000	FIELD OFFICE	LUMP SUM	ALL REQUIRED
645.0001.0000	TRAINING PROGRAM, 1 TRAINEES/ APPRENTICES	LABOR HOUR	500
646.0001.0000	CPM SCHEDULING	LUMP SUM	ALL REQUIRED
670.0001.0000	PAINTED TRAFFIC MARKINGS	LUMP SUM	ALL REQUIRED

PLANS DEVELOPED BY: RESPEC COMPANY, LLC. CERT. OF AUTHORIZATION NO.: AEC0163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
N:\Projects\18185FB-AuroraDr-Neves\C5001\inst18185FB-C1 Ftr. Jm/20/23 09:42am

ESTIMATE OF QUANTITIES  
(1 OF 2)



ADDENDUM NO. 3, ATTACHMENT NO. 3

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
△	01/19/23	ADDENDUM 2					
△	01/23/23	ADDENDUM 3	ALASKA	0629001/NFHWHY00124	2022	C2	C2

ESTIMATE OF QUANTITIES- GHU BETTERMENT

ITEM NO	DESCRIPTION	PAY UNIT	QUANTITY
603.0021.0018	CORRUGATED POLYETHYLENE PIPE 18 INCH	LINEAR FOOT	36
603.0021.0024	CORRUGATED POLYETHYLENE PIPE 24 INCH	LINEAR FOOT	53 △
626.2002.0000	SANITARY SEWER LIFT STATION	LUMP SUM	ALL REQUIRED
626.2020.0000	SANITARY SEWER LIFT STATION BYPASS	LUMP SUM	ALL REQUIRED
627.0001.0006	DUCTILE IRON WATER CONDUIT, 6 INCHES, 350 △	LINEAR FOOT	60
627.0001.0012	DUCTILE IRON WATER CONDUIT, 12 INCHES, 350	LINEAR FOOT	640
627.0009.0004	GATE VALVE, 4 INCH	EACH	1 △
627.0009.0010	GATE VALVE, 10 INCH	EACH	3 △
627.0009.0012	GATE VALVE, 12 INCH	EACH	4 △
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED

ESTIMATED LUMP SUM QUANTITIES

ITEM NO	DESCRIPTION	FACTOR
201.0009.0000	CLEARING AND GRUBBING	0.3 ACRES
501.0001.0000	CLASS A CONCRETE	317 CUBIC YARDS
503.0001.0000	REINFORCING STEEL	26,930 POUNDS
503.0002.0000	EPOXY-COATED REINFORCING STEEL	22,000 POUNDS
627.2000.0000	DUCTILE IRON WATER CONDUIT, 12 INCHES, CLASS 350	140 LINEAR FEET △
627.2000.0000	HDPE WATER CONDUIT, 14- INCH, SDR 11, CLASS 350	340 LINEAR FEET
670.0001.0000	PAINTED TRAFFIC MARKINGS	SEE H2 FOR STRIPING QTY BREAKDOWN

ESTIMATING FACTORS

ITEM NO	DESCRIPTION	FACTOR
203.0006.0000	BORROW	2.00 TONS/CUBIC YARD
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	1.96 TONS/CUBIC YARD
304.0001.000F	SUBBASE, GRADING F	2.00 TONS/CUBIC YARD
401.0001.002B	HMA, TYPE II; CLASS B	1.96 TONS/CUBIC YARD
	ASPHALT BINDER, GRADE PG 52E-40	5.5% OF HMA QUANTITY
618.0002.0000	SEEDING	1.5 LBS/1,000 SQUARE FEET

PLANS DEVELOPED BY: RESPEC COMPANY, LLC. CERT. OF AUTHORIZATION NO.: AECC163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
N:\Projects\18185FB-AuroraDr\_Noyes\C\5001\inst18185FB-C2\_Mon, Jun/23/23 12:49pm

ESTIMATE OF QUANTITIES  
(2 OF 2)



PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AECC163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
 N:\Projects\18185FB-AuroraDr\_Noyes\C66001\crist18185FB-D1 Fri, Sep/16/22 03:50pm

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHwy00124	2022	D1	D2

REMOVAL OF CURB & GUTTER SUMMARY				
BEGIN	END	OFFSET	LENGTH (LF)	REMARKS
"01" 13+99	"01" 16+02	RT	196	
"01" 14+39	"01" 14+73	LT	114	MEDIAN ISLAND
"01" 14+91	"01" 16+18	LT	217	
"01" 17+37	"01" 18+43	RT	135	
"01" 17+53	"01" 20+20	LT	267	
"01" 18+76	"01" 19+28	RT	94	
"01" 19+60	"01" 20+20	RT	66	
TOTAL:			1,089	
ROUNDED TOTAL:			1,100	

REMOVAL OF FENCE					
BEGIN	END	OFFSET	QUANTITY	UNIT	REMARKS
"01" 15+89	"01" 16+17	RT	26	LF	FENCE
"01" 16+06	"01" 16+32	LT	26	LF	FENCE
"01" 17+16	"01" 17+42	RT	26	LF	FENCE
"01" 17+32	"01" 17+58	LT	26	LF	FENCE
TOTAL:			104		

REMOVAL OF SIDEWALK SUMMARY				
BEGIN	END	OFFSET	AREA (SY)	REMARKS
"01" 14+00	"01" 18+38	RT	202	
"01" 14+46	"01" 14+69	LT	22	MEDIAN ISLAND ADA PATH
"01" 14+95	"01" 20+20	LT	281	
"01" 18+81	"01" 19+23	RT	47	
"01" 19+66	"01" 20+20	RT	33	
TOTAL:			586	
ROUNDED TOTAL:			600	

CLEARING & GRUBBING SUMMARY					
ALIGNMENT	BEGIN STATION	END STATION	AREA		REMARKS
			SF	ACRE	
"01"	14+00	15+60	2633	0.06	
"01"	15+60	20+25	8116	0.19	
TOTAL:			10,749	0.25	
ROUNDED TOTAL:			-	0.30	

REMOVAL OF PAVEMENT SUMMARY				
BEGIN	END	OFFSET	AREA (SY)	REMARKS
"01" 14+00	"01" 15+60	LT/RT	983	
"01" 14+36	"01" 14+75	LT	50	MEDIAN ISLAND
"01" 15+60	"01" 20+20	LT/RT	1,937	
TOTAL:			2,970	
ROUNDED TOTAL:			3,000	

**NOTES:**

1. REMOVE EXISTING CURB & GUTTER AND SIDEWALK AS NOTED IN THE PLANS.

SUMMARY TABLES



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWO0124	2022	D2	D2

### GUARDRAIL SUMMARY

BEGIN STATION	END STATION	RT/LT	PARALLEL GUARDRAIL TERMINAL (EACH)	TRANSITION RAIL (EACH)	REMOVING AND DISPOSING OF GUARDRAIL (LINEAR FOOT)	REMARKS
15+27	15+98	RT	1	1		END OFFSET (X) SHALL BE 0 FT
15+56	16+21	LT	1	1		END OFFSET (X) SHALL BE 0 FT
17+34	18+02	RT	1	1		END OFFSET (X) SHALL BE 2 FT
17+56	18+24	LT	1	1		END OFFSET (X) SHALL BE 0 FT
15+23	16+15	RT			89	APPROXIMATE LENGTH AND STATIONING
15+57	16+32	LT			77	APPROXIMATE LENGTH AND STATIONING
17+16	17+92	RT			76	APPROXIMATE LENGTH AND STATIONING
17+32	18+08	LT			77	APPROXIMATE LENGTH AND STATIONING
PAY ITEMS TOTALS:			4	4	319	

### CURB & GUTTER SUMMARY

BEGIN	END	OFFSET	LENGTH (LF)	SHAPE	STYLE	REMARKS
"01" 13+99	"01" 16+02	RT	196	STANDARD	CATCH	
"01" 14+39	"01" 14+73	LT	114	STANDARD	SPILL	MEDIAN ISLAND (SEE NOTE 1)
"01" 15+04	"01" 15+32	LT	129	STANDARD	CATCH	BRIDGEWATER DR. (SEE NOTE 1)
"01" 15+32	"01" 16+18	LT	88	STANDARD	CATCH	
"01" 17+37	"01" 18+43	RT	135	STANDARD	CATCH	
"01" 17+53	"01" 20+20	LT	267	STANDARD	CATCH	
"01" 18+76	"01" 19+28	RT	94	STANDARD	CATCH	
"01" 19+60	"01" 20+20	RT	66	STANDARD	CATCH	
TOTAL:			1,089			
ROUNDED TOTAL:			1,100			

### CONCRETE SUMMARY

BEGIN	END	OFFSET	CONCRETE SIDEWALK, 6 INCHES THICK (SY)	REMARKS
"01" 14+00	"01" 18+38	RT	264	
"01" 14+40	"01" 14+72	LT	35	MEDIAN ISLAND ADA PATH
"01" 15+06	"01" 20+20	LT	348	
"01" 18+82	"01" 19+23	RT	48	
"01" 19+65	"01" 20+20	RT	34	
TOTAL:			729	
ROUNDED TOTAL:			730	

### ADJUST EXISTING INLET FRAME AND GRATE

NAME	STATION	OFFSET	QTY (EA)	REMARKS
CB-S148	"01" 14+85	80.5 LT	1	
CB-S143	"01" 19+13	17.3 RT	1	
CB-S141	"01" 19+76	17.6 RT	1	
CB-S138	"01" 19+76	16.7 LT	1	
-	"01" 18+73	79.6 RT	1	WILLOW - EXISTING INLET NOT SURVEYED
TOTAL:			5	

### ADJUST EXISTING MANHOLE

NAME	STATION	OFFSET	QTY (EA)	REMARKS
MH-S132	"01" 14+89	93.8 LT	1	SS MH
MH-S152	"01" 18+73	5.8 RT	1	SD MH
MH-S121	"01" 18+84	15.9 RT	1	SS MH
MH-S137	"01" 19+50	5.3 RT	1	SD MH
-	"01" 18+55	63 RT	1	WILLOW - SD MH
TOTAL:			5	

### SUPERELEVATION TABLE

#### ALIGNMENT "01"

DESCRIPTION	STATION	LEFT LANE	RIGHT LANE	REMARKS
BEGIN TRANSITION	13+23 (SEE NOTE 2)	-	-	
BEGIN RUNOFF	13+62 (SEE NOTE 2)	-	-	
BEGIN FULL SUPERELEVATION	14+78	3.00%	-3.00%	
END FULL SUPERELEVATION	15+65	3.00%	-3.00%	
BEGIN 2% CROSS SLOPE (SEE NOTE 3)	16+17.85	2.00%	-2.00%	
END 2% CROSS SLOPE (SEE NOTE 3)	17+37.09	2.00%	-2.00%	
BEGIN RUNOUT	17+75	0.00%	-2.00%	
END TRANSITION	18+13	-2.00%	-2.00%	

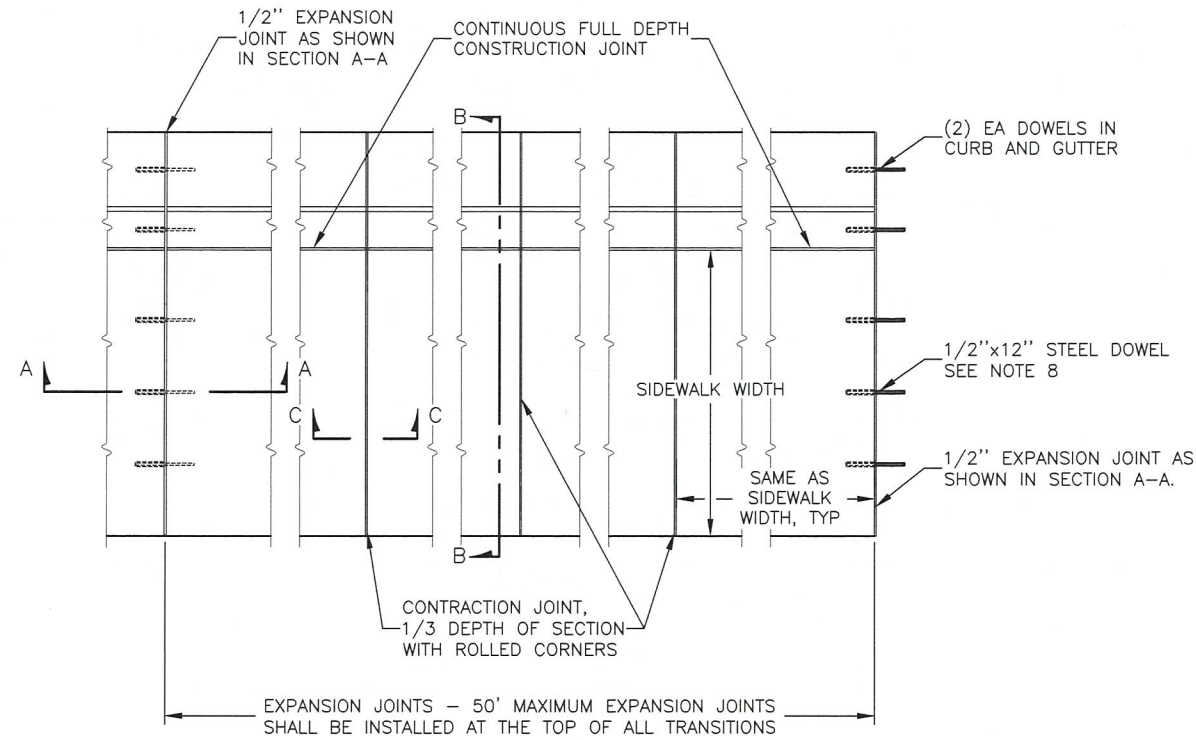
#### SUPERELEVATION NOTES:

- SEE STANDARD PLAN I-81.00 FOR THE SUPERELEVATION TRANSITION DETAILS. ROTATION TYPE SHALL BE CASE I. PAVEMENT REVOLVED ABOUT CENTERLINE.
- STATION PROVIDED FOR REFERENCE ONLY. SEE PLAN FOR BEGIN WORK STATION.
- 2% CROSS SLOPE ACROSS BOTH LANES FROM STATION 16+17.85 THROUGH STATION 17+37.09, SEE SHEET F2.

SUMMARY TABLES

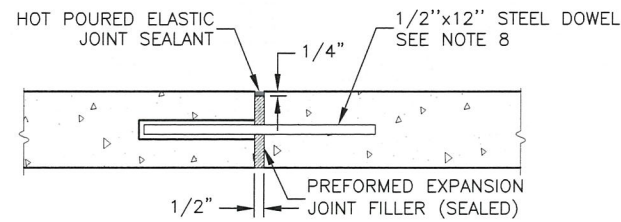


NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	E1	E6



PLAN VIEW

NTS



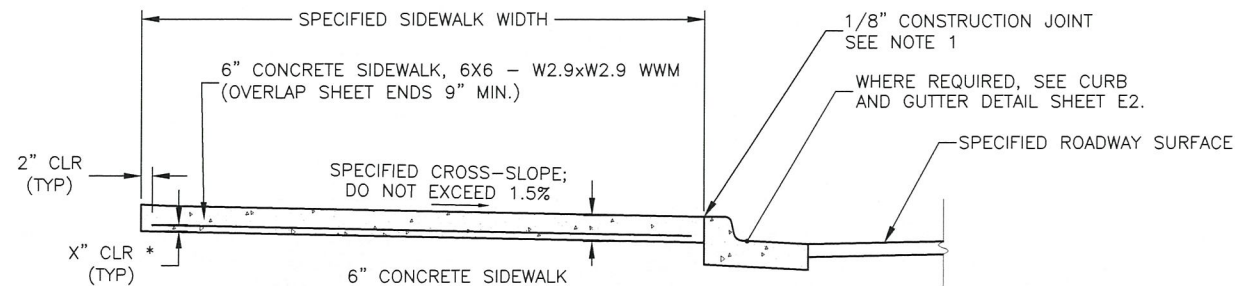
PARTIAL SECTION VIEW A - A

NTS

**SIDEWALK & CURB AND GUTTER EXPANSION JOINT DETAIL**

**EXPANSION JOINT NOTES:**

1. INSTALL CONTINUOUS FULL DEPTH 1/8" CONSTRUCTION JOINT AT ALL LOCATIONS WHERE SIDEWALK AND CURB (ANY TYPE) MEET.
2. PROTECT CONCRETE DURING CURE.
3. SEAL ALL EXPANSION JOINTS WITH JOINT SEALANT.

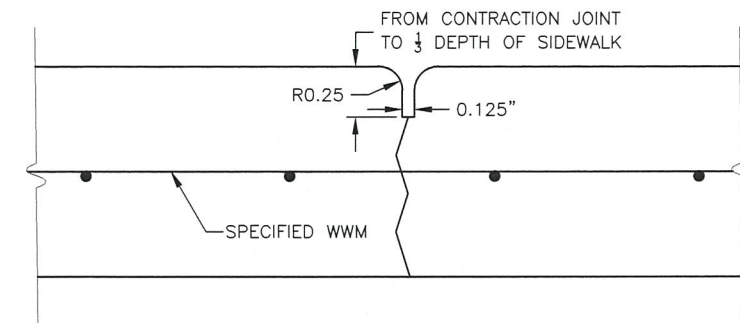


\* 6" CONCRETE SIDEWALK, X= 1 1/2"

CONCRETE SIDEWALK REINFORCEMENT DETAIL  
SECTION B-B

**CONCRETE SIDEWALK NOTES:**

1. CONSTRUCT CONCRETE SIDEWALK IN ACCORDANCE WITH THE TYPICAL SECTIONS AND OTHER DETAILS IN THESE PLANS, DETAILS ON THIS SHEET, AND THE REQUIREMENTS IN SECTION 608.
2. CONCRETE SIDEWALKS SHALL RECEIVE A BROOM FINISH (MEDIUM) RUNNING PERPENDICULAR TO THE SIDEWALK CENTERLINE.
3. LIQUID CURING MEMBRANE TO BE INSTALLED PER MANUFACTURERS INSTRUCTIONS. SEE SPECIFICATION SECTIONS 550-3.05 & 550-3.06 FOR CONCRETE FINISHING AND CURING REQUIREMENTS TO ALL EXPOSED CONCRETE.
4. SIDEWALK REINFORCEMENT SHALL BE SET ON SPACERS AND PULLED UP WHILE PLACING CONCRETE TO POSITION IT THE REQUIRED CLEAR DISTANCE FROM THE BOTTOM OF SIDEWALK.
5. EXPANSION AND CONTRACTION JOINTS IN THE SIDEWALK SHALL LINE UP WITH EXPANSION AND CONTRACTION JOINTS IN THE CURB.
6. CONTRACTION JOINT SPACING FROM EXPANSION JOINTS OR OTHER CONTRACTION JOINTS SHALL BE THE SPECIFIED WIDTH (W) OF THE CONCRETE SIDEWALK.
7. UNLESS OTHERWISE NOTED, EXPANSION AND CONTRACTION JOINTS SHALL BE PERPENDICULAR TO THE CONCRETE SIDEWALK CENTERLINE.
8. WHERE EXPANSION JOINTS ARE SPECIFIED AT THE MATCH LIMITS FOR NEW CONCRETE SIDEWALK AGAINST EXISTING CONCRETE SIDEWALK, SAW CUT THE EXISTING SIDEWALK TO FULL DEPTH PRIOR TO REMOVAL. DRILL INTO THE CONCRETE, GREASE THE DOWEL, AND INSERT IT DIRECTLY INTO THE HOLE.
9. EXPANSION JOINTS SHALL BE INSTALLED AT THE TOP OF ALL TRANSITIONS TO PEDESTRIAN CURB RAMPS.
10. APPLY STE-1 TACK COAT BETWEEN CONCRETE AND ADJOINING ASPHALT. STE-1 TACK COAT IS SUBSIDIARY TO PAY ITEM 401.0001.002B.



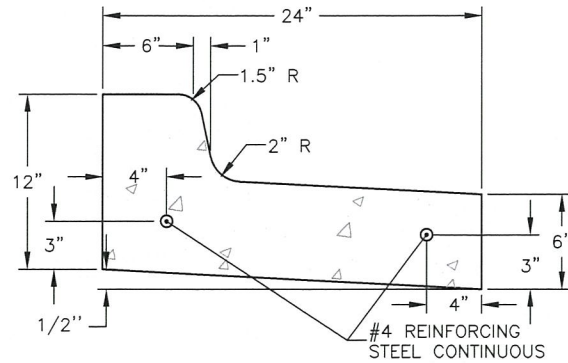
CONCRETE SIDEWALK CONTRACTION JOINT DETAIL  
(ALSO KNOWN AS A CRACK CONTROL JOINT OR DUMMY JOINT)  
SECTION C-C

**SIDEWALK DETAILS**

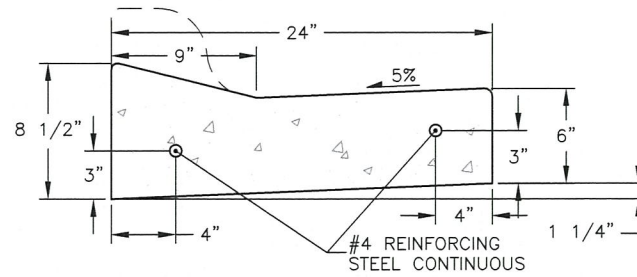


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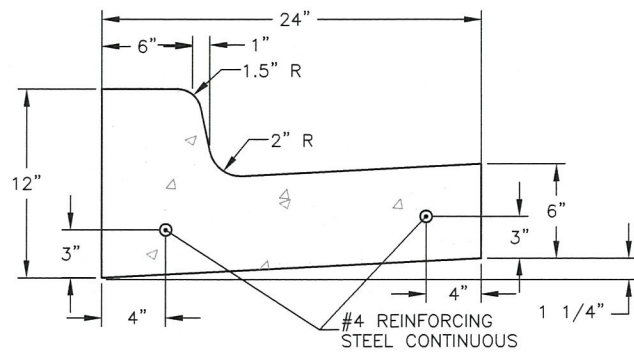
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	E2	E6



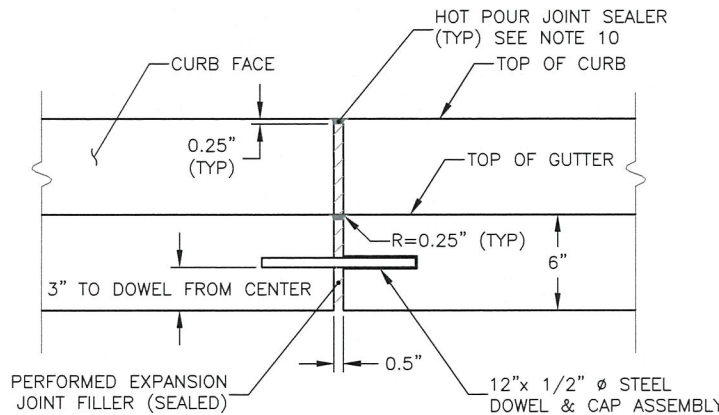
STANDARD CURB AND GUTTER  
SPILL



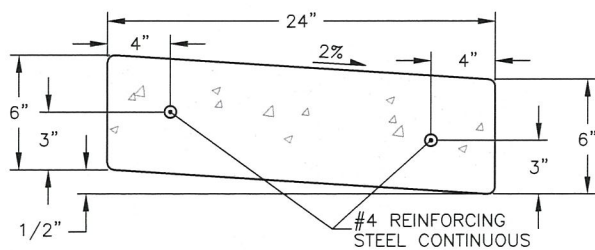
DEPRESSED CURB AND GUTTER



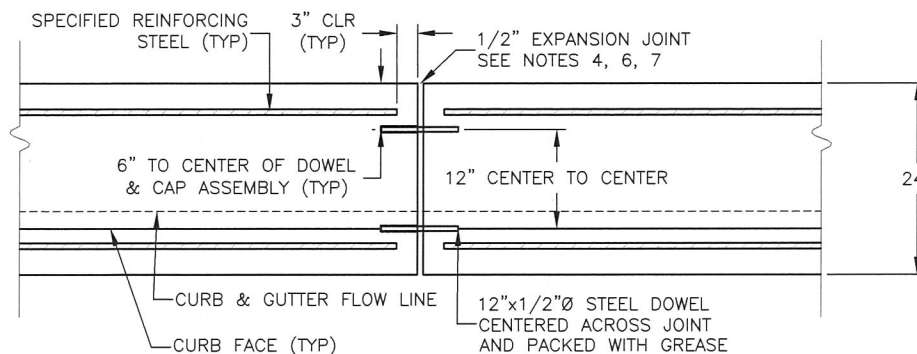
STANDARD CURB AND GUTTER  
CATCH



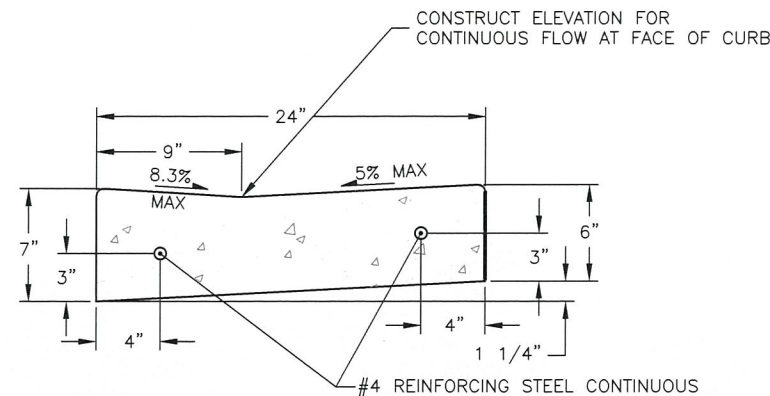
CURB & GUTTER EXPANSION JOINT DETAIL  
ELEVATION VIEW



CURB RAMP CURB AND GUTTER  
SPILL



CURB & GUTTER EXPANSION JOINT DETAIL  
PLAN VIEW NOT TO SCALE



CURB RAMP CURB AND GUTTER  
CATCH

CONCRETE CURB AND GUTTER NOTES:

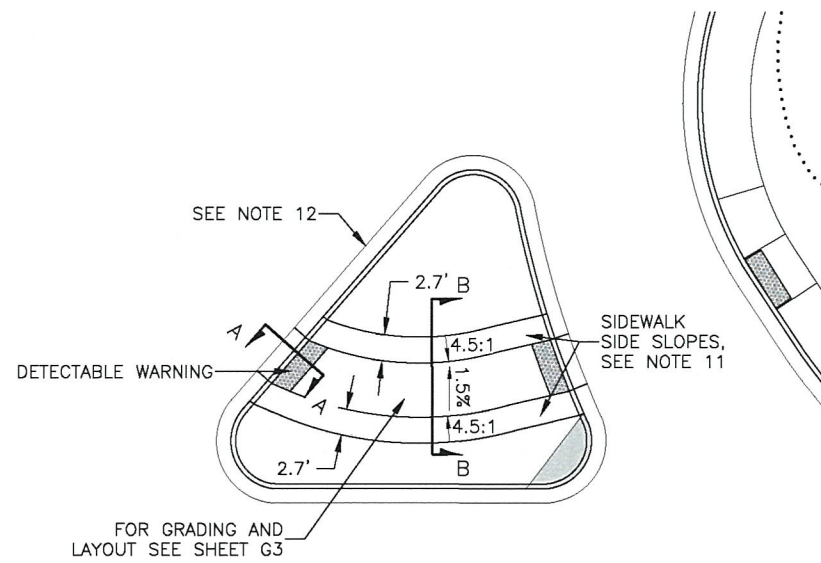
1. CONSTRUCT CONCRETE CURB & CUTTER IN ACCORDANCE WITH THE DETAILS IN THESE PLANS AND THE REQUIREMENTS OF SECTION 609.
2. INSTALL CONTINUOUS FULL DEPTH 1/8" CONSTRUCTION JOINT AT ALL LOCATIONS WHERE SIDEWALK AND CURB (ANY TYPE) MEET. USE CONTINUOUS BOND BREAKER BETWEEN THE SIDEWALK AND THE CURB.
3. PROTECT CONCRETE FROM DAMAGE DURING CURE. REPLACE ANY CONCRETE DAMAGED DURING CURE.
4. EXPANSION AND CONTRACTION JOINTS IN THE CURB & GUTTER SHALL LINE UP WITH EXPANSION AND CONTRACTION JOINTS IN ADJACENT SIDEWALK., MAXIMUM SPACING BETWEEN EXPANSION JOINTS IS 50 FT. THE ENGINEER MAY ADJUST THE LOCATION OF EXPANSION OR CONTRACTION JOINTS.
5. CONTRACTION JOINT SPACING FROM EXPANSION JOINTS OR OTHER CONTRACTION JOINTS SHALL BE THE SPECIFIED WIDTH OF THE ADJACENT CONCRETE SIDEWALK. IF NO SIDEWALK IS ADJACENT TO THE CURB & GUTTER, USE THE SAME SPACING CONSISTENT WITH THE CURB & GUTTER ADJACENT TO SIDEWALK ELSEWHERE ON THE PROJECT OR AS OTHERWISE APPROVED BY THE ENGINEER.
6. UNLESS OTHERWISE NOTED, EXPANSION AND CONTRACTION JOINTS SHALL BE PERPENDICULAR TO THE CONCRETE CURB FACE.
7. INSTALL EXPANSION JOINTS AT THE TOP OF ALL TRANSITIONS TO PEDESTRIAN CURB RAMPS.
8. PLACE AND SPLICE ANY CURB & GUTTER REINFORCING STEEL IN ACCORDANCE WITH SECTION 503.
9. SEE SECTION 609-2.01 FOR CURB & GUTTER REINFORCING STEEL REQUIREMENTS.
10. APPLY JOINT SEALER EVENLY TO COMPLETELY SEAL ALL EXPANSION JOINTS.
11. APPLY STE-1 TACK COAT BETWEEN CONCRETE SURFACES AND ADJOINING ASPHALT. STE-1 TACK COAT IS SUBSIDIARY TO PAY ITEM 401.0001.002B.
12. LIQUID CURING MEMBRANE TO BE INSTALLED PER MANUFACTURERS INSTRUCTIONS. SEE SPECIFICATION SECTIONS 550-3.05 & 550-3.06 FOR CONCRETE FINISHING AND CURING REQUIREMENTS TO ALL EXPOSED CONCRETE.

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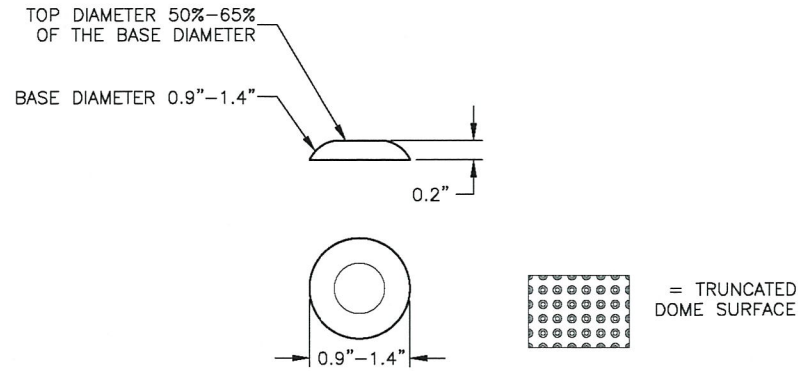
CURB & GUTTER DETAILS



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	E3	E6



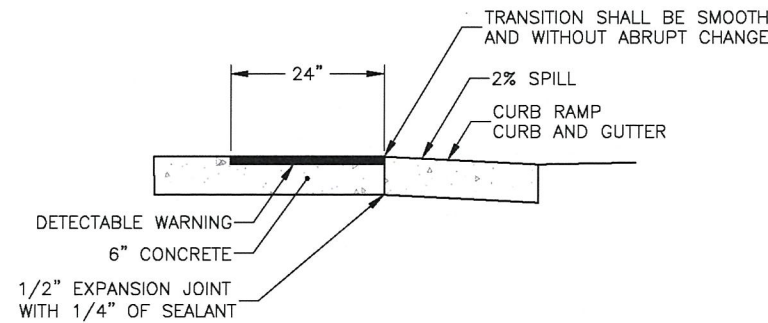
**MEDIAN ISLAND PLAN VIEW**  
NTS



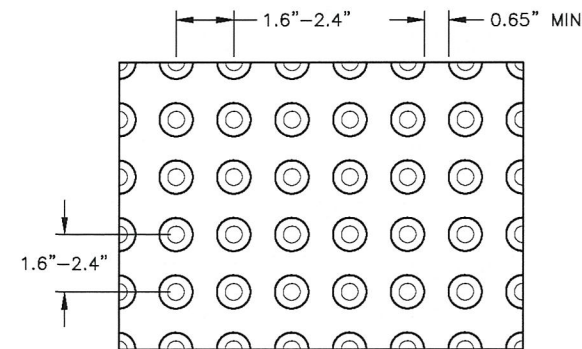
**TRUNCATED DOME DETAILS**

**CURB RAMP NOTES:**

1. CONSTRUCT 6 INCH THICK RAMP AND LANDING OF CONCRETE.
2. CONCRETE SHALL RECEIVE A COARSE BROOMED FINISH RUNNING PERPENDICULAR TO THE CURB ON RAMP RUNS AND UPPER LANDINGS AND PARALLEL TO THE DIRECTION OF TRAVEL ON LOWER LANDINGS.
3. INSTALL FEDERAL YELLOW CAST IRON DETECTABLE WARNINGS AT THE BACK OF THE CURB RAMP CURB AND GUTTER.
4. SEE CURB RAMP SUMMARY FOR INSTALLATION LOCATIONS.
5. CONSTRUCT RAMP SLOPES AT A NOMINAL 7.7% GRADE, OR FLATTER. RAMP SLOPES MAY BE INCREASED TO A MAXIMUM OF 8.3% WHEN SITE CONDITIONS WARRANT IT. RAMP LENGTHS SHOULD BE INCREASED TO KEEP GRADES UNDER 8.3% MAXIMUM, BUT ARE NOT REQUIRED TO EXCEED 15.0 FEET. THE RESULTING RAMP GRADE AT A 15.0 FOOT RAMP LENGTH IS ACCEPTABLE EVEN IF IT EXCEEDS 8.3%.
6. CONSTRUCT LANDING AND SIDEWALK CROSS SLOPE AT NOMINAL 1.5% (1% MIN., 2% MAX) DO NOT CONSTRUCT LANDING AND SIDEWALK CROSS SLOPES STEEPER THAN 2%.
7. WWM STEEL REINFORCEMENT FOR SIDEWALKS, PEDESTRIAN RAMPS, AND CURB CUTS SHALL BE 6"x6"-W2.9 WWM.
8. WWM REINFORCEMENT STEEL FOR SIDEWALK REINFORCEMENT TO BE SET ON SPACERS AND PULLED UP AS REQUIRED TO POSITION STEEL 1 1/2" UP FROM BOTTOM OF SIDEWALK.
9. ALL CURB RAMP LAYOUTS AND DIMENSIONS IN THIS PLAN SET ARE APPROXIMATE AND NEED TO BE FIELD FIT AND SHALL MEET 2006 ADA STANDARDS FOR MAXIMUM SLOPES. FINAL LAYOUT TO BE APPROVED BY THE ENGINEER PRIOR TO CONCRETE POUR.
10. SEE SHEET E2 FOR EXPANSION SIDEWALK AND CURB AND GUTTER JOINT DETAIL.
11. SIDEWALK SIDE SLOPES SHALL BE 2.7' WIDE AND INSTALLED AT 4.5:1 SLOPES.
12. MEDIAN ISLAND IS STANDARD CURB AND GUTTER SPILL ALONG THE PERIMETER CURB LINE, AND TRANSITIONS TO CURB RAMP CURB AND GUTTER SPILL AS SHOWN IN THE MEDIAN ISLAND CURB RAMP DETAIL SECTION A-A.



**SECTION A-A**  
NTS

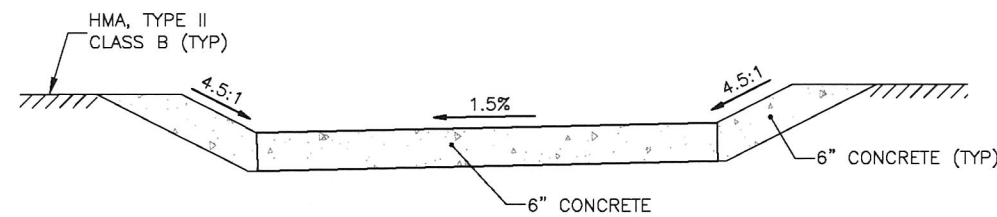


**TRUNCATED PATTERN DETAIL**

**DETECTABLE WARNING NOTES:**

1. ALL DETECTABLE WARNING WIDTHS PRESENTED IN THE CURB RAMP SUMMARY TABLE ARE MEASURED FROM TOP BACK OF CURB.

CURB RAMP SUMMARY					
NO.	OFFSET	WIDTH (FT)	RADII	QTY (EA)	REMARKS
"01" 14+43	LT	6'-0"	-	1	MEDIAN ISLAND ADA ACCESS
"01" 14+72	LT	5'-8"	104.6'	1	MEDIAN ISLAND ADA ACCESS
"01" 14+87	LT	6'-4"	33.0'	1	PARALLEL
"01" 18+40	RT	6'-8"	28.0'	1	PARALLEL
"01" 18+89	RT	6'-3"	14.0'	1	PARALLEL
"01" 19+24	RT	8'-2"	14.0'	1	PARALLEL
"01" 19+64	RT	7'-4"	14.0'	1	PARALLEL
				TOTAL:	7



**SECTION B-B**  
NTS

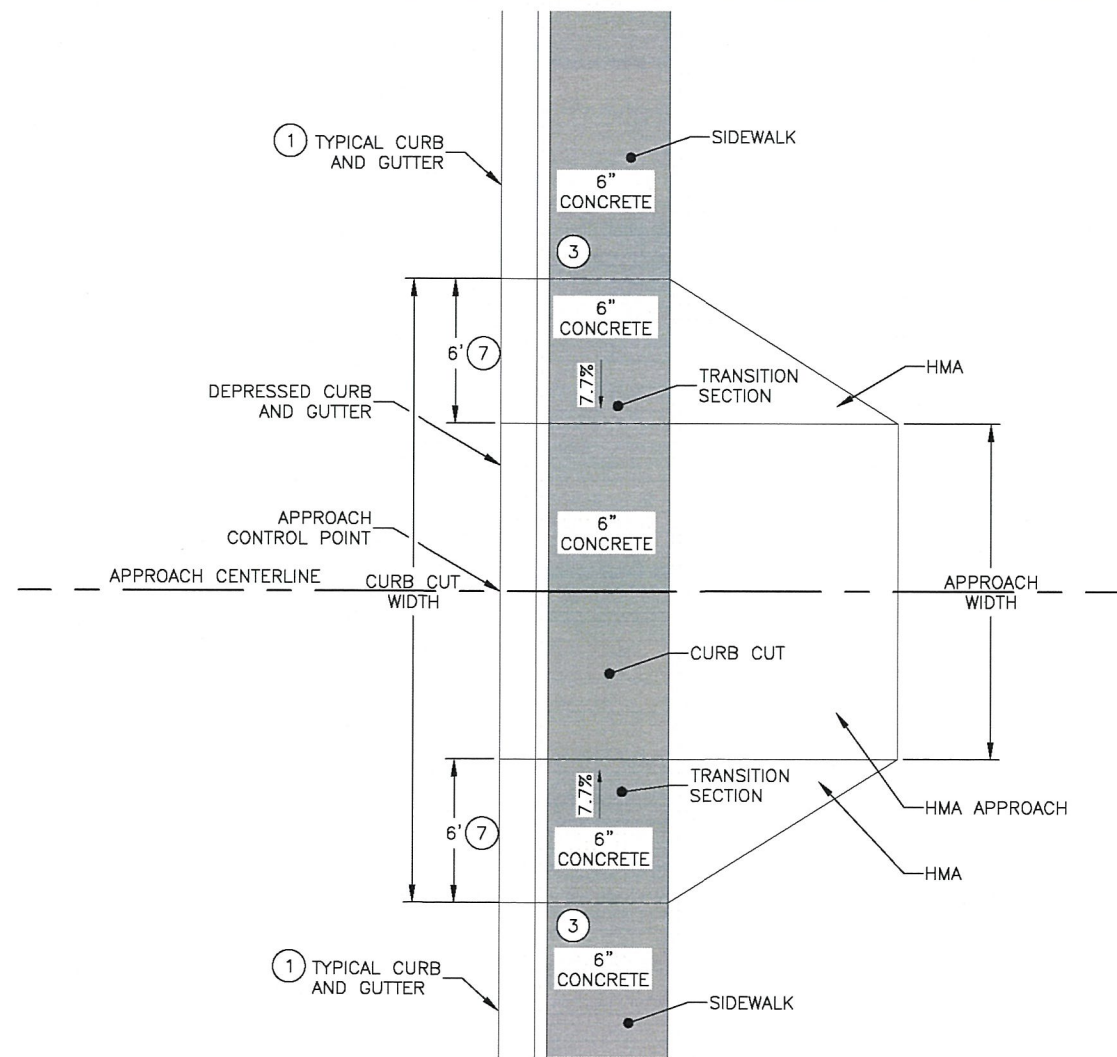
**MEDIAN ISLAND CURB RAMP DETAILS**

**RAMP & CURB DETAILS**

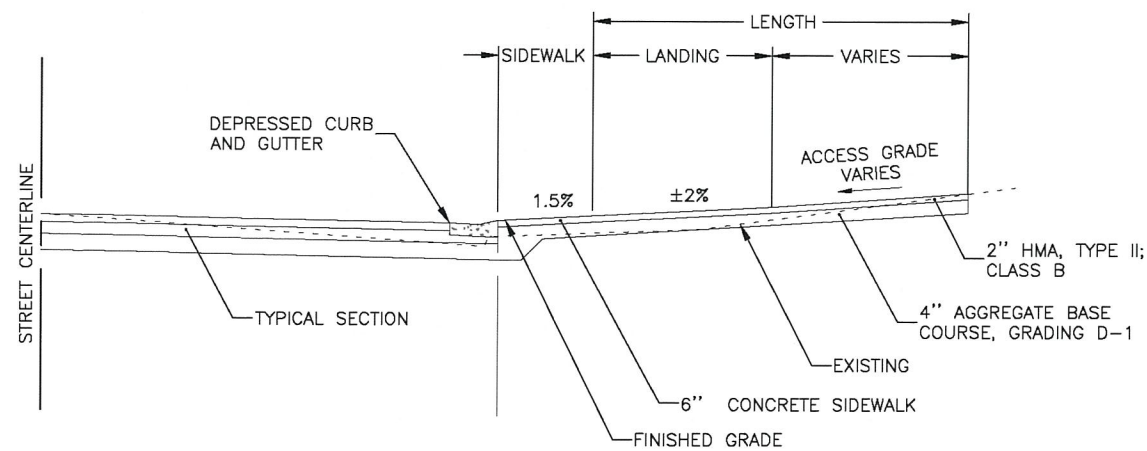


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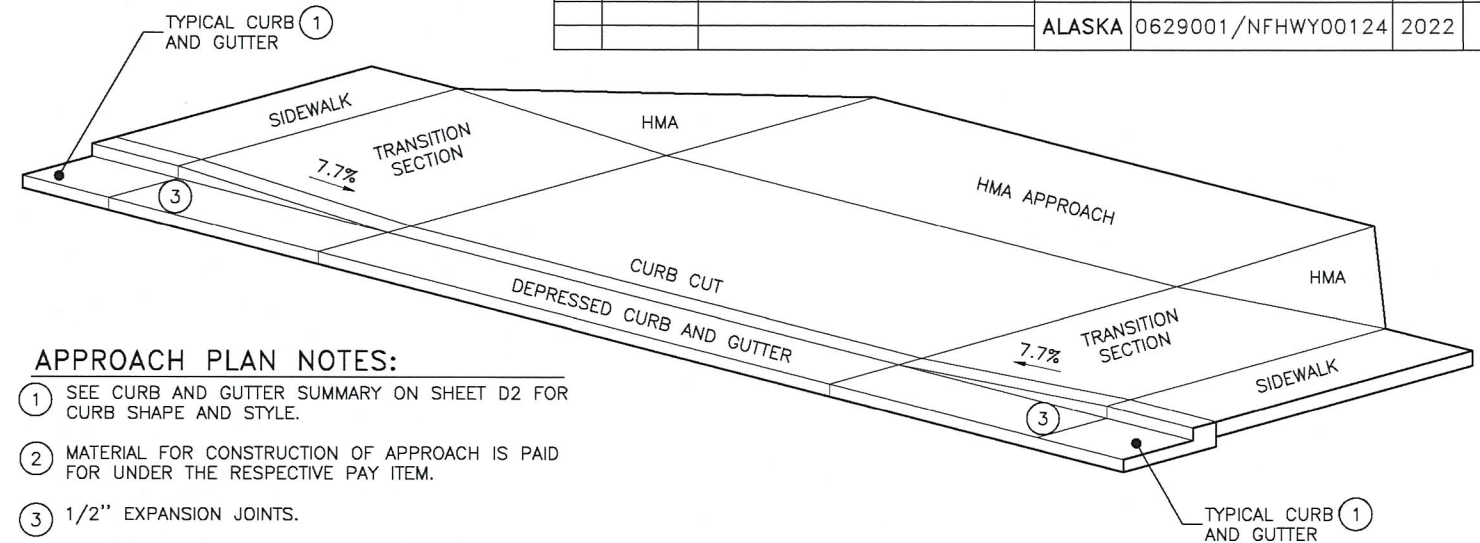
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	E4	E6



APPROACH PLAN PLAN DETAIL  
NTS



APPROACH PLAN SECTION DETAIL  
NTS



APPROACH PLAN DETAIL  
NTS

APPROACH PLAN NOTES:

- SEE CURB AND GUTTER SUMMARY ON SHEET D2 FOR CURB SHAPE AND STYLE.
- MATERIAL FOR CONSTRUCTION OF APPROACH IS PAID FOR UNDER THE RESPECTIVE PAY ITEM.
- 1/2" EXPANSION JOINTS.
- WWM STEEL REINFORCEMENT FOR PEDESTRIAN RAMPS AND CURB CUTS SHALL BE 6"x6"-W2.9XW2.9. ALL STEEL SHALL BE SET ON SPACERS AND PULLED UP AS REQUIRED TO POSITION STEEL 1-1/2" UP FROM BOTTOM OF SIDEWALK.
- FOR SIDEWALK REINFORCEMENT, POSITION STEEL 1-1/2" UP FROM BOTTOM OF SIDEWALK.
- SEE SHEET E2 FOR EXPANSION SIDEWALK & CURB AND GUTTER JOINT DETAIL.
- TRANSITION SECTION LENGTHS SHOWN IN PLANS ARE APPROXIMATE. CONSTRUCT TRANSITIONS AT A NOMINAL 7.7% GRADE OR FLATTER. SLOPES MAY BE INCREASED TO A MAXIMUM OF 8.3% WHERE SITE CONDITIONS WARRANT.

APPROACH SUMMARY

STA	OFFSET	SKEW ANGLE (90° TYP.)	WIDTH (FT)	LENGTH (FT)	LANDING LENGTH (FT)	QTY (EA)	REMARKS
14+84	16.4 RT	90°	20	22	10	1	
18+85	14.5 LT	90°	20	2.5	2.5	1	NO WORK PERMITTED OUTSIDE ROW
19+59	15.5 LT	90°	12	6	--	1	APPROACH LENGTH TIES INTO EXISTING CONDITION PRIOR TO FULL LANDING LENGTH
						TOTAL:	3

APPROACH SECTION NOTES:

- MAX RESIDENTIAL ACCESS GRADE 15%.
- MATERIAL FOR CONSTRUCTION OF APPROACH IS PAID FOR UNDER THE RESPECTIVE PAY ITEM.

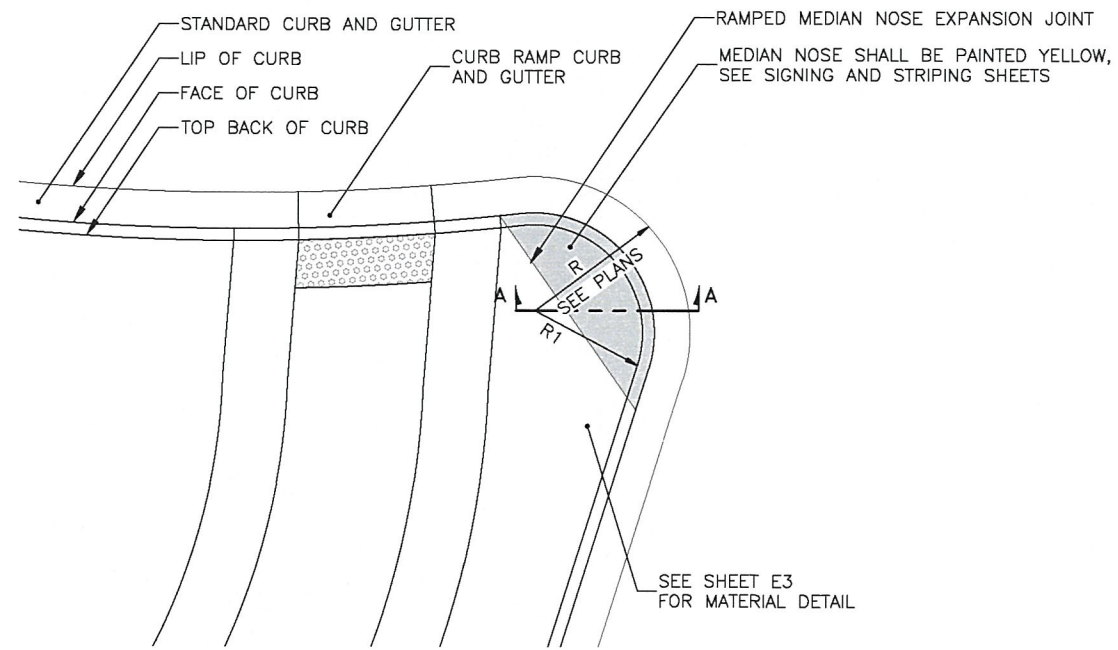
PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AECC163270, 102B AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
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APPROACH DETAILS

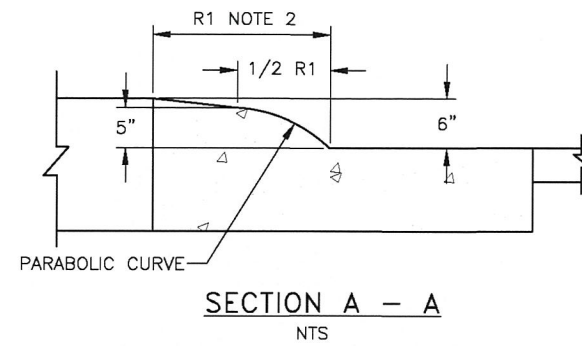




NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	E5	E6



**RAMPED MEDIAN NOSE DETAIL**  
NTS



**RAMPED MEDIAN NOSE NOTES:**

1. CONSTRUCT RAMP MEDIAN NOSE TO RADIUS POINT "R1" OR 3 FEET WHICHEVER IS GREATER.
2. RAMPED MEDIAN NOSE SHALL BE 6" PORTLAND CEMENT CONCRETE POURED INTEGRAL WITH CURB AND GUTTER AND IS SUBSIDIARY TO PAY ITEM 609.0002.0001 CURB AND GUTTER TYPE 1.
3. RAMPED MEDIAN NOSE PAINTING IS SUBSIDIARY TO RESPECTIVE STRIPING PAY ITEMS, FOR MORE DETAILS AND INFORMATION ON PAINTING REFER TO SIGNING AND STRIPING PLAN SHEETS AND SPECS.

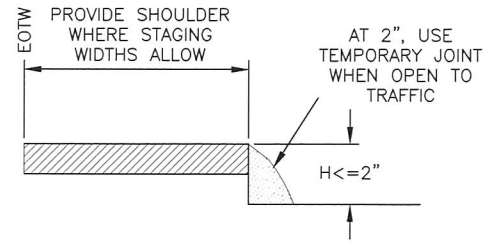
PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AECC163270, 102B AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
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**MEDIAN NOSE  
DETAILS**



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	E6	E6

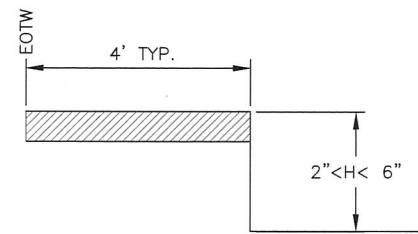
### VERTICAL DROP-OFFS



**CASE A**

DROP-OFFS  $\leq 2$  INCHES  
(PAVED SURFACES ONLY)

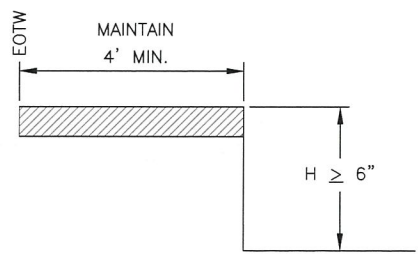
- USE "UNEVEN LANES" (W8-11) SIGNS FOR ALL DROP-OFFS IN BETWEEN TRAFFIC LANES
- LEAVE NO DROP-OFFS  $> 1.5$ " IN THE TRAFFIC LANE OR ACTIVE WHEEL TRACK



**CASE B**

$2 < \text{DROP-OFFS} < 6$ "  
(ALL ROADWAY SURFACES)

- PLACE CONES OR CANDLES FOR DROP-OFFS  $\geq 4$  FEET AND  $\leq 30$  FEET FROM EOTW.
- USE DRUMS OR TYPE II BARRICADES FOR DROP-OFFS  $< 4$  FEET FROM THE EOTW.



**CASE C**

DROP-OFFS  $\geq 6$ "  
(ALL ROADWAY SURFACES AND ROADSIDE SLOPES)

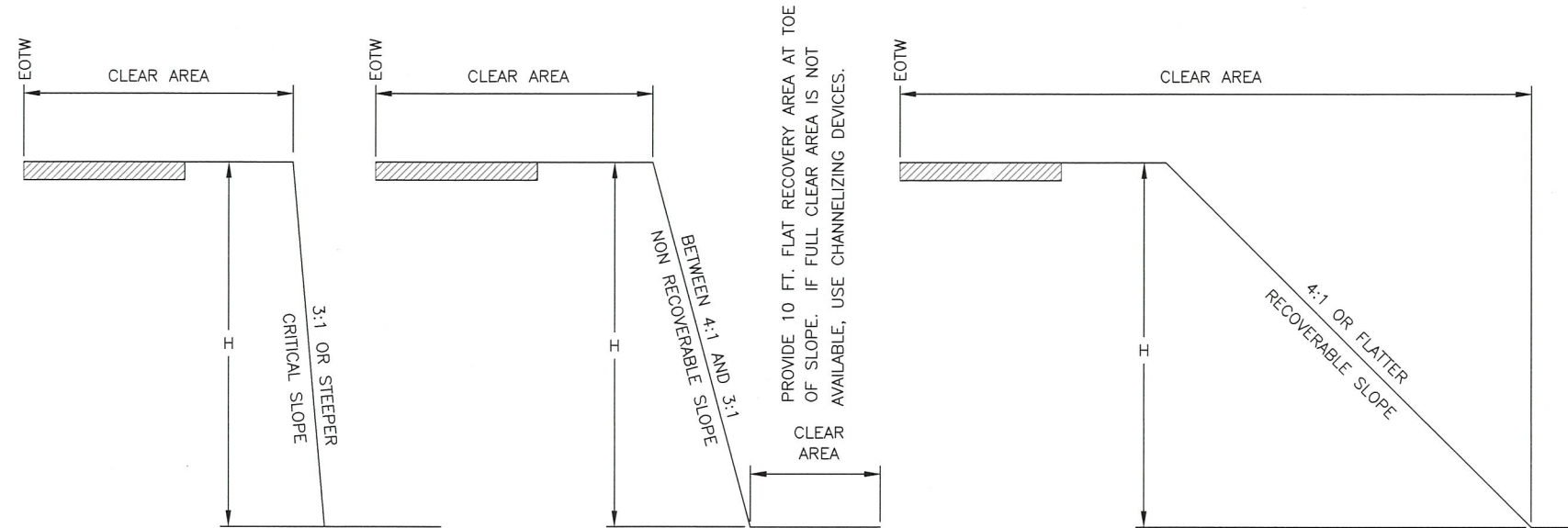
- PLACE DRUMS OR TYPE II BARRICADES FOR DROP-OFFS  $\leq 24$ " WITHIN THE CLEAR AREA.
- PROVIDE PORTABLE CONCRETE BARRIERS FOR DROP-OFFS  $> 24$ " WITHIN 15 FEET OF THE EOTW. USE DRUMS OR TYPE II BARRICADES IF BEYOND 15 FEET.

### FILL SLOPES

STEEPER THAN OR EQUAL TO 3:1

BETWEEN 4:1 AND 3:1

FLATTER THAN OR EQUAL TO 4:1



CLEAR AREA REQUIREMENTS			
	LOW SPEED $\leq 35$ MPH	INTERMEDIATE SPEED 40 MPH TO 45 MPH	HIGH SPEED $\geq 50$ MPH
RURAL	15'	24'	30'
URBAN	10' DITCH SECTIONS, OR 2' BEHIND CURB	15' DITCH CONDITIONS, OR 2' BEHIND CURB	15' DITCH CONDITIONS, OR 2' BEHIND CURB

CHANNELIZING DEVICE REQUIREMENTS FOR SLOPES 3:1 OR STEEPER WITHIN THE CLEAR AREA		
	$H \leq 15'$	$H > 15'$
$< 2000$ VPD LOW VOLUME	CANDLES OR CONES	TYPE II BARRICADES OR DRUMS
$> 2000$ VPD	TYPE II BARRICADE OR DRUMS	PORTABLE CONCRETE BARRIER OR TEMPORARY GUARDRAIL

#### TRAFFIC CONTROL NOTES:

- USE THE EXISTING CROSS-SECTION (PRIOR TO CONSTRUCTION) AS A BASIS FOR DETERMINING WHEN CHANNELIZING DEVICES ARE NEEDED.
- INSTALL CHANNELIZING DEVICES WHEN THE HORIZONTAL OR VERTICAL CURVATURE IS MADE MORE SEVERE.
- INSTALL FLEXIBLE DELINEATORS WHEN ALL VEGETATION OVER 4 FEET HIGH IS CLEARED FROM FILL SLOPES THAT ARE 3:1 OR STEEPER IN THE CLEAR AREA.
- USE PORTABLE CONCRETE BARRIER FOR WARRANTING CONDITIONS WHICH LAST LONGER THAN 3 DAYS. FOR CONDITIONS LASTING LESS THAN 3 DAYS, OTHER CHANNELIZING DEVICES MAY BE INSTALLED.
- TERMINATE RUNS OF PORTABLE CONCRETE BARRIER USING THE FOLLOWING METHODS:
  - CONNECT TO A PORTABLE CRASH CUSHION, OR
  - PROVIDE A CONCRETE BARRIER WITH THREE BEAM TRANSITION TO W-BEAM GUARDRAIL, TREATED WITH A PARALLEL TERMINAL (SEE SECTION 710).
  - FLARE THE ENDS OF THE PORTABLE CONCRETE BARRIER AWAY FROM THE ROADWAY AT A RATE OF 7:1 ON A COMPACTED SLOPE OF 6:1 OR FLATTER, OUTSIDE OF THE CLEAR AREA. INSTALL A SLOPING PORTABLE CONCRETE BARRIER END TREATMENT, OR
  - BURY IN THE BACKSLOPE.

- TERMINATE THE RUNS OF TEMPORARY W-BEAM GUARDRAIL USING THE FOLLOWING METHODS:
  - PROVIDE A PARALLEL TERMINAL (SEE SECTION 710)
  - FLARE THE ENDS OF THE TEMPORARY GUARDRAIL AWAY FROM THE ROADWAY AT A RATE OF 6:1 ON A COMPACTED SLOPE OF 6:1 OR FLATTER OUTSIDE OF THE CLEAR AREA, TERMINATE WITH A STANDARD W-BEAM END SECTION, OR
  - BURY IN THE BACKSLOPE.

#### EQUIPMENT NOTES:

- WHEN THERE IS ACTIVE, NONMOBILE CONSTRUCTION EQUIPMENT WITHIN THE CLEAR AREA, DELINEATE THE ROADSIDE WITH TRAFFIC CONES.
- SEPARATE PROCEDURES ARE REQUIRED FOR MOBILE WORK ZONE OPERATIONS AND SHORT DURATION WORK OF LESS THAN 12 HOURS.

#### WINTER SHUTDOWN NOTES:

- WHEN REQUIRED, USE CHANNELIZING DEVICES WHICH CAN BE MAINTAINED OVER WINTER.
- NO CHANNELIZING DEVICES ARE REQUIRED IF:
  - CONSTRUCTION SLOPES ARE RECOVERABLE, AND
  - SLOPES ARE SMOOTH AND COMPACTED, AND
  - REQUIRED CLEAR AREA IS PROVIDED

#### REVISIONS

DESCRIPTION	BY	DATE
CREATED	GG	11/20/03
CLARIFIED DETAILS	CA	01/31/06
UPDATED ET-PLUS NOMENCLATURE	CFJ	02/02/10
UPDATED 6A	CMA	07/18/11
NATIONAL CAD STDS	SP	02/13/15
NOTE TO DESIGNERS & MINOR CHANGES	SP	12/05/18

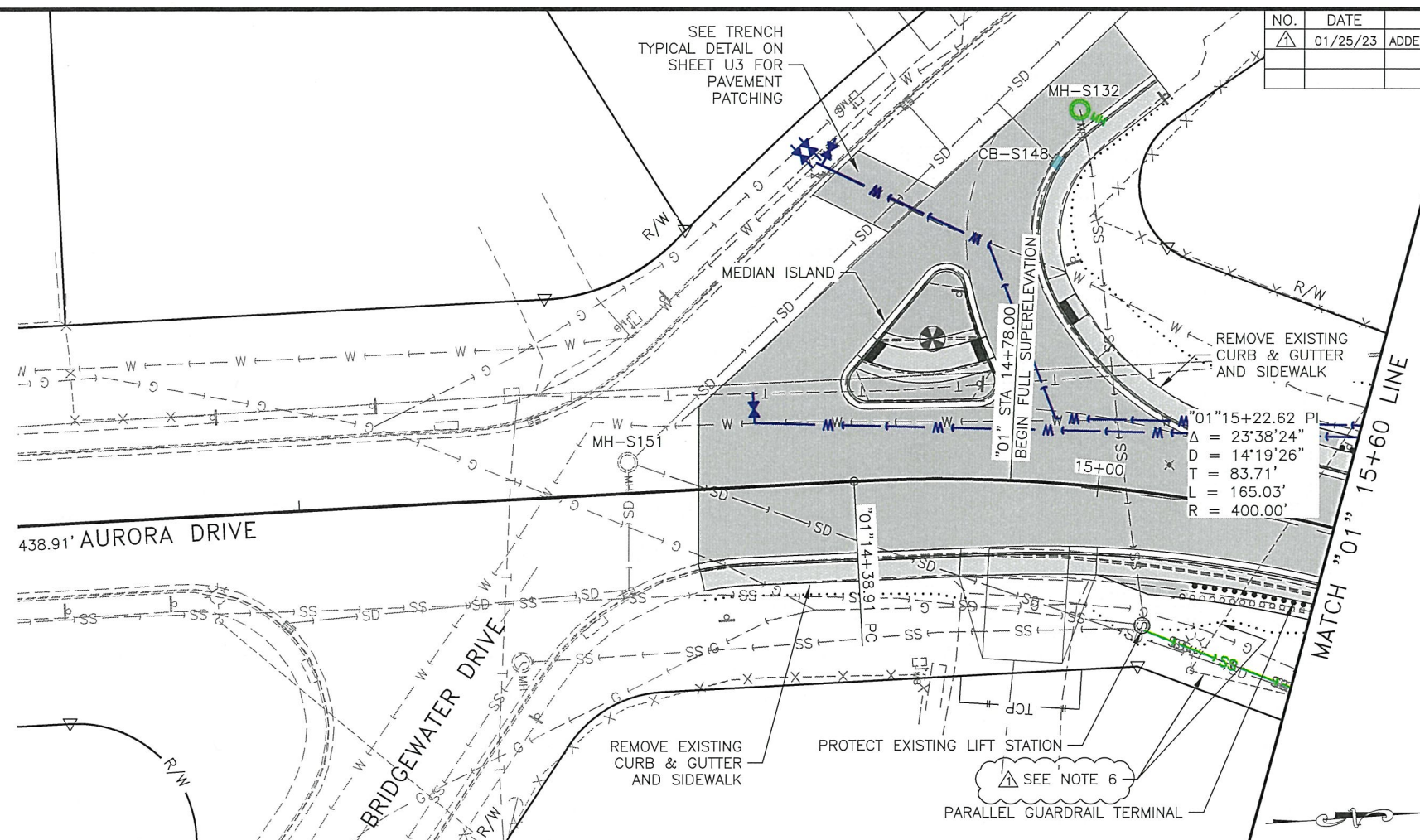
TRAFFIC CONTROL  
DEVICES & DETAILS



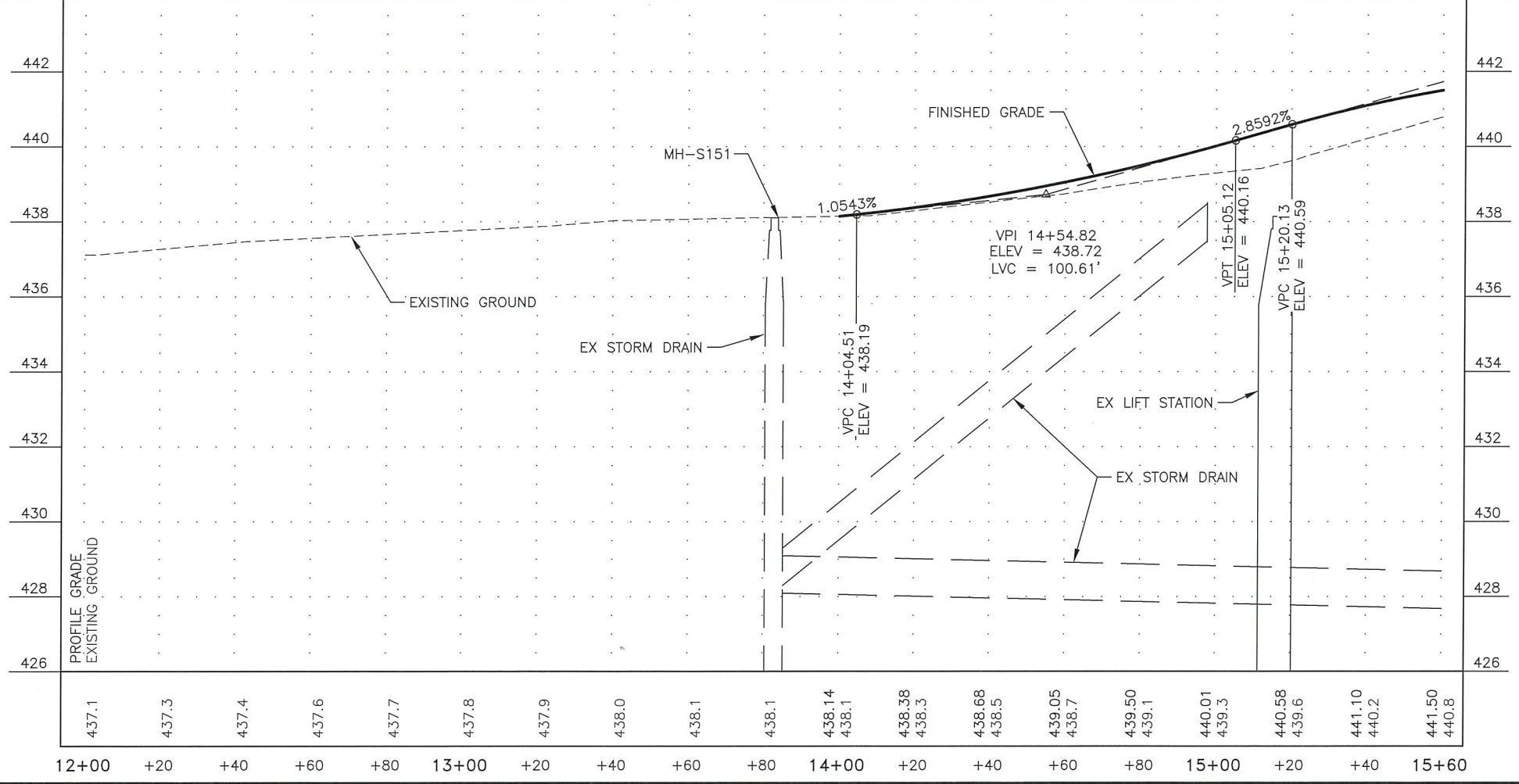
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
1	01/25/23	ADDENDUM 4	ALASKA	0629001/NFHWHY00124	2022	F1	F2

**ADDENDUM NO. 3 ATTACHMENT NO. 4**  
**NOTES:**

- FOR PARALLEL GUARDRAIL TERMINALS, CONSTRUCT THE GUARDRAIL TERMINAL WIDENING IN ACCORDANCE WITH THE "ALTERNATE DETAIL" ON STANDARD PLAN G-20.12. SEE REMARKS COLUMN IN GUARDRAIL SUMMARY TABLE ON SHEET D2 FOR END OFFSET (X).
- SEE APPROACH DETAILS ON SHEET E4.
- REMOVE ALL EXISTING GUARDRAIL. SEE GUARDRAIL SUMMARY TABLE ON SHEET D2.
- SAWCUT AND MATCH EXISTING PAVEMENT AT AURORA DR, BRIDGEWATER DR, WILLOW ST, COTTONWOOD ST, AND ALL APPROACHES. SEE DETAIL ON SHEET B1.
- ADJUST THE EXISTING SANITARY SEWER MH FRAMES, CATCH BASIN INLET FRAMES, EXISTING STORM DRAIN MANHOLE RIMS, AND WATER VALVE BOX ELEVATIONS AS LISTED IN THE SUMMARY TABLE ON SHEET D2.
- OH LINE ONLY SERVES THE CITY OF FAIRBANKS LIGHTING CIRCUIT AND MAY BE DE-ENERGIZED DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH CITY OF FAIRBANKS AND ANY RESOURCES REQUIRED TO DE-ENERGIZE THE LINE TO FACILITATE THEIR CONSTRUCTION OPERATIONS.



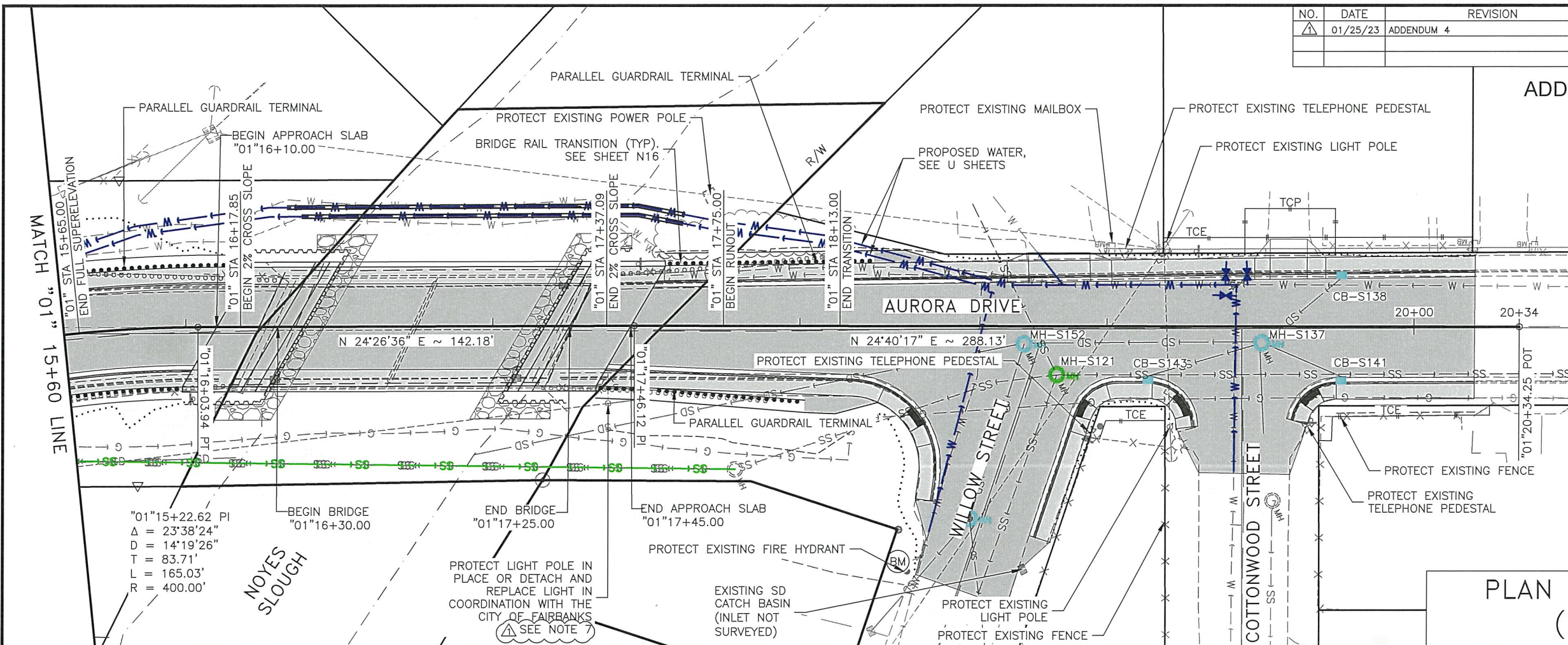
**PLAN AND PROFILE**  
**(1 OF 2)**



PLANS DEVELOPED BY: RESPEC COMPANY, LLC. CERT. OF AUTHORIZATION NO.: AECC163270, 102B AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
 N:\Projects\18185FB-AuroraDr\_Noyes\C:\2001const\18185fb-10+00.00-16+00.00 - Wed, Jan/25/23 04:54pm

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
1	01/25/23	ADDENDUM 4	ALASKA	0629001/NFHWY00124	2022	F2	F2

ADDENDUM NO. 3 ATTACHMENT NO. 5



PLAN AND PROFILE  
(2 OF 2)

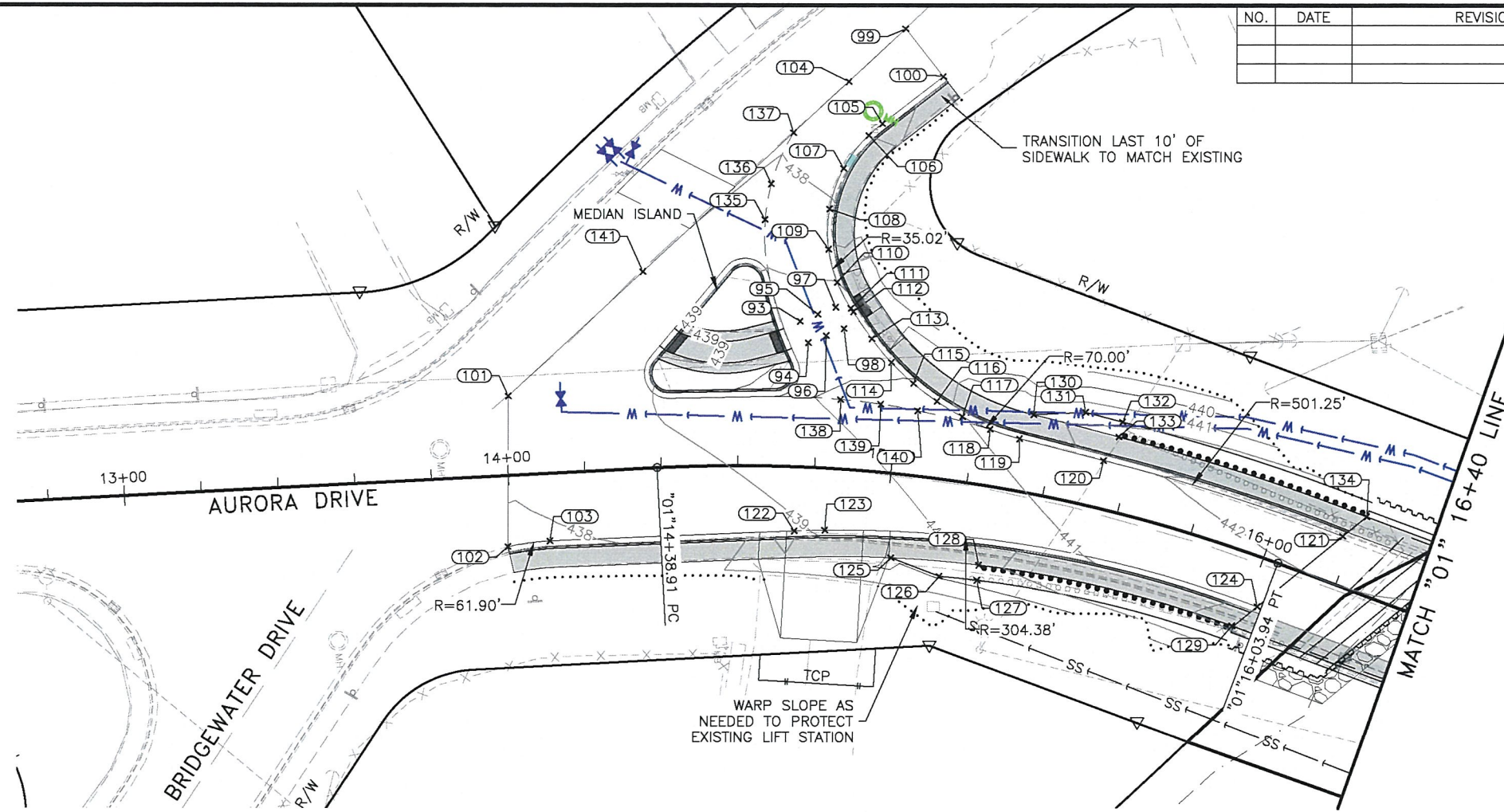


NOTES:

- FOR PARALLEL GUARDRAIL TERMINALS, CONSTRUCT THE GUARDRAIL TERMINAL WIDENING IN ACCORDANCE WITH THE "ALTERNATE DETAIL" ON STANDARD PLAN G-20.12. THE END OFFSET (X) SHALL BE 0 FEET, EXCEPT GUARDRAIL TERMINAL 17+34 TO 18+02 RT THE END OFFSET (X) SHALL BE 2 FT. SEE REMARKS SECTION IN SUMMARY TABLE ON D2 FOR MORE INFORMATION.
- SEE APPROACH DETAILS ON SHEET E4.
- REMOVE ALL EXISTING GUARDRAIL. SEE GUARDRAIL SUMMARY TABLE ON SHEET D2.
- SAWCUT AND MATCH EXISTING PAVEMENT AT AURORA DR, BRIDGEWATER DR, WILLOW ST, COTTONWOOD ST, AND ALL APPROACHES, SEE DETAIL ON SHEET B1.
- ADJUST THE EXISTING SANITARY SEWER MH FRAMES, CATCH BASIN INLET FRAMES, EXISTING STORM DRAIN MANHOLE RIMS, AND WATER VALVE BOX ELEVATIONS AS LISTED IN THE SUMMARY TABLE ON SHEET D2.
- PLACE ADDITIONAL SUBBASE GRADING F, TAPER DEPTH AT 10:1 AWAY FROM BRIDGE. PLACE UNDER FULL WIDTH OF ROADWAY AND SIDEWALKS.
- OH LINE ONLY SERVES THE CITY OF FAIRBANKS LIGHTING CIRCUIT AND MAY BE DE-ENERGIZED DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH CITY OF FAIRBANKS AND ANY RESOURCES REQUIRED TO DE-ENERGIZE THE LINE TO FACILITATE THEIR CONSTRUCTION OPERATIONS.

PLANS DEVELOPED BY: RESPEC COMPANY, LLC. CERT. OF AUTHORIZATION NO.: AEC0163270. 1028, AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
N:\Projects\18185FB-AuroraDr\_Noyes\18185fb-16+00.00-20+34.25 Wed, Jan/25/23 04:55pm

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	G1	G5



CONTROL POINT TABLE					
PT#	DESC.	NORTHING	EASTING	ELEV.	REMARKS
93	GB	204794.51	671075.65	439.25	
94	GB	204796.33	671081.37	439.37	
95	GB	204799.27	671074.13	439.22	
96	GB	204801.10	671079.85	439.34	
97	GB	204804.03	671072.61	439.18	
98	GB	204805.86	671078.33	439.29	
99	EP	204827.23	671001.30		
100	LOC	204836.19	671014.43		
101	EP	204717.30	671090.05		
102	LOC	204714.60	671129.33		
103	PT-LOC	204725.63	671128.56	437.88	
104	EP	204811.38	671014.10		
105	EP-PC	204819.44	671025.68	437.52	
106	LOC	204815.66	671028.44	437.61	
107	LOC	204808.51	671036.62	437.60	
108	LOC	204804.15	671046.89	438.13	
109	LOC	204803.19	671057.40	438.52	
110	LOC	204804.84	671066.13	439.02	
111	PT-LOC	204808.02	671073.16	439.16	
112	RAMP-LOC	204808.58	671074.10	439.18	
113	PC-LOC	204812.95	671081.46	439.33	
114	LOC	204817.67	671087.97	439.74	

CONTROL POINT TABLE					
PT#	DESC.	NORTHING	EASTING	ELEV.	REMARKS
115	LOC	204823.04	671093.83	440.14	
116	LOC	204828.86	671098.92	440.52	
117	LOC	204835.22	671103.33	440.79	
118	LOC	204842.23	671107.11	441.10	
119	PT-LOC	204849.68	671110.09	441.30	
120	PC-LOC	204871.11	671117.26	441.74	
121	PT-LOC	204932.08	671141.26	442.25	
122	PC-LOC	204789.37	671130.20	438.89	
123	APPROACH	204797.33	671130.52	439.10	
124	PT-LOC	204908.56	671158.07	441.68	
125	SW	204814.16	671138.93	440.13	
126	EP	204826.42	671144.61	440.15	SEE NOTE 4
127	EP	204836.14	671146.30	440.46	SEE NOTE 4
128	GDRL	204836.89	671142.37	440.82	
129	GDRL	204901.65	671162.63	442.11	
130	SW	204853.72	671104.08	441.93	SEE NOTE 4
131	EP	204867.32	671104.39	441.81	SEE NOTE 4
132	EP	204876.79	671107.54	441.97	
133	GDRL	204875.54	671111.34	442.27	
134	GDRL	204938.64	671136.57	442.75	
135	FG	204787.16	671048.57	438.53	
136	FG	204789.39	671039.38	438.25	

CONTROL POINT TABLE					
PT#	DESC.	NORTHING	EASTING	ELEV.	REMARKS
137	EP	204796.09	671026.44		
138	FG	204803.72	671096.75	440.12	
139	FG	204814.16	671098.67	440.38	
140	FG	204823.70	671101.03	440.62	
141	EP	204754.52	671060.00		

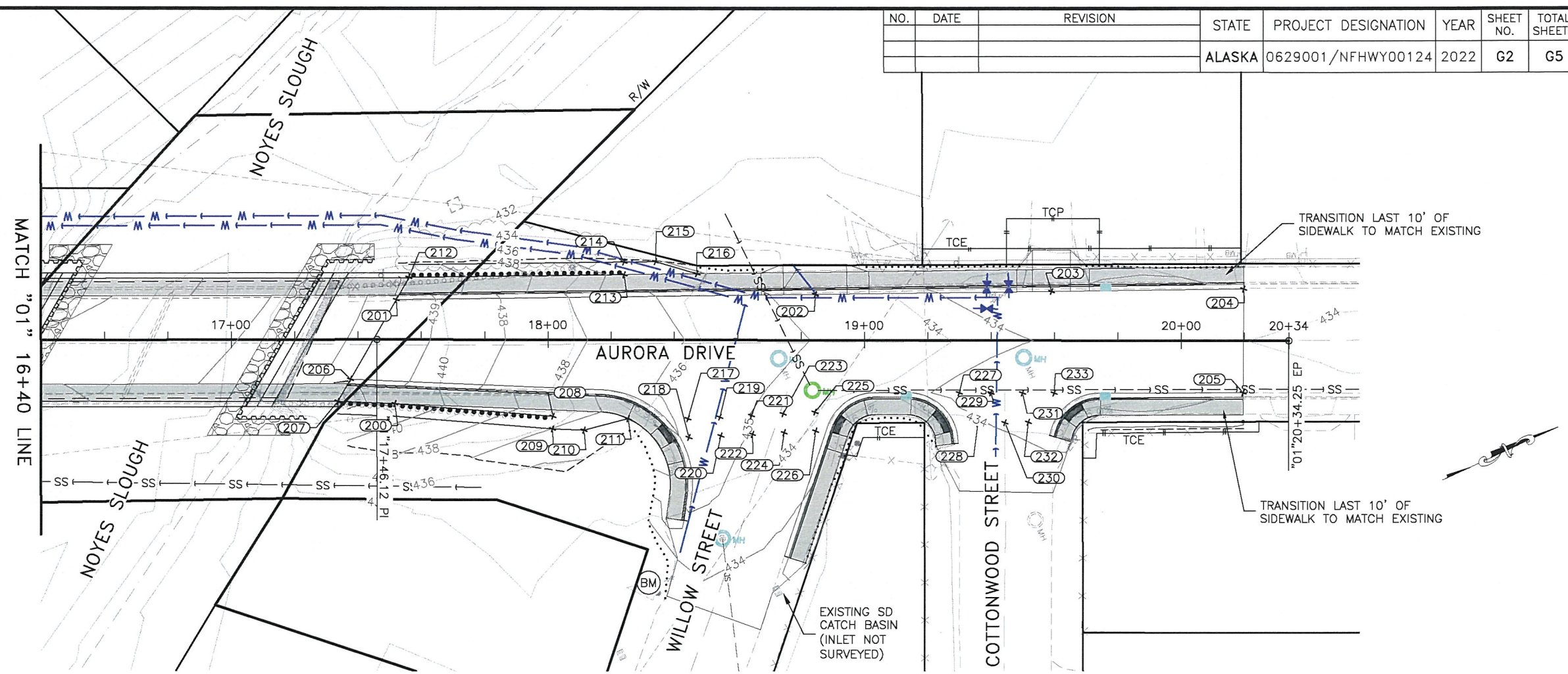
**NOTES:**

- POINTS WITH BLANK ELEVATIONS ARE INTENDED TO MATCH EXISTING ELEVATIONS.
- SEE SHEET D2 TYPICAL ON CLARIFICATION FOR STANDARD CURB AND GUTTER INSTALLED AS CATCH OR SPILL.
- SEE SHEET G3 FOR THE MEDIAN ISLAND GRADING AND ADDITIONAL INFORMATION.
- PAVEMENT WIDENING FOR GUARDRAIL TERMINAL. SEE STANDARD PLAN G-20.12.

**APPROACHES & GRADING**



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	G2	G5



CONTROL POINT TABLE					
PT#	DESC.	NORTHING	EASTING	ELEV.	REMARKS
200	GDRL	205040.86	671226.80	439.64	
201	LOC	205054.96	671197.01	439.56	
202	APPROACH	205175.93	671250.56	434.69	
203	APPROACH	205244.17	671280.76	433.67	
204	LOC	205299.73	671305.35		
205	LOC	205285.89	671335.13		
206	LOC	205031.30	671213.93	439.71	
207	GDRL	205024.77	671218.64	440.29	
208	GDRL	205084.51	671251.19	437.37	
209	EP	205082.70	671254.76	437.01	SEE NOTE 3
210	EP	205091.61	671259.29	436.74	SEE NOTE 3
211	SW	205105.90	671261.77	436.79	
212	GDRL	205061.48	671192.24	439.88	
213	GDRL	205123.66	671219.76	436.80	
214	EP	205125.27	671216.11	436.44	SEE NOTE 3
215	EP	205134.42	671220.15	436.12	SEE NOTE 3
216	SW	205144.69	671229.08	436.12	
217	GB	205123.14	671269.70	435.80	
218	GB	205120.93	671275.23	435.85	
219	GB	205132.43	671273.38	435.42	

CONTROL POINT TABLE					
PT#	DESC.	NORTHING	EASTING	ELEV.	REMARKS
220	GB	205130.23	671278.93	435.35	
221	GB	205141.73	671277.07	434.98	
222	GB	205139.52	671282.62	434.92	
223	GB	205151.03	671280.75	434.72	
224	GB	205148.81	671286.32	434.60	
225	GB	205160.32	671284.43	434.46	
226	GB	205158.04	671289.99	434.34	
227	GB	205204.33	671297.79	433.89	
228	GB	205205.66	671309.06	434.02	
229	GB	205213.41	671301.98	433.78	
230	GB	205213.50	671312.45	433.89	
231	GB	205222.49	671306.17	433.69	
232	GB	205220.30	671315.39	433.77	
233	GB	205231.57	671310.36	433.62	

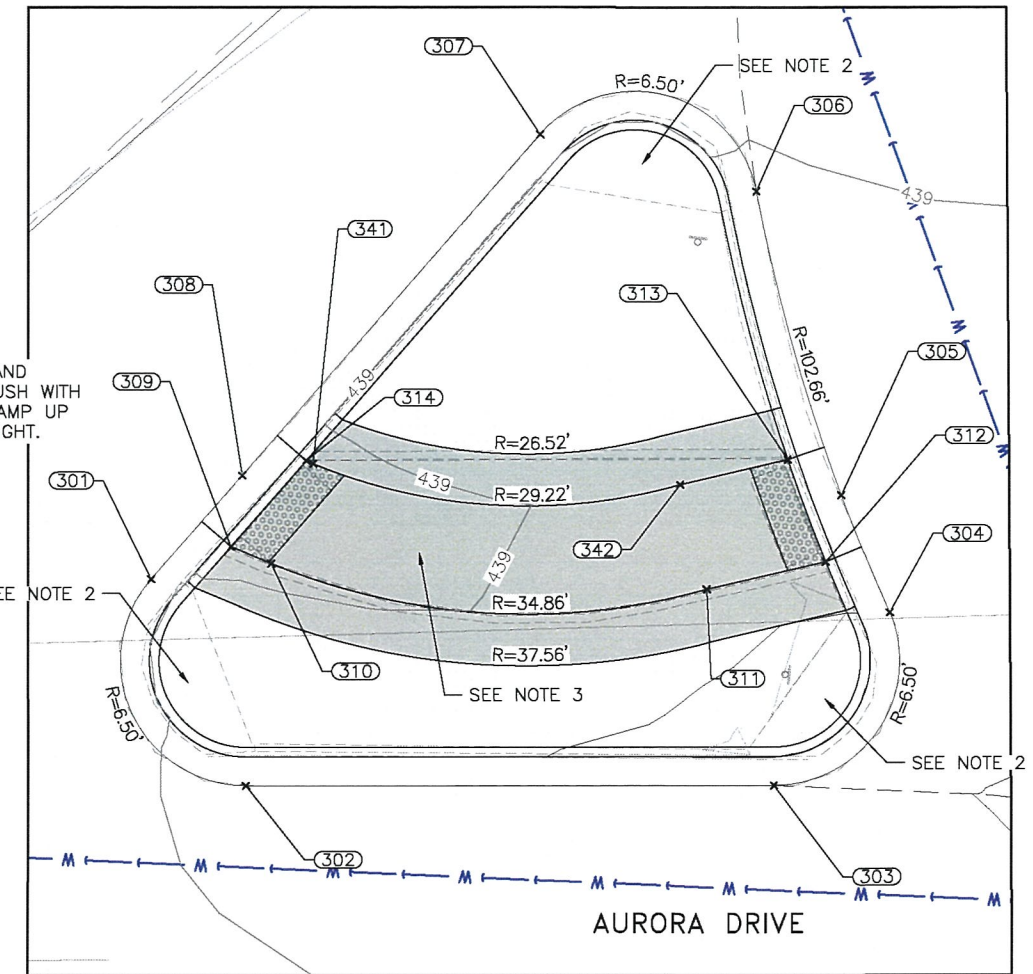
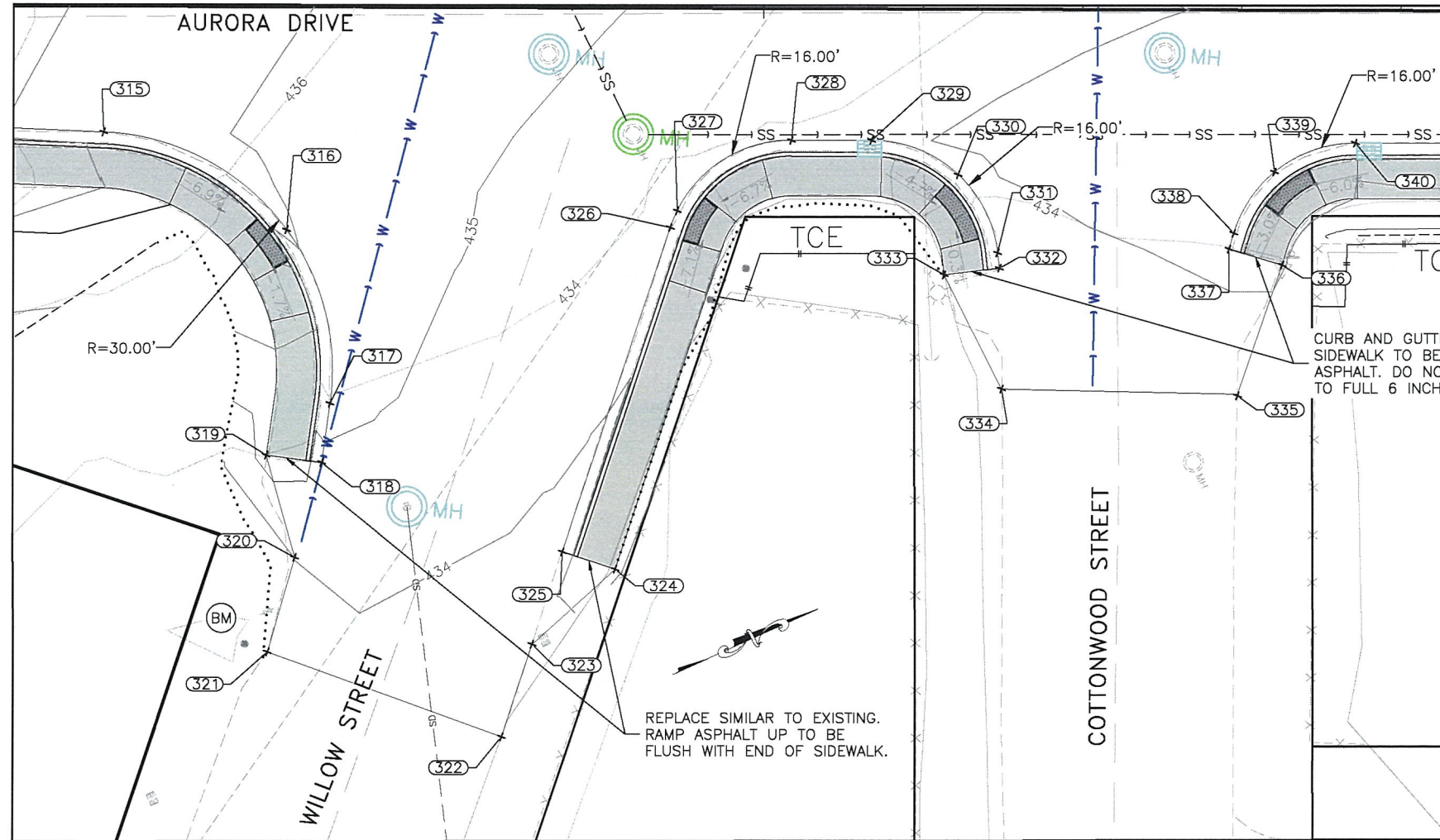
- NOTES:**
- POINTS WITH BLANK ELEVATIONS ARE INTENDED TO MATCH EXISTING ELEVATIONS.
  - SEE SHEET D2 ON CLARIFICATION FOR STANDARD CURB AND GUTTER INSTALLED AS CATCH OR SPILL.
  - PAVEMENT WIDENING FOR GUARDRAIL TERMINAL. SEE STANDARD PLAN G-20.12.

## APPROACHES & GRADING



PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AECC163270, 102B AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWHY00124	2022	G3	G5



CONTROL POINT TABLE					
PT#	DESC.	NORTHING	EASTING	ELEV.	REMARKS
301	PC-LOC	204754.89	671082.49	438.62	
302	PT-LOC	204759.28	671093.48	439.20	
303	PC-LOC	204786.73	671094.76	439.70	
304	PRC-LOC	204793.14	671086.04	439.55	
305	RAMP-LOC	204790.95	671079.82	439.30	
306	PRC-LOC	204787.26	671063.81	439.15	
307	PT-LOC	204776.15	671060.31	438.55	
308	RAMP-LOC	204759.86	671077.30	438.57	
309	TBC	204759.10	671080.99	438.64	
310	PC-SW	204761.15	671081.96	438.69	
311	PT-SW	204783.71	671084.39	439.36	
312	TBC	204789.98	671083.24	439.38	
313	TBC	204788.26	671077.83	439.30	
314	TBC	204763.21	671076.69	438.60	
315	PC-LOC	205101.98	671249.97	436.53	
316	RAMP-LOC	205117.82	671270.67	436.02	
317	PT-LOC	205113.76	671292.83	435.09	
318	LOC	205109.73	671299.17	434.87	
319	EP	205103.79	671295.46	435.34	
320	EP	205101.71	671308.65	433.91	

CONTROL POINT TABLE					
PT#	DESC.	NORTHING	EASTING	ELEV.	REMARKS
321	EP	205093.69	671318.12		
322	EP	205116.05	671340.08		
323	EP	205124.35	671331.01	433.61	
324	EP	205137.77	671326.70	434.23	
325	LOC	205132.64	671321.94	433.76	
326	PC-LOC	205161.88	671290.40	434.24	
327	RAMP-LOC	205163.54	671288.84	434.26	
328	PT-LOC	205180.26	671286.72	434.27	
329	PC-LOC	205189.40	671290.90	434.11	
330	RAMP-LOC	205197.54	671299.33	434.12	
331	PT-LOC	205197.99	671310.33	434.18	
332	LOC	205197.40	671312.20	434.20	
333	EP	205190.73	671310.06	434.27	
334	EP	205191.36	671326.14		
335	EP	205217.96	671339.19		
336	EP	205229.89	671326.56	433.88	
337	LOC	205224.64	671321.93	433.81	
338	PC-LOC	205226.02	671320.37	433.74	
339	RAMP-LOC	205233.88	671315.50	433.62	
340	PT-LOC	205244.63	671316.39	433.56	

CONTROL POINT TABLE					
PT#	DESC.	NORTHING	EASTING	ELEV.	REMARKS
341	PC-SW	204763.56	671076.87	438.60	
342	PT-SW	204782.57	671078.87	439.25	

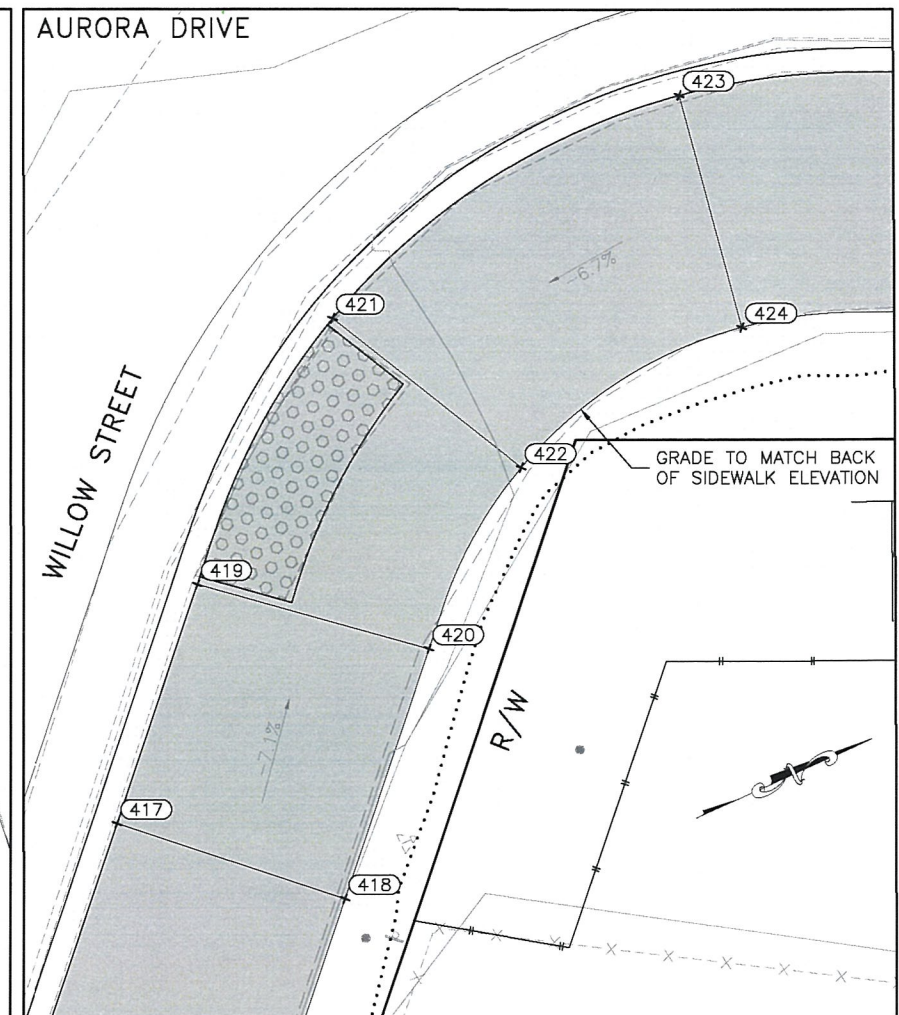
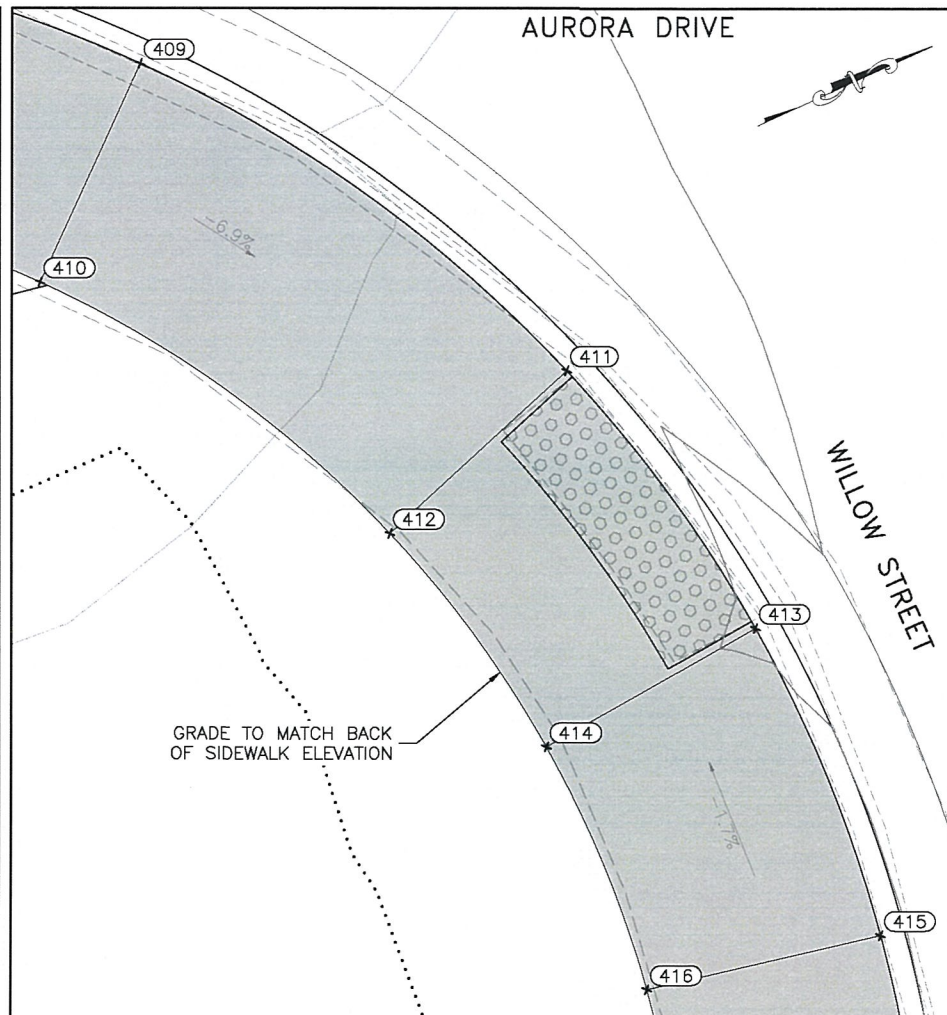
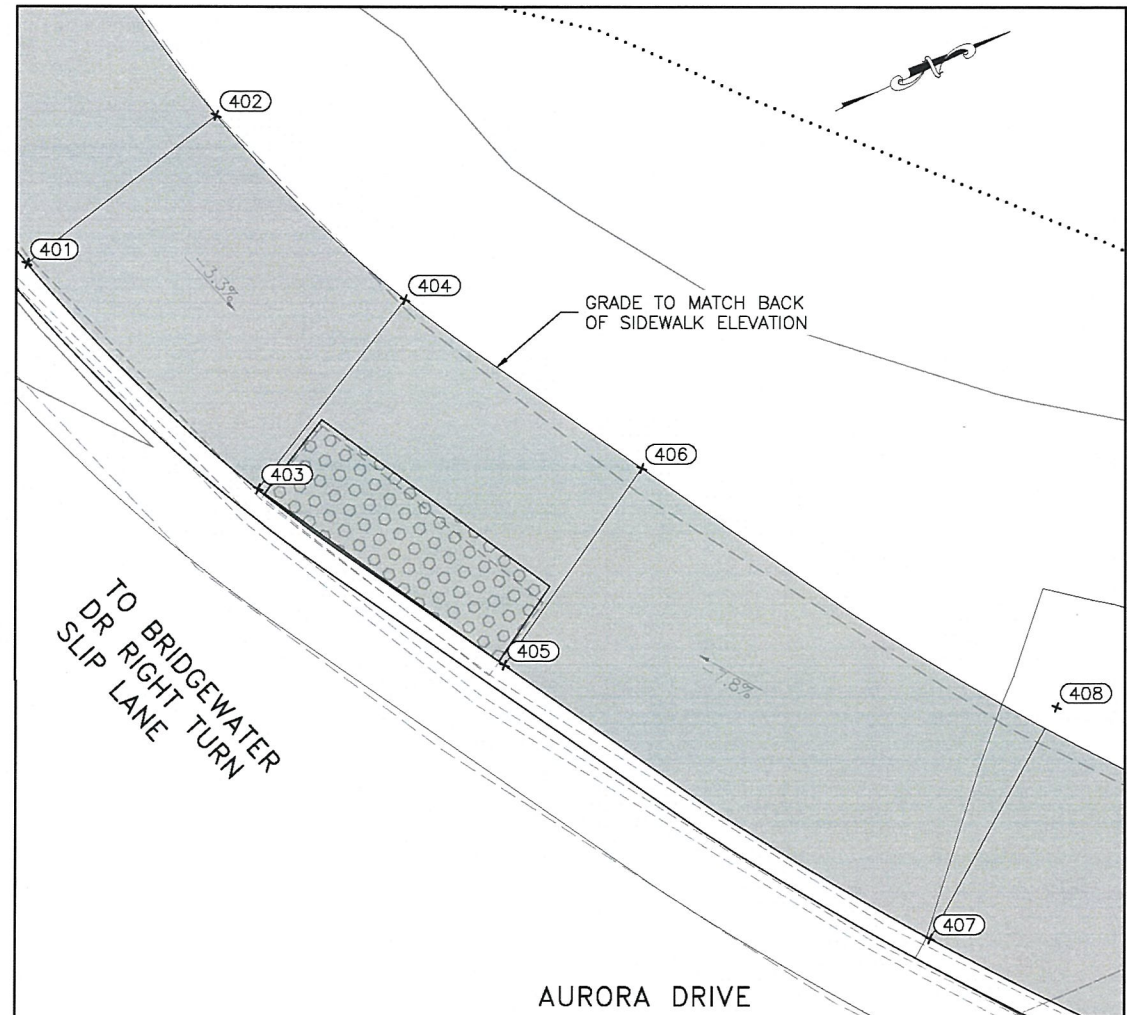
**NOTES:**

- POINTS WITH BLANK ELEVATIONS ARE INTENDED TO MATCH EXISTING ELEVATIONS.
- SEE RAMPED MEDIAN NOSE DETAIL ON SHEET E5
- SEE SHEET E3 FOR THE MEDIAN ISLAND CURB RAMP DETAILS FOR LAYOUT DIMENSIONS AND GRADES.
- SEE SHEET D2 TYPICAL ON CLARIFICATION FOR STANDARD CURB AND GUTTER INSTALLED AS CATCH OR SPILL.
- THE MEDIAN ISLAND IS STANDARD CURB AND GUTTER SPILL ALONG THE PERIMETER CURB LINE, AND TRANSITIONS TO CURB RAMP CURB AND GUTTER SPILL AS SHOWN ON SHEET E3 IN THE MEDIAN ISLAND CURB RAMP DETAIL SECTION A-A.

**APPROACHES & GRADING**



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	G4	G5



CONTROL POINT TABLE					
PT#	DESC.	NORTHING	EASTING	ELEV.	REMARKS
401	RAMP TOP	204806.31	671064.06	439.33	
402	RAMP TOP	204811.17	671062.88	439.40	
403	RAMP BOTTOM	204808.76	671070.31	439.13	
404	RAMP BOTTOM	204813.16	671067.99	439.20	
405	RAMP BOTTOM	204811.90	671075.78	439.23	
406	RAMP BOTTOM	204816.20	671073.23	439.30	
407	RAMP TOP	204817.60	671084.65	440.01	
408	RAMP TOP	204821.99	671081.34	440.06	
409	RAMP TOP	205109.57	671258.37	436.73	
410	RAMP TOP	205105.79	671261.65	436.80	
411	RAMP BOTTOM	205114.99	671267.86	436.09	
412	RAMP BOTTOM	205110.24	671269.41	436.16	
413	RAMP BOTTOM	205116.34	671274.37	435.99	
414	RAMP BOTTOM	205111.36	671274.82	436.06	
415	RAMP TOP	205116.06	671281.29	436.10	
416	RAMP TOP	205111.16	671280.30	436.18	
417	RAMP TOP	205159.01	671296.44	434.62	
418	RAMP TOP	205162.67	671299.84	434.69	
419	RAMP BOTTOM	205162.59	671292.58	434.24	
420	RAMP BOTTOM	205166.41	671295.80	434.32	

CONTROL POINT TABLE					
PT#	DESC.	NORTHING	EASTING	ELEV.	REMARKS
421	RAMP BOTTOM	205167.45	671288.70	434.26	
422	RAMP BOTTOM	205169.73	671293.15	434.33	
423	RAMP TOP	205175.92	671287.47	434.69	
424	RAMP TOP	205175.10	671292.40	434.76	

**NOTES:**

- SEE SHEET D2 TYPICAL ON CLARIFICATION FOR STANDARD CURB AND GUTTER INSTALLED AS CATCH OR SPILL.
- CONSTRUCT RAMP SLOPES AT A NOMINAL 7.7% GRADE, OR FLATTER. RAMP SLOPES MAY BE INCREASED TO A MAXIMUM OF 8.3% WHEN SITE CONDITIONS WARRANT IT. RAMP LENGTHS SHOULD BE INCREASED TO KEEP GRADES UNDER 8.3% MAXIMUM, BUT ARE NOT REQUIRED TO EXCEED 15.0 FEET. THE RESULTING RAMP GRADE AT A 15.0 FOOT RAMP LENGTH IS ACCEPTABLE EVEN IF IT EXCEEDS 8.3%.
- CONSTRUCT LANDING AND SIDEWALK CROSS SLOPE AT NOMINAL 1.5% (1% MIN., 2% MAX) DO NOT CONSTRUCT LANDING AND SIDEWALK CROSS SLOPES STEEPER THAN 2%.

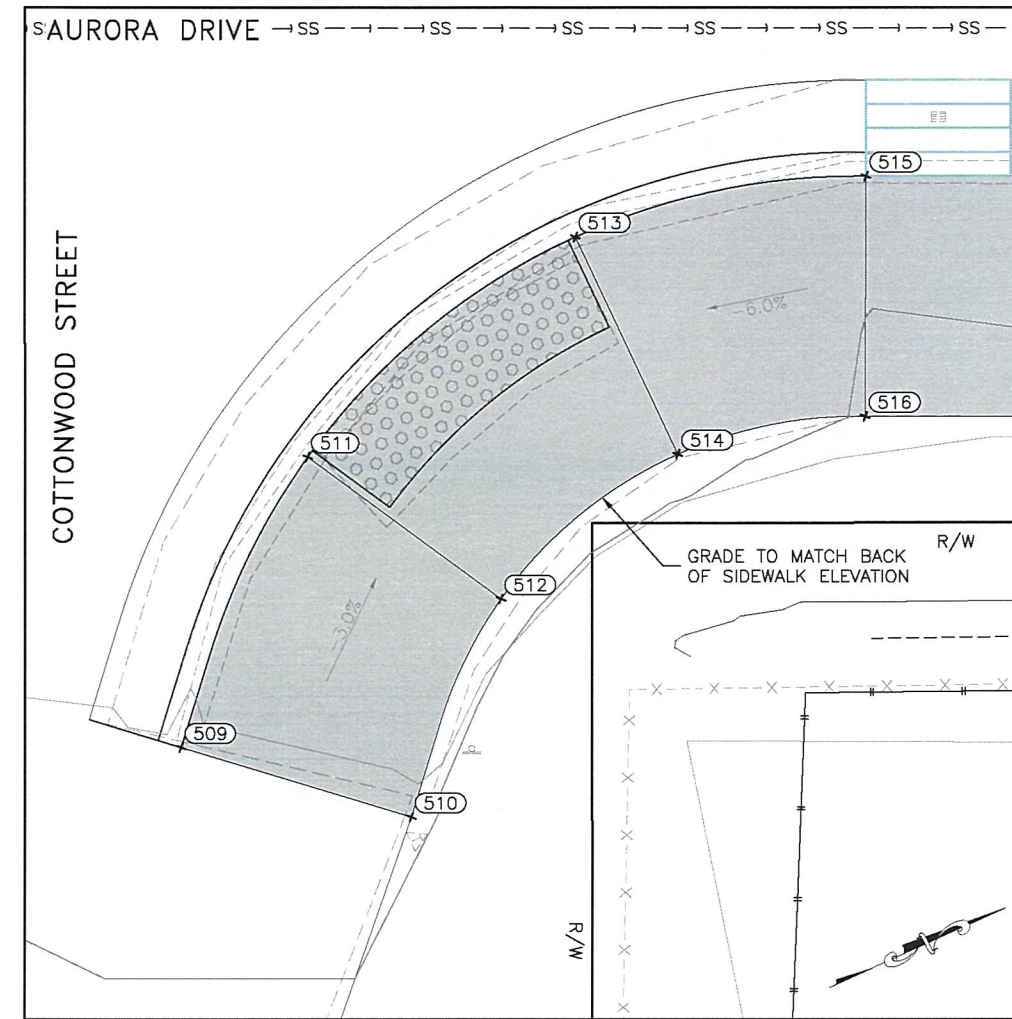
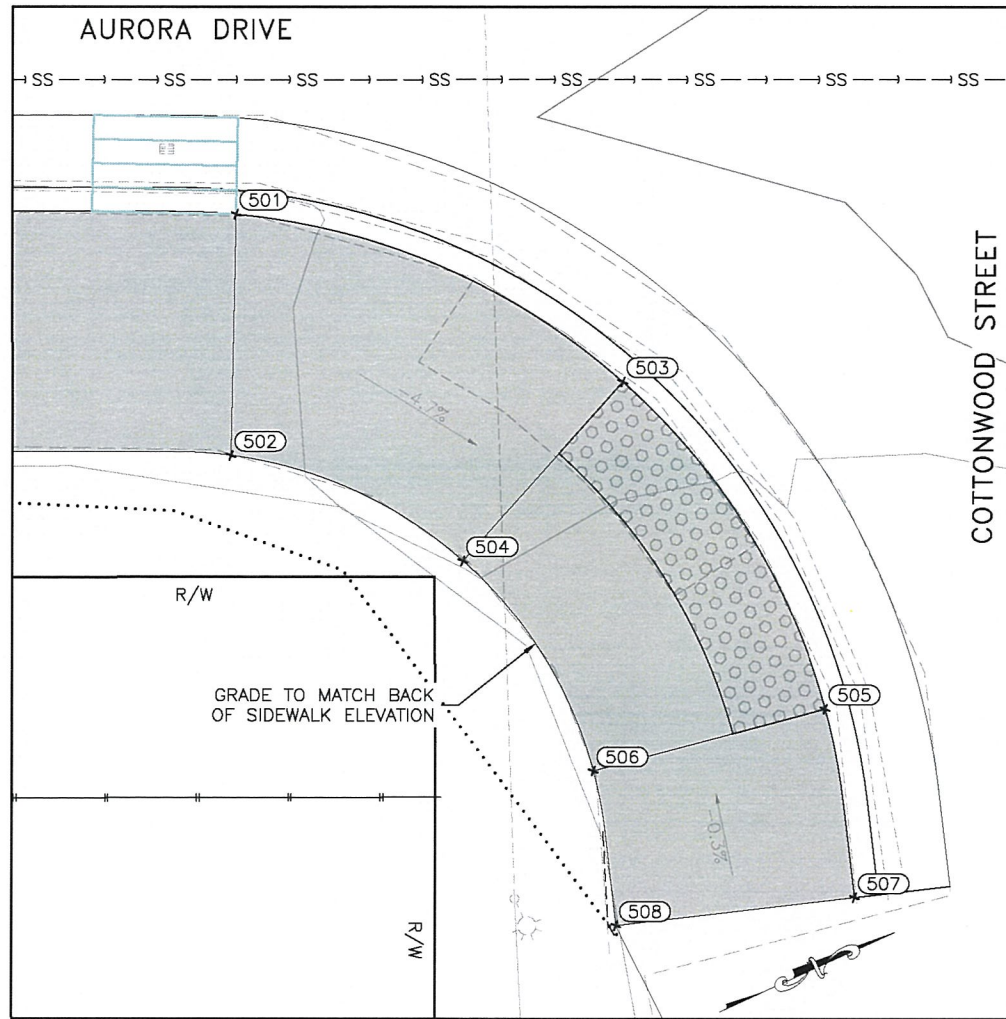
**APPROACHES & GRADING**



PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AEC0163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHwy00124	2022	G5	G5



CONTROL POINT TABLE					
PT#	DESC.	NORTHING	EASTING	ELEV.	REMARKS
501	RAMP TOP	205189.69	671293.29	434.51	
502	RAMP TOP	205187.52	671297.82	434.58	
503	RAMP BOTTOM	205195.56	671299.79	434.15	
504	RAMP BOTTOM	205190.99	671301.81	434.22	
505	RAMP BOTTOM	205196.57	671307.75	434.18	
506	RAMP BOTTOM	205191.63	671306.93	434.26	
507	RAMP TOP	205195.49	671311.59	434.20	
508	RAMP TOP	205190.73	671310.06	434.27	
509	RAMP TOP	205226.14	671323.25	433.81	
510	RAMP TOP	205229.89	671326.56	433.88	
511	RAMP BOTTOM	205231.04	671318.82	433.64	
512	RAMP BOTTOM	205233.48	671323.18	433.71	
513	RAMP BOTTOM	205238.01	671316.96	433.60	
514	RAMP BOTTOM	205238.07	671321.96	433.67	
515	RAMP TOP	205244.04	671318.32	433.96	
516	RAMP TOP	205241.95	671322.86	434.03	

**NOTES:**

- SEE SHEET D2 TYPICAL ON CLARIFICATION FOR STANDARD CURB AND GUTTER INSTALLED AS CATCH OR SPILL.
- CONSTRUCT RAMP SLOPES AT A NOMINAL 7.7% GRADE, OR FLATTER. RAMP SLOPES MAY BE INCREASED TO A MAXIMUM OF 8.3% WHEN SITE CONDITIONS WARRANT IT. RAMP LENGTHS SHOULD BE INCREASED TO KEEP GRADES UNDER 8.3% MAXIMUM, BUT ARE NOT REQUIRED TO EXCEED 15.0 FEET. THE RESULTING RAMP GRADE AT A 15.0 FOOT RAMP LENGTH IS ACCEPTABLE EVEN IF IT EXCEEDS 8.3%.
- CONSTRUCT LANDING AND SIDEWALK CROSS SLOPE AT NOMINAL 1.5% (1% MIN., 2% MAX) DO NOT CONSTRUCT LANDING AND SIDEWALK CROSS SLOPES STEEPER THAN 2%.

PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AECC163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
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**APPROACHES & GRADING**



ADDENDUM NO. 2, ATTACHMENT NO. 4

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
△	01/19/23	ADDENDUM 2	ALASKA	0629001/NFHWY00124	2022	H1	H5

SIGN SUMMARY

LOC. NO	STATION	OFFSET (FT)	LOCATION		ASDS CODE	LEGEND	SIZE HXV (INCHES)	BRACING/FRAMING		AREA (SQFT.)	MTG. HGT. (FT.)	DIR.	POST			REMARKS	
			LT.	RT.				BRACED	FRAMED				TYPE	SIZE (INCHES)	NO.		
1	14+65	46.4	X		R5-1	DO NOT ENTER	30X30	X		6.25		S	P(ST)	2.5	1		
2	14+70	21.9	X		W12-1	DOUBLE ARROW	36X36	X		9.00		N	P(ST)	2.5	1		
					OM1-1	OBJECT MARKER 1	18X18			2.25		N					
3	14+89	56.0	X		R1-2	YIELD	48X48X48	X	X	16.00		E	P(ST)	2.5	1		
					R5-1	DO NOT ENTER	30X30			6.25		W					
4	15+95	22.5		X	I-3	NOYES SLOUGH	30x18	X		3.75		N	TS	3	1	SEE NOTE 24 ON SHEET H2	
					I-152	ADOPT A STREAM	30x24	X		5.00		N					
					I-152	TWA	30x12	X		2.50		N					
5	17+60	22.8	X		I-3	NOYES SLOUGH	30x18	X		3.75		S	TS	3	1	SEE NOTE 24 ON SHEET H2	
					I-152	ADOPT A STREAM	30x24	X		5.00		S					
					I-152	TWA	30x12	X		2.50		S					
6	18+58	21.3	X		R3-9dP	END	30X12	X		2.50		N	P(ST)	2.5	1		
					R3-9b	TWO-WAY LEFT TURN ONLY	24X36			6.00		N					
7	18+94	35.3		X	D3-100	1800 AURORA DR 200	42X8	X	X	-		E/W	P(ST)	2.5	1	REMOVE AND RELOCATE EXISTING SIGN. SEE NOTE 3.	
					D3-100	WILLOW ST 1700	36X8	X		-		N/S					REMOVE AND RELOCATE EXISTING SIGN. SEE NOTE 3.
					R1-1	STOP	30X30			6.25		E					
8	19+67	29.0		X	D3-100	225 AURORA DR 232	48X8	X	X	-		E/W	P(ST)	2.5	1	REMOVE AND RELOCATE EXISTING SIGN. SEE NOTE 3.	
					D3-100	COTTONWOOD ST 1700	48X8	X	X	-		N/S					REMOVE AND RELOCATE EXISTING SIGN. SEE NOTE 3.
					R1-1	STOP	30X30			6.25		E					
										6.25							
										SUBTOTAL	68.25				8		
										ROUNDED SUBTOTAL	85.00				10		

NOTES:

- POST TYPE CODING: P(ST): PERFORATED STEEL TUBE POST  
TS: TUBE STEEL
- REMOVE AND RELOCATE ADOPT A WATERWAY SIGNS SHALL BE SUBSIDIARY TO 615.0001.0000
- SEE SMALL STREET NAME SIGN BRACING DETAILS ON H5.

PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AEC0163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
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SIGNING & STRIPING SUMMARY AND NOTES



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHwy00124	2022	H2	H5

**SIGNING NOTES:**

- REMOVE AND DISPOSE OF ALL EXISTING SIGNS AND FOUNDATIONS WITHIN THE PROJECT LIMITS, EXCEPT THOSE DESIGNATED FOR REINSTALLATION, SALVAGE OR OTHERWISE NOTED.
- OFFSET DISTANCES LISTED ARE FROM DESIGN CENTERLINE TO NEAR EDGE OF SIGN.
- SIGN LOCATED IN SIDEWALK TO BE INSTALLED USING P(ST) SIGN POSTS WITH SIDEWALK MOUNTING STUB PER DETAIL ON SHEET H5. OTHERWISE INSTALL P(ST) POSTS WITH SLEEVE TYPE CONCRETE FOUNDATION PER DETAIL ON SHEET H5.
- MOUNT SIGNS THAT PROJECT OVER OR WITHIN 2 FEET OF THE SIDEWALK WITH A MOUNTING HEIGHT OF 8 FEET.
- MOUNTING HEIGHTS ARE PER STANDARD PLANS S-05.02. UNLESS OTHERWISE NOTED.
- DETERMINE POST LENGTHS IN THE FIELD. DO NOT EXTEND POSTS ABOVE TOP OF SIGN.
- INSTALL PST POSTS WITH SLEEVE TYPE CONCRETE FOUNDATION PER DETAIL ON SHEET H5 ATTACH THE SIGN POST SLEEVE USING 3/8 " GALVANIZED BOLT, NUT, SPLIT LOCK WASHER AND TWO FLAT WASHERS.
- INSTALL "TUBE POST SIGN BRACING" AS SHOWN ON STANDARD PLANS S-01.02 ON ALL SIGNS, EXCEPT D3-100 SERIES AND SPECIAL 1 SIGNS, MOUNTED ON A SINGLE PST POST AND HAVING A HORIZONTAL DIMENSION OF 30 INCHES OR GREATER. USE GALVANIZED 3/8" BOLTS, SPLIT LOCK WASHERS AND NUTS. STAINLESS STEEL FASTENER HARDWARE MAY BE USED INSTEAD OF GALVANIZED. 1/4"x1-1/2" ALUMINUM ALLOY 6061-T6 BAR MAY ALSO BE USED TO FABRICATE SIGN BRACES AS SHOWN ON STANDARD PLANS S-01.02.
- INTENTIONALLY NOT USED.
- INSTALL D3-100, SIGNS ABOVE THEIR RESPECTIVE STOP SIGNS. WHEN TWO D3-100 SERIES SIGNS ARE TO BE LOCATED ON THE SAME POST, INSTALL THE CROSS-STREET PANEL IN THE LOWER POSITION.
- INSTALL D3-100 SERIES SIGNS PER DETAILS IN STANDARD PLANS S-20.11
- D3-100 SERIES SIGNS REQUIRE TWO SEPARATE SINGLE SIDED PANELS. END-BRACE PANELS PER SMALL STREET NAMING SIGN BRACING DETAILS SHOWN IN STANDARD PLAN S-01.02 AND ON SHEET H5.
- STOP (R1-1) AND YIELD (R2-1) SIGN LOCATIONS, ESPECIALLY THOSE AT LARGE RADIUS INTERSECTIONS, MAY NEED ADJUSTMENT IN THE FIELD. THE ENGINEER WILL APPROVE FINAL LOCATIONS.
- MAINTAIN EXISTING SIGNS UNTIL NEW SIGNS ARE INSTALLED. DO NOT LEAVE DUPLICATE OR CONFLICTING SIGNING UP AT ANY TIME.
- USE SERIES C LETTERS FOR D3-100 SERIES SIGNS UNLESS OTHERWISE NOTED. USE 4.5" FOR DIMENSIONS "E" FOR 12" D3-100 SIGNS. THE LETTERING INDICATING THE TYPE OF STREET (SUCH AS St, Ave, or Rd) WILL BE UPPER CASE AND LOWER CASE. THIS MODIFIES THE ASDS.
- USE A 3" HORIZONTAL SPACING BETWEEN WORDS, BETWEEN CARDINAL DIRECTIONS AND WORDS, AND BETWEEN WORDS AND NUMBERS ON D3-100 AND D3-100A SIGNS UNLESS OTHERWISE NOTED.
- LOCATE AND PROTECT ALL NEW AND EXISTING UNDERGROUND UTILITIES, INCLUDING BUT NOT LIMITED TO: PIPELINES, INTERCONNECT CABLES, SIGNAL SYSTEMS, LIGHTING SYSTEMS, STORM AND SANITARY SEWERS, WATER SYSTEMS, AND TELEPHONE AND ELECTRICAL CABLES, PRIOR TO INSTALLING SIGN POSTS. NOT ALL EXISTING UTILITIES MAY BE SHOWN ON THE PLANS.
- INSTALL 48" DIAMOND WARNING SIGNS ON A SINGLE POST WITH A BRACE HAVING EFFECTIVE BRACE LENGTH OF 54" OR WITH THREE WIND FRAMING MEMBERS AS SHOWN ON STANDARD PLAN S-00.12. THIS MODIFIES STANDARD PLAN S-01.02.
- ATTACH ALL SIGNS TO THEIR SUPPORTS WITH 3/8" BOLTS, EXCEPT ATTACH UNFRAMED SIGNS TO PST POSTS WITH ALUMINUM DRIVE RIVETS. WIND WASHERS ARE NOT REQUIRED WITH DRIVE RIVETS. INCLUDE SPLIT LOCK WASHERS WHEN BOLTS ARE USED.
- ALL SIGNS NOTED FOR REMOVAL AND REINSTALLATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE IF THEY ARE DAMAGED DURING THE RELOCATION EFFORT.
- ALL FASTENER HARDWARE SHALL MEET THE REQUIREMENTS OF THE FASTENER SPECIFICATION TABLE ON STANDARD PLAN SHEET S-20.11.
- DELIVER ALL SALVAGED SIGN PANELS, NOT IDENTIFIED FOR REUSE IN THE SIGNING SUMMARY, TO THE DOT&PF FAIRBANKS MAINTENANCE YARD LOCATED AT 2301 PEGER ROAD. CONTACT DANIEL SCHACHER (907) 451-5276 TO ARRANGE DELIVERY. SALVAGED SIGNS ARE SUBSIDIARY TO THE 615.0001.0000 STANDARD SIGN PAY ITEM.
- CLEARING, AS DIRECTED BY THE ENGINEER, MAY BE REQUIRED TO ENSURE ADEQUATE VISIBILITY OF SIGNS. THIS WORK IS SUBSIDIARY TO PAY ITEM 615.0001.0000.
- INSTALL FRANGIBLE COUPLING SYSTEMS IN ACCORDANCE WITH STANDARD PLANS S-31.02.
- HINGED JOINTS WITH FRANGIBLE FUSE PLATES ARE REQUIRED ON ALL MULTIPLE POST SIGNS WITH FRANGIBLE COUPLING SYSTEMS. THE HINGE LOCATION ON ALL POSTS SHALL BE THE SAME DISTANCE BELOW THE SIGN, INSTEAD OF THE 6" MINIMUM SHOWN ON STANDARD PLAN S-31.02. SEE MANUFACTURER'S SPECIFICATION FOR HINGE LOCATION BELOW SIGN.

670.0001.0000 PAINTED TRAFFIC MARKINGS			
DESCRIPTION	QTY	UNIT	REMARKS
4" DY	556	LF	
4" Y TWLTL	253	LF	
8" W	117	LF	
8" WD-1	46	LF	
LENGTH TOTAL	972	LF	
LEFT ARROWS	45	SF	
24" WHITE	156	SF	
WHITE CHEVRONS	35	SF	
MEDIAN NOSE PAINT	82	SF	
AREA TOTAL	318	SF	

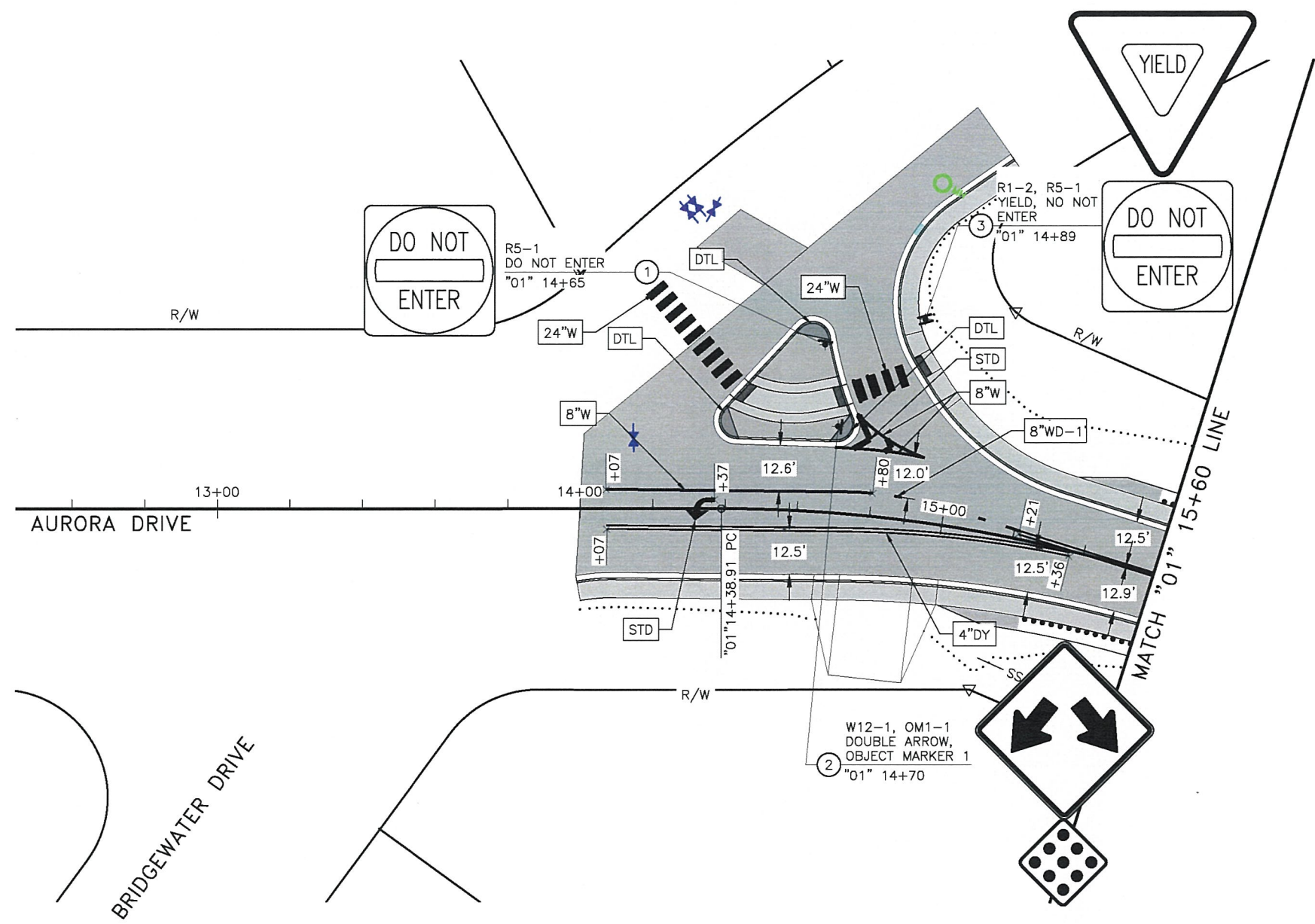
**STRIPING NOTES:**

- ALL PROPOSED PAVEMENT MARKINGS SHALL BE SURFACE APPLIED PAINTED TRAFFIC MARKINGS.
- DIMENSIONS REFER TO THE CENTER OF STRIPE OR STRIPE GROUP, EDGE OF PAVEMENT OR LIP OF CURB WHEN PRESENT.
- TRANSITION NEW PAVEMENT MARKINGS TO MATCH EXISTING MARKINGS AT A 100:1 TAPER ON THE NEW ASPHALT.
- STATION PROVIDED FOR TURN ARROWS IS THE LEADING EDGE OF THE ARROW.
- COAT THE TOP AND FACE OF ALL RAMPED MEDIAN ISLAND NOSES WITH YELLOW TRAFFIC PAINT UP TO THE RAMPED NOSE EXPANSION JOINT. THIS WORK IS SUBSIDIARY TO THE 670 PAY ITEM.

**SIGNING & STRIPING SUMMARY AND NOTES**



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHwy00124	2022	H3	H5



**TRAFFIC MARKING KEY:**

- 4" DY 4" DOUBLE YELLOW LINE
- 4" Y TWLTL 4" YELLOW TWO-WAY LEFT-TURN STANDARD
- 8" W 8" WHITE LINE
- 8" WD-1 8" WHITE WIDE DOTTED LINE (2' STRIPE / 4' SKIP PATTERN)
- 24" W 24" WHITE LINE
- STD STANDARD DRAWING
- DTL SEE DETAILS

**SIGN SYMBOL KEY:**

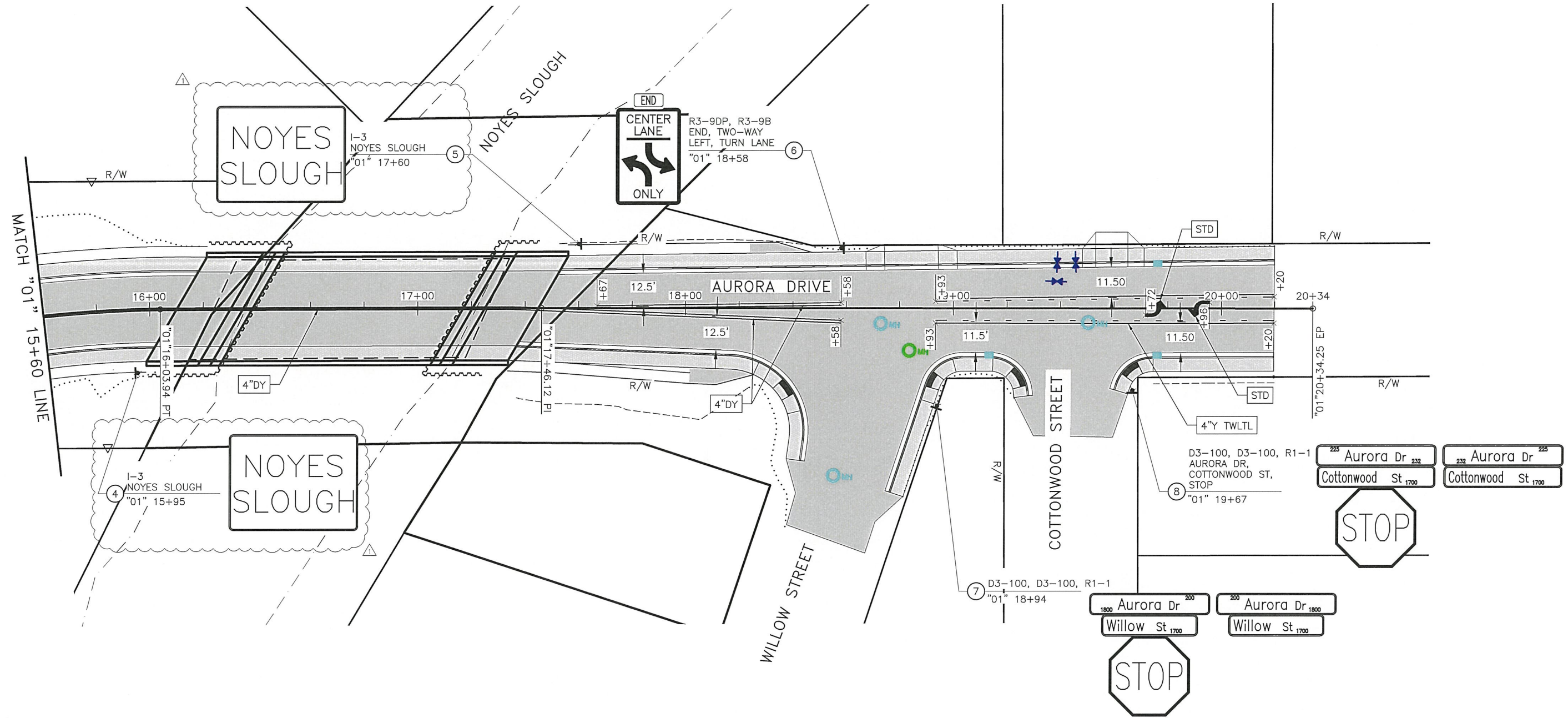
- # SIGN CODE(S)  
STATION
- # SIGNING LOCATION #

PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AECC163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
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**SIGNING & STRIPING PLAN  
(1 OF 2)**



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
1	01/19/23	ADDENDUM 2	ALASKA	0629001/NFHWHY00124	2022	H4	H5



TRAFFIC MARKING KEY:

- 4" DY 4" DOUBLE YELLOW LINE
- 4" Y TWLTL 4" YELLOW TWO-WAY LEFT-TURN STANDARD
- 8" W 8" WHITE LINE
- 8" WD-1 8" WHITE WIDE DOTTED LINE (2' STRIPE / 4' SKIP PATTERN)
- 24" W 24" WHITE LINE
- STD STANDARD DRAWING
- DTL SEE DETAILS

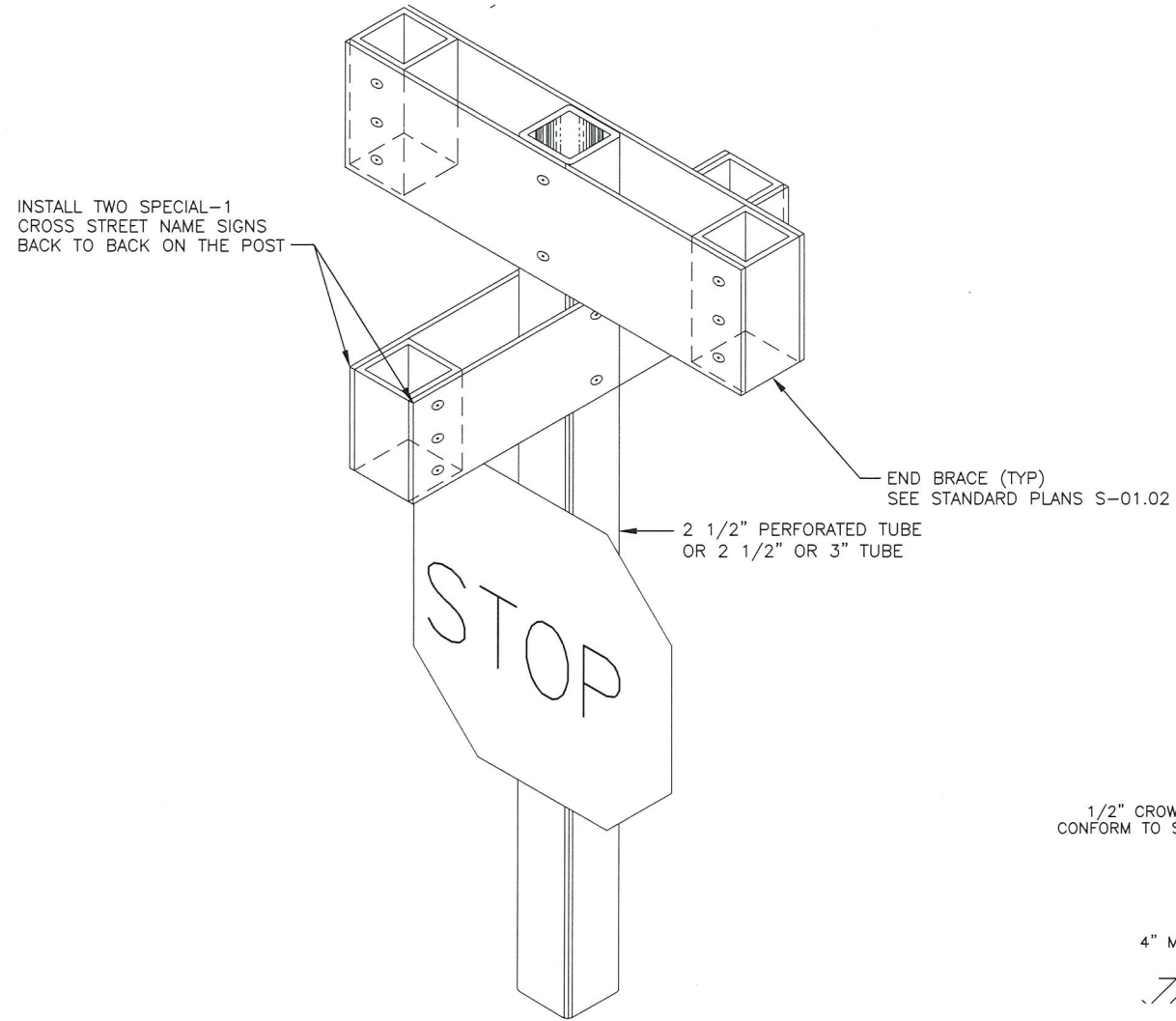
SIGN SYMBOL KEY:

- # SIGN CODE(S)  
STATION
- SIGNING LOCATION #

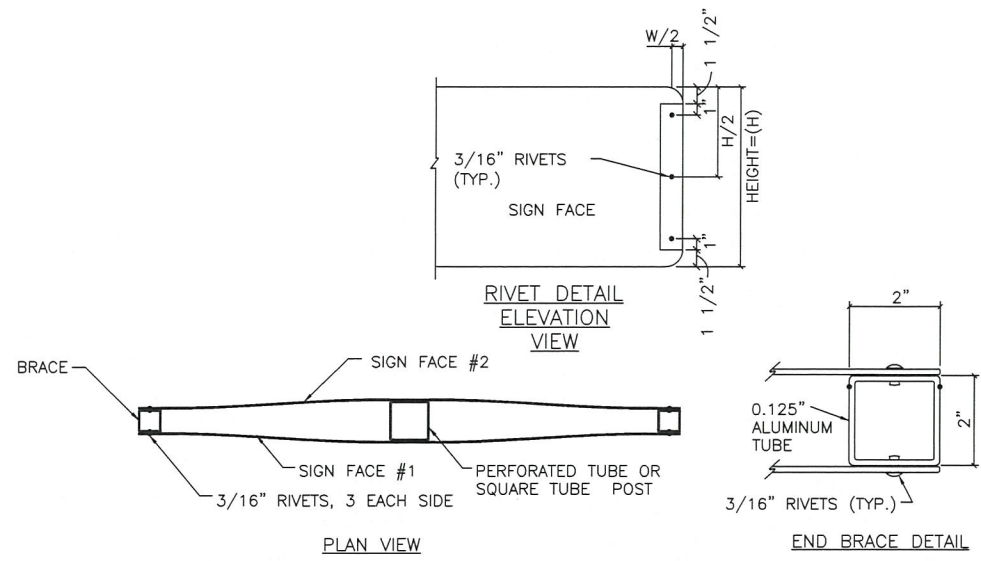
SIGNING & STRIPING PLAN  
(2 OF 2)



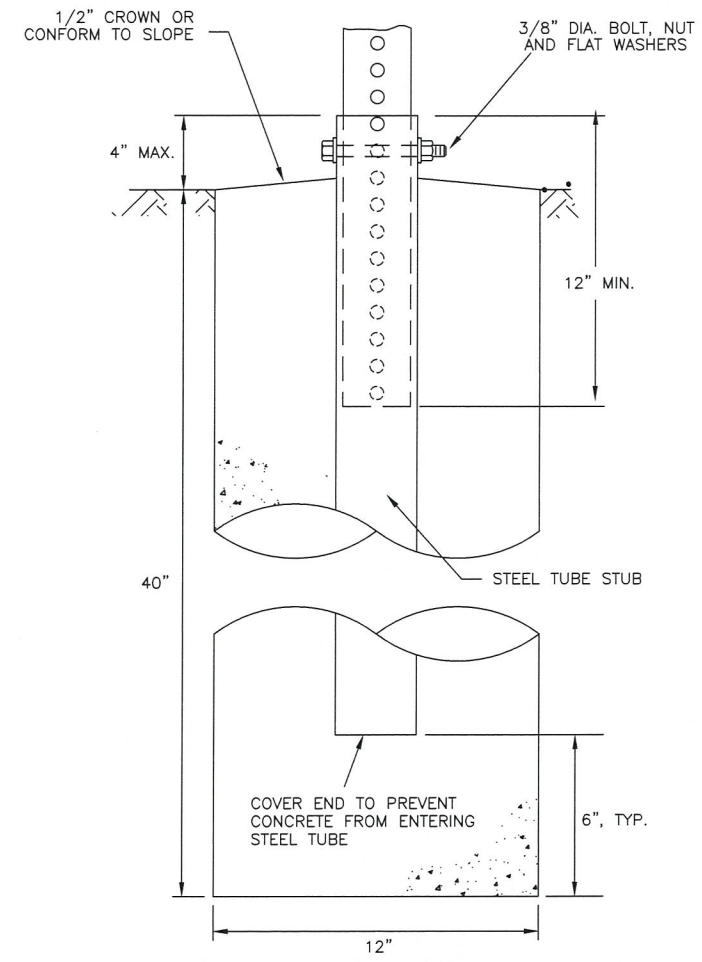
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWHY00124	2022	H5	H5



**STREET NAME SIGN**



**SMALL STREET NAME SIGN  
(D3-1, D3-100A, D3-100) BRACING DETAILS**



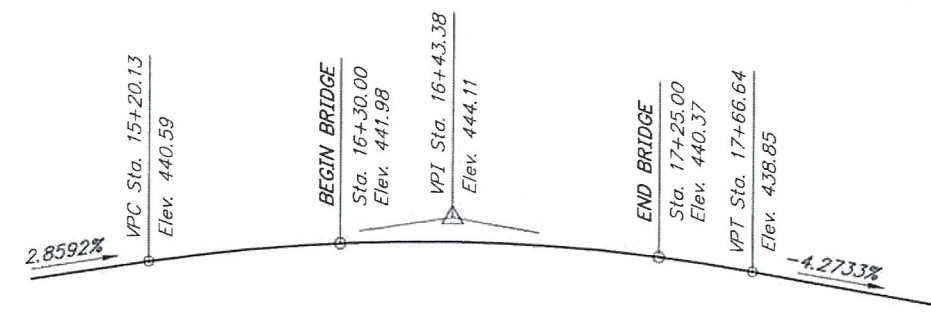
**SLEEVE TYPE CONCRETE  
FOUNDATION**

**SIGN DETAILS**

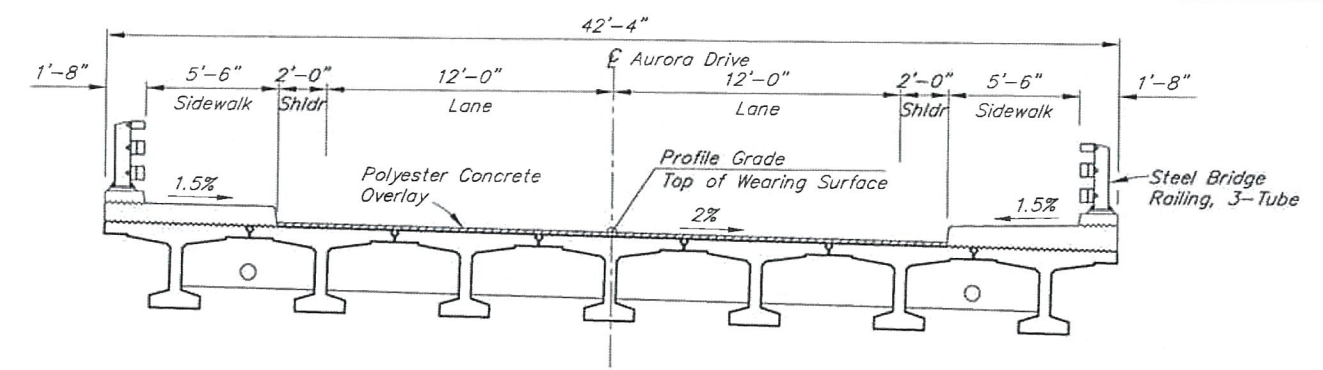


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 N:\Projects\18185FB-AuroraDr\_Noyes\C\1201cmst18185FB-HS Fr. Sep/16/22 04:10pm

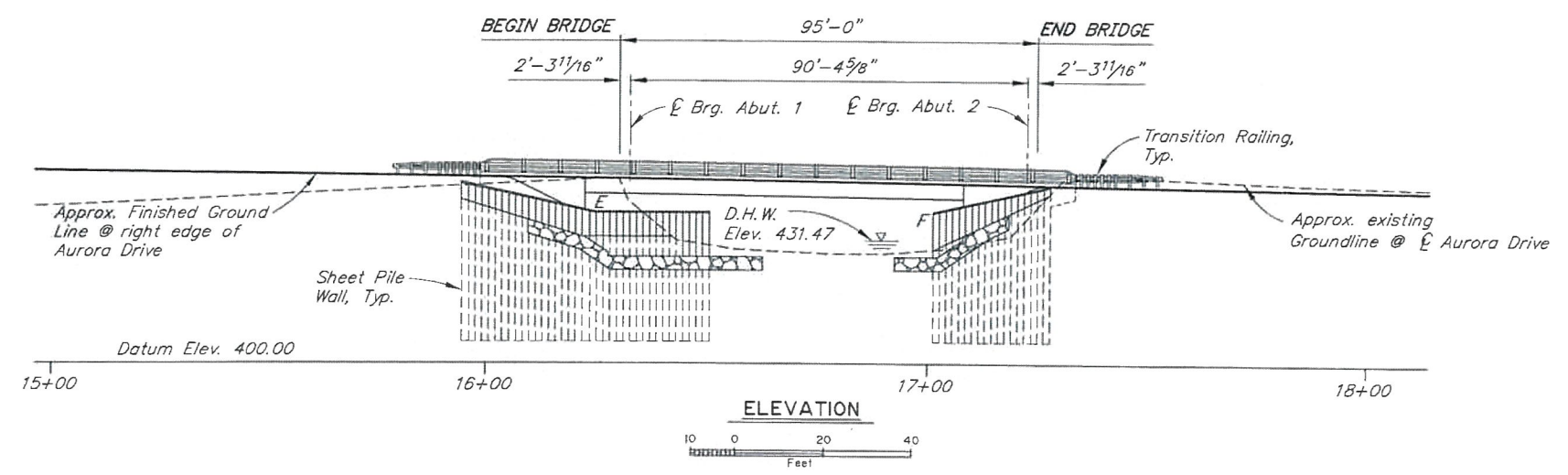
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWO0124	2022	N1	N24



PROFILE GRADE DATA  
No Scale

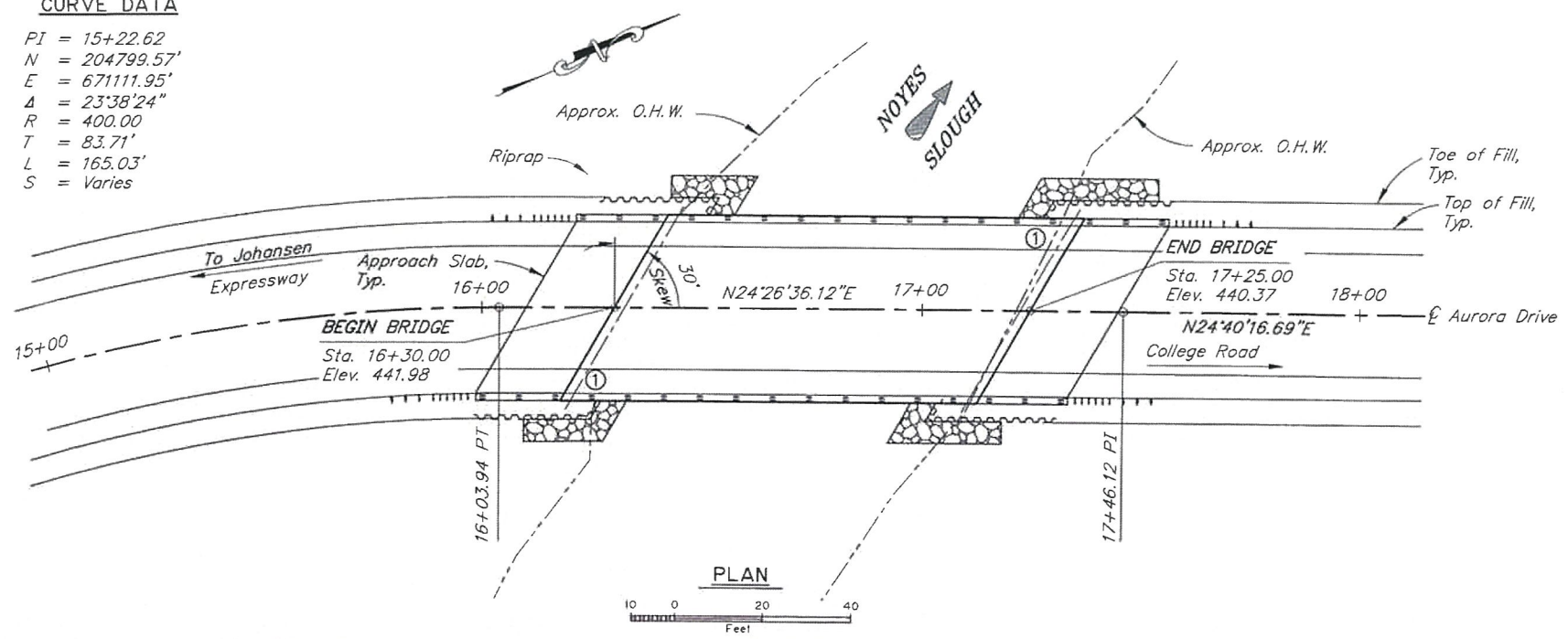


TYPICAL SECTION  
12 0 4 8  
In. Feet



ELEVATION  
10 0 20 40  
Feet

**CURVE DATA**  
 PI = 15+22.62  
 N = 204799.57'  
 E = 671111.95'  
 Δ = 23°38'24"  
 R = 400.00  
 T = 83.71'  
 L = 165.03'  
 S = Varies



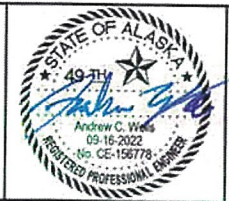
PLAN  
10 0 20 40  
Feet

BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	1
SITE PLAN	2
RIPRAP DETAILS	3
SHEET PILE WALLS	4
CABLE SAFETY RAILING	5
ABUTMENT 1	6
ABUTMENT 2	7
ABUTMENT DETAILS	8
WINGWALLS	9
FRAMING PLAN AND TYPICAL SECTION	10
GIRDERS	11
GIRDER DETAILS	12
APPROACH SLABS	13
SIDEWALK DETAILS	14
STEEL BRIDGE RAILING, 3-TUBE	15
TRANSITION RAIL, 3-TUBE	16
TEST HOLE & PENETROMETER LOCATIONS	17
TEST HOLE & PENETROMETER LEGEND	18
TEST HOLE & PENETROMETER LOGS	19-24

① Denotes location of Bridge No. Plate.

DESIGNED BY: Andrew Wells	CHECKED BY: Jesse Escamilla III	LAYOUT BY: Andrew Wells	CHECKED BY: Jesse Escamilla III
DRAWN BY: Sam Solie	CHECKED BY: Andrew Wells	SPECIFICATIONS BY: Andrew Wells	P.S. & E. COMPARED BY: Jesse Escamilla III
QUANTITIES BY: Andrew Wells	CHECKED BY: Jesse Escamilla III	APPROVAL RECOMMENDED BY: Rich Pratt	

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



NOYES SLOUGH BRIDGE  
 AURORA DRIVE  
 GENERAL LAYOUT



BRIDGE NO. 209  
 DWG. NO. 1

R:\cod\209\209-1 Fri, Sep/16/22 10:45am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWY00124	2022	N2	N24

**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

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

SEISMIC PARAMETERS:.....PGA = 0.28  
 S<sub>s</sub> = 0.65  
 S<sub>1</sub> = 0.20  
 Site Class = D  
 Liquefaction Potential = High  
 AASHTO 7% probability of exceedance in 75 years.

REINFORCEMENT:.....ASTM A706, Grade 60, F<sub>y</sub> = 60,000 psi  
 ASTM A970 Headed bars, Class HA.  
 Space reinforcement evenly unless otherwise noted.

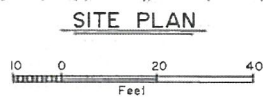
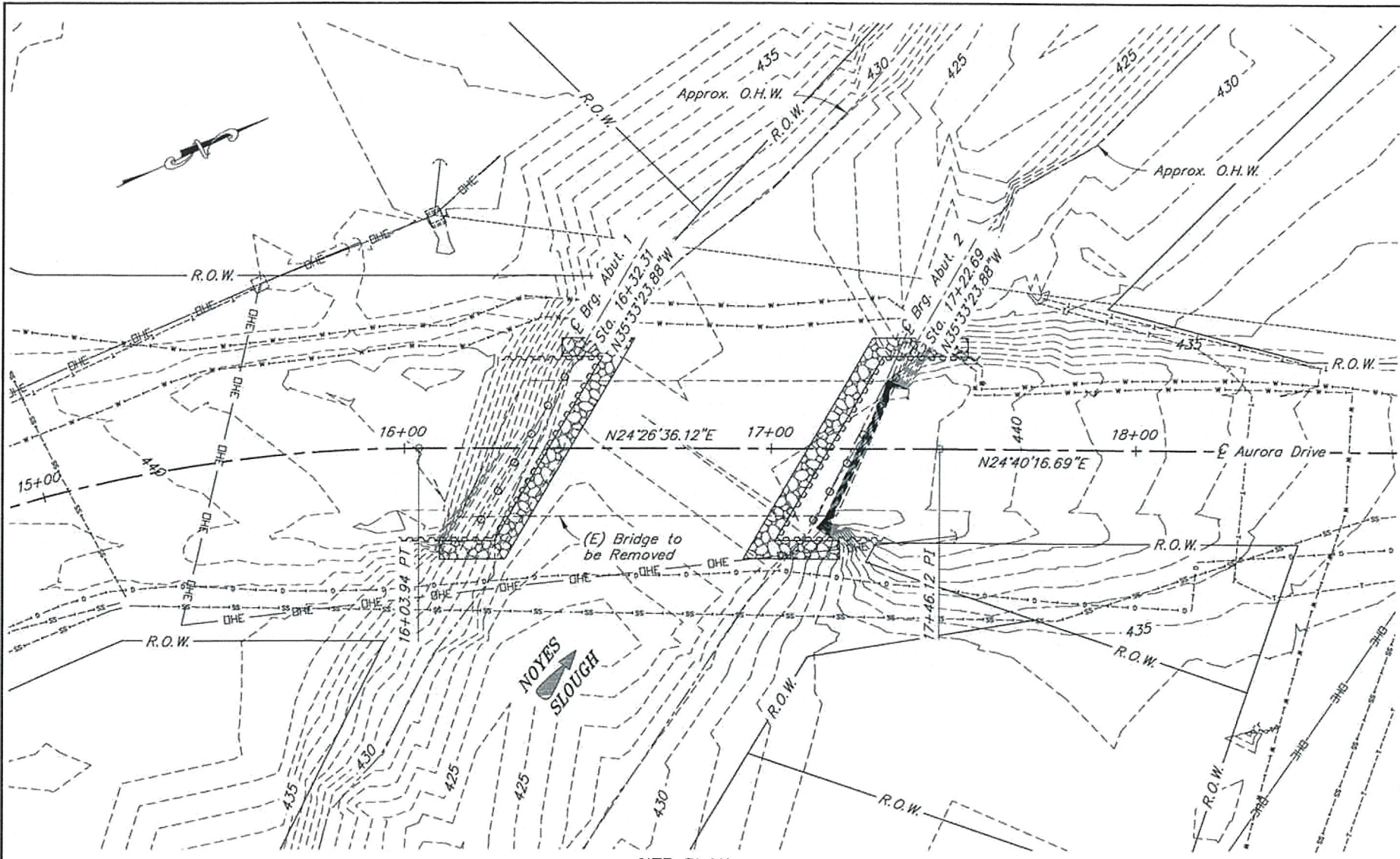
PRESTRESSED CONCRETE:.....See "GIRDERS" Dwg.

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

STRUCTURAL STEEL:.....ASTM A709, Grade 36T3, F<sub>y</sub> = 36,000 psi  
 Galvanize structural steel in accordance with AASHTO M111 unless shown otherwise.

STRUCTURAL STEEL PILING:.....API 5L X52 PSL2, F<sub>y</sub> = 52,000 psi.  
 or ASTM A709, GR50T3, F<sub>y</sub> = 50,000 psi.

STRUCTURAL STEEL SHEET PILE:.....ASTM A572, Grade 50, F<sub>y</sub> = 50,000 psi.  
 Galvanize all Sheet Piles in accordance with AASHTO M111.



LOCATION	PILE TYPE	DRIVING CRITERIA			DESIGN DATA		
		MINIMUM PENETRATION (ft)	ESTIMATED PILE TIP ELEVATION	DRIVING RESISTANCE (k)	STRENGTH FACTORED LOAD (k)	NOMINAL RESISTANCE (k)	RESISTANCE FACTOR, φ
Abutment 1	2'-0"Øx1/2"	70	337	560	365	560	0.65
Abutment 2	2'-0"Øx1/2"	70	315	560	365	560	0.65

**ABBREVIATIONS:**

- C = centerline
- E = plate
- & = and
- @ = at
- Ø = diameter
- ± = approximate
- Abut. = abutment
- Approx. = approximate
- b.f. = back/dirt face
- bot. = bottom
- Br. = bridge
- btwn. = between
- Brg. = bearings
- C.I.P. = cast in place
- Clr. = clear, clearance
- CY = cubic yard
- dia. = diameter
- Dwg. = drawing
- E = expansion
- (E) = existing
- EA = each
- Elev. = elevation
- e.a. = each face
- e.w. = each way
- F = fixed
- f.f. = front/air face
- f'c = specified concrete compressive strength
- F<sub>y</sub> = yield stress
- Galv. = galvanize
- o-----o----- = gas line
- Hwy. = highway
- ksf = 1000 pounds per square foot
- LB = pound
- LF = linear foot
- LS = lump sum
- Lt. = left
- max. = maximum
- min. = minimum
- n.f. = near face
- No. = number
- o.c. = on center
- O.H.W. = ordinary high water
- DHE----- = overhead lines
- T----- = phone line underground
- pcf = pounds per cubic foot
- psf = pounds per square foot
- psi = pounds per square inch
- R.O.W. = right of way
- Rt. = right
- Rd. = road
- spc. = space, spaces
- Sta. = station
- SS----- = storm sewer line
- SF = square feet
- Symm. = symmetric
- Typ. = typical
- VPC = point of vertical curve
- VPI = point of vertical intersection
- VPT = point of vertical tangent
- W----- = water line
- w/ = with

**ESTIMATE OF QUANTITIES**

ITEM NO.	ITEM	PAY UNIT	ESTIMATING UNIT	SUBST.	SUPERST.	TOTAL QUANTITY
202.0023.0000	Removal of Bridge, No. 209	LS	LS	All Req'd	All Req'd	All Req'd
205.0006.0000	Structural Fill	CY	CY	1,010	---	1,010
501.0001.0000	Class A Concrete	LS	CY	175.2	141.6	316.8
501.0007.0000	Precast Concrete Member, 92'-0" Decked Bulb-Tee	EA	EA	---	7	7
503.0001.0000	Reinforcing Steel	LS	LBS	26,930	---	26,930
503.0002.0000	Epoxy-Coated Reinforcing Steel	LS	LBS	220	21,780	22,000
505.0005.0000	Furnish Structural Steel Pipe Piles, 2'-0" Dia. x 1/2"	LF	LF	1,290	---	1,290
505.0006.0000	Drive Structural Steel Pipe Piles, 2'-0" Dia. x 1/2"	EA	EA	12	---	12
505.0009.0000	Structural Steel Sheet Piles	SF	SF	6,335	---	6,335
507.0001.0003	Steel Bridge Railing, 3-Tube	LF	LF	---	270	270
507.0006.0000	Cable Safety Railing	LF	LF	---	207	207
525.2001.0000	Polyester Concrete Overlay	LS	LS	---	All Req'd	All Req'd
606.0016.0000	Transition Rail	EA	EA	---	4	4
611.0001.0002	Riprap, Class II	CY	CY	130	---	130
631.0002.0001	Geotextile, Erosion Control, Class 1	SY	SY	230	---	230

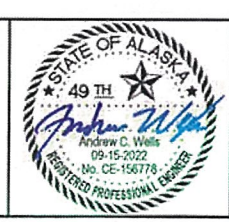
Item numbers are for reference only. Quantities shown are not necessarily the pay quantities nor the total quantity of the particular item.

DESIGNED BY: Andrew Wells  
 CHECKED BY: Jesse Escamilla III  
 FOUNDATIONS REVIEWED BY: David Hemstreet

DRAWN BY: Sam Sallie  
 CHECKED BY: Andrew Wells

QUANTITIES BY: Andrew Wells  
 CHECKED BY: Jesse Escamilla III

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



**NOYES SLOUGH BRIDGE**  
 AURORA DRIVE  
 SITE PLAN

BRIDGE NO. 209  
 DWG. NO. 2

R:\eod\209\209-2\_Tru\_Sep/15/22\_10:50am



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
1	1/11/2023	ADDENDUM #1	ALASKA	0629001/NFHWHY00124	2022	N3	N24

### HYDRAULIC & HYDROLOGIC SUMMARY, BRIDGE NO. 209

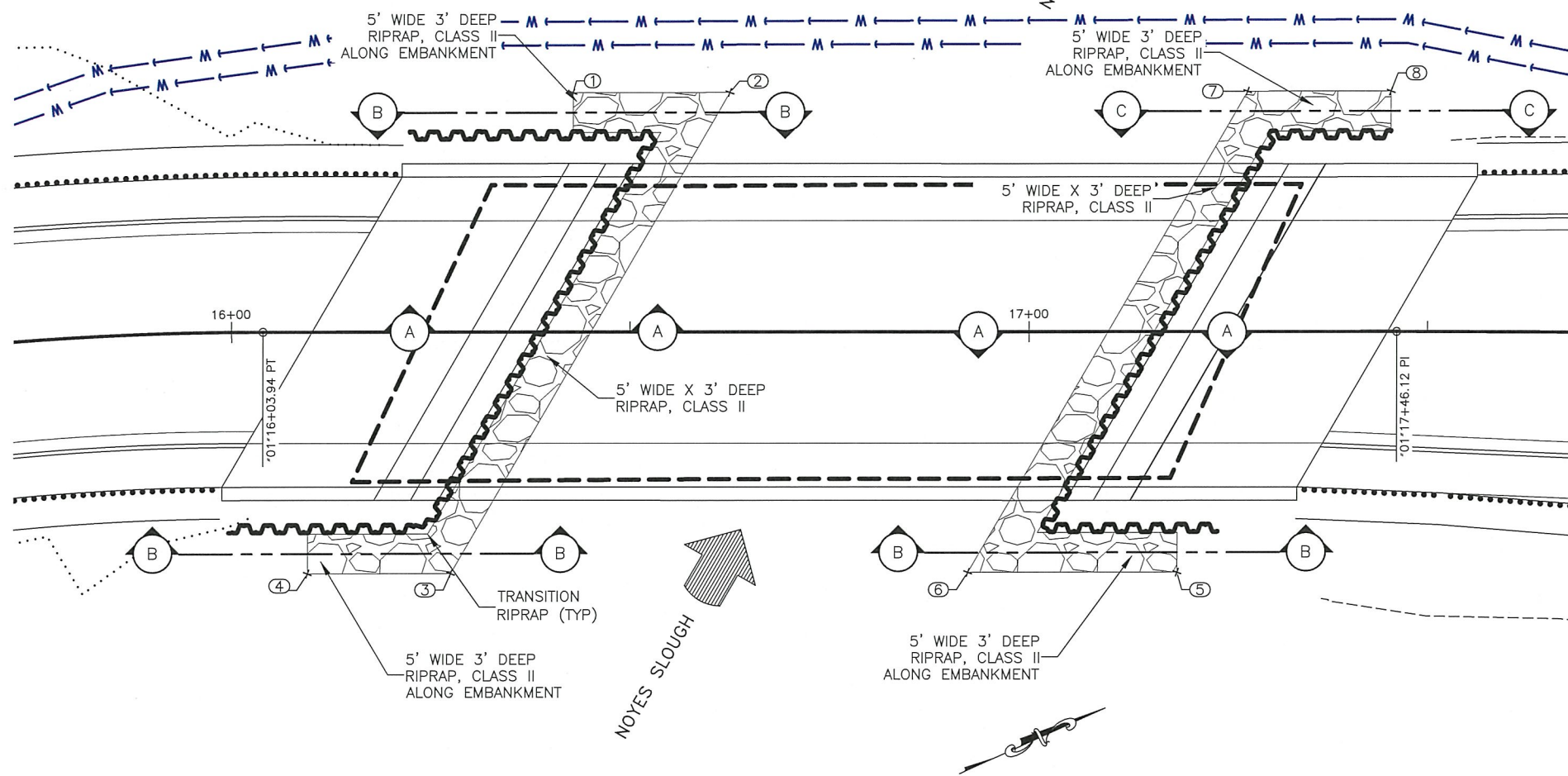
Flood Frequency (Yr.)	100	500
Exceeding Probability (%)	1	0.2
Design Discharge (cfs)	700	1,022
Design High Water (ft, NAVD88)	431.47	432.88
Anticipated Additional Backwater (ft)	0.0	0.0
Contraction Scour (ft)	0.61	0.71
Abutment Scour (ft)	2.42	3.76
Pier Scour (ft)	n.a.	n.a.
Long-term Bed Elevation Changes (ft)	0	0
Total Scour (ft)	3.03	4.47

**NOTES:**

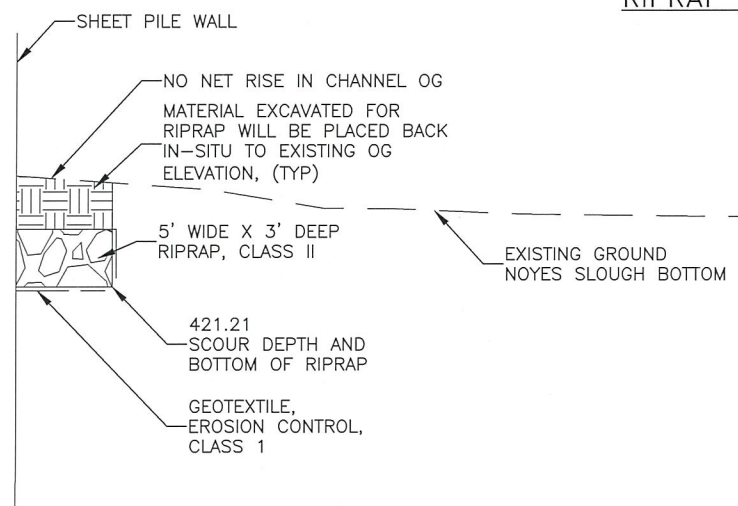
- ALL ELEVATIONS ARE BASED ON NAVD88.
- END RIPRAP AT ELEVATION 433.47 IN ALL BRIDGE QUADRANTS.
- EXCAVATED MATERIAL WILL BE PLACED BACK IN ORIGINAL LOCATION. ALLOW NO NET RISE IN CHANNEL BOTTOM GRADE.

**RIPRAP LAYOUT**

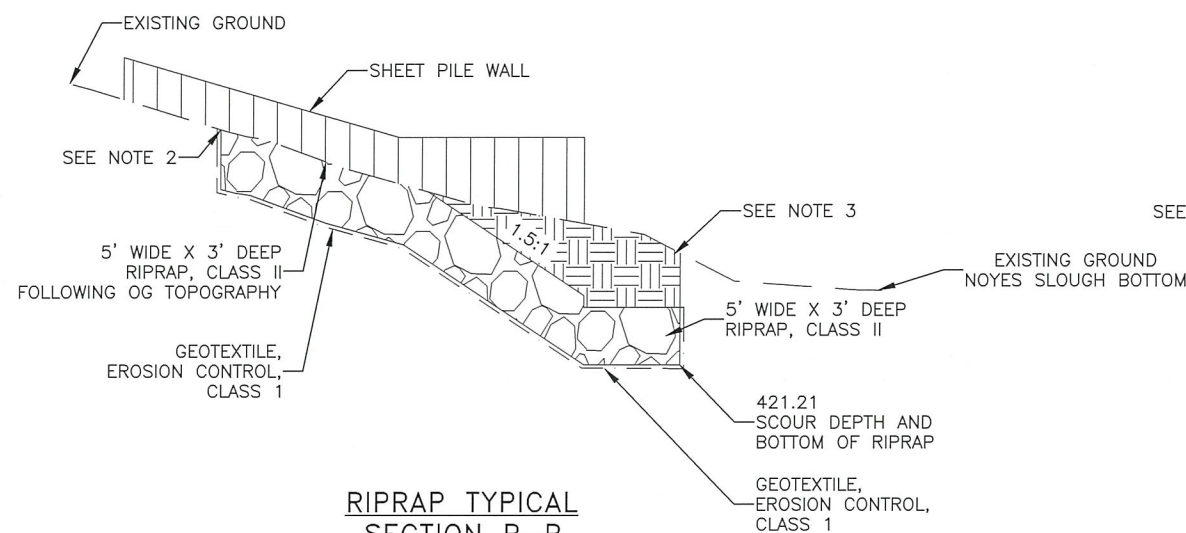
POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	204962.54	671135.79	433.47	RIPRAP TOP
2	204980.48	671143.92	421.21	RIPRAP BOTTOM
3	204923.61	671184.58	421.21	RIPRAP BOTTOM
4	204907.23	671177.16	433.47	RIPRAP TOP
5	205006.57	671222.16	433.47	RIPRAP TOP
6	204982.73	671211.32	421.21	RIPRAP BOTTOM
7	205039.59	671170.67	421.21	RIPRAP BOTTOM
8	205055.97	671178.09	433.47	RIPRAP TOP



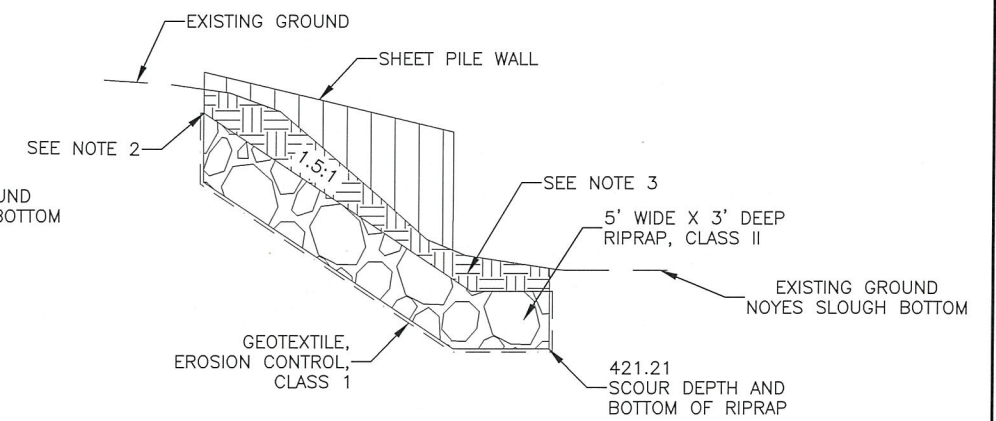
**RIPRAP PLAN LAYOUT**



**RIPRAP TYPICAL SECTION A-A**  
NTS



**RIPRAP TYPICAL SECTION B-B**  
NTS



**RIPRAP TYPICAL SECTION C-C**  
NTS

N:\Projects\18185FB-AuroraDr\_Noyes\C\7001\ms18185FB-N3 Tue, Oct/04/22 03:12pm

DESIGNED BY: Heather Benton	CHECKED: Heather Estabrook
DRAWN BY: Heather Benton	CHECKED: Heather Benton
QUANTITIES BY: Heather Benton	CHECKED: Heather Estabrook

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

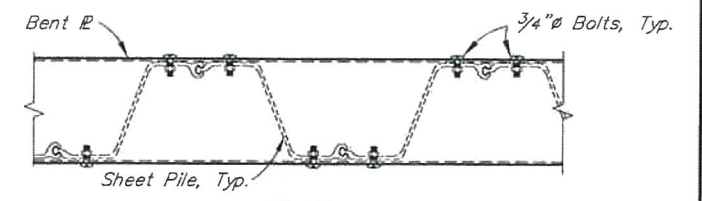
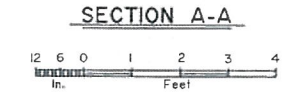
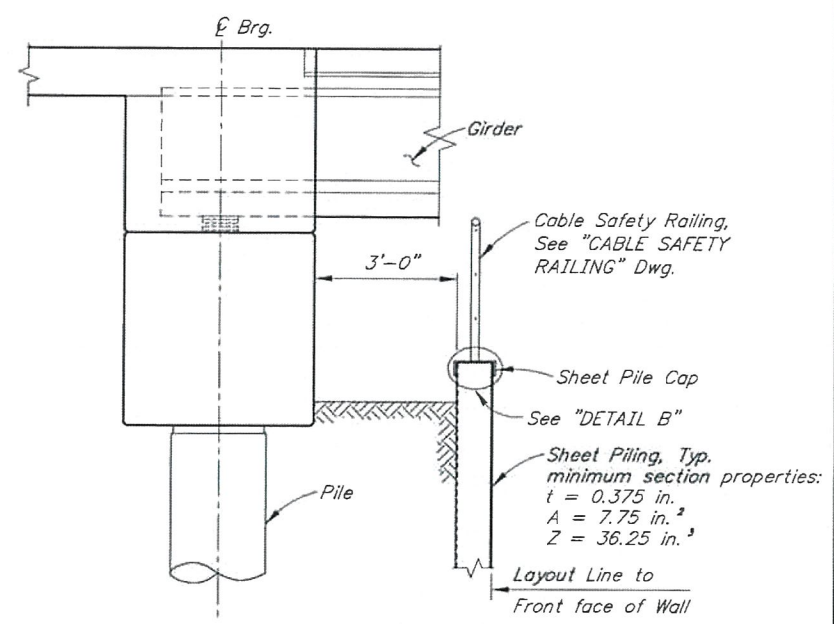
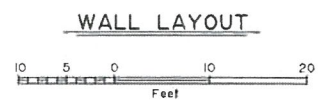
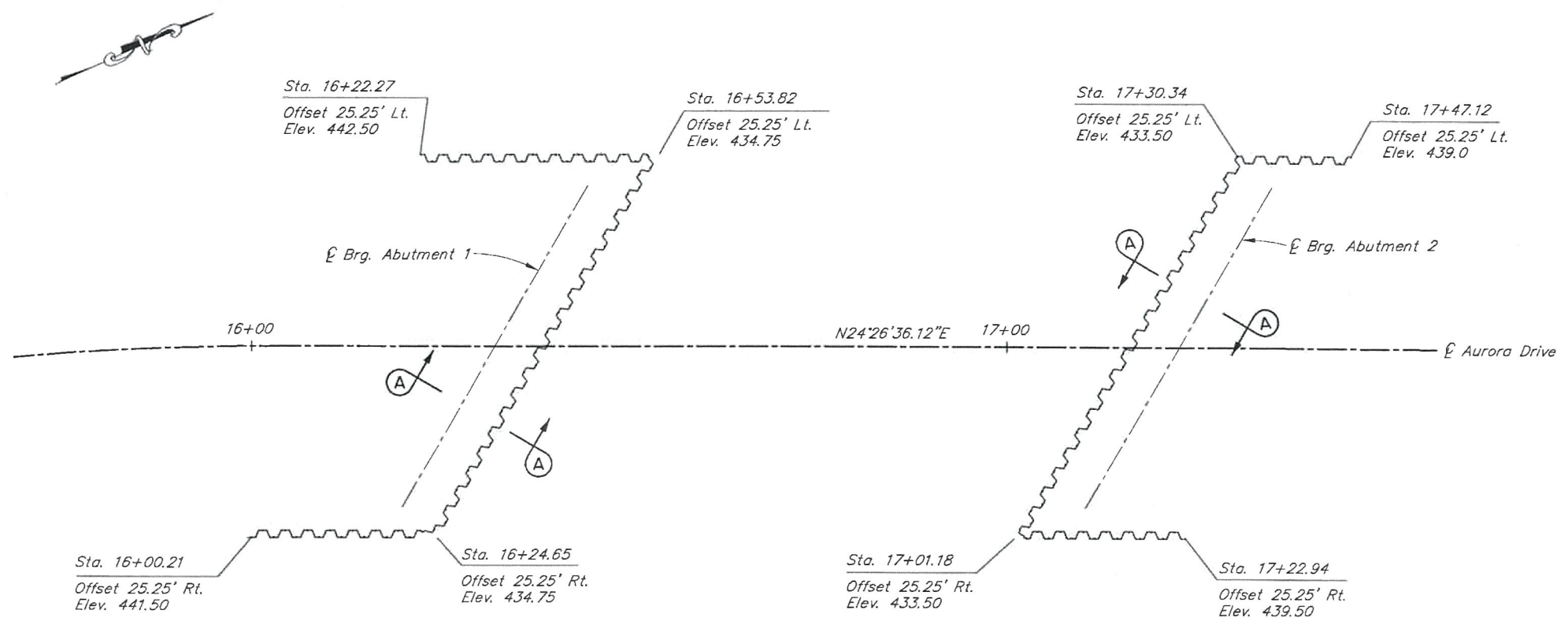


NOYES SLOUGH BRIDGE  
AURORA DRIVE  
RIPRAP DETAILS

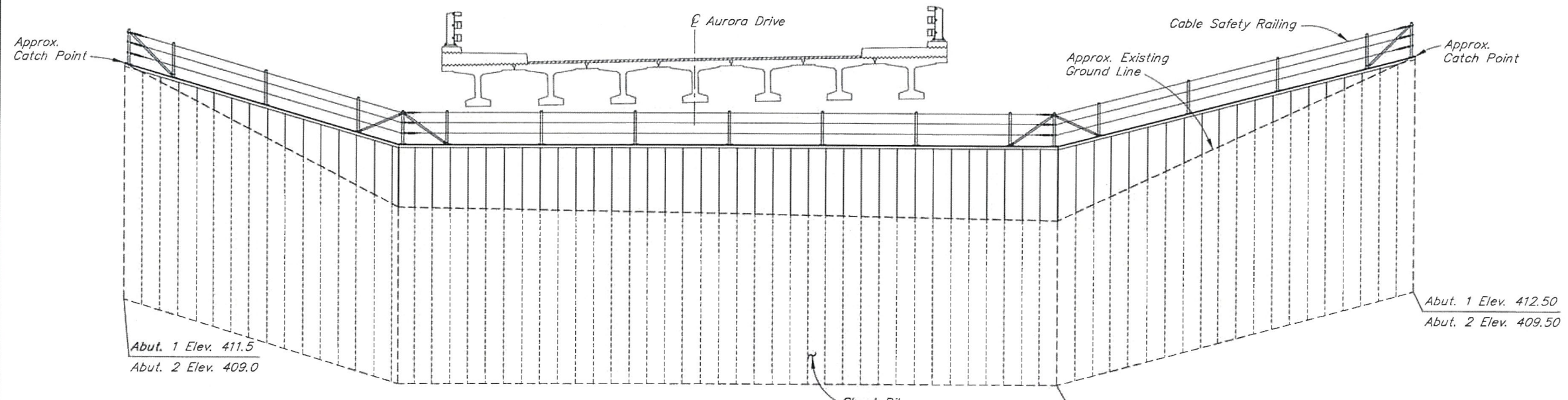


BRIDGE NO. 209  
DWG. NO. N3

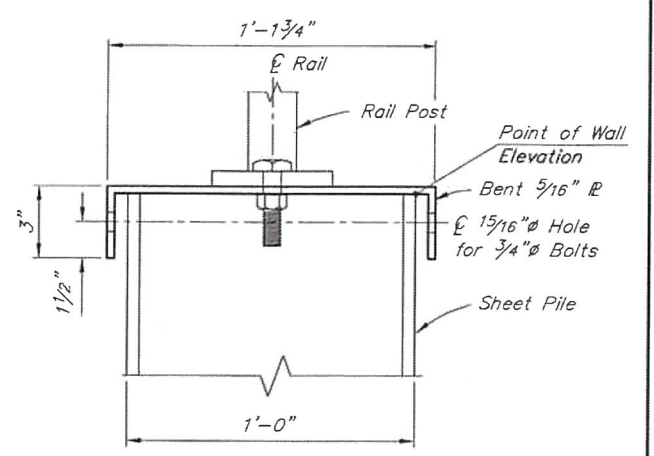
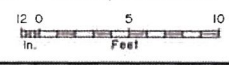
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWO0124	2022	N4	N24



PLAN



DEVELOPED ELEVATION  
(Abutment 1 shown, Abutment 2 similar)

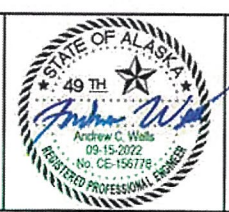


DETAIL B



DESIGNED BY: <i>Andrew Wells</i>	CHECKED: <i>Jesse Escamilla III</i>
DRAWN BY: <i>Sam Sallie</i>	CHECKED: <i>Andrew Wells</i>
QUANTITIES BY: <i>Andrew Wells</i>	CHECKED: <i>Jesse Escamilla III</i>

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



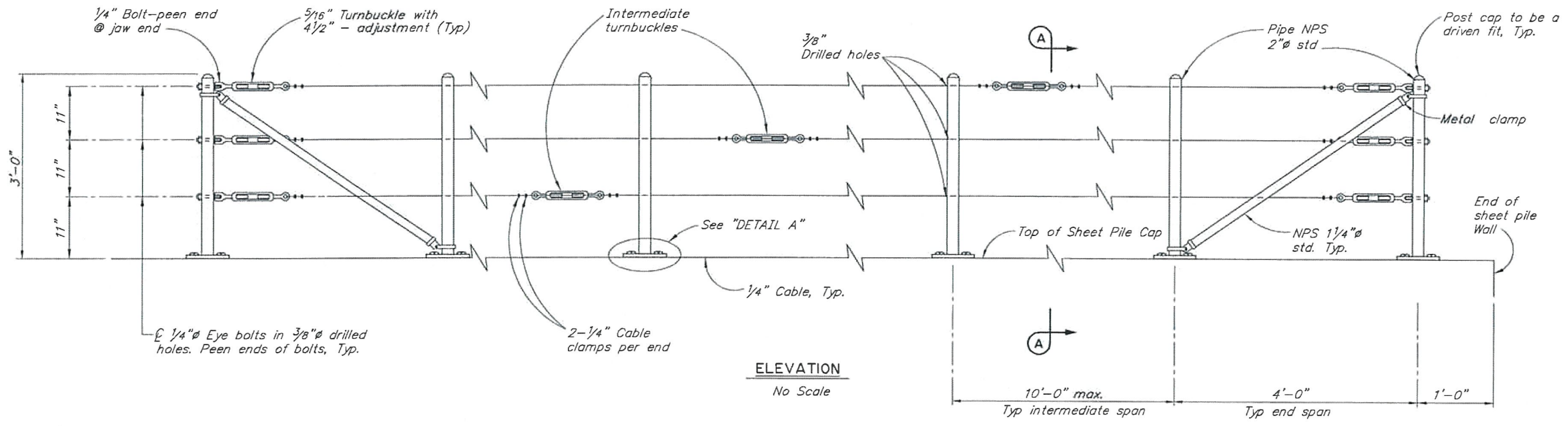
NOYES SLOUGH BRIDGE  
AURORA DRIVE  
SHEET PILE WALLS



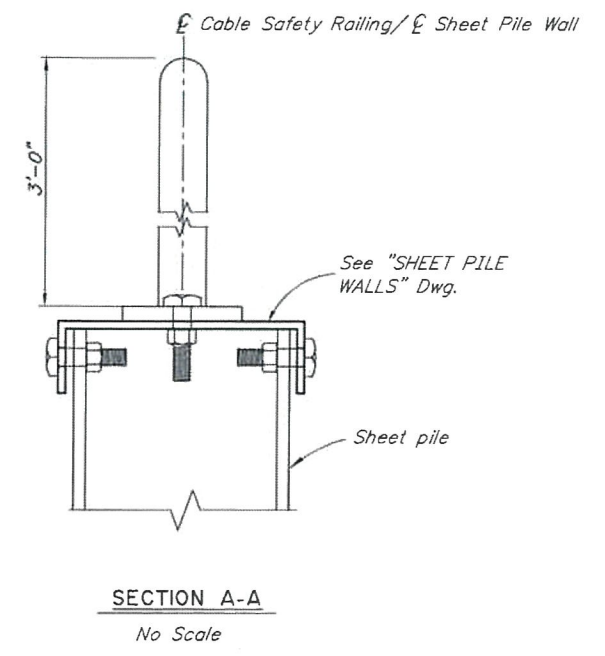
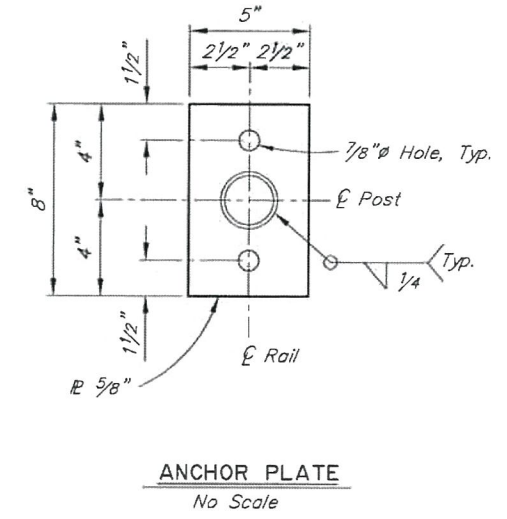
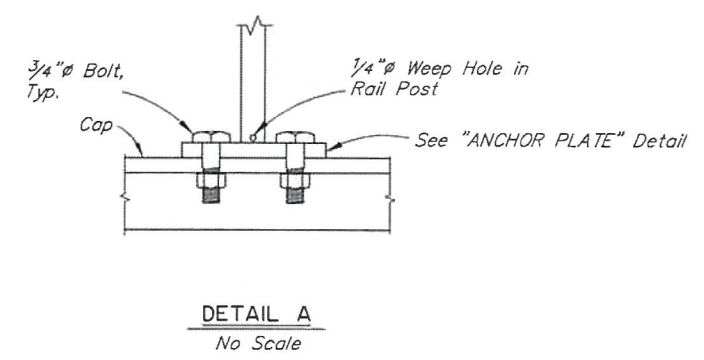
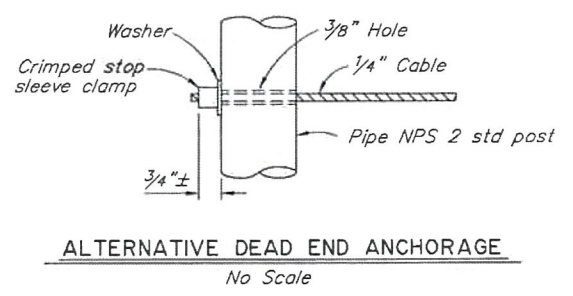
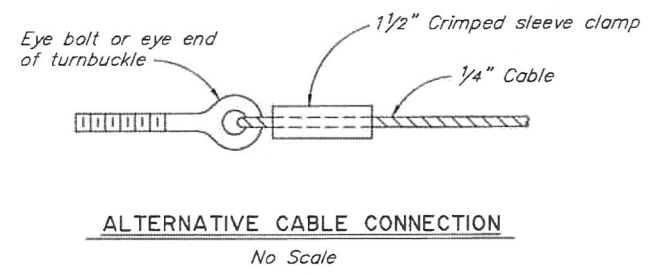
BRIDGE NO. 209  
DWG. NO. 4

R:\cadd\209\209-4 Thu, Sep/15/22 10:50am

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWO0124	2022	N5	N24



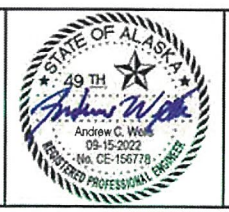
- NOTES:**
1. Place intermediate turnbuckles in adjacent spans.
  2. Do not splice cable between intermediate turnbuckles and end posts.
  3. Galvanize all posts, cable and hardware.
  4. Install all posts plumb.
  5. Alignment of holes in posts may vary to conform to slope of top of sheet pile wall.
  6. Brace posts with diagonal braces at each end, each change in direction and at each change in slope.
  7. Provide thimbles at all cable loops.




R:\cadd\209\209-5 Thu, Sep/15/22 10:50am

DESIGNED BY: Andrew Wells	CHECKED: Jesse Escamilla III
DRAWN BY: Sam Sallie	CHECKED: Andrew Wells
QUANTITIES BY: Andrew Wells	CHECKED: Jesse Escamilla III

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION  
3132 Channel Drive  
Juneau, Alaska 99801  
907-485-2975

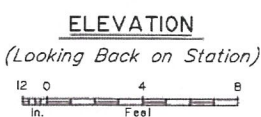
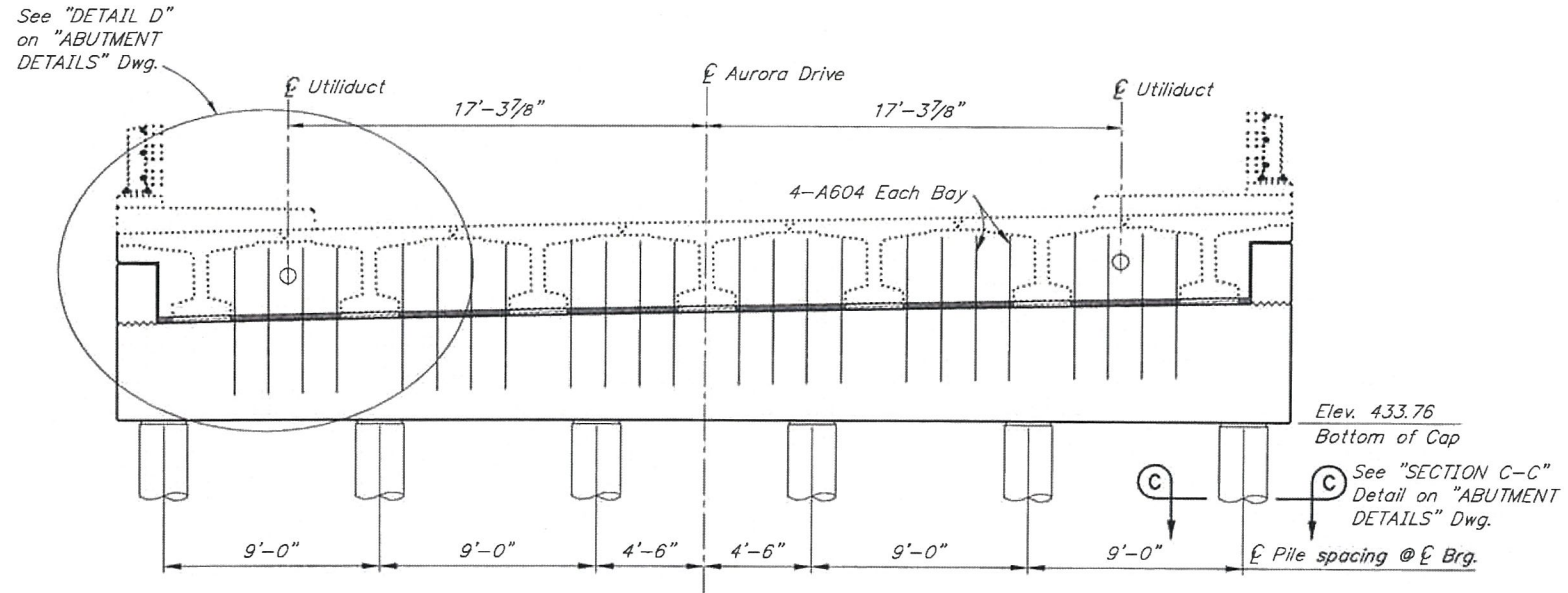
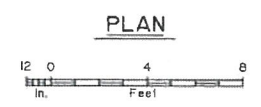
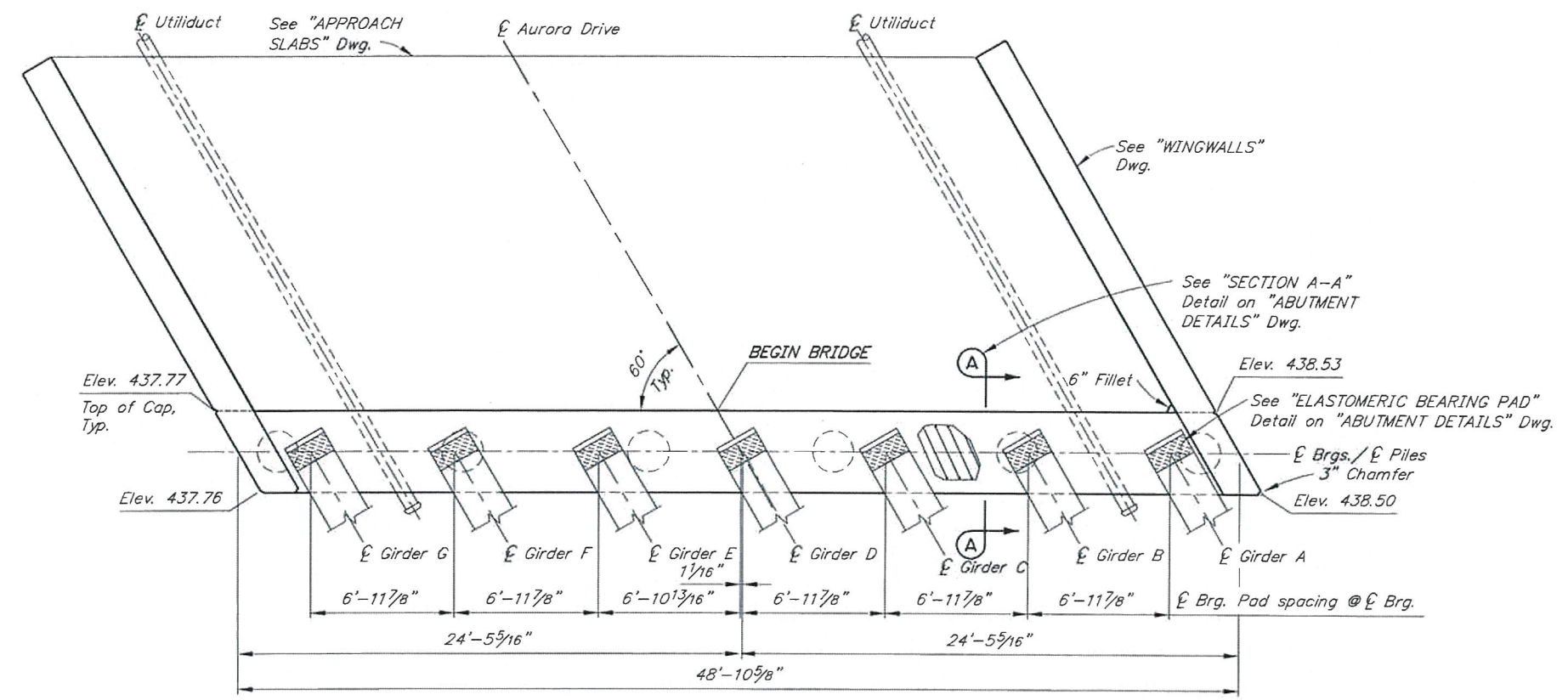


NOYES SLOUGH BRIDGE  
AURORA DRIVE  
CABLE SAFETY RAILING

  
BRIDGE NO. 209  
DWG. NO. 5

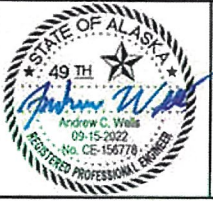
REINFORCING STEEL - ABUTMENT 1						
MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
A401	S	4	6	266'-9"	SPIRAL	
A402		4	132	VARIES	STIRRUP	
A403		4	30	6'-0"	HOOP	
A404	S	4	10	48'-6"	---	
A405		4	60	5'-3"	BENT	
A501	E	5	52	15'-5"	STIRRUP	
A601	E,S	6	5	48'-6"	---	
A602	E,S	6	5	44'-8"	---	
A603	E	6	6	4'-2"	---	
A604	E	6	24	6'-0"	---	
A701	E	7	8	3'-0"	BENT	
A801	S	8	48	40'-0"	---	
A1001	H,S	10	14	48'-6"	HEADED	

E - Epoxy-Coated  
H - Headed reinforcing steel  
S - Splices not included



DESIGNED BY: Andrew Wells	CHECKED: Jesse Escamilla III
DRAWN BY: Sam Solite	CHECKED: Andrew Wells
QUANTITIES BY: Andrew Wells	CHECKED: Jesse Escamilla III

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION

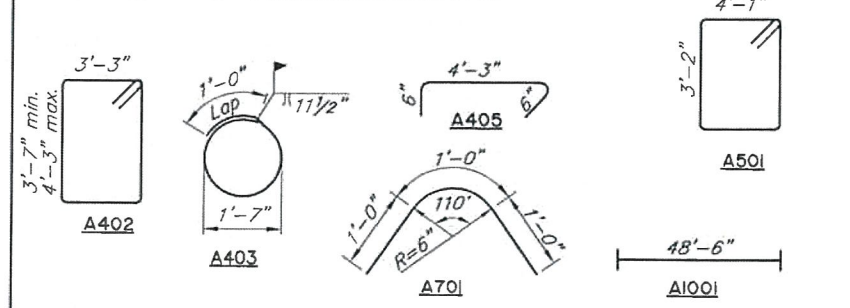
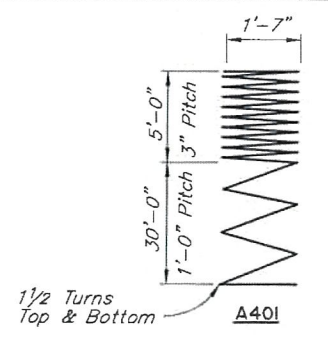


NOYES SLOUGH BRIDGE  
AURORA DRIVE  
ABUTMENT 1

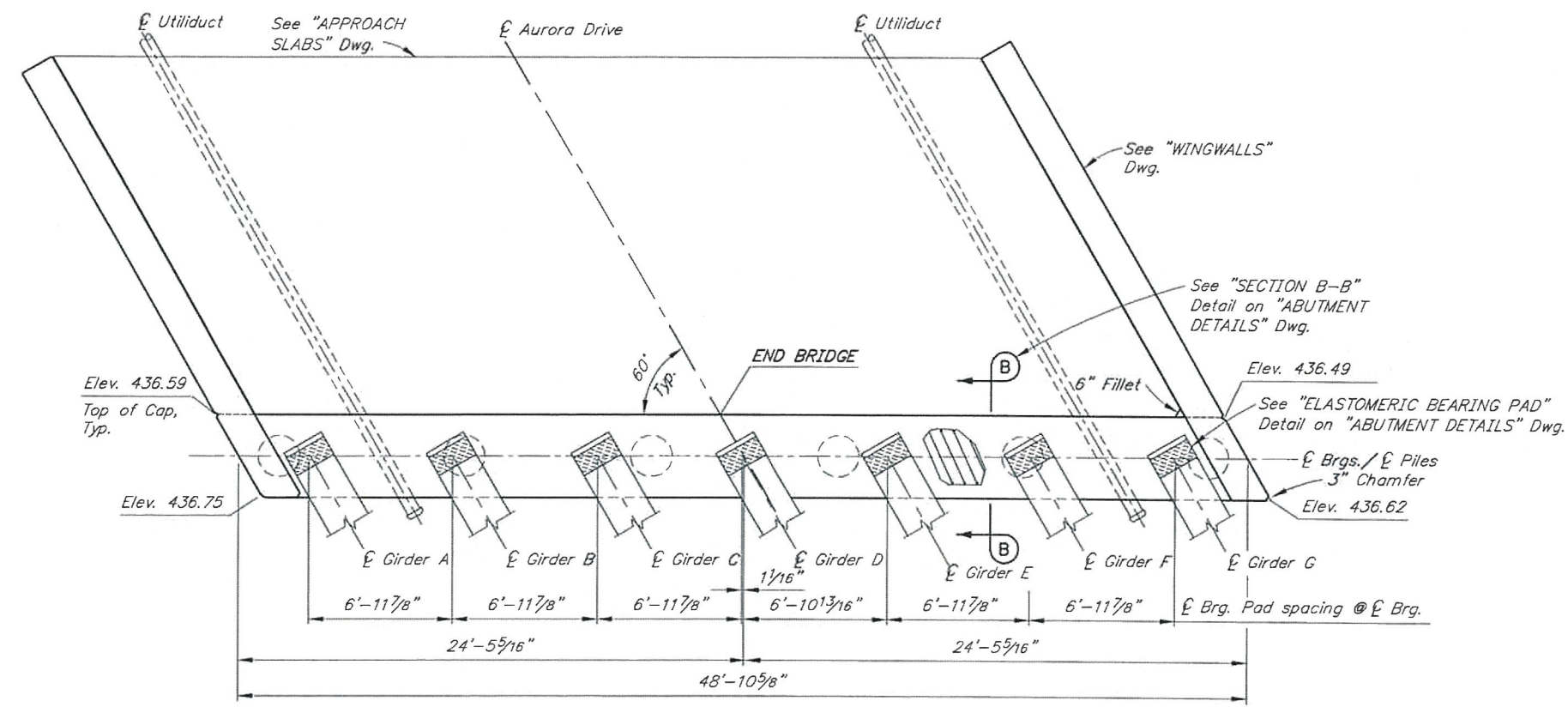
BRIDGE NO. 209  
DWG. NO. 6

**REINFORCING STEEL - ABUTMENT 2**

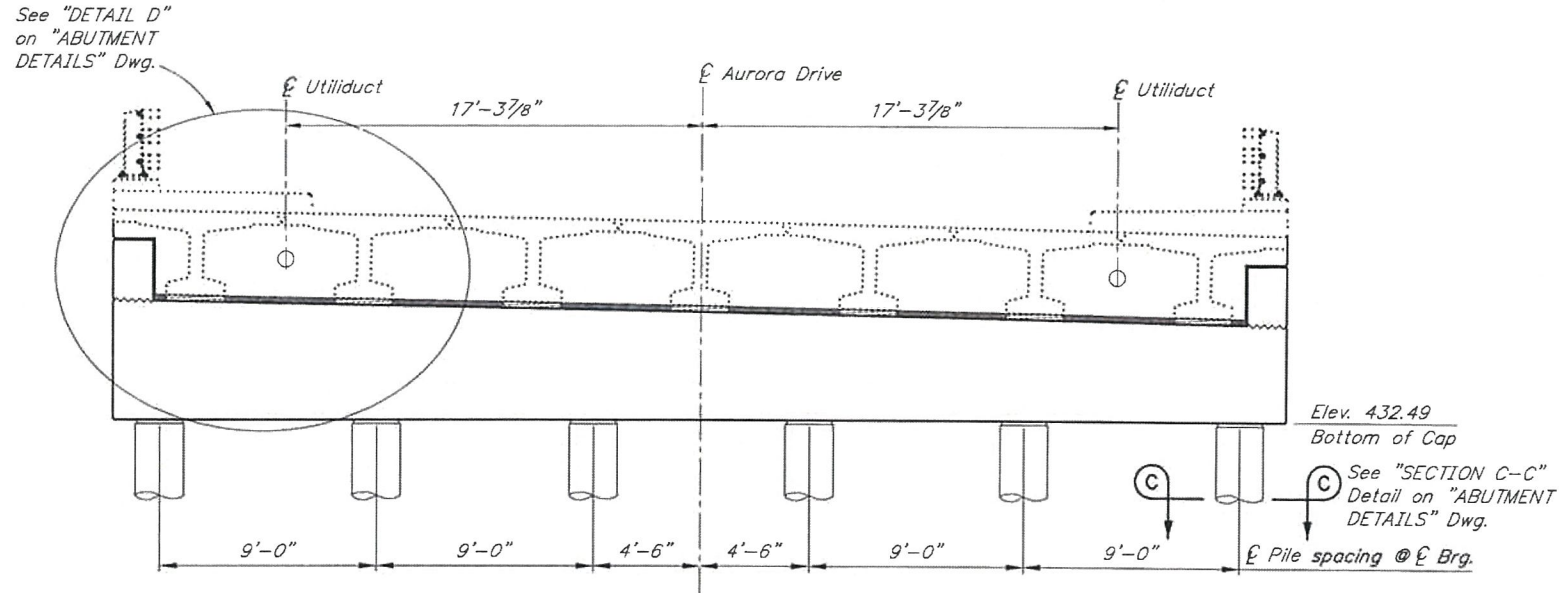
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
A401	S	4	6	266'-9"	SPIRAL
A402		4	132	VARIES	STIRRUP
A403		4	30	6'-0"	HOOP
A404	S	4	10	48'-6"	----
A405		4	60	5'-3"	BENT
A501	E	5	52	15'-5"	STIRRUP
A601	E,S	6	5	48'-6"	----
A602	E,S	6	5	44'-8"	----
A603	E	6	6	4'-2"	----
A701	E	7	8	3'-0"	BENT
A801	S	8	48	40'-0"	----
A1001	H,S	10	14	48'-6"	HEADED



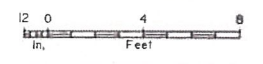
E - Epoxy-Coated  
H - Headed reinforcing steel  
S - Splices not included



**PLAN**



**ELEVATION**




DESIGNED BY: <i>Andrew Wells</i>	CHECKED: <i>Jesse Escamilla III</i>
DRAWN BY: <i>Sam Sallie</i>	CHECKED: <i>Andrew Wells</i>
QUANTITIES BY: <i>Andrew Wells</i>	CHECKED: <i>Jesse Escamilla III</i>

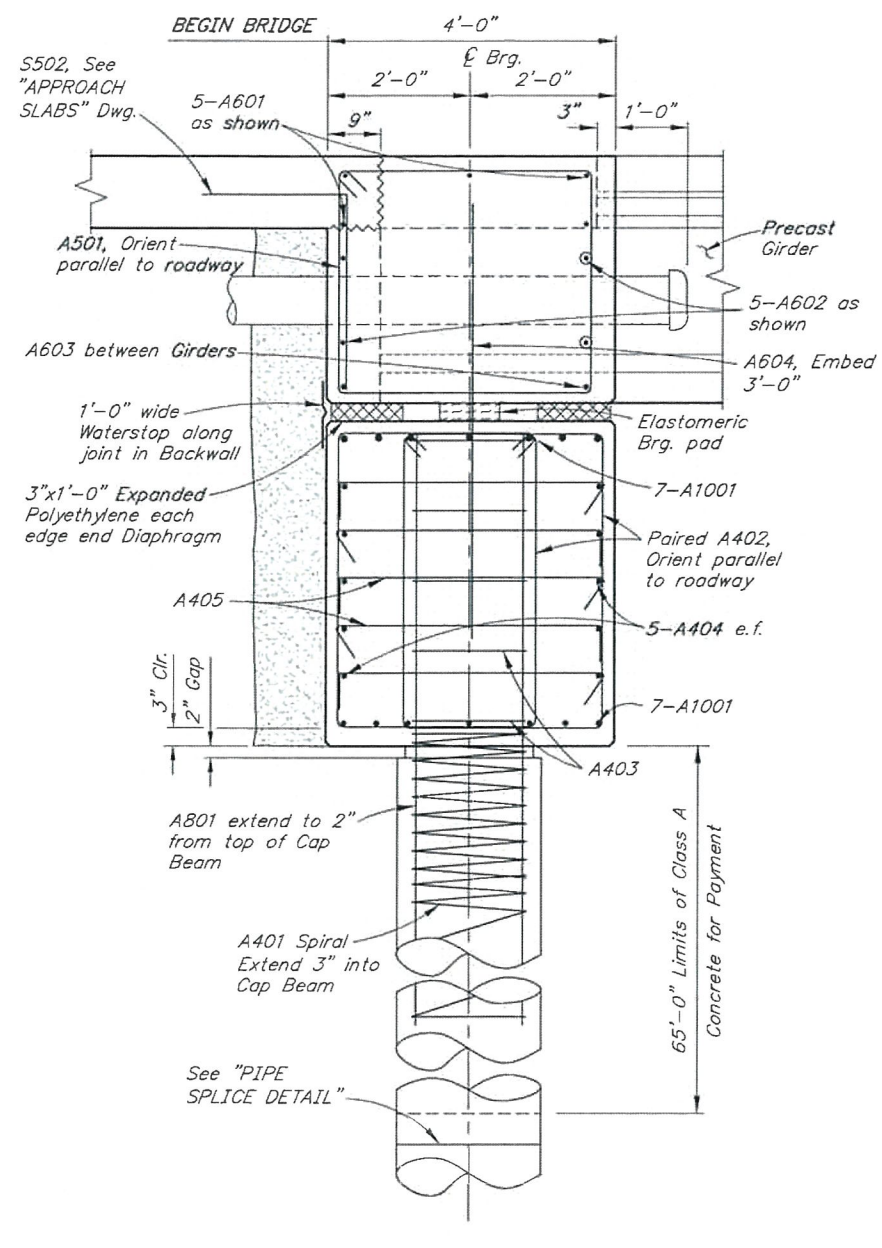
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



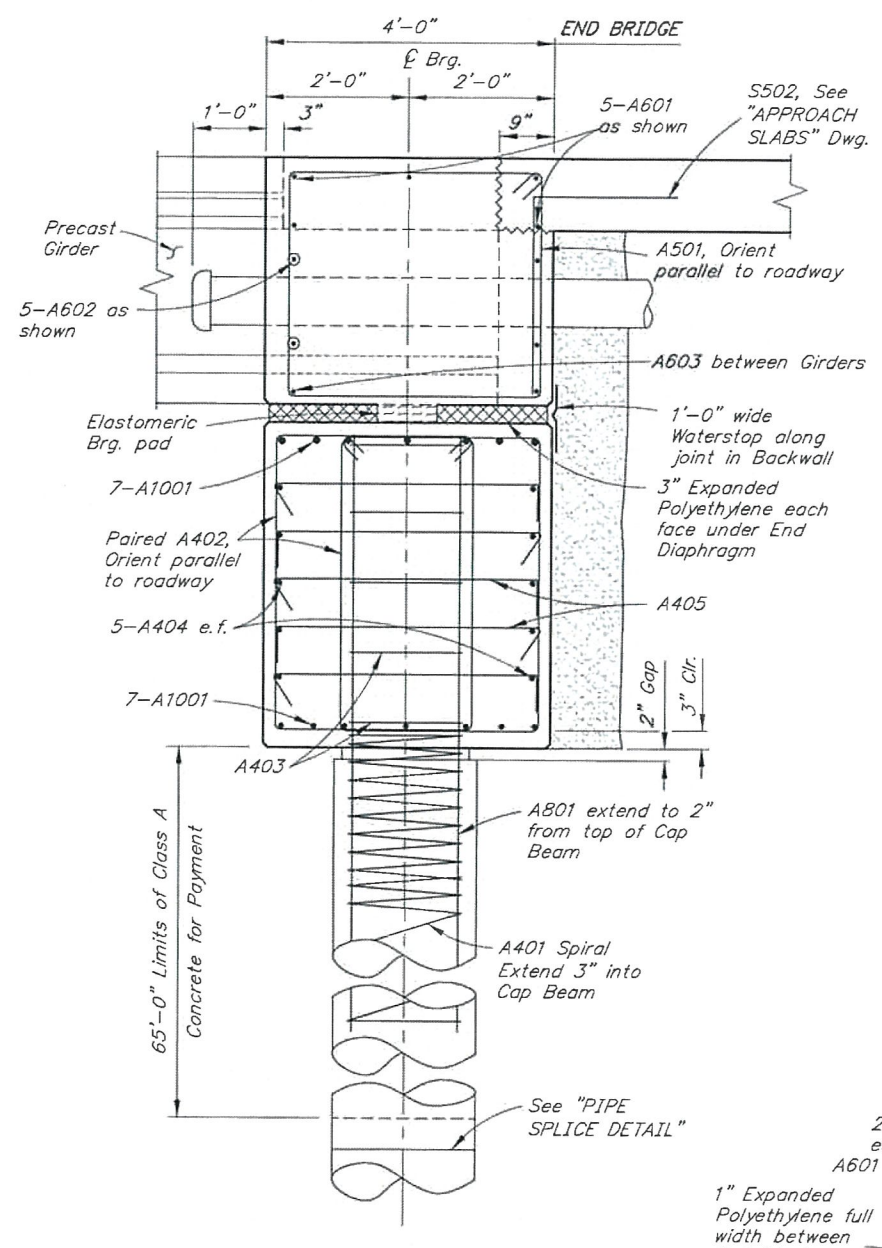
**NOYES SLOUGH BRIDGE**  
AURORA DRIVE  
ABUTMENT 2

  
BRIDGE NO. 209  
DWG. NO. 7

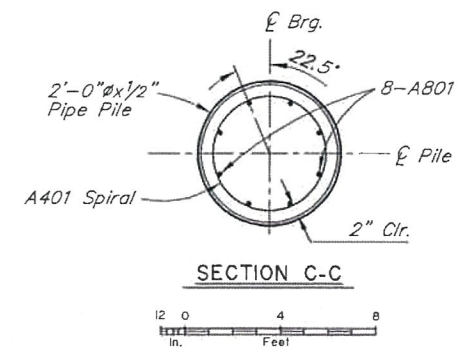
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NHFWY00124	2022	N8	N24



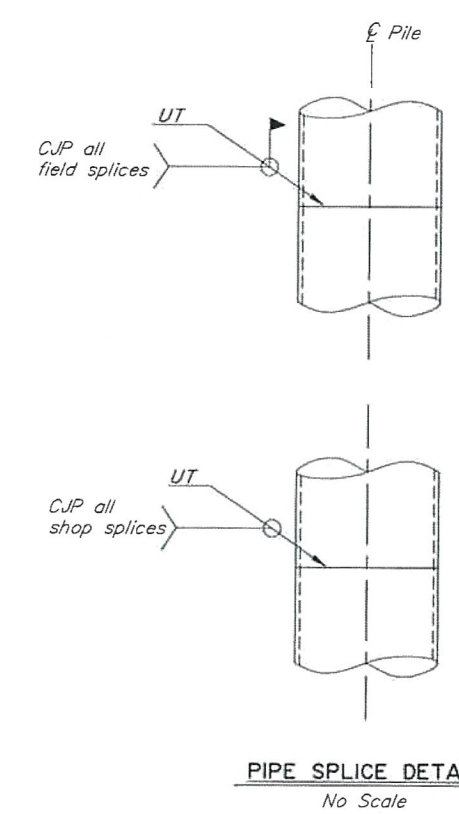
**SECTION A-A**  
12 0 4 8  
In. Feet



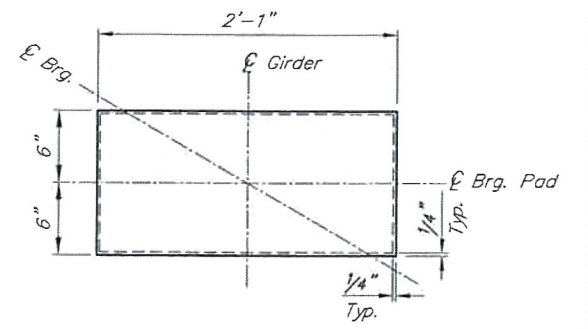
**SECTION B-B**  
12 0 4 8  
In. Feet



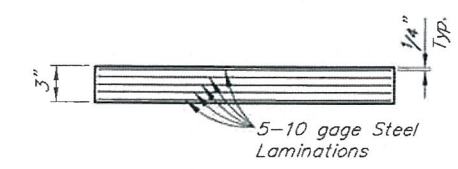
**SECTION C-C**  
12 0 4 8  
In. Feet



**PIPE SPLICE DETAIL**  
No Scale



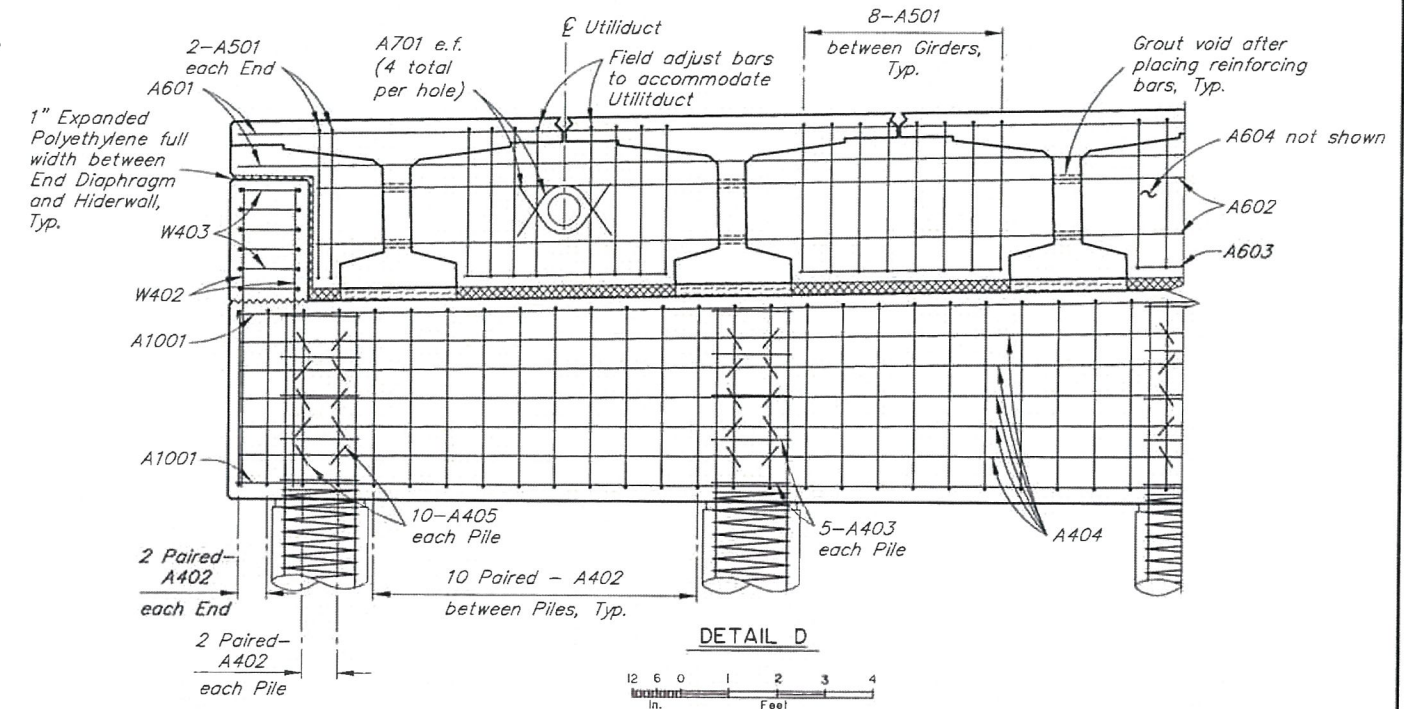
**PLAN**



**ELEVATION**

**ELASTOMERIC BEARING PAD**

Grade 5  
Shear Modulus = 0.115 ksi  
Dead Load = 63 k  
Live Load = 77 k



**DETAIL D**



DESIGNED BY: Andrew Wells	CHECKED: Jesse Escamilla III
DRAWN BY: Sam Solite	CHECKED: Andrew Wells
QUANTITIES BY: Andrew Wells	CHECKED: Jesse Escamilla III

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



**NOYES SLOUGH BRIDGE**  
AURORA DRIVE  
**ABUTMENT DETAILS**

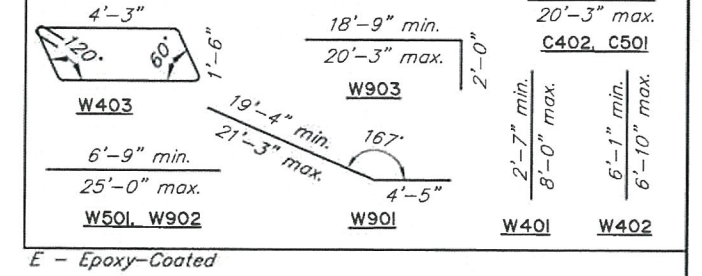


BRIDGE NO. 209  
DWG. NO. 8

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWO0124	2022	N9	N24

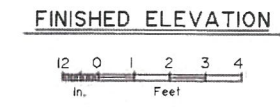
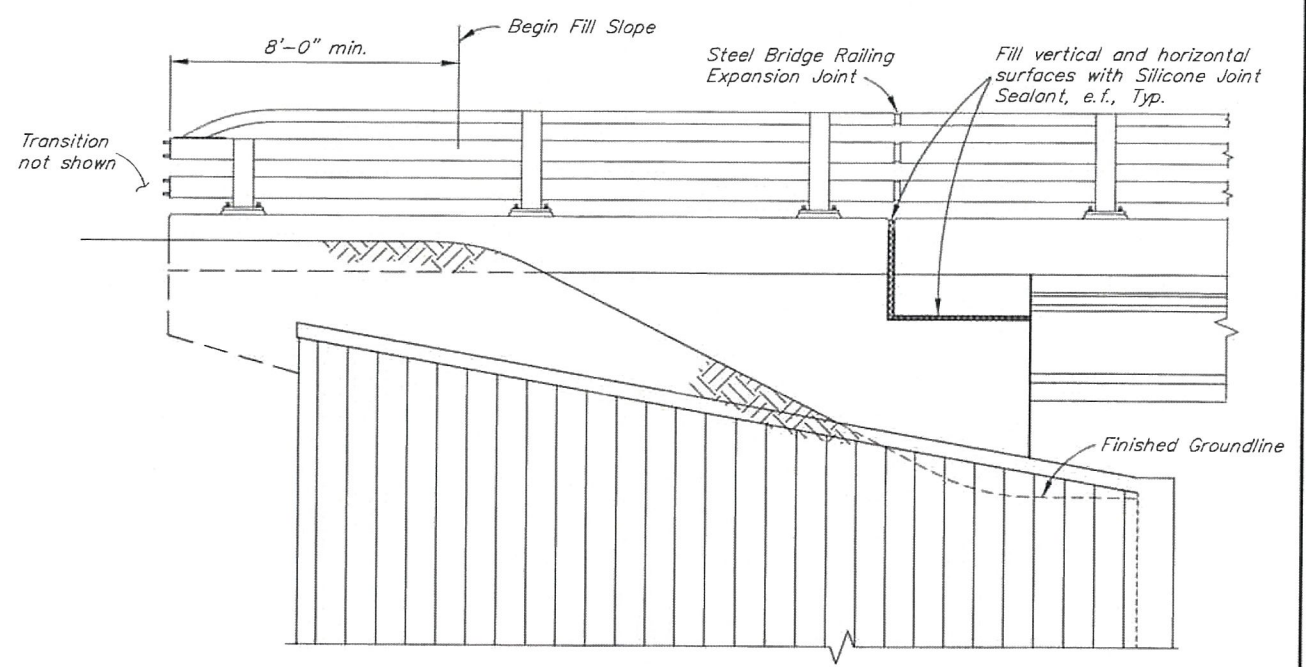
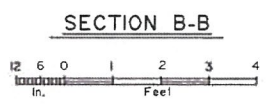
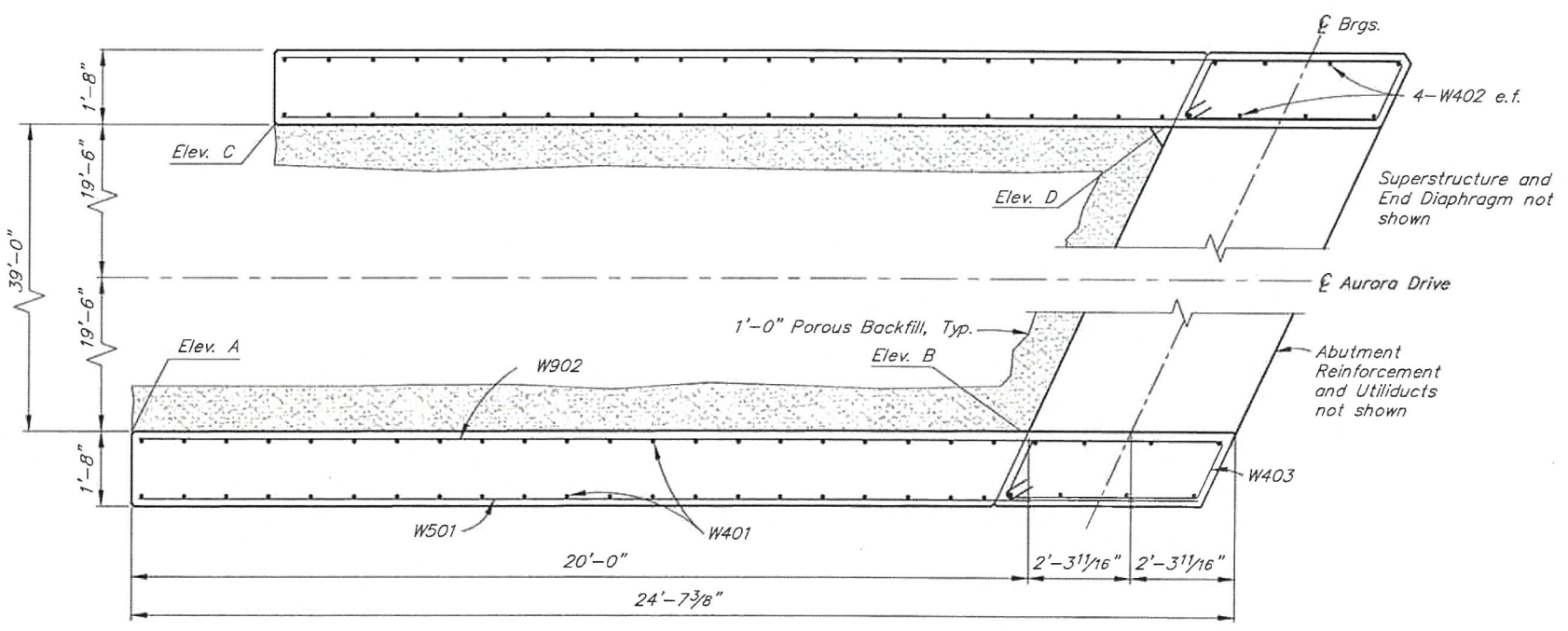
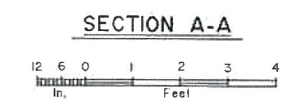
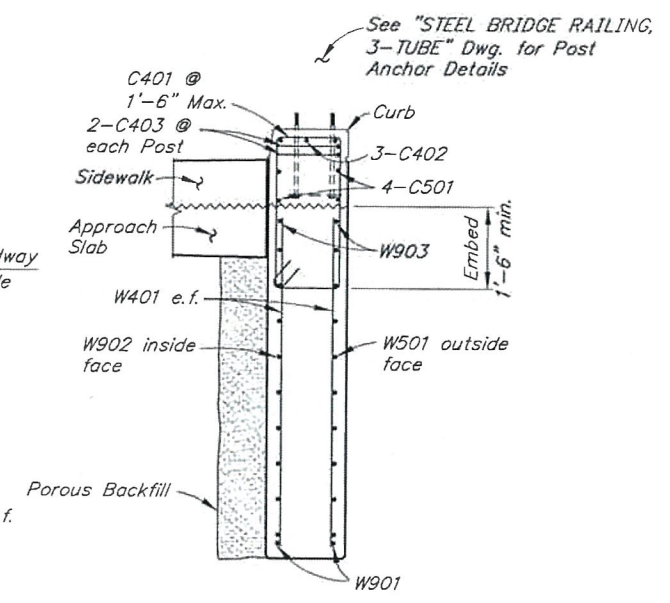
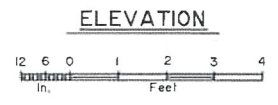
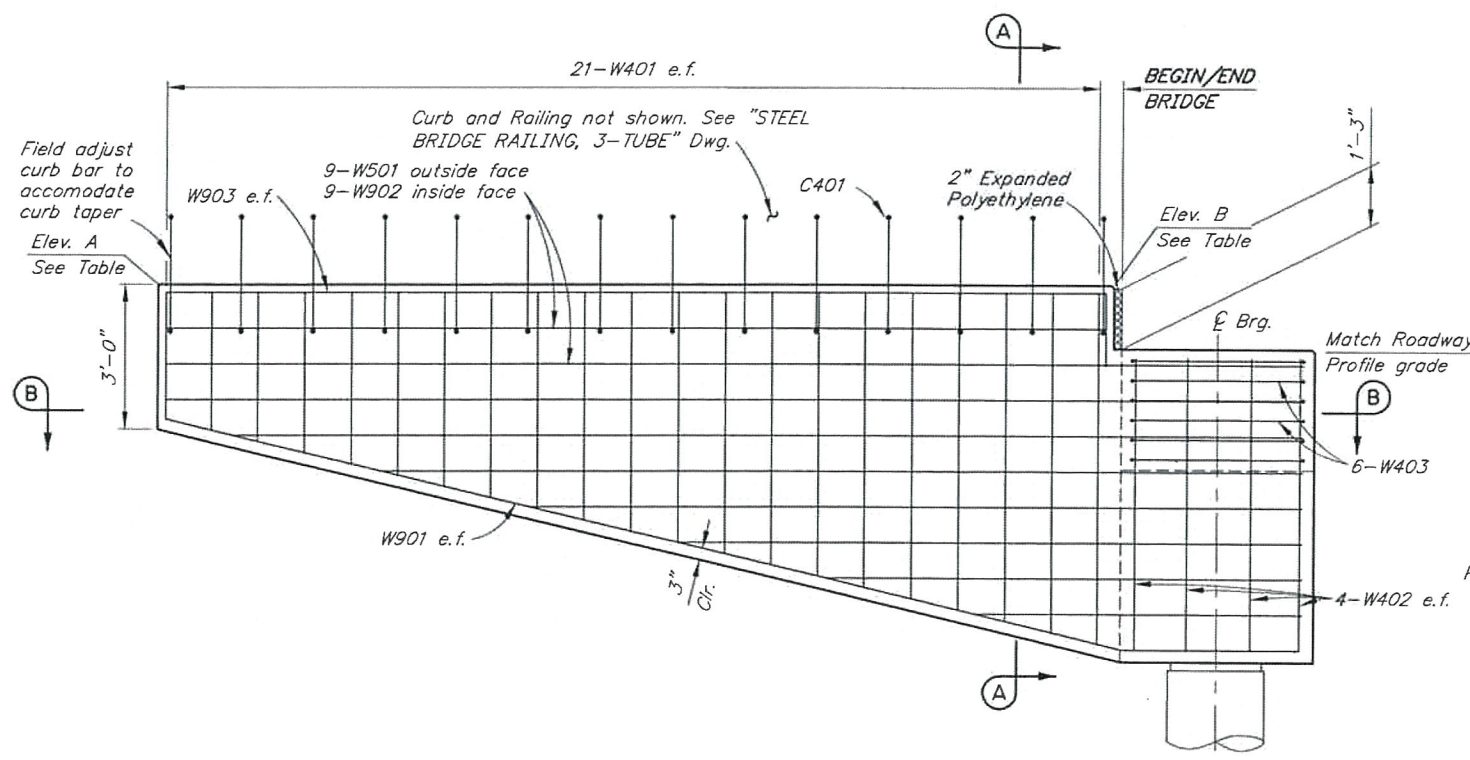
**REINFORCING STEEL - ONE ABUTMENT**

MARK	NOTE	SIZE	NO.	LENGTH	TYPE	BENDING DIAGRAM
W401		4	84	VARIES	---	
W402		4	16	VARIES	---	
W403		4	12	12'-3"	BENT	
W501		5	18	VARIES	---	
W901		9	4	VARIES	BENT	
W902		9	18	VARIES	---	
W903		9	4	VARIES	BENT	
C401	E	4	28	9'-1"	STIRRUP	
C402	E	4	6	VARIES	---	
C403	E	4	12	3'-10"	BENT	
C501	E	5	8	VARIES	---	



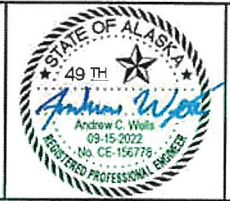
E - Epoxy-Coated

LOCATION	A (UPSTREAM)	B (UPSTREAM)	C (DOWNSTREAM)	D (DOWNSTREAM)
ABUTMENT 1	441.42	441.55	442.33	442.26
ABUTMENT 2	439.65	440.25	439.41	440.34



DESIGNED BY: Andrew Wells	CHECKED: Jesse Escamilla III
DRAWN BY: Sam Solite	CHECKED: Andrew Wells
QUANTITIES BY: Andrew Wells	CHECKED: Jesse Escamilla III

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



**NOYES SLOUGH BRIDGE**  
AURORA DRIVE  
WINGWALLS

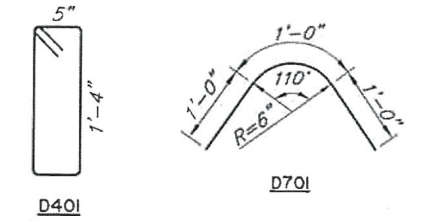


BRIDGE NO. 209  
DWG. NO. 9

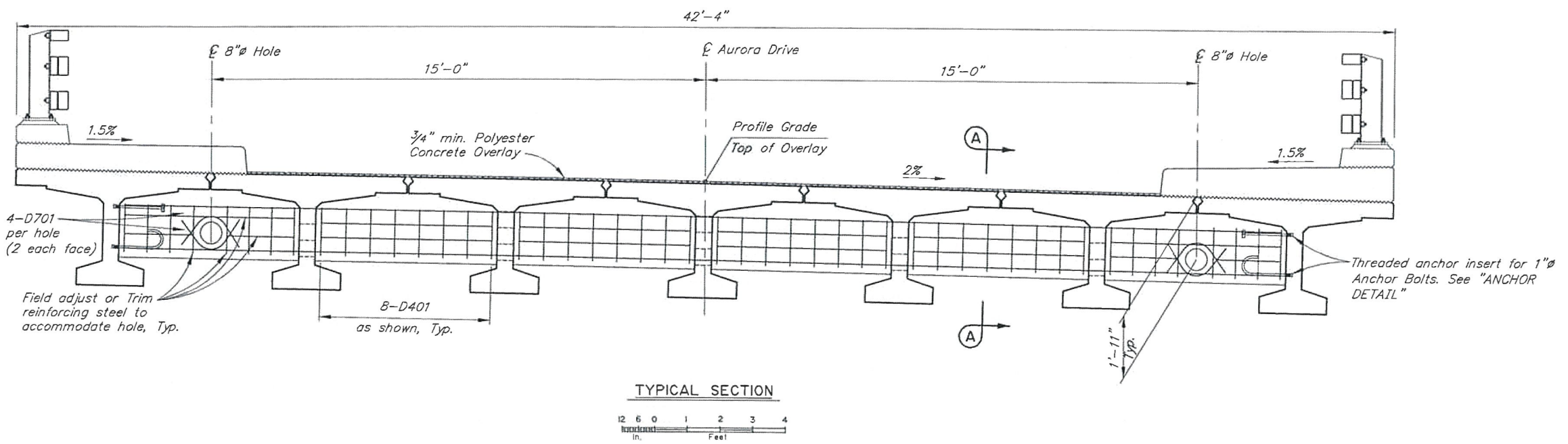
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFWY00124	2022	N10	N24

REINFORCING STEEL - ONE DIAPHRAGM					
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D401	E	4	48	4'-3"	STIRRUP
D501	E	5	24	6'-0"	---
D601	E,S	6	4	41'-0"	---
D701	E	7	8	3'-0"	BENT

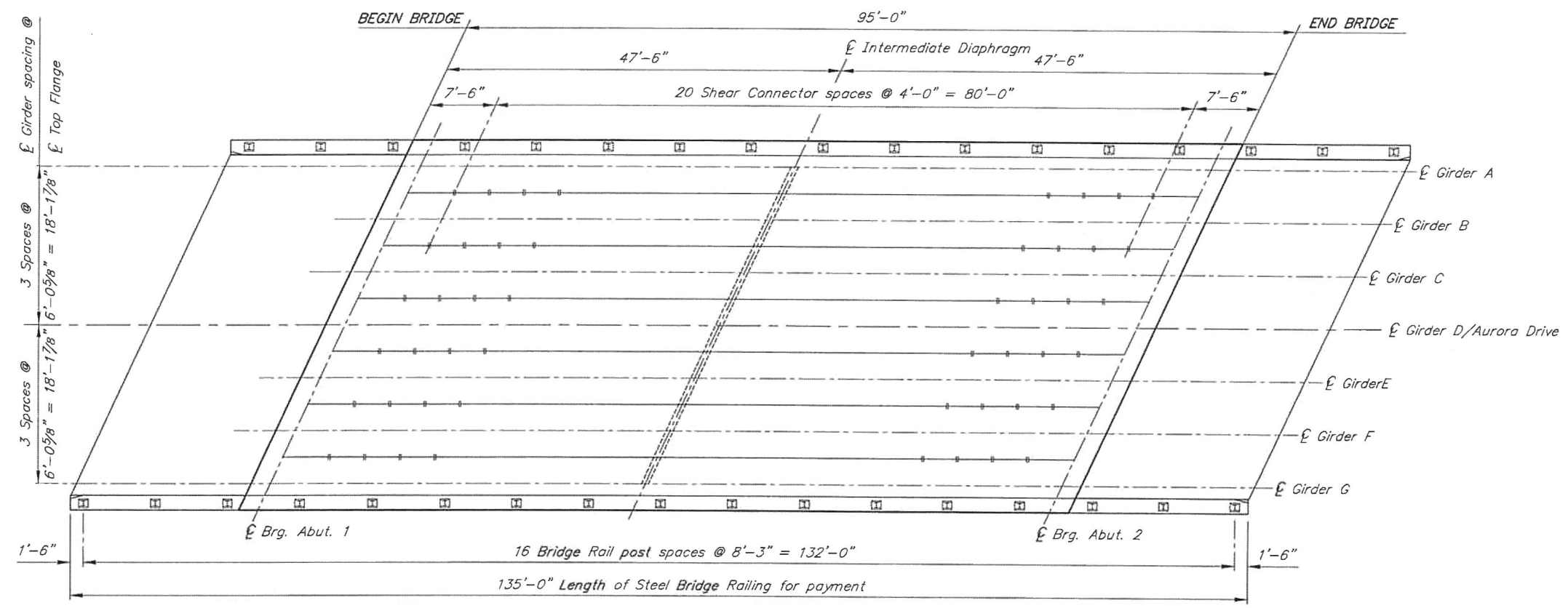
BENDING DIAGRAM



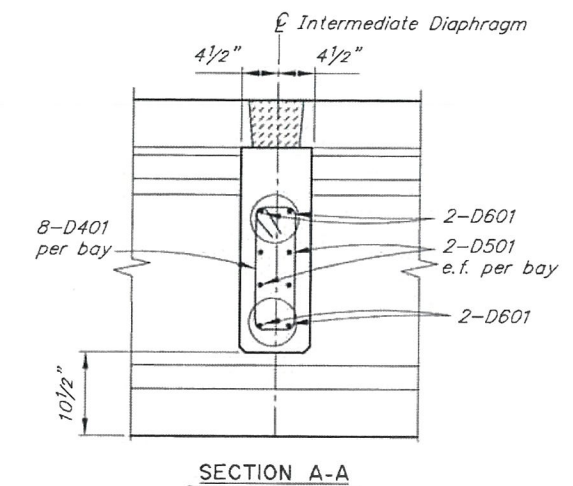
E - Epoxy-Coated  
S - Splices not included



TYPICAL SECTION  
12 6 0 1 2 3 4  
In. Feet

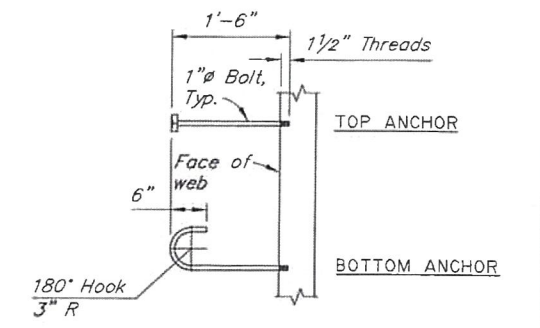


FRAMING PLAN  
12 0 4 6 12  
In. Feet



SECTION A-A

12 6 0 1 2  
In. Feet

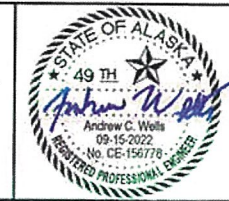


ANCHOR DETAIL

12 6 0 1 2 3  
In. Feet

DESIGNED BY: Andrew Wells	CHECKED: Jesse Escamilla III
DRAWN BY: Sam Sallie	CHECKED: Andrew Wells
QUANTITIES BY: Andrew Wells	CHECKED: Jesse Escamilla III

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



NOYES SLOUGH BRIDGE  
AURORA DRIVE  
FRAMING PLAN AND TYPICAL SECTION



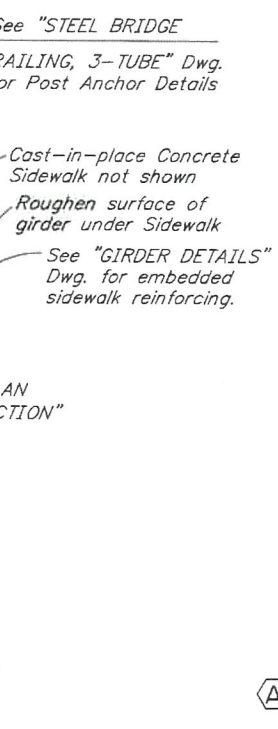
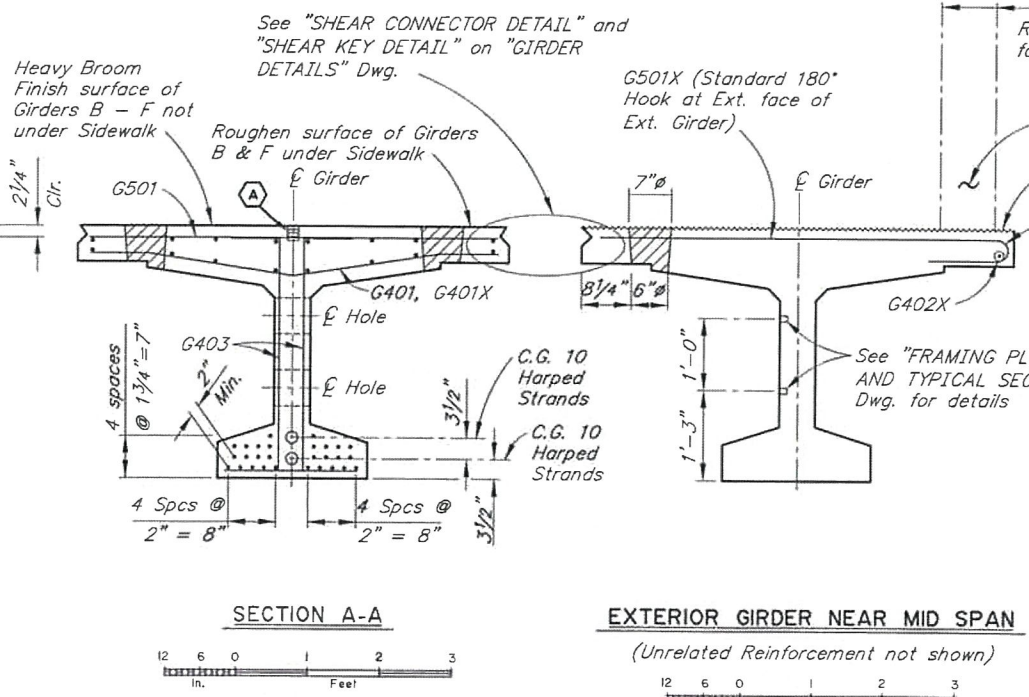
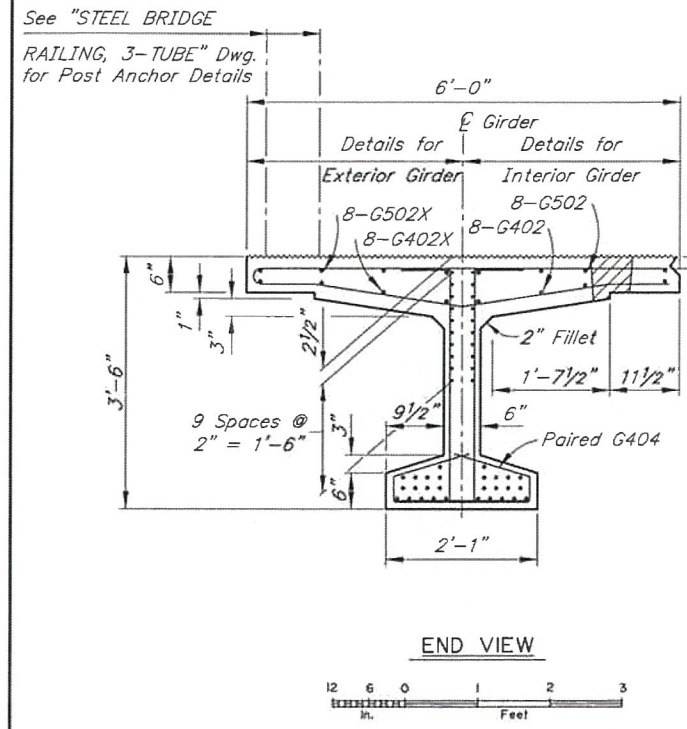
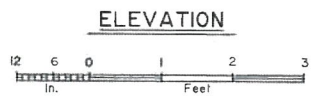
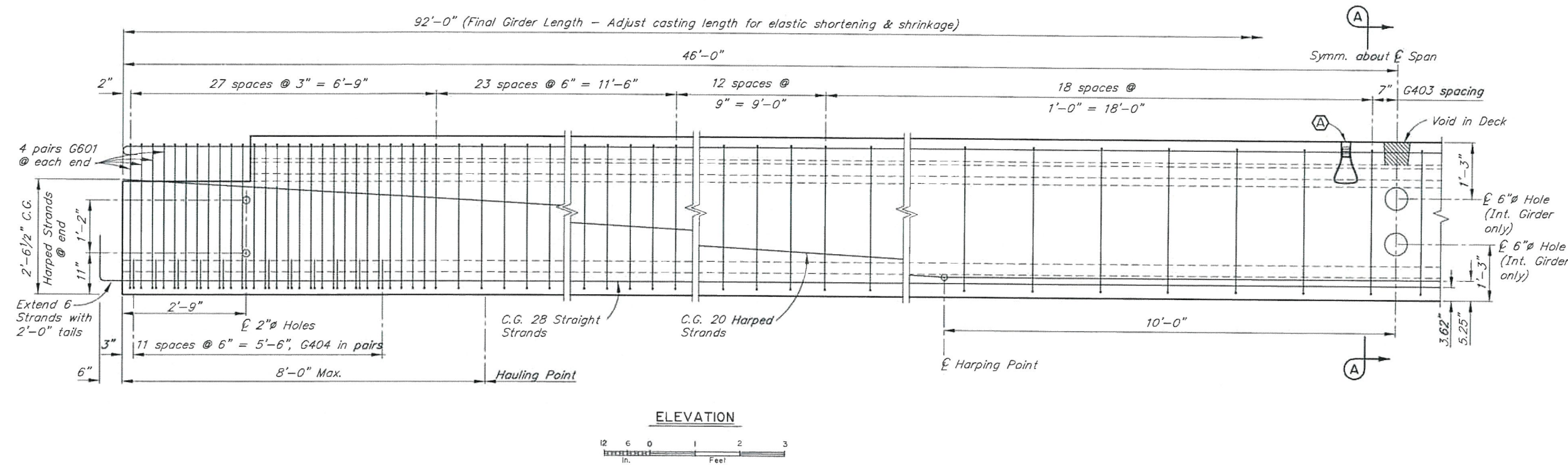
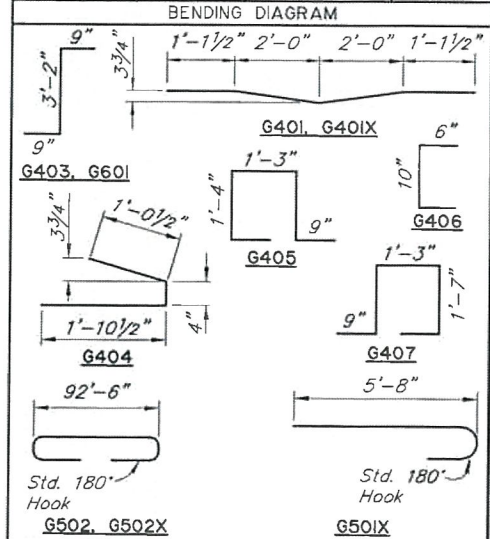
BRIDGE NO. 209  
DWG. NO. 10



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWO0124	2022	N11	N24

**REINFORCING STEEL-ONE GIRDER**

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
G401	E	4	135	5'-9"	BENT
G401X	E	4	154	5'-9"	BENT
G402	E,S	4	8	86'-1"	----
G402X	E	4	8	86'-1"	----
G403	E	4	302	4'-8"	BENT
G404	E	4	48	3'-3"	BENT
G405	E,LL	4	64	5'-5"	BENT
G406	E,LL	4	128	1'-10"	BENT
G407	E,L	4	4	5'-11"	BENT
G501	E	5	135	5'-7"	----
G501X	E	5	154	6'-3"	BENT
G502	E,S	5	8	93'-8"	BENT
G502X	E,S	5	8	93'-8"	BENT
G601	E	6	16	4'-8"	BENT

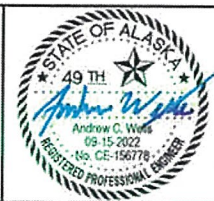


**GIRDER NOTES**

- Use Class P Concrete having the following strengths:  
At Stress Transfer  $f'_{ci} = 7,000$  psi  
At 28 days  $f'c = 8,000$  psi
- Use  $1/2$ "  $\phi$  low relaxation strands with an ultimate strength of 270 ksi and a cross section area of 0.153 in<sup>2</sup>.
- Design is based on the following steel stresses:  
Pretensioning - Jacking Stress 189 ksi  
After initial losses - 170 ksi  
After all losses - 141 ksi
- Deflect forms to compensate for camber and roadway grade.
- Galvanize structural steel embedded in girders except for shear connectors.
- 1" clear on all reinforcing except as noted.
- Finish top flange surface with heavy broom finish.
- Omit Shear Key, Shear Connector, and Deck Voids on outside of exterior girders.
- Cast Girder ends plumb with respect to roadway grade.
- $\Delta$  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 and rail post spacing.

DESIGNED BY: Andrew Wells	CHECKED: Jesse Escamilla III
DRAWN BY: Sam Solite	CHECKED: Andrew Wells
QUANTITIES BY: Andrew Wells	CHECKED: Jesse Escamilla III

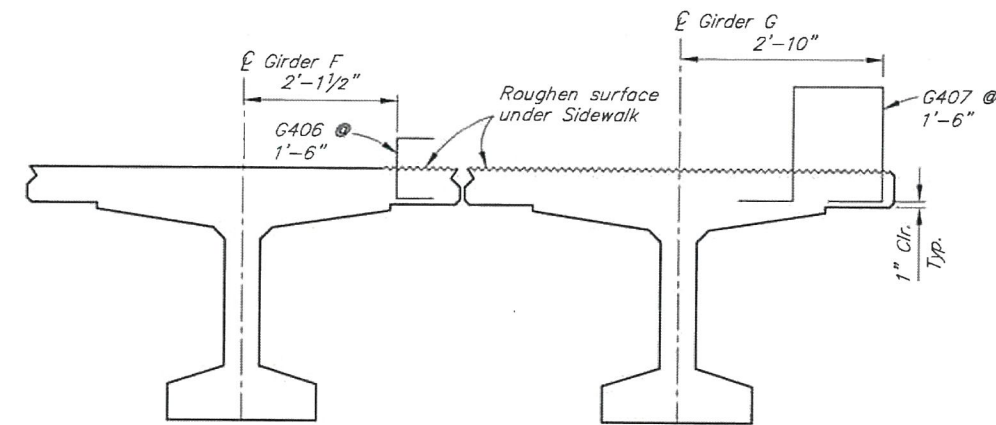
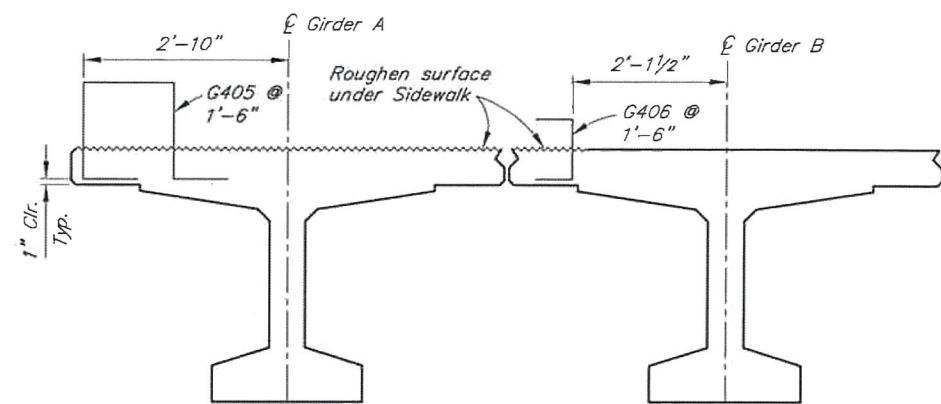
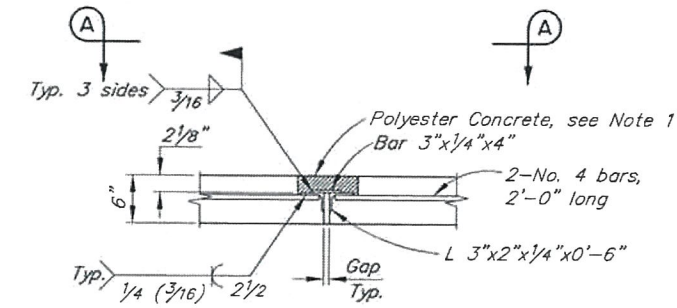
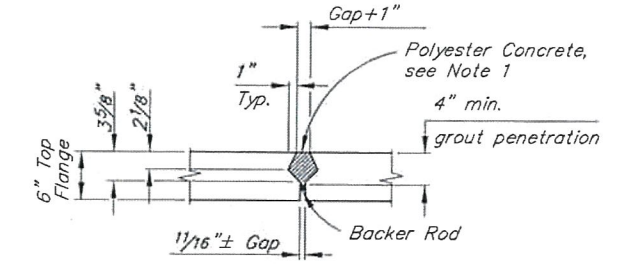
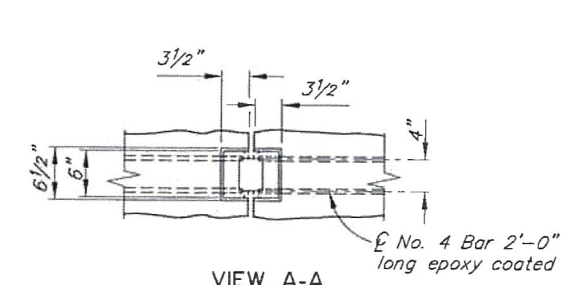
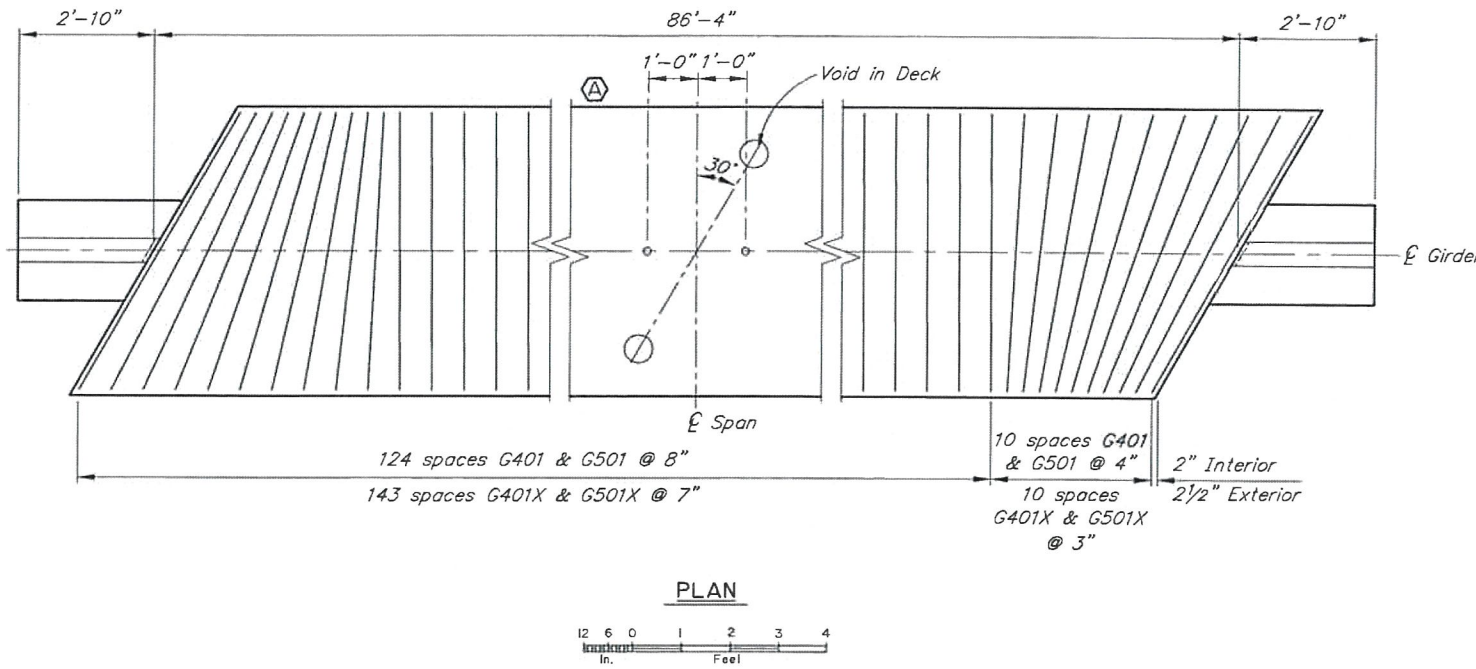
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



**NOYES SLOUGH BRIDGE**  
AURORA DRIVE  
**GIRDERS**

BRIDGE NO. 209  
DWG. NO. II

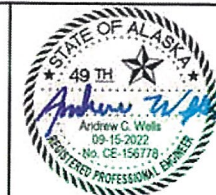
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWY00124	2022	N12	N24



- NOTES:**
- Grout may be substituted for polyester concrete in keyways under sidewalk.

DESIGNED BY: Andrew Wells	CHECKED: Jesse Escamilla III
DRAWN BY: Sam Solite	CHECKED: Andrew Wells
QUANTITIES BY: Andrew Wells	CHECKED: Jesse Escamilla III

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



NOYES SLOUGH BRIDGE  
AURORA DRIVE  
GIRDER DETAILS

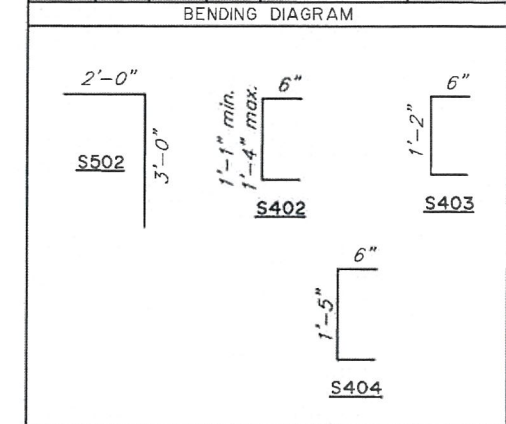


BRIDGE NO. 209  
DWG. NO. 12

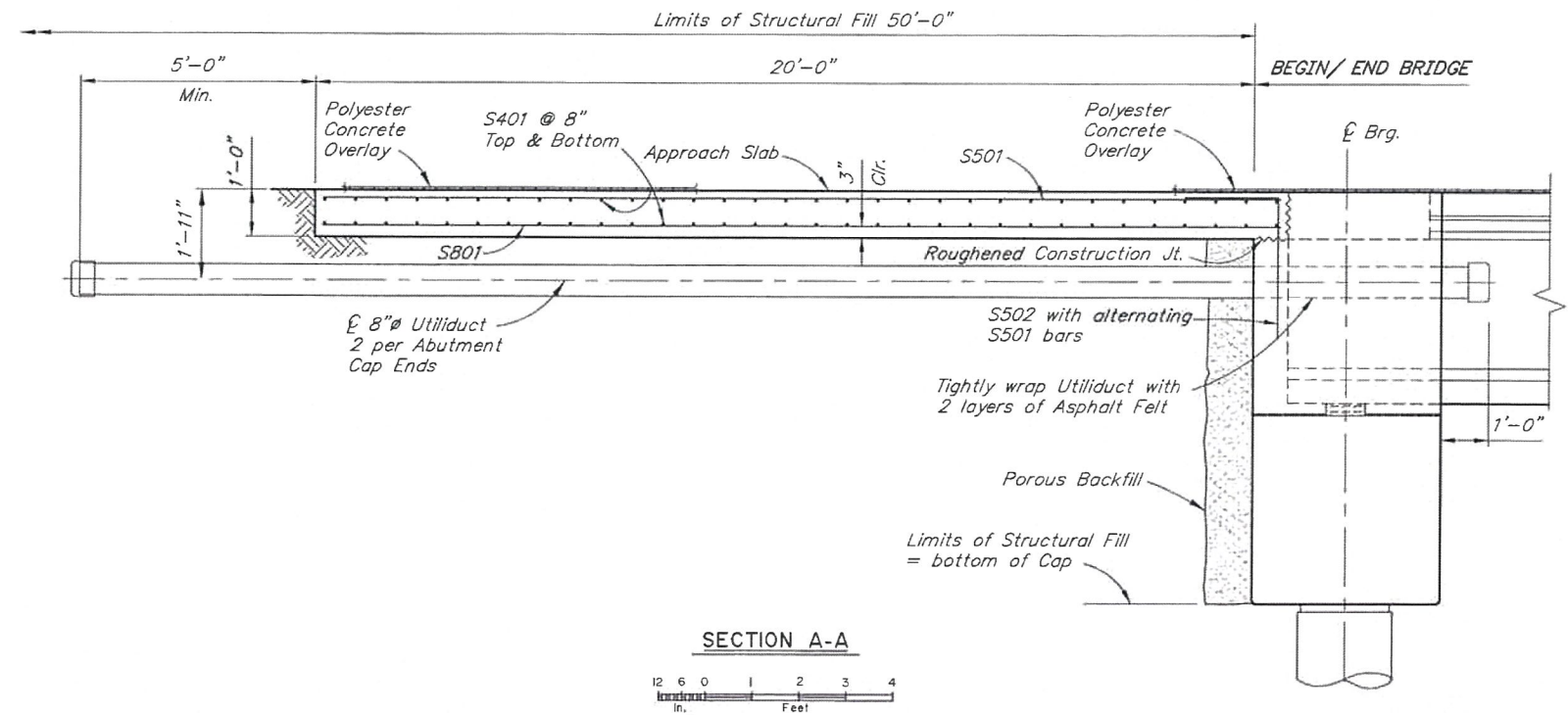
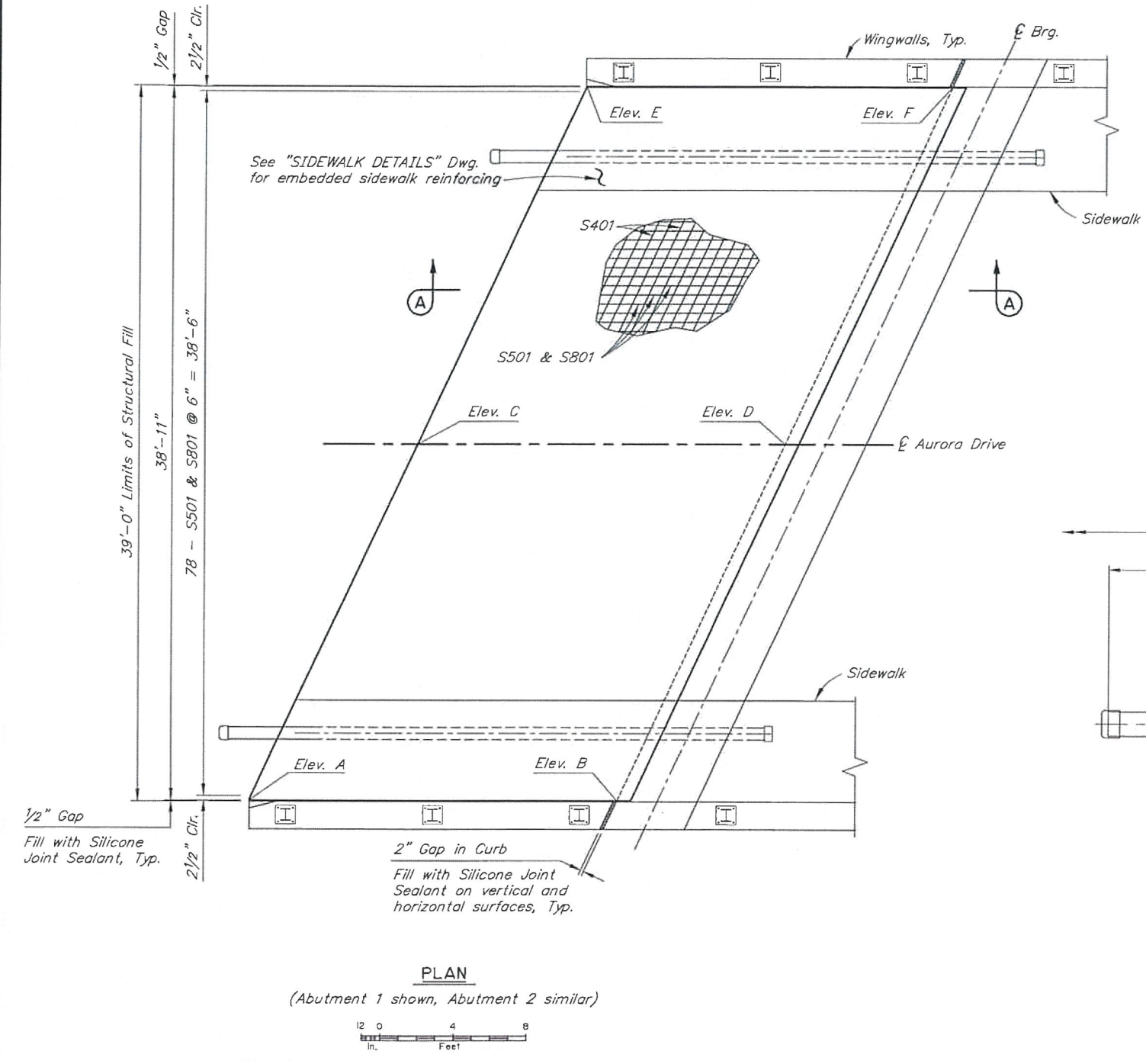
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFWY00124	2022	N13	N24

LOCATION	A (UPSTREAM)	B (UPSTREAM)	C (CENTERLINE)	D (CENTERLINE)	E (DOWNSTREAM)	F (DOWNSTREAM)
ABUTMENT 1	441.42	441.55	441.93	441.92	442.33	442.26
ABUTMENT 2	439.65	440.25	439.64	440.31	439.41	440.34

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
S401	E, S	4	62	44'-6"	----
S402	E	4	14	VARIES	BENT
S403	E	4	28	2'-2"	BENT
S404	E	4	14	2'-5"	BENT
S501	E	5	78	20'-5"	----
S502	E	5	39	5'-0"	BENT
S801	E	8	78	20'-5"	----



E - Epoxy-Coated  
S - Length does not include splices



DESIGNED BY: Andrew Wells	CHECKED: Jesse Escamilla III
DRAWN BY: Sam Sallie	CHECKED: Andrew Wells
QUANTITIES BY: Andrew Wells	CHECKED: Jesse Escamilla III

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



NOYES SLOUGH BRIDGE  
AURORA DRIVE  
APPROACH SLABS



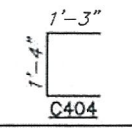
BRIDGE NO. 209  
DWG. NO. 13

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWHY00124	2022	N14	N24

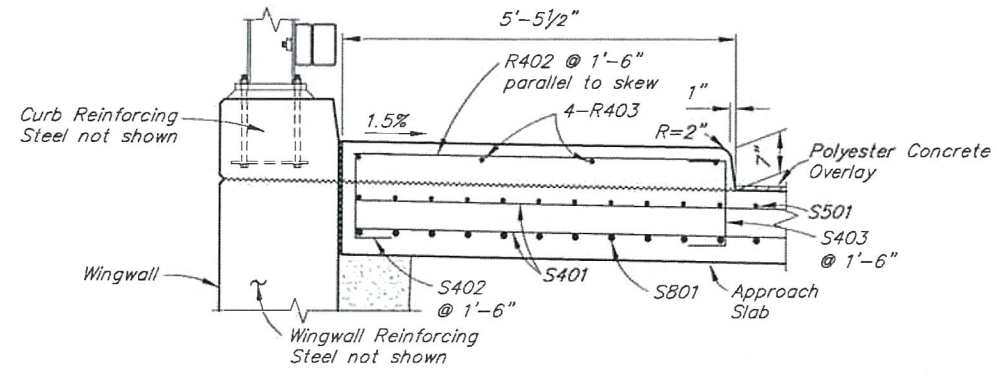
**REINFORCING STEEL -  
BOTH SIDEWALKS**

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
C404	E	4	44	3'-10"	BENT
C405	E,S	4	6	94'-8"	----
R401	E	4	128	8'-0"	----
R402	E	4	56	5'-9"	----
R403	E,S	4	8	134'-8"	----
R404	E,S	4	4	94'-8"	----

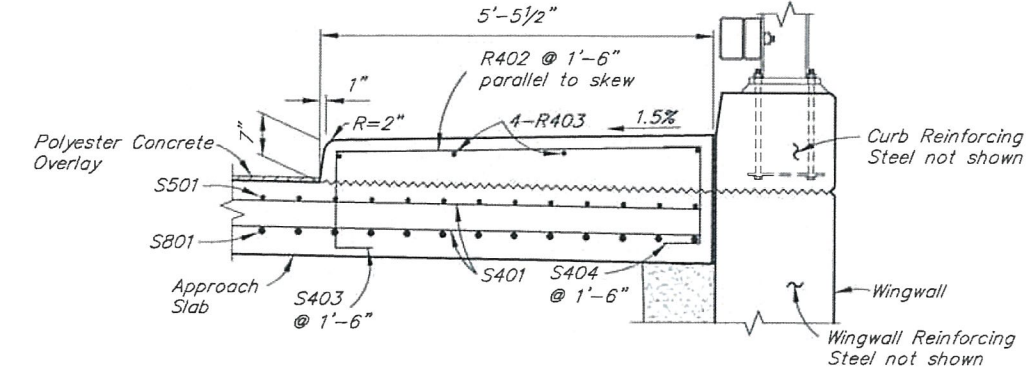
BENDING DIAGRAM



E - Epoxy-Coated  
S - Length does not include splices.



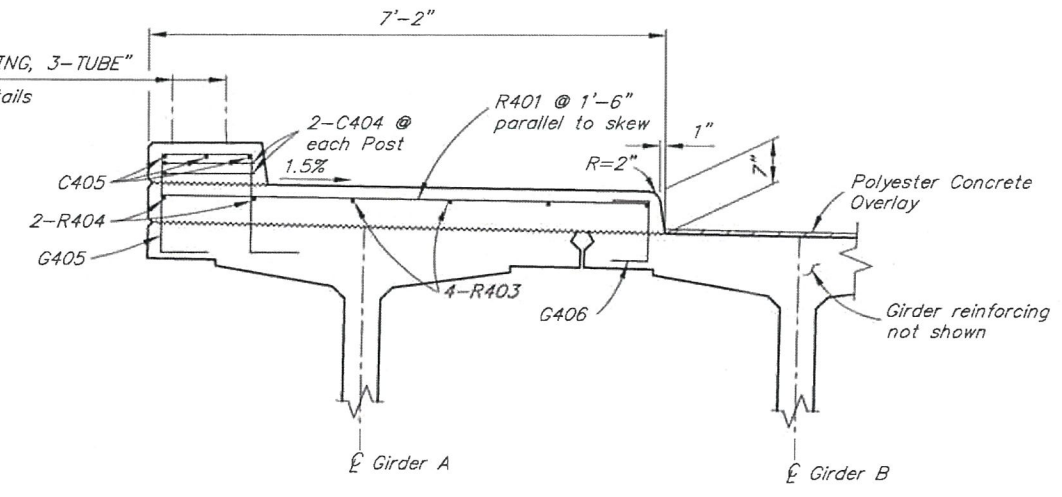
**DOWNSTREAM APPROACH SLAB SIDEWALK DETAIL**



**UPSTREAM APPROACH SLAB SIDEWALK DETAIL**



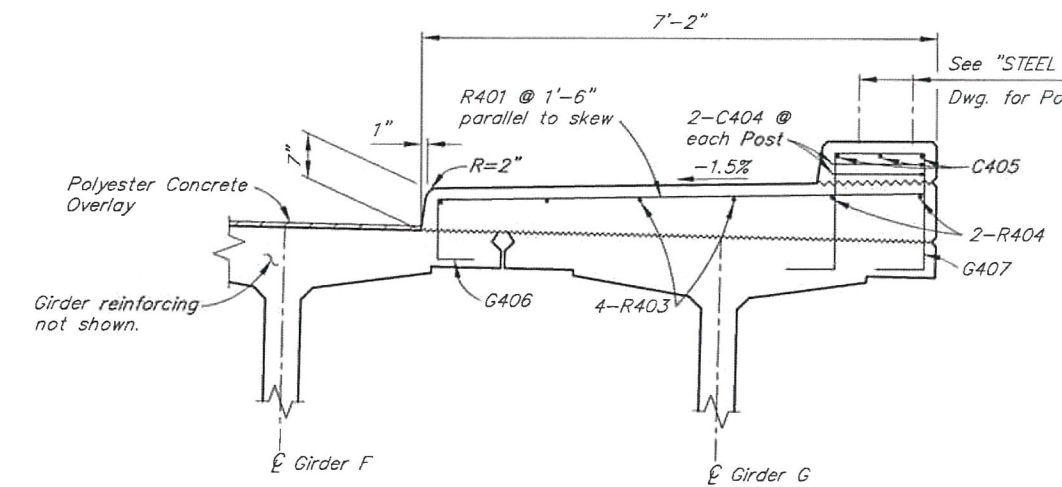
See "STEEL BRIDGE RAILING, 3-TUBE"  
Dwg. for Post Anchor Details



**DOWNSTREAM BRIDGE SIDEWALK DETAIL**



See "STEEL BRIDGE RAILING, 3-TUBE"  
Dwg. for Post Anchor Details



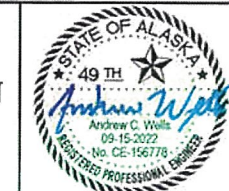
**UPSTREAM BRIDGE SIDEWALK DETAIL**



**NOTE:**  
Match approach sidewalk  
at approach slab

DESIGNED BY: <i>Andrew Wells</i>	CHECKED: <i>Jesse Escornilla III</i>
DRAWN BY: <i>Sam Solie</i>	CHECKED: <i>Andrew Wells</i>
QUANTITIES BY: <i>Andrew Wells</i>	CHECKED: <i>Jesse Escornilla III</i>

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION

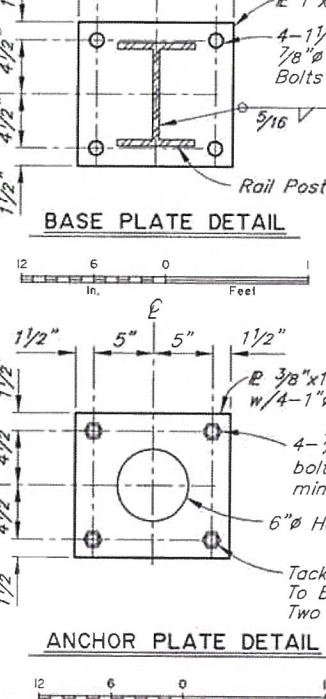
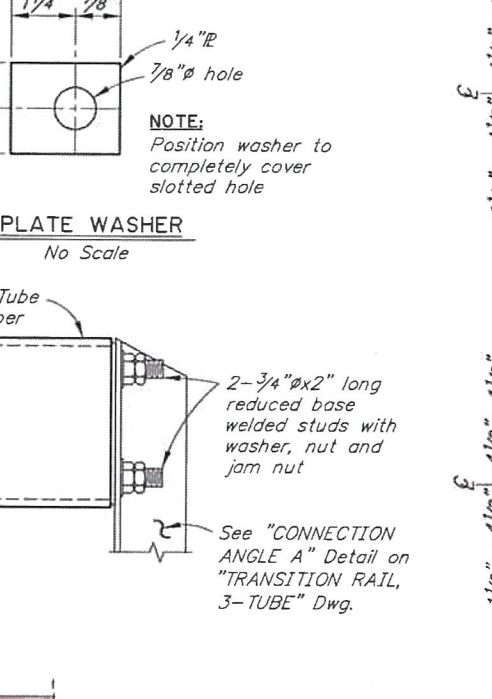
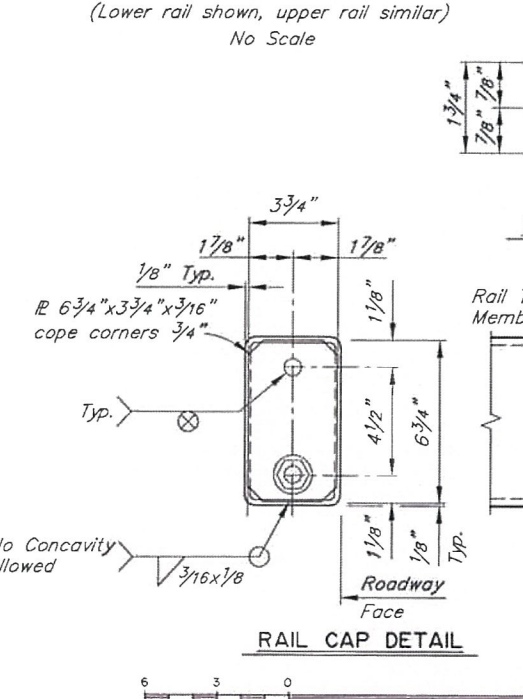
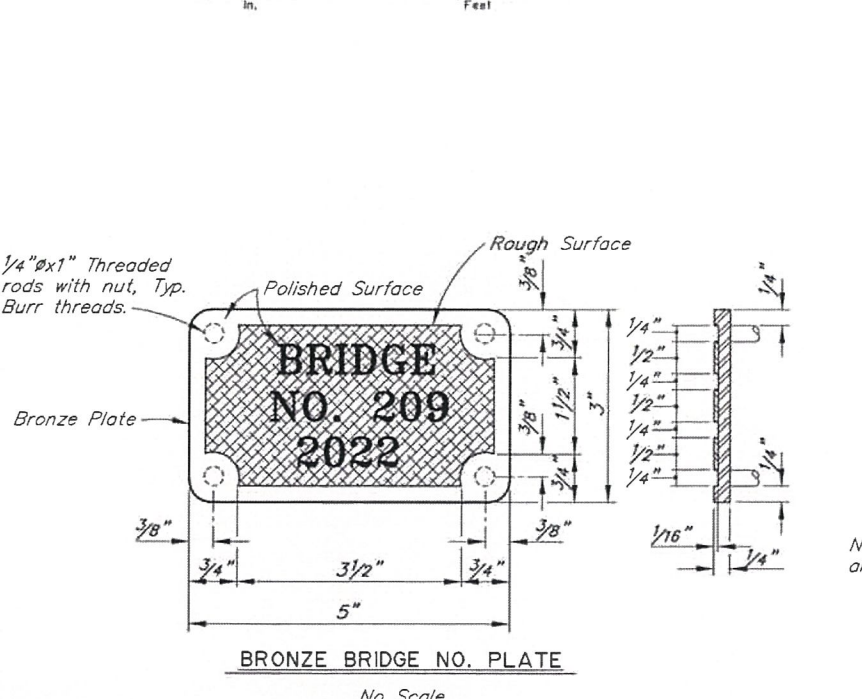
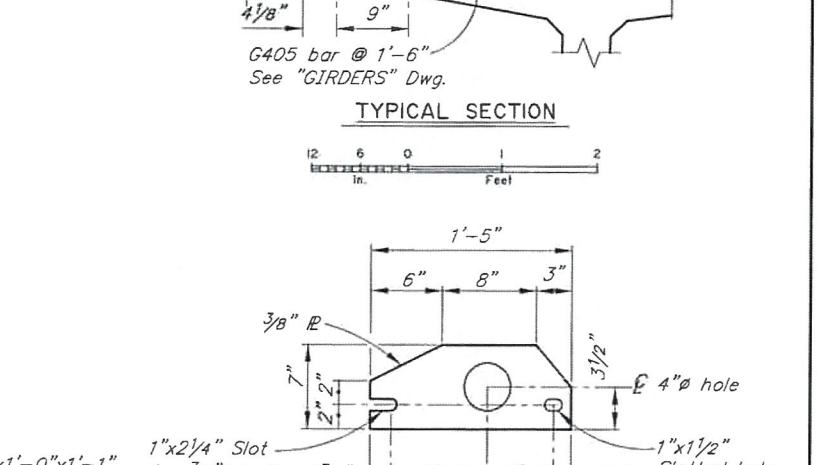
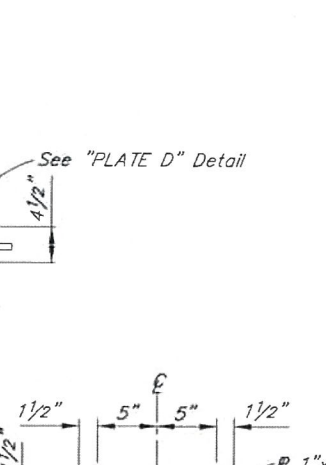
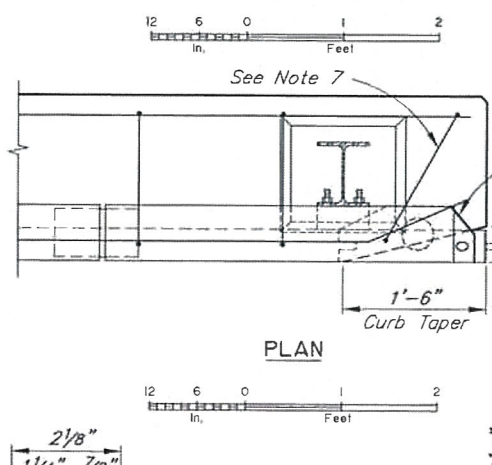
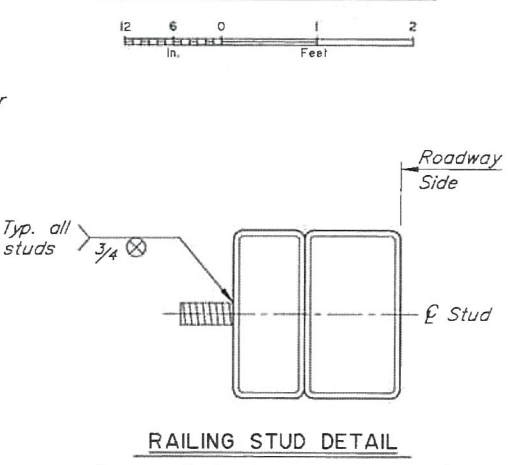
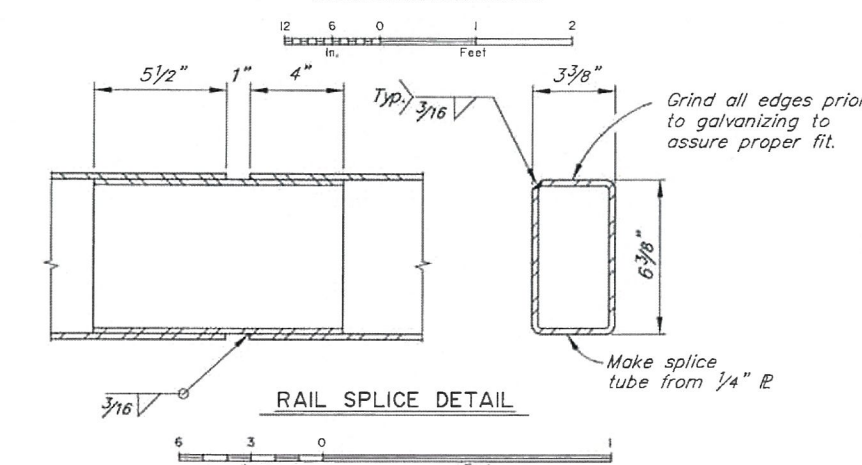
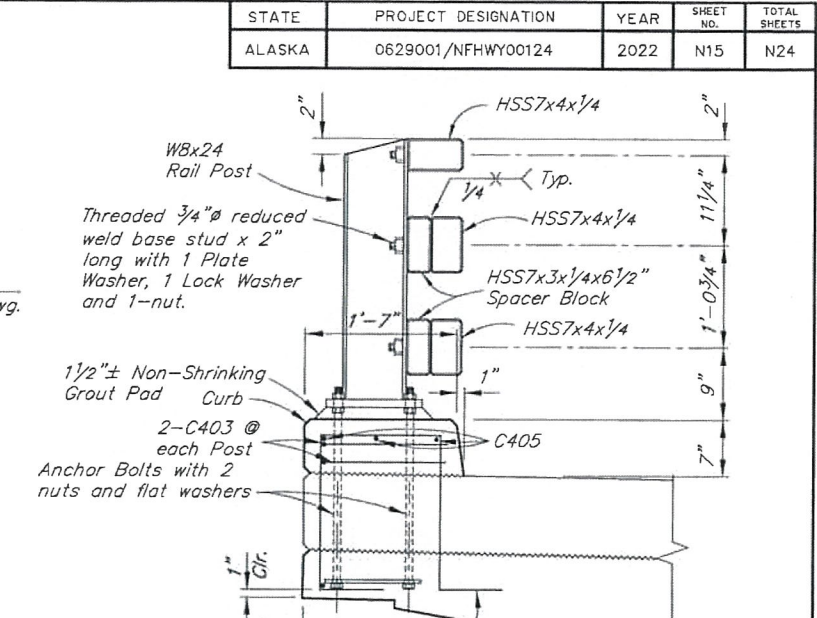
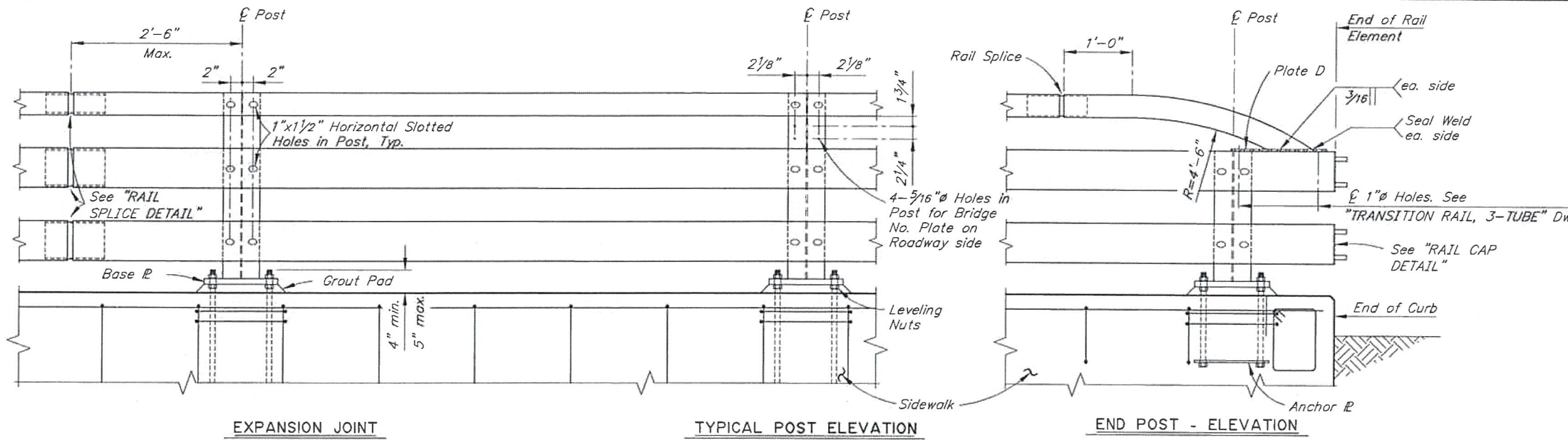


**NOYES SLOUGH BRIDGE**  
AURORA DRIVE  
**SIDEWALK DETAILS**



BRIDGE NO. 209  
DWG. NO. 14

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NHFWY00124	2022	N15	N24

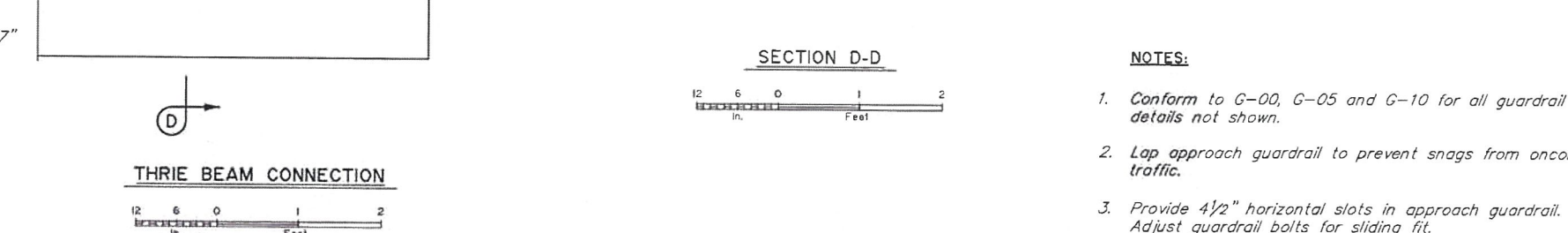
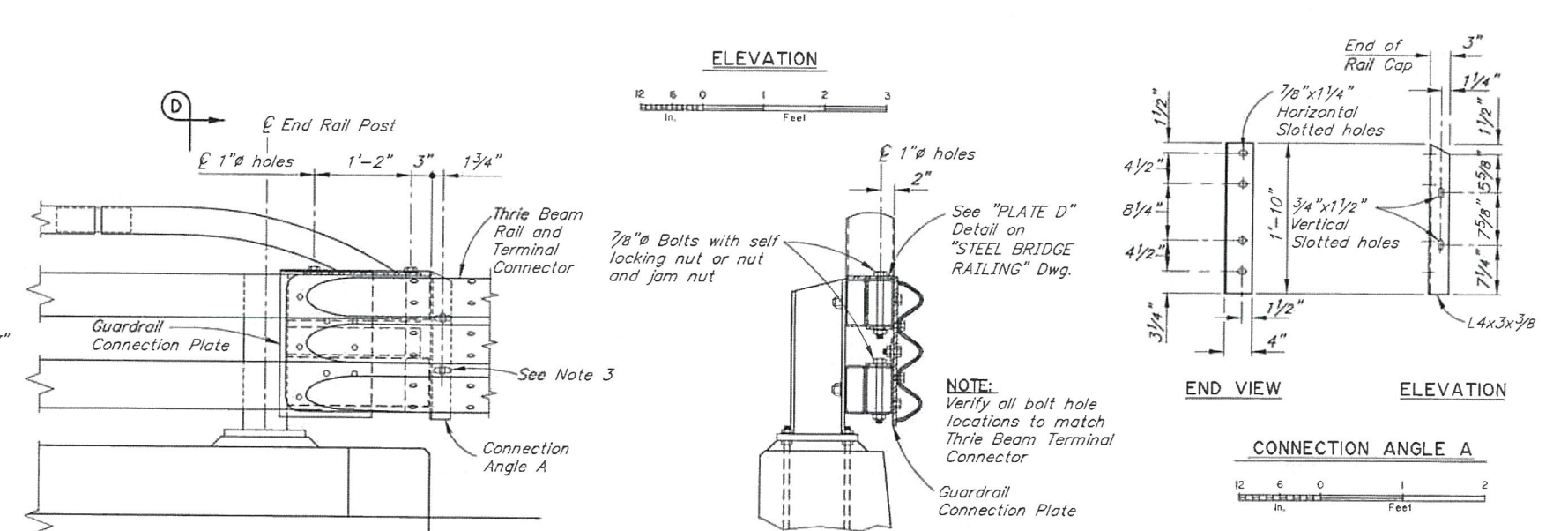
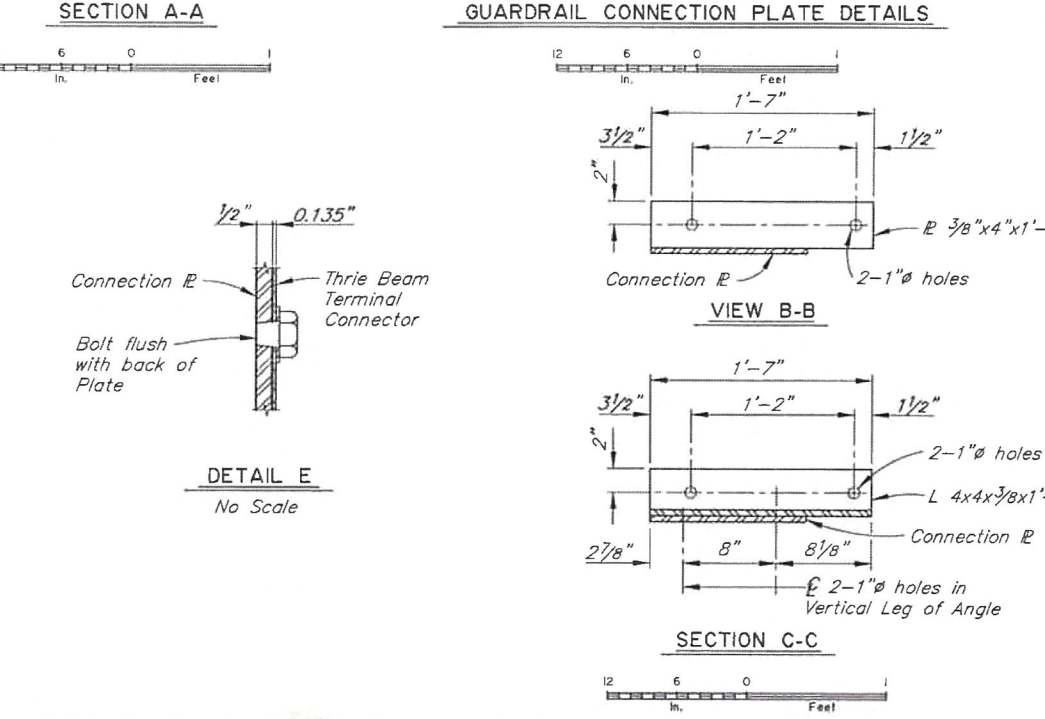
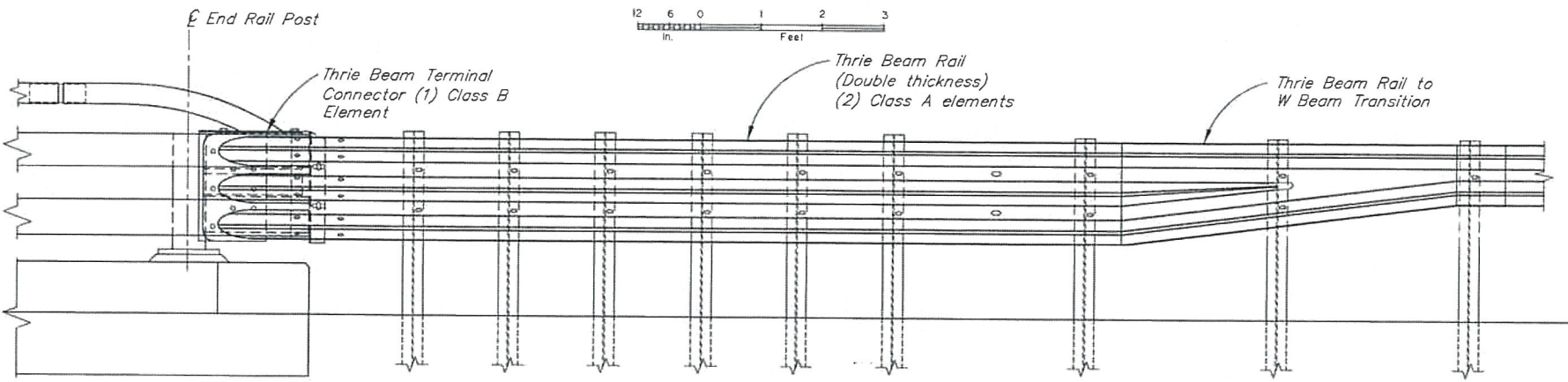
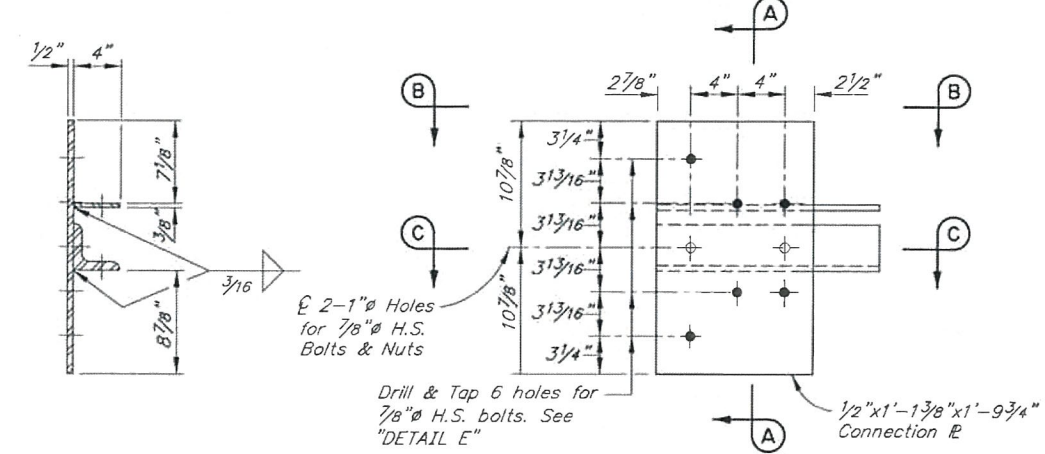
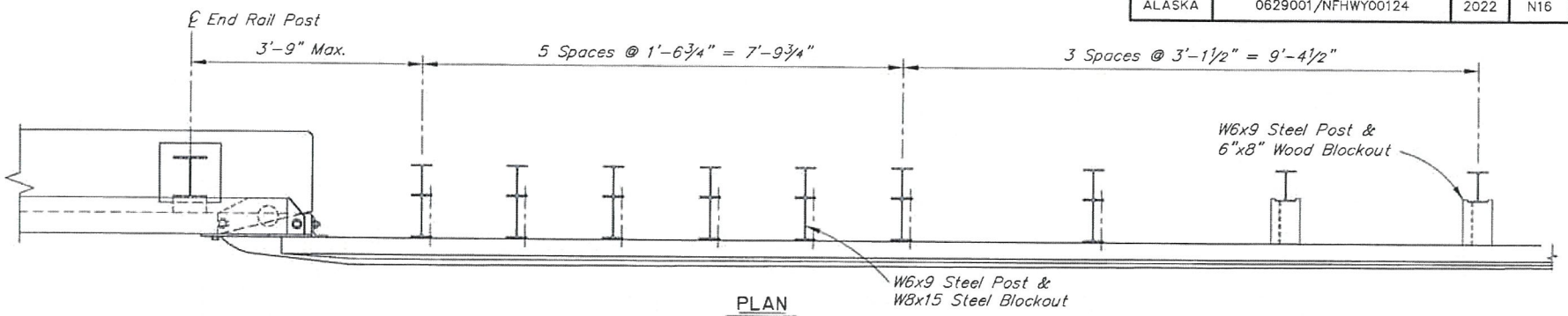
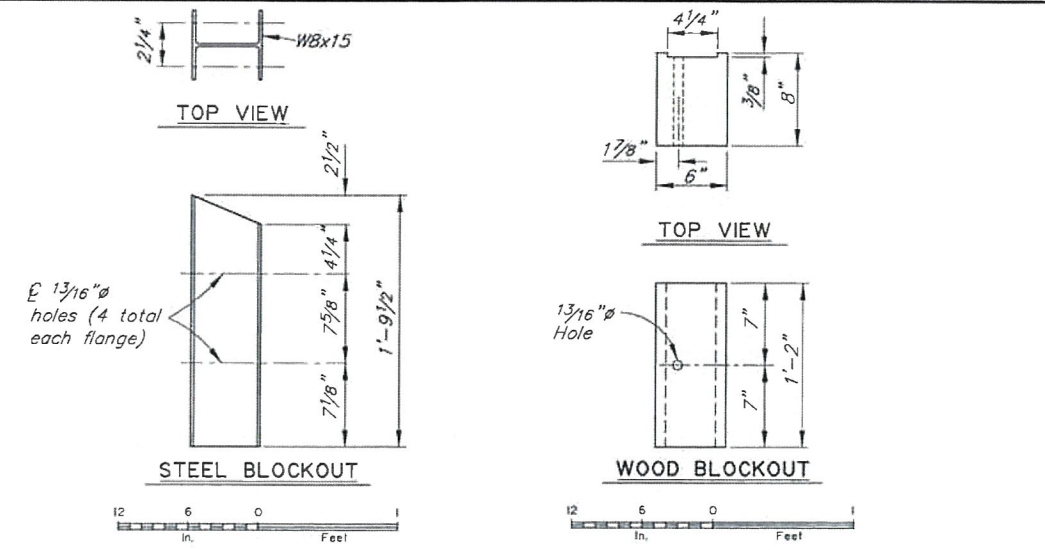


**NOTES:**

1. Locate bridge number plates on right hand side of approaching traffic near each end as shown on "GENERAL LAYOUT" Dwg. (2 total).
2. Furnish bridge number plates. Use "Century" type style lettering. Use studs and nuts that conform to UNS C65100 or C65500. Braze 1/4" threaded rod to back of plate with nut - 4 required. Use tamper proof nuts.
3. Provide railing expansion joints at 50'-0" maximum intervals. Railing shall be continuous over 2 posts minimum. Railing expansion joints are required in rail panels that span bridge expansion joints.
4. Install grout in a single placement.
5. See "FRAMING PLAN AND TYPICAL SECTION" Dwg. for rail post spacing.
6. Install bridge rail posts plumb.
7. Adjust reinforcing to accommodate curb taper.

DESIGNED BY: Andrew Wells <i>Andrew Wells</i> DRAWN BY: Sam Solite <i>Sam Solite</i> QUANTITIES BY: Andrew Wells <i>Andrew Wells</i>	CHECKED: Jesse Escamilla III <i>Jesse Escamilla III</i> CHECKED: Andrew Wells <i>Andrew Wells</i> CHECKED: Jesse Escamilla III <i>Jesse Escamilla III</i>	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	 Andrew C. Wells No. CE-156778 09-15-2022 REGISTERED PROFESSIONAL ENGINEER	<b>NOYES SLOUGH BRIDGE</b> AURORA DRIVE <b>STEEL BRIDGE RAILING, 3-TUBE</b>	 BRIDGE NO. 209 DWG. NO. 15
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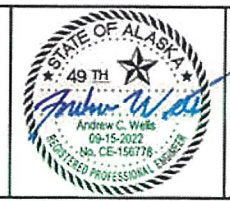
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWO0124	2022	N16	N24



- NOTES:**
1. Conform to G-00, G-05 and G-10 for all guardrail details not shown.
  2. Lap approach guardrail to prevent snags from oncoming traffic.
  3. Provide 4 1/2" horizontal slots in approach guardrail. Adjust guardrail bolts for sliding fit.

DESIGNED BY: Andrew Wells	CHECKED: Jesse Escamilla III
DRAWN BY: Sam Solie	CHECKED: Andrew Wells
QUANTITIES BY: Andrew Wells	CHECKED: Jesse Escamilla III

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION





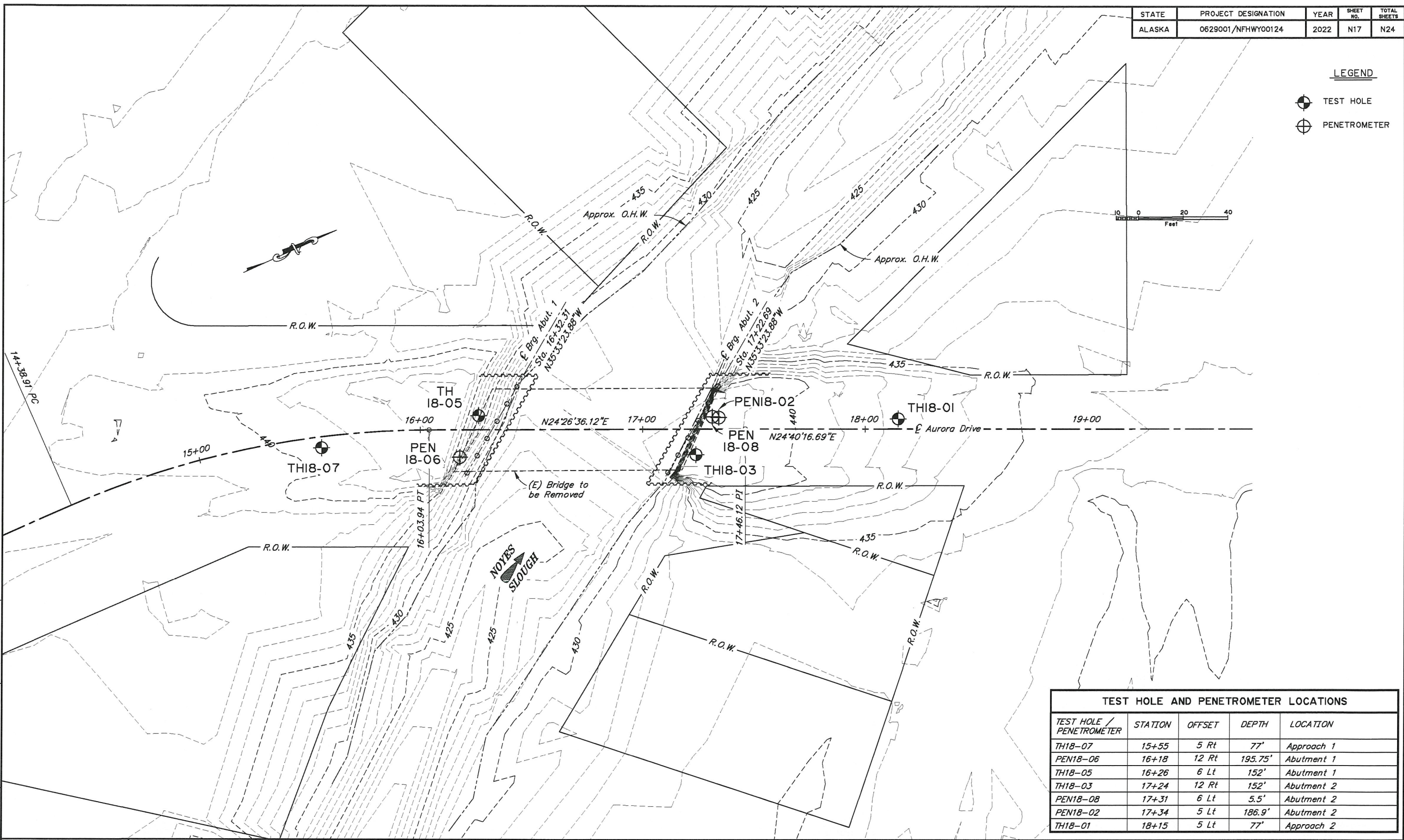
NOYES SLOUGH BRIDGE  
AURORA DRIVE  
TRANSITION RAIL, 3-TUBE

BRIDGE NO. 209  
DWG. NO. 16

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWHY00124	2022	N17	N24

**LEGEND**

-  TEST HOLE
-  PENETROMETER



TEST HOLE AND PENETROMETER LOCATIONS				
TEST HOLE / PENETROMETER	STATION	OFFSET	DEPTH	LOCATION
TH18-07	15+55	5 Rt	77'	Approach 1
PEN18-06	16+18	12 Rt	195.75'	Abutment 1
TH18-05	16+26	6 Lt	152'	Abutment 1
TH18-03	17+24	12 Rt	152'	Abutment 2
PEN18-08	17+31	6 Lt	5.5'	Abutment 2
PEN18-02	17+34	5 Lt	186.9'	Abutment 2
TH18-01	18+15	5 Lt	77'	Approach 2

R:\cadd\209\DWG\22-9-15 GEO\209\_GEO\_-1 LOC Sep 15, 2022 - 2:28pm

DESIGNED BY:	D. Hemstreet	CHECKED:	Engineer
DRAWN BY:	R. Angell	CHECKED:	J. Nicolazzo
QUANTITIES BY:	Engineer	CHECKED:	Engineer

STATE OF ALASKA  
**DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES**  
STATEWIDE MATERIALS

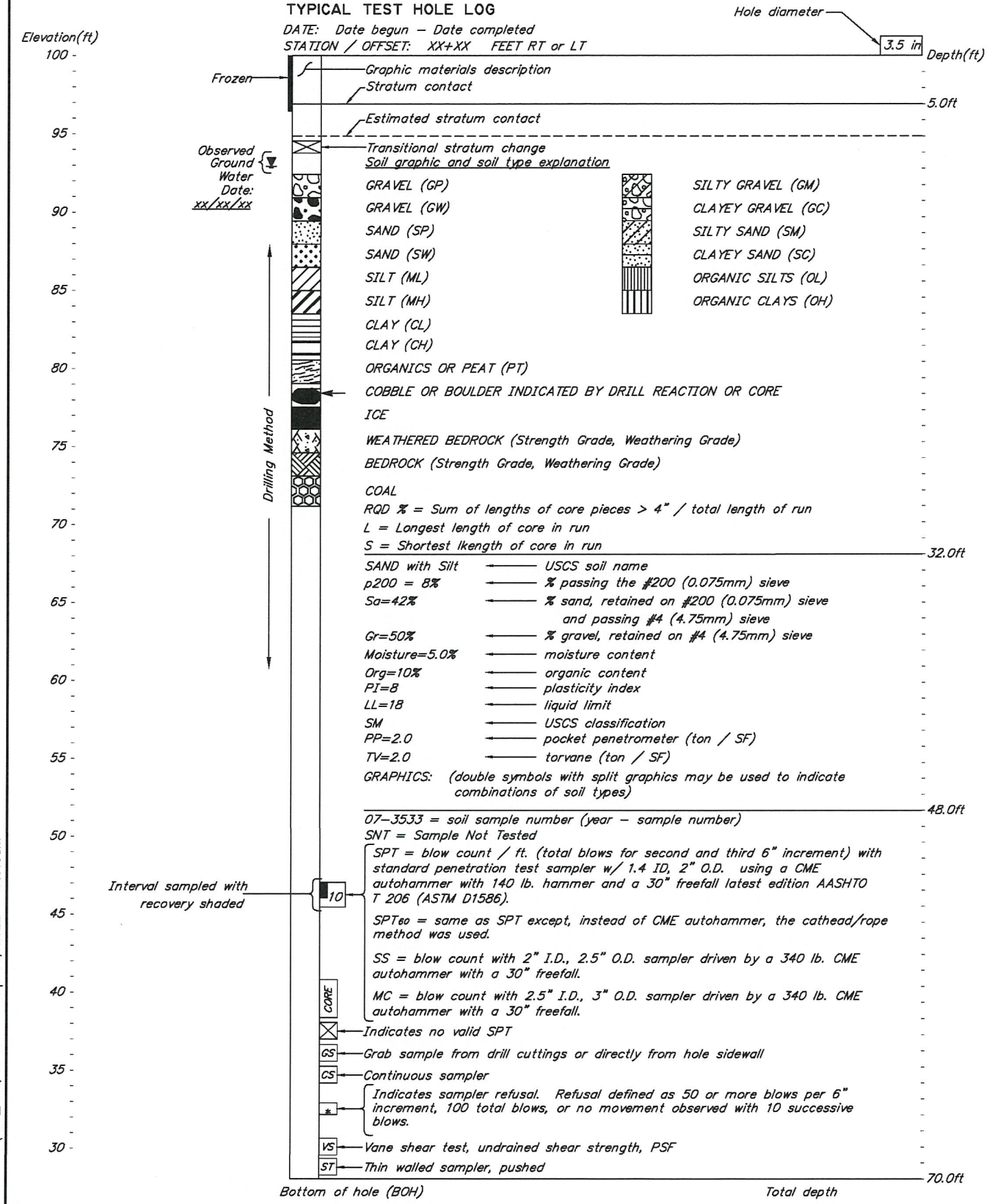


**NOYES SLOUGH BRIDGE**  
AURORA DRIVE  
**TEST HOLE & PENETROMETER LOCATION**

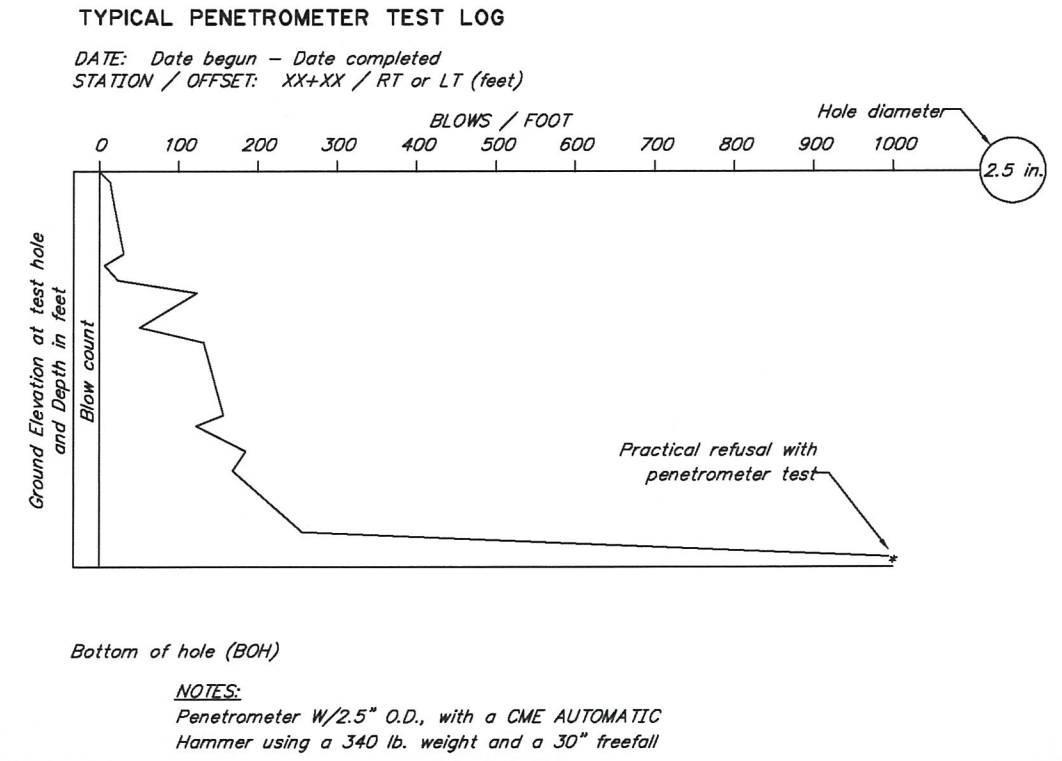


BRIDGE NO. 209  
DWG. NO. 17

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWY00124	2022	N18	N24



- NOTES:**
- 1) The test hole logs depicted graphically in these drawings are distillations of the original field logs, based on post-field investigation review and analysis. These drafted logs include changes made to field descriptions based upon laboratory test data, review and analysis. Detailed field observations of rock and soil sampled during the drilling program are not reproduced in the drafted logs.
  - 2) Description of soils follows Alaska Geotechnical Procedures manual. Classification of soils follows Unified Soil Classification System (ASTM D2487).
  - 3) The test hole logs from these sheets are an integral part of the Foundation Geology Report. See Construction Contract Bid Documents - invitation to bid/notice to bidders. Important information about the test hole logs and the foundation investigation is contained in the report. The test hole logs are not severable from and cannot be completely and correctly interpreted without reference to the Foundation Geology Report.



R:\cad\209\DWG\22-9-15 GEO\209\_GEO\_-2\_TYP Sep 16, 2022 - 10:43am

DESIGNED BY: D. Hamstreet	CHECKED: Engineer
DRAWN BY: R. Angell	CHECKED: J. Nicolazzo
QUANTITIES BY: Engineer	CHECKED: Engineer

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 STATEWIDE MATERIALS



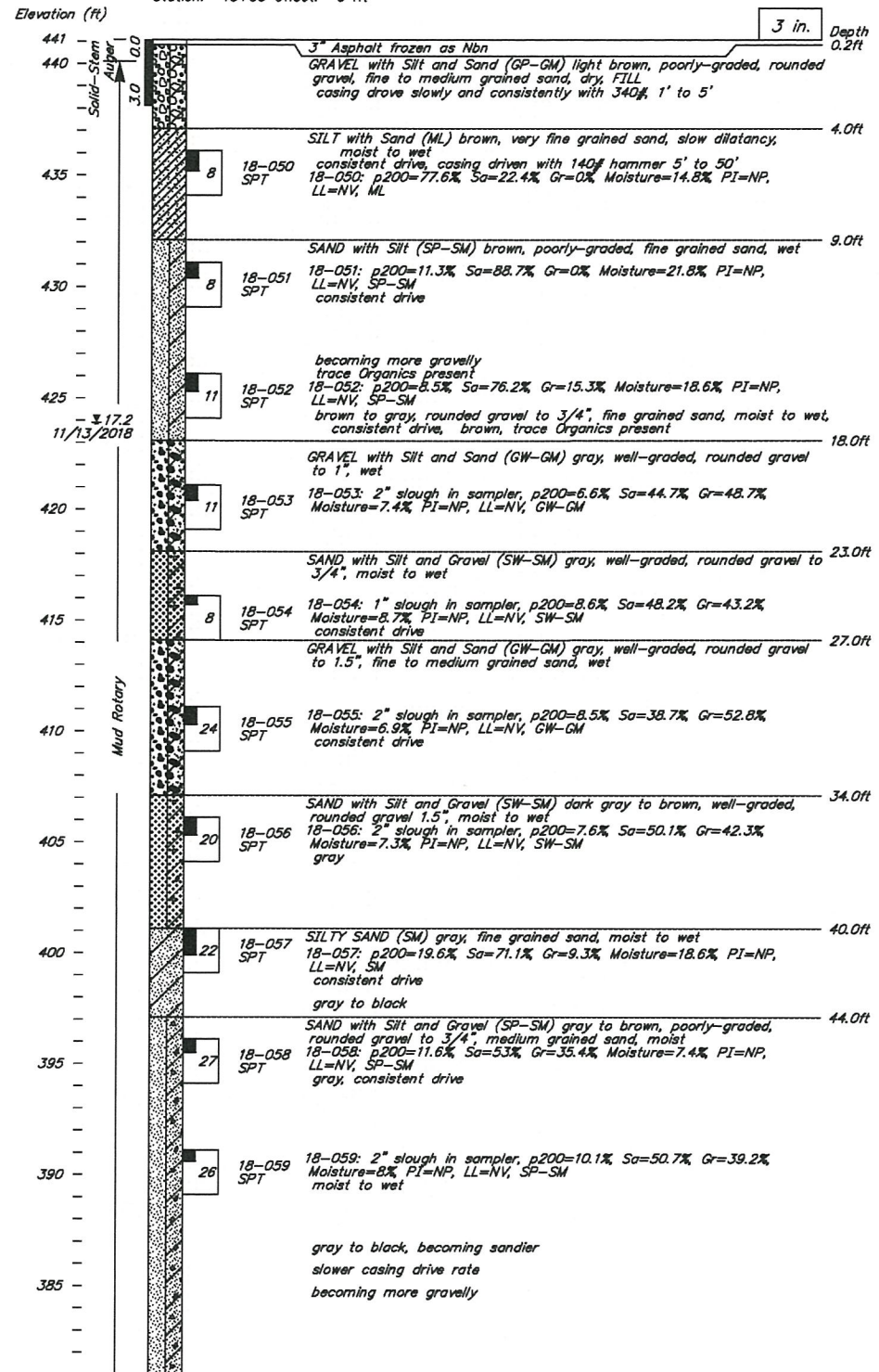
**NOYES SLOUGH BRIDGE**  
 AURORA DRIVE  
**TEST HOLE & PENETROMETER LEGEND**

BRIDGE NO. 209  
 DWG. NO. 18

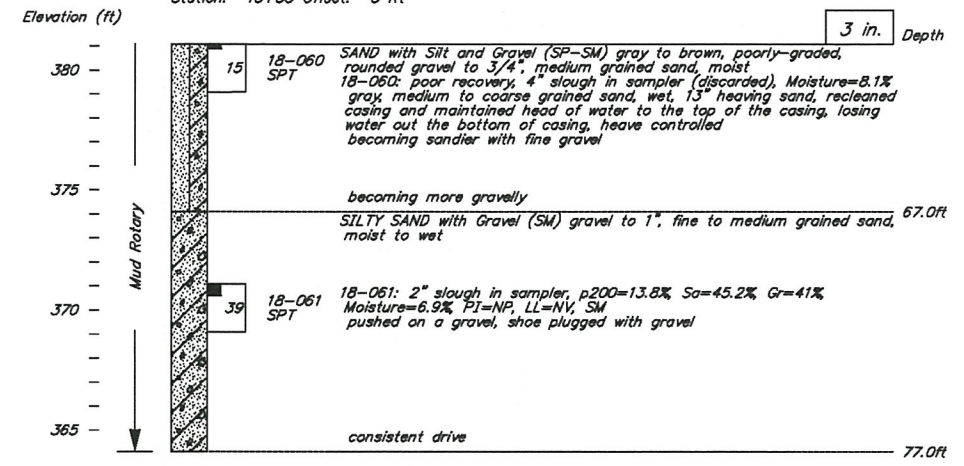


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFWY00124	2022	N19	N24

**TH18-07**  
 Date: 11/9/18 - 11/13/18  
 Station: 15+55 Offset: 5 Rt



**TH18-07 (cont)**  
 Date: 11/9/18 - 11/13/18  
 Station: 15+55 Offset: 5 Rt



B.O.H. 77 ft.  
 Notes: 3" mud rotary Swing ties; SE bridge corner 59.71' and SW bridge corner 79.68'  
 Hammer: CME Auto Hammer, 140 lb hammer  
 Equipment: CME 55  
 Drilling Method: Casing Size NW  
 Geologist: C. Bohart

R:\cad\209\DWG\22-9-15 GEO\209\_GEO\_-3 TH18-07 Sep 15, 2022 - 2:29pm

DESIGNED BY: D. Hemstreet	CHECKED: Engineer
DRAWN BY: R. Angell	CHECKED: J. Nicolazzo
QUANTITIES BY: Engineer	CHECKED: Engineer

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 STATEWIDE MATERIALS



**NOYES SLOUGH BRIDGE**  
 AURORA DRIVE  
**TEST HOLE & PENETROMETER LOGS**

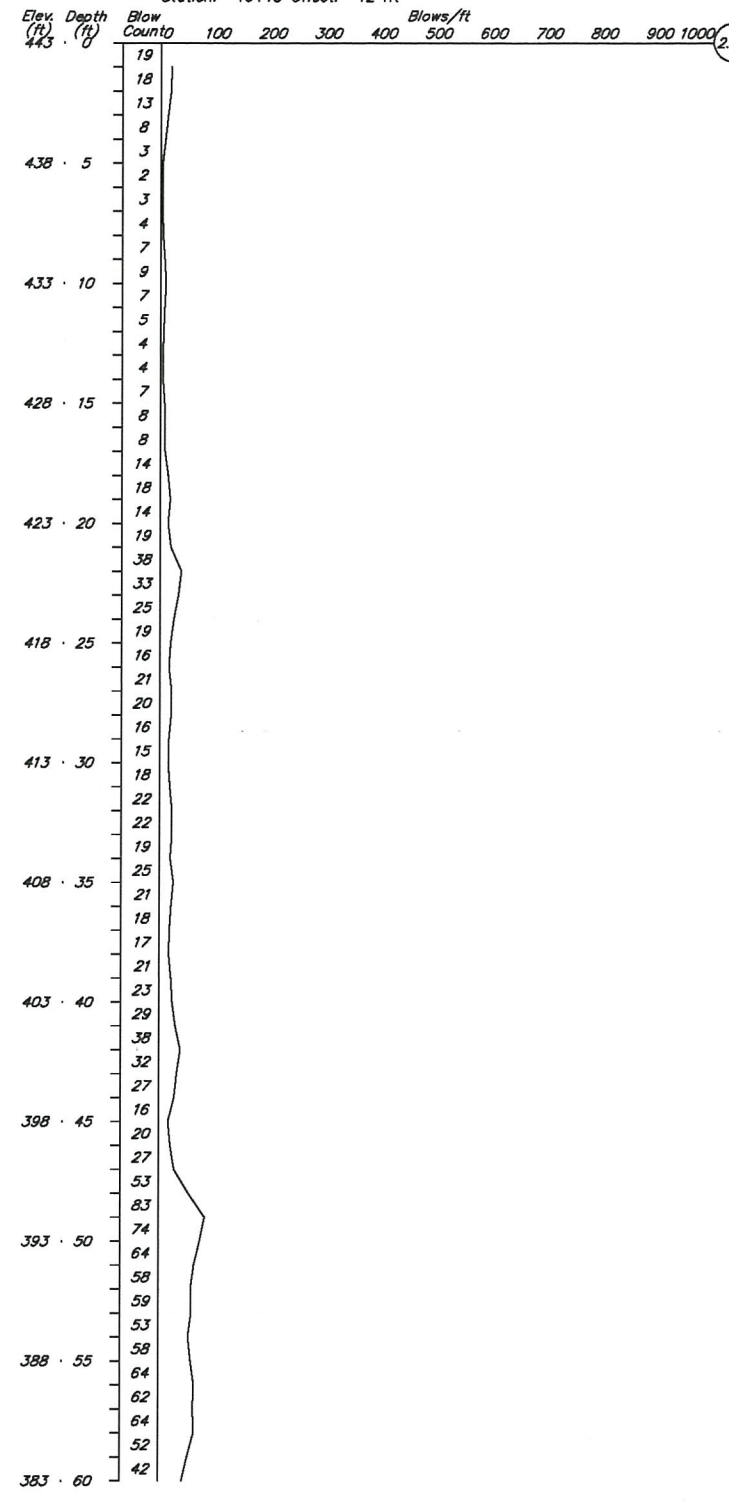


BRIDGE NO. 209  
 DWG. NO. 19

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWO0124	2022	N20	N24

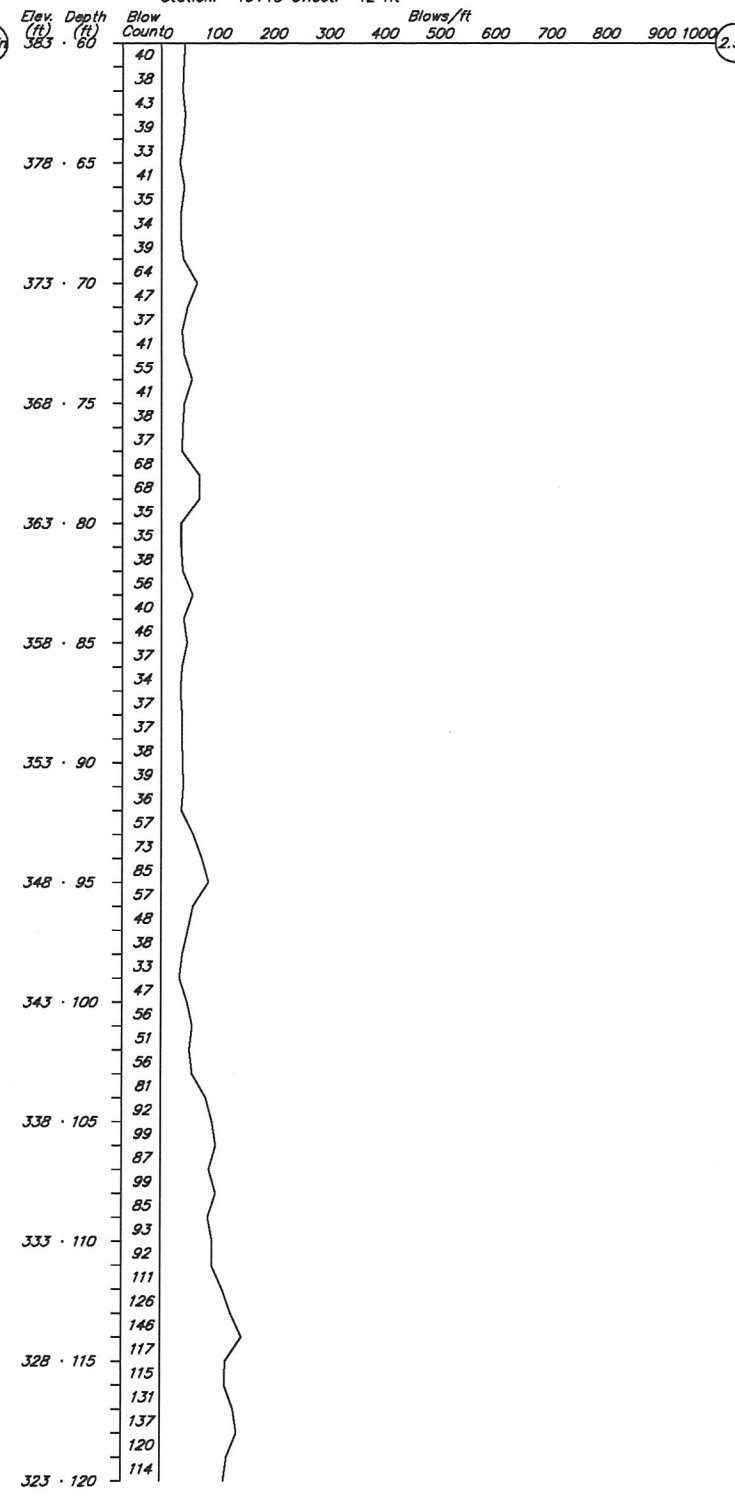
**PEN18-06**

Date: 10/25/18 - 10/29/18  
Station: 16+18 Offset: 12 Rt



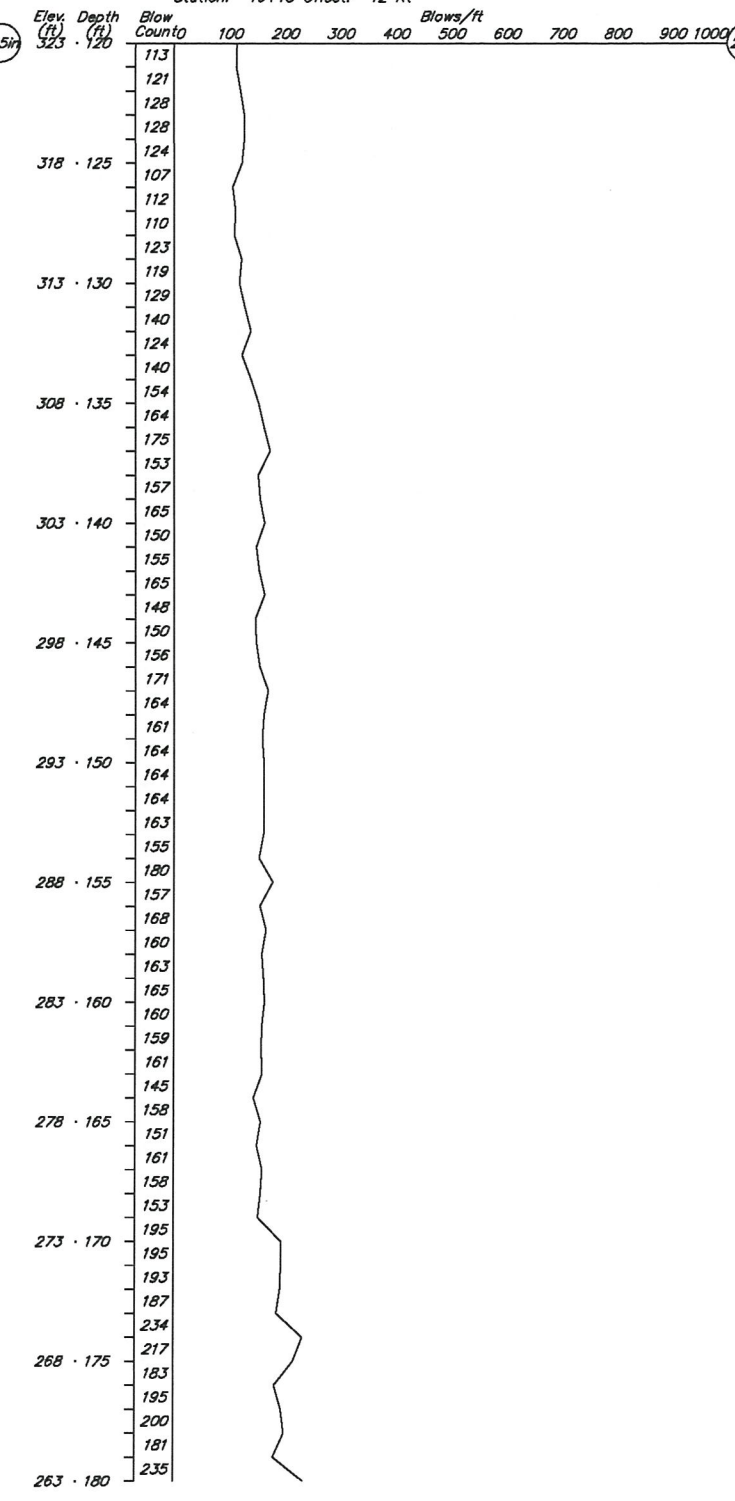
**PEN18-06 (cont)**

Date: 10/25/18 - 10/29/18  
Station: 16+18 Offset: 12 Rt



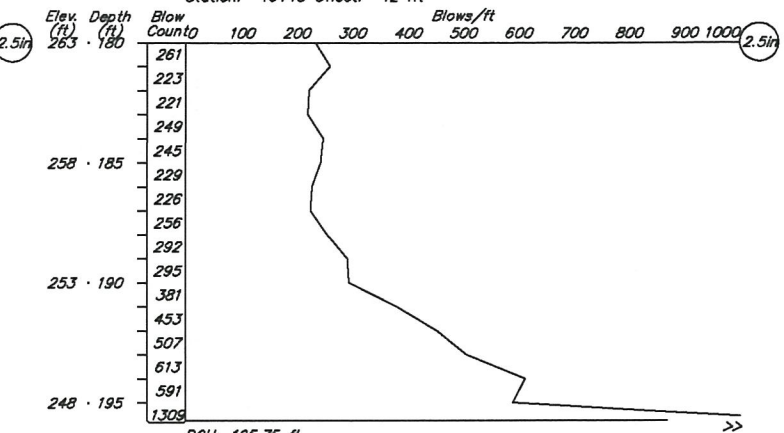
**PEN18-06 (cont)**

Date: 10/25/18 - 10/29/18  
Station: 16+18 Offset: 12 Rt



**PEN18-06 (cont)**

Date: 10/25/18 - 10/29/18  
Station: 16+18 Offset: 12 Rt



BOH: 195.75 ft  
Notes: Continued next day at 69 feet. Finished 10/29 from 195.2 to 195.75  
10.3' S of bridge deck. Swing ties; SW bridge corner 32.00' and SE bridge corner 8.93'  
Hammer: CME Auto Hammer, 340 lb hammer  
Equipment: CME 55  
Drilling Method: Penetrometer  
Geologist: C. Bohart

R:\cad\209\DWG\22-9-15 GEO\209\_GEO\_-4 PEN18-06 Sep 15, 2022 - 2:29pm

DESIGNED BY: <i>D. Hemstreet</i>	CHECKED: <i>Engineer</i>
DRAWN BY: <i>R. Angell</i>	CHECKED: <i>J. Nicolazzo</i>
QUANTITIES BY: <i>Engineer</i>	CHECKED: <i>Engineer</i>

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
STATEWIDE MATERIALS



NOYES SLOUGH BRIDGE  
AURORA DRIVE  
TEST HOLE & PENETROMETER LOGS

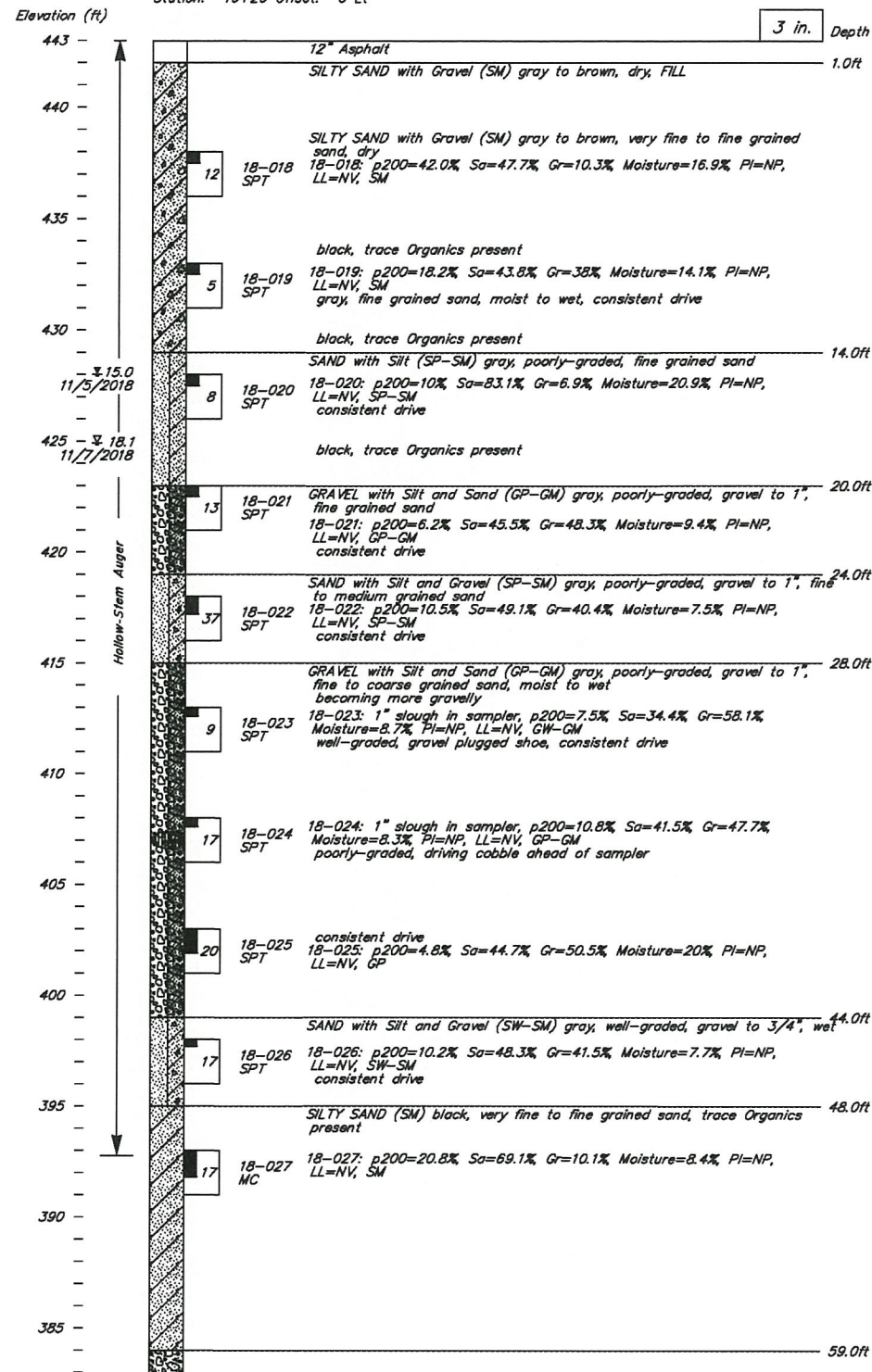


BRIDGE NO. 209  
DWG. NO. 20

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFWY00124	2022	N21	N24

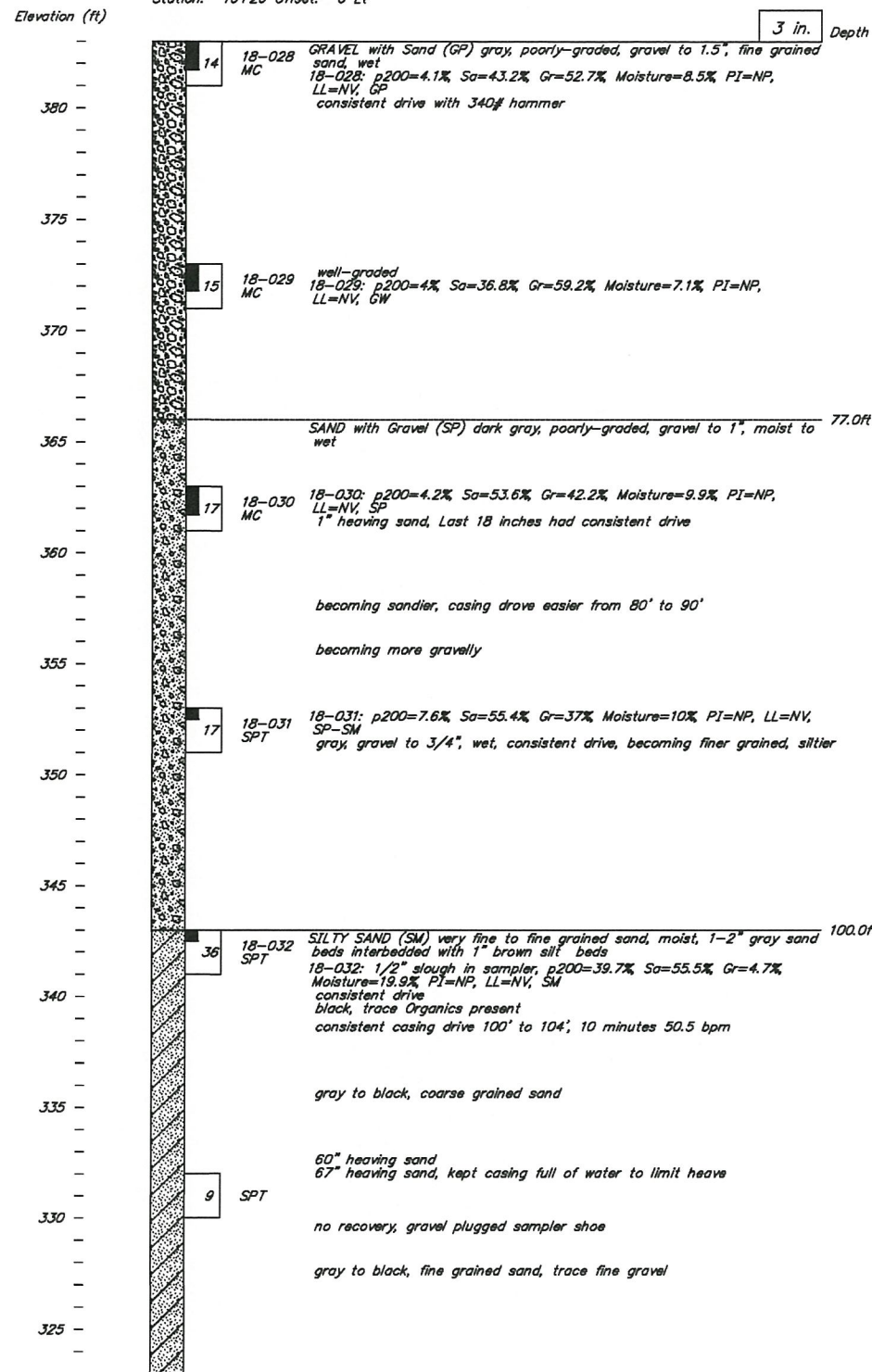
**TH18-05**

Date: 11/2/18 - 11/6/18  
Station: 16+26 Offset: 6 Lt



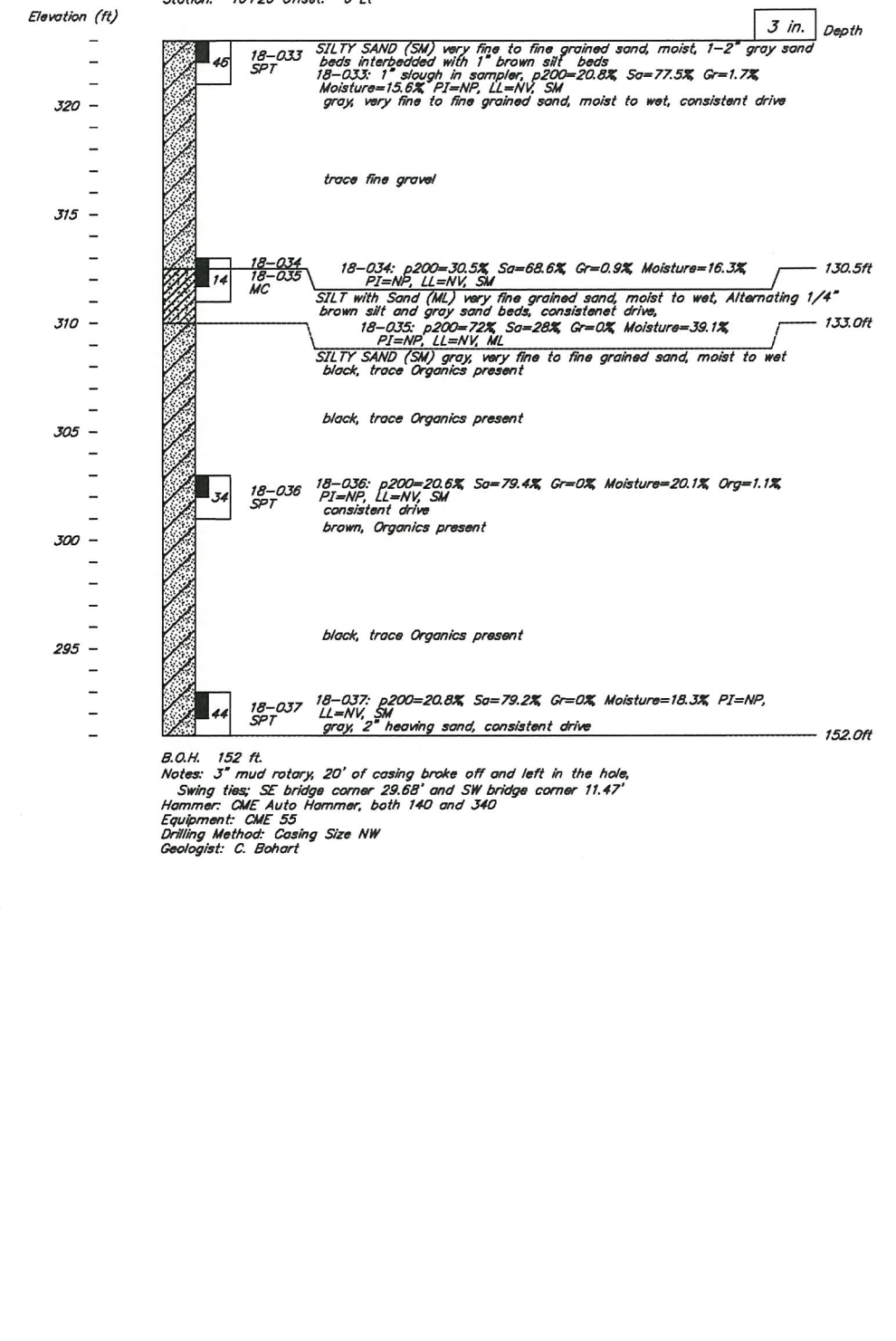
**TH18-05 (cont)**

Date: 11/2/18 - 11/6/18  
Station: 16+26 Offset: 6 Lt



**TH18-05 (cont)**

Date: 11/2/18 - 11/6/18  
Station: 16+26 Offset: 6 Lt

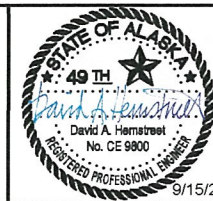


B.O.H. 152 ft.  
Notes: 3" mud rotary, 20' of casing broke off and left in the hole,  
Swing ties: SE bridge corner 29.68' and SW bridge corner 11.47'  
Hammer: CME Auto Hammer, both 140 and 340  
Equipment: CME 55  
Drilling Method: Casing Size NW  
Geologist: C. Bohart

R:\cad\209\DWG\22-9-15 GEO\209\_GEO\_-5 TH18-05 Sep 15, 2022 - 2:30pm

DESIGNED BY:	D. Hamstreet	CHECKED:	Engineer
DRAWN BY:	R. Angell	CHECKED:	J. Nicolazzo
QUANTITIES BY:	Engineer	CHECKED:	Engineer

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
STATEWIDE MATERIALS



**NOYES SLOUGH BRIDGE**  
AURORA DRIVE  
**TEST HOLE & PENETROMETER LOGS**

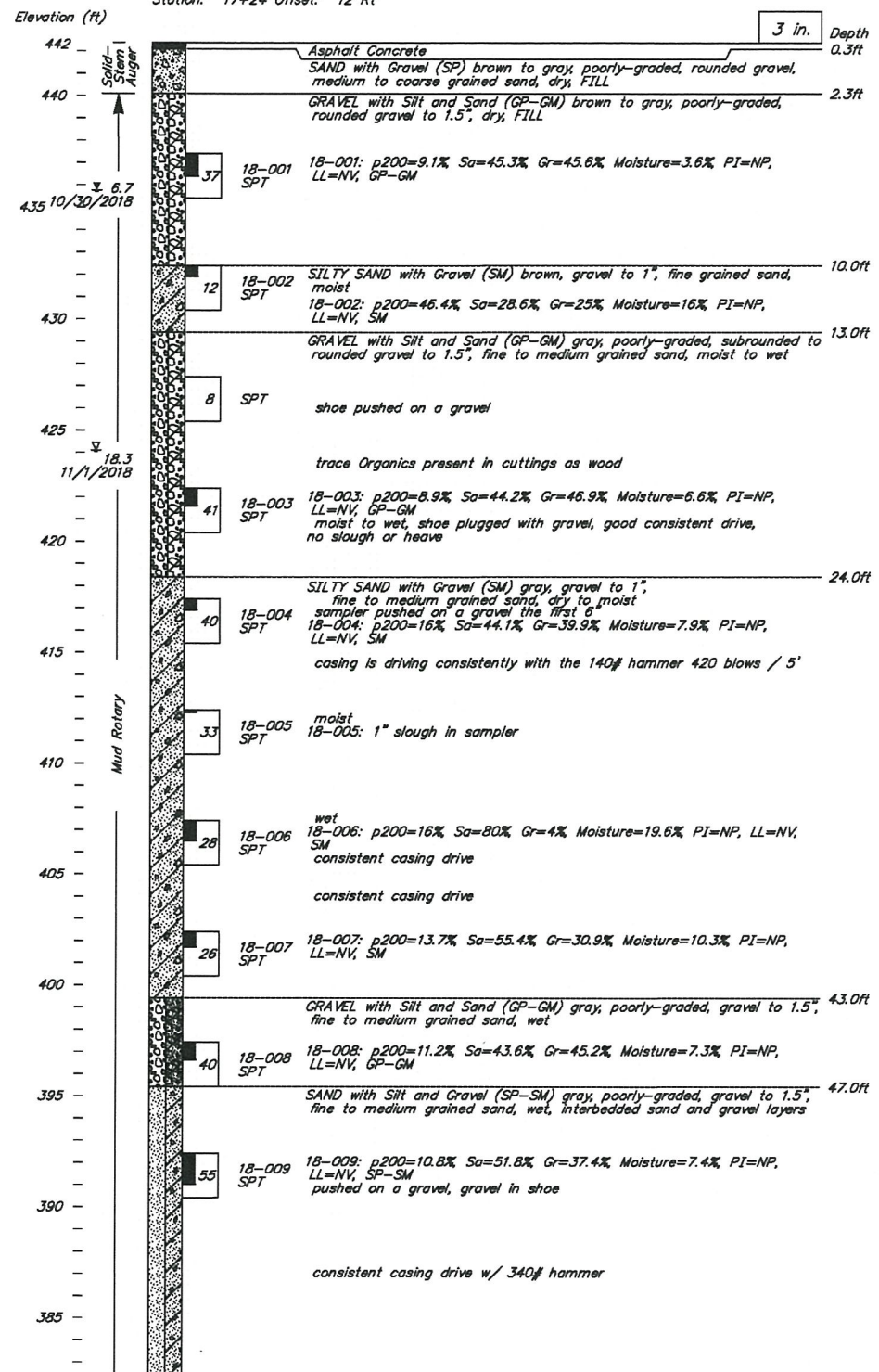


BRIDGE NO. 209  
DWG. NO. 21

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWY00124	2022	N22	N24

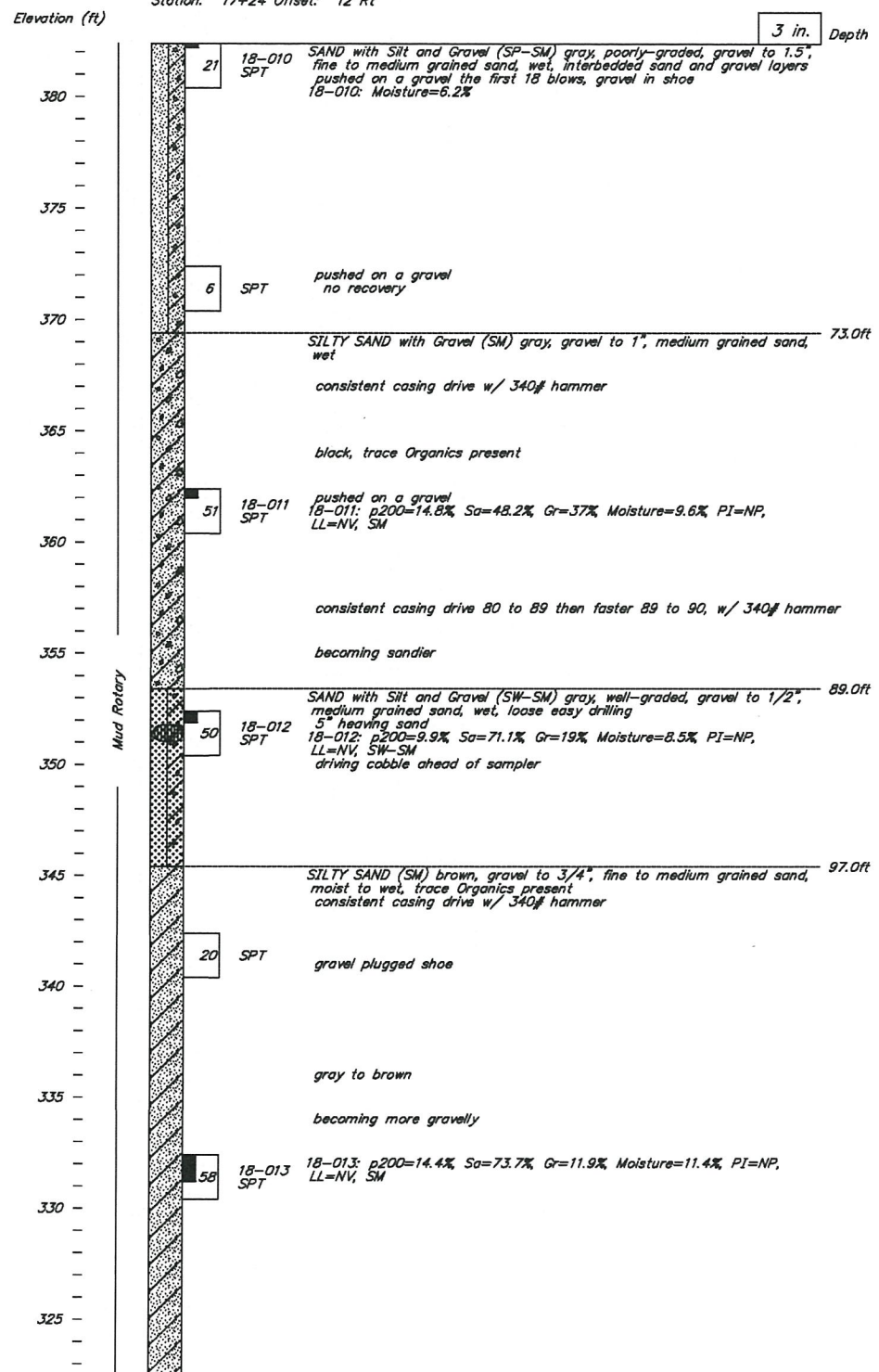
**TH18-03**

Date: 10/29/18 - 11/1/18  
Station: 17+24 Offset: 12 Rt



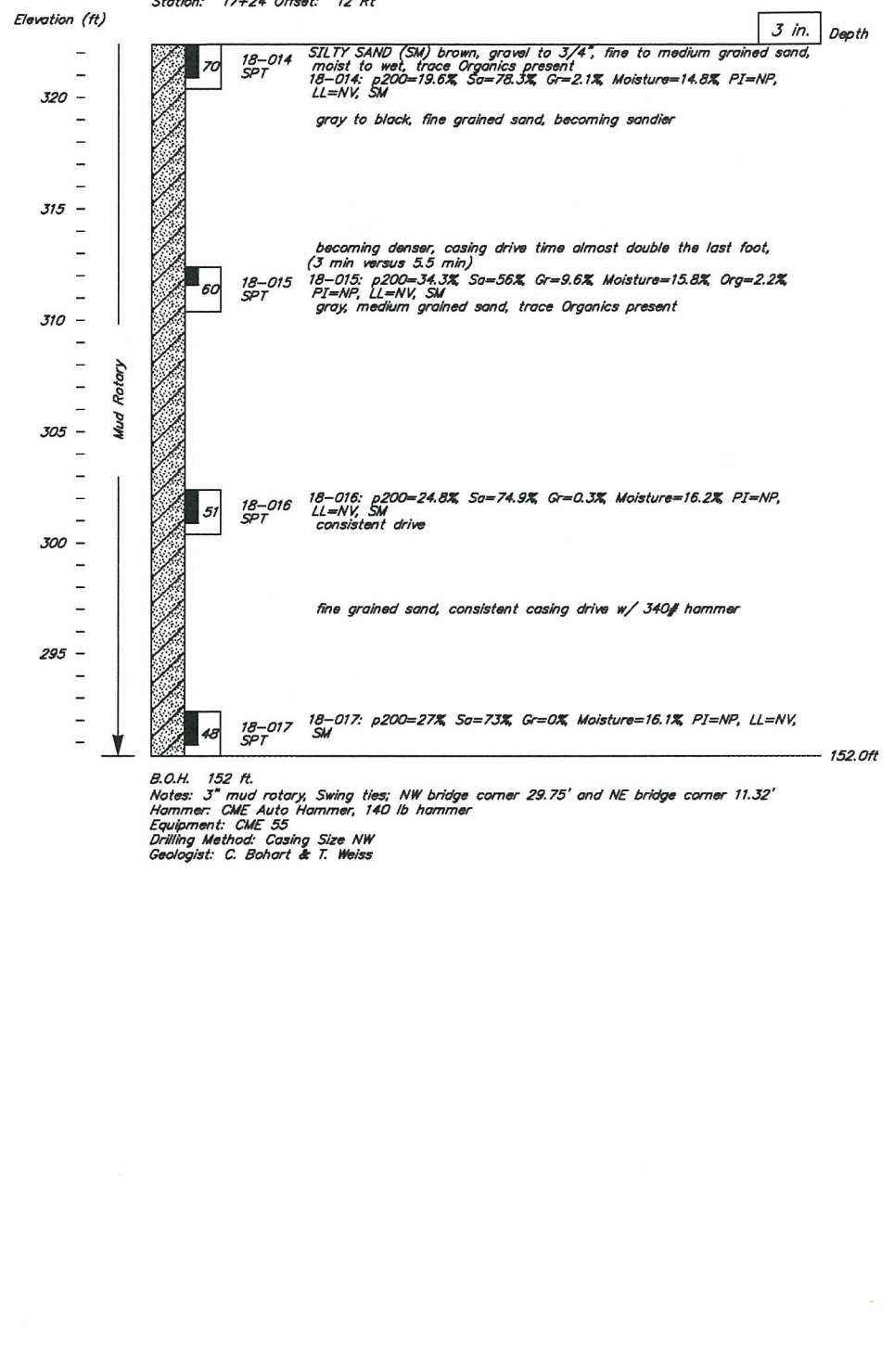
**TH18-03 (cont)**

Date: 10/29/18 - 11/1/18  
Station: 17+24 Offset: 12 Rt



**TH18-03 (cont)**

Date: 10/29/18 - 11/1/18  
Station: 17+24 Offset: 12 Rt



B.O.H. 152 ft.  
Notes: 3" mud rotary, Swing ties; NW bridge corner 29.75' and NE bridge corner 11.32'  
Hammer: CME Auto Hammer, 140 lb hammer  
Equipment: CME 55  
Drilling Method: Casing Size NW  
Geologist: C. Bohart & T. Weiss

R:\cadd\209\DWG\22-9-15 GEO\209\_GEO\_-6 TH18-03 Sep 15, 2022 - 2:30pm

DESIGNED BY:	D. Hemstreet	CHECKED:	Engineer
DRAWN BY:	R. Angell	CHECKED:	J. Nicolazzo
QUANTITIES BY:	Engineer	CHECKED:	Engineer

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
STATEWIDE MATERIALS



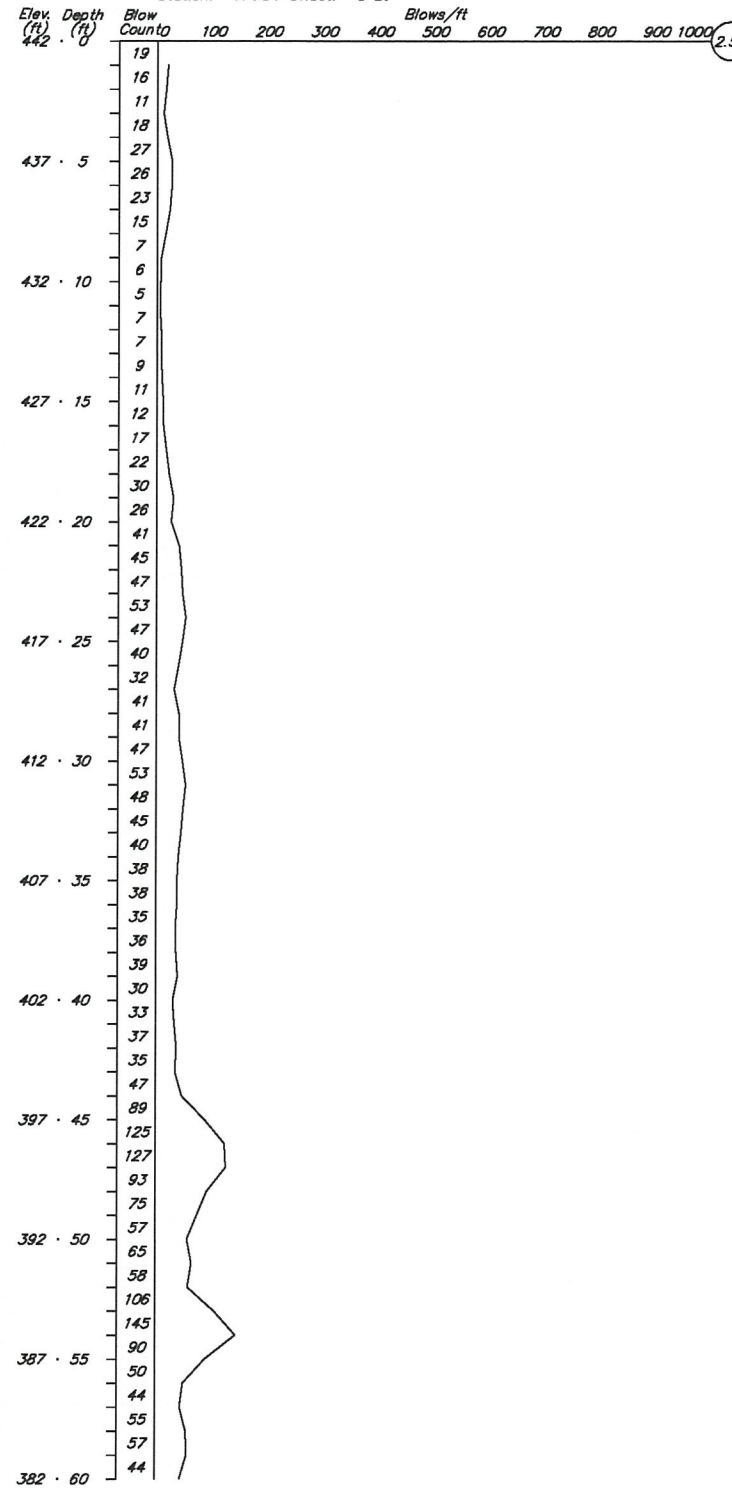
**NOYES SLOUGH BRIDGE**  
AURORA DRIVE  
**TEST HOLE & PENETROMETER LOGS**



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWY00124	2022	N23	N24

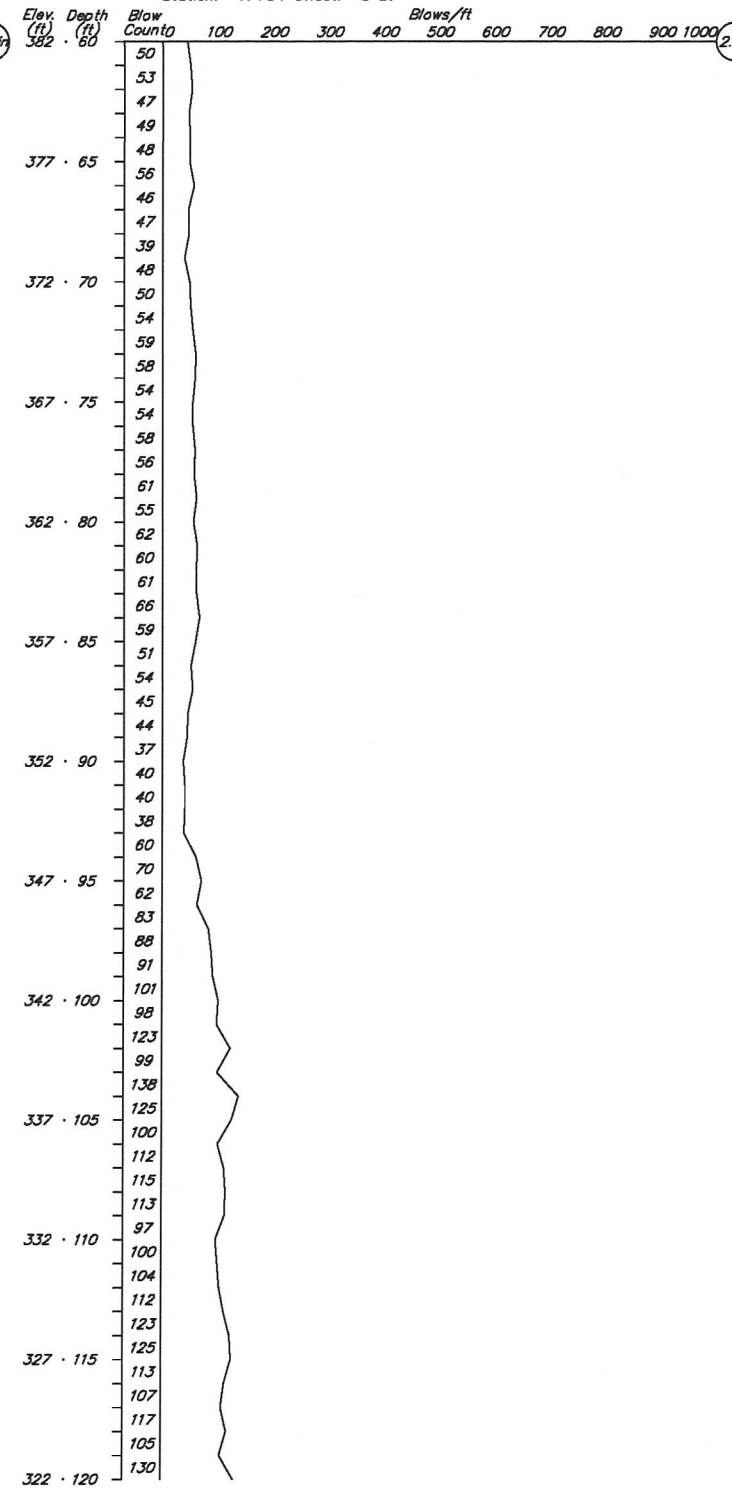
**PEN18-02**

Date: 10/24/18 - 10/25/18  
Station: 17+34 Offset: 5 Lt



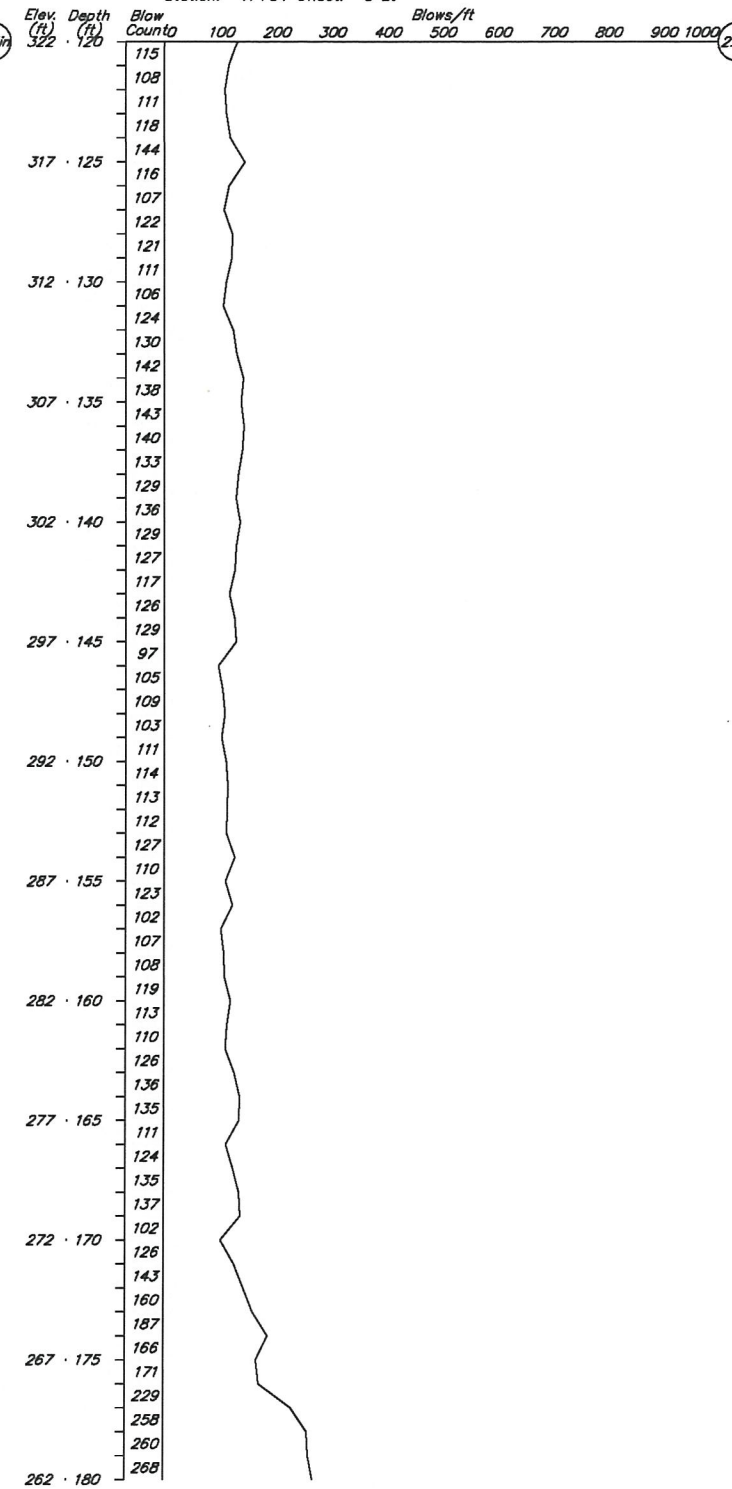
**PEN18-02 (cont)**

Date: 10/24/18 - 10/25/18  
Station: 17+34 Offset: 5 Lt



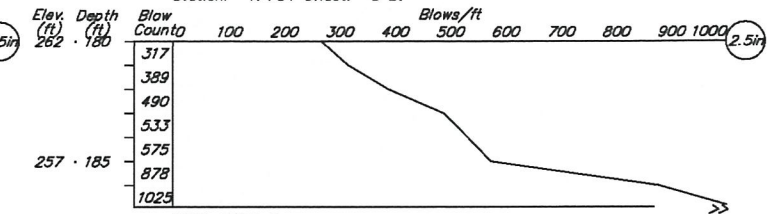
**PEN18-02 (cont)**

Date: 10/24/18 - 10/25/18  
Station: 17+34 Offset: 5 Lt



**PEN18-02 (cont)**

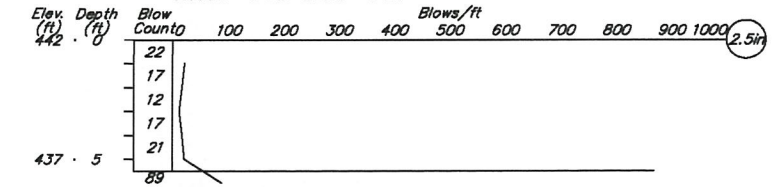
Date: 10/24/18 - 10/25/18  
Station: 17+34 Offset: 5 Lt



BOH: 186.9 ft  
Notes: Continued next day at 145-feet 10.3' N of bridge deck.  
Swing ties: NW bridge corner 11.63' and NE bridge corner 30.87'  
Hammer: CME Auto Hammer, 340 lb hammer  
Equipment: CME 55  
Drilling Method: Penetrometer  
Geologist: C. Bohart

**PEN18-08**

Date: 10/24/18 - 10/24/18  
Station: 17+31 Offset: 6 Lt



BOH: 5.5 ft  
Notes: Drove rod to 5.5 feet and met bouncing "refusal". The blunt drive shoe was marked across the face. The drillers found a buried piece of trashed iron, most likely rebar. 8.1' N of bridge deck. Swing ties: NW bridge corner 11.35' and NE bridge corner 29.65'  
Hammer: CME Auto Hammer, 340 lb hammer  
Equipment: CME 55  
Drilling Method: Penetrometer  
Geologist: C. Bohart

R:\cad\209\DWG\22-9-15 GEO\209\_GEO\_-7 PEN18-02&08 Sep 15, 2022 - 2:30pm

DESIGNED BY: D. Hamstreet	CHECKED: Engineer
DRAWN BY: R. Angell	CHECKED: J. Nicolazzo
QUANTITIES BY: Engineer	CHECKED: Engineer

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
STATEWIDE MATERIALS



NOYES SLOUGH BRIDGE  
AURORA DRIVE  
TEST HOLE & PENETROMETER LOGS

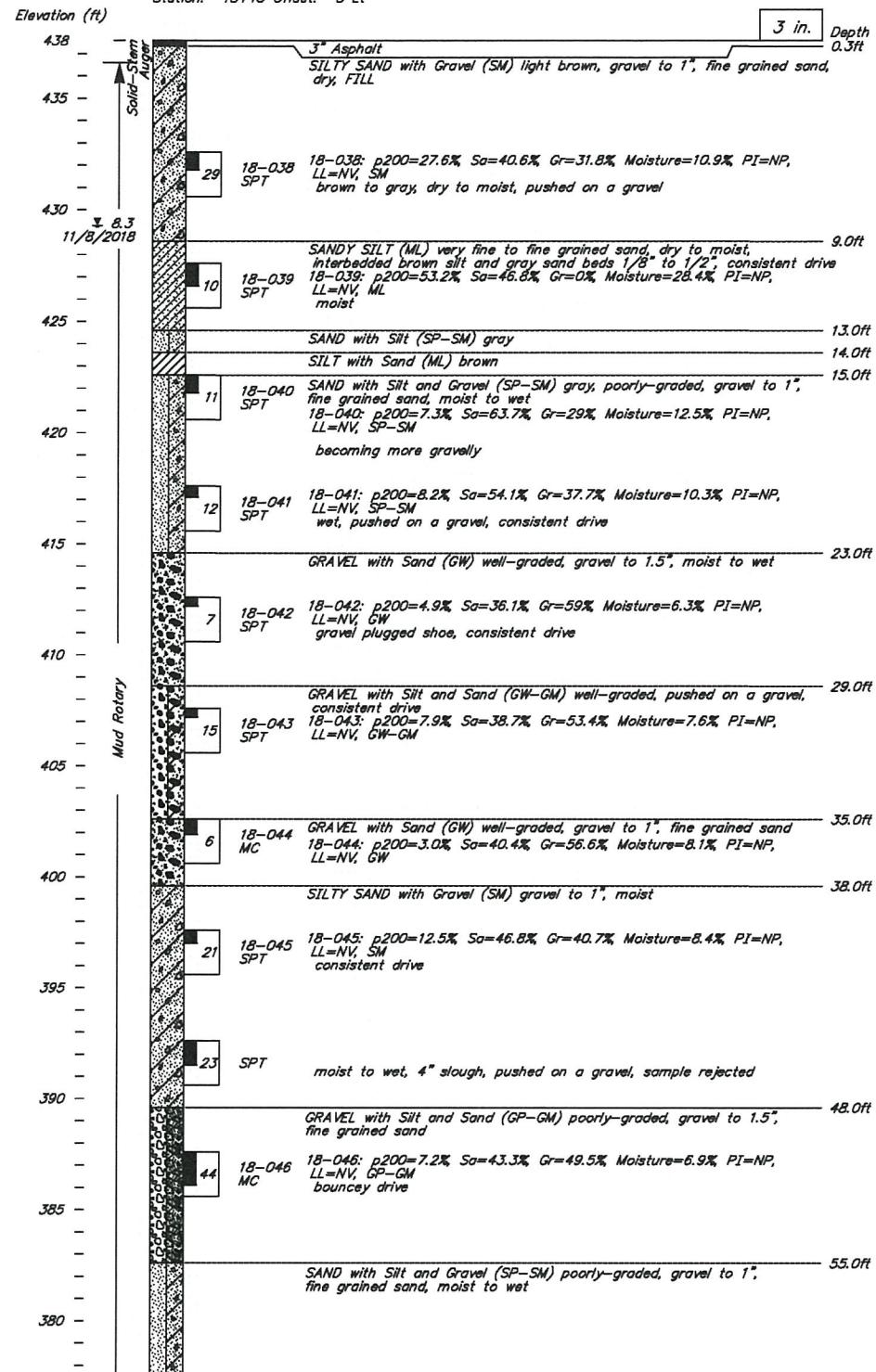


BRIDGE NO. 209  
DWG. NO. 23

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0629001/NFHWY00124	2022	N24	N24

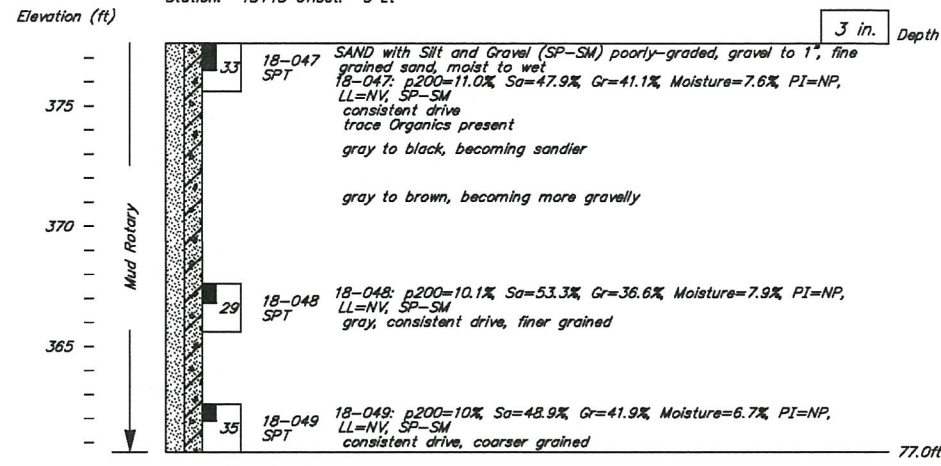
**TH18-01**

Date: 11/7/18 - 11/8/18  
Station: 18+15 Offset: 5 Lt



**TH18-01 (cont)**

Date: 11/7/18 - 11/8/18  
Station: 18+15 Offset: 5 Lt



B.O.H. 77 ft.  
Notes: 3" mud rotary, Swing ties; NW bridge corner 82.55' and NE bridge corner 101.42'  
Hammer: CME Auto Hammer, both 140 and 340  
Equipment: CME 55  
Drilling Method: Casing Size NW  
Geologist: C. Bohart

R:\cad\209\DWG\22-9-15 GEO\209\_GEO\_-8 TH18-01 Sep 15, 2022 - 2:30pm

DESIGNED BY: D. Hamstreet	CHECKED: Engineer
DRAWN BY: R. Angell	CHECKED: J. Nicolazzo
QUANTITIES BY: Engineer	CHECKED: Engineer

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
STATEWIDE MATERIALS



NOYES SLOUGH BRIDGE  
AURORA DRIVE  
TEST HOLE & PENETROMETER LOGS





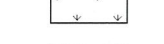
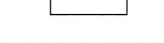

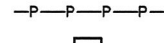
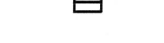



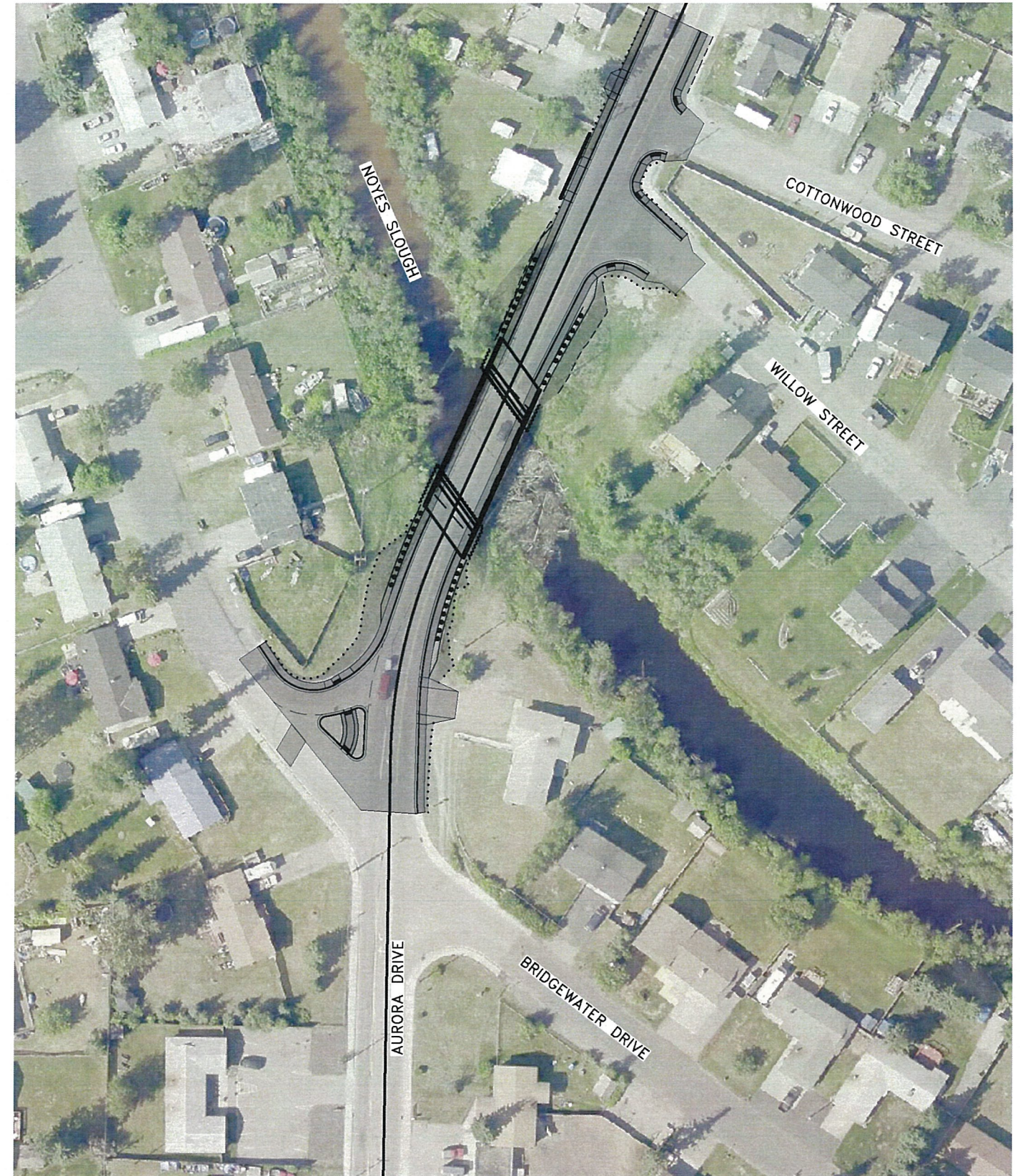
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	Q1	Q2

**GENERAL NOTES:**

1. THIS ESCP IS A GENERAL PLAN FOR GUIDING THE DEVELOPMENT OF THE CONTRACTORS SWPPP. THE CONTRACTOR IS EXPECTED TO PROVIDE ADDITIONAL DETAILS AND BMP'S BASED ON THE CONTRACTORS ACTUAL SCHEDULE AND CONSTRUCTION METHODS, AS REQUIRED TO COMPLY WITH THE CONSTRUCTION GENERAL PERMIT AKR1000000.
2. EROSION AND SEDIMENT CONTROL FEATURES MUST BE BASED ON THE DOT&PF MANUAL ALASKA STORM WATER POLLUTION PREVENTION PLAN GUIDE (OCTOBER 2016 OR LATEST VERSION) AND LATEST BMPs.
3. INITIATE EROSION AND SEDIMENT CONTROLS PRIOR TO ANY EARTH DISTURBING ACTIVITIES.
4. DEVICES MAY NEED TO BE REMOVED AND REINSTALLED TO ALLOW CONSTRUCTION ACTIVITIES TO PROCEED. MAINTAIN ALL DEVICES DAILY INCLUDING, BUT NOT LIMITED TO REMOVAL AND DISPOSAL OF ACCUMULATED SOILS, CLEANING DEVICES AND REPLACEMENT OF DAMAGED DEVICES.
5. STOCKPILE AND STAGING LOCATIONS MUST BE RECLAIMED TO THEIR ORIGINAL CONDITION. STOCKPILES AND/OR STAGING AREAS ARE NOT ALLOWED IN WETLANDS.
6. ENSURE LOADS ARE STABLE OR COVERED SO THAT NO MATERIAL ESCAPES DURING HAULING ACTIVITIES.
7. PROVIDE CONCRETE WASHOUT FACILITIES.
8. PROVIDE VEHICLE CLEANING EQUIPMENT OR OTHER APPROVED CONTROLS TO PREVENT TRACKING OF DIRT AND GRAVEL ONTO PAVED SURFACES.
9. PROVIDE INLET PROTECTION AT ALL INLETS IN AND ADJACENT TO WORK AREAS (SEE BMP 25.00 - 29.00 DOT&PF SWPPP GUIDE).
10. AVOID UNNECESSARY GROUND DISTURBANCE AND MAINTAIN NATIVE VEGETATION WHERE PRACTICABLE THROUGH THE USE OF BMPs AND DOT&PF REVIEW OF PROPOSED SWPPP.
11. VEGETATIVE BUFFER IS THE PREFERRED METHOD OF PERIMETER CONTROL FOR THIS PROJECT. WHERE VEGETATION IS NOT WIDE ENOUGH PER BMP 38.00 DOT&PF SWPPP GUIDE, A BMP MUST BE INSTALLED FOR PERIMETER CONTROL.
12. IF EXCAVATION DEWATERING WILL OCCUR ON THE PROJECT, THE CONTRACTOR MUST COMPLY WITH THE EXCAVATION DEWATERING GENERAL PERMIT Akg0020000 AND SUBMIT A NOI AND A CERTIFIED BMP PLAN TO ADEC FOR APPROVAL BEFORE DEWATERING CAN BEGIN.
13. CONTRACTOR SHALL COMPLY WITH SPECIFICATION SECTION 641. ALL IN-WATER WORK MUST BE ISOLATED FROM FLOWING WATER, REFER TO APPENDIX A OF THE CONTRACT FOR ENVIRONMENTAL PERMIT INFORMATION. SUPPORT ACTIVITIES ARE CONTRACTOR FURNISHED. REFER TO APPENDIX C OF THE CONTRACT FOR THE ESCP TEMPLATE.

**ESCP LEGEND:**

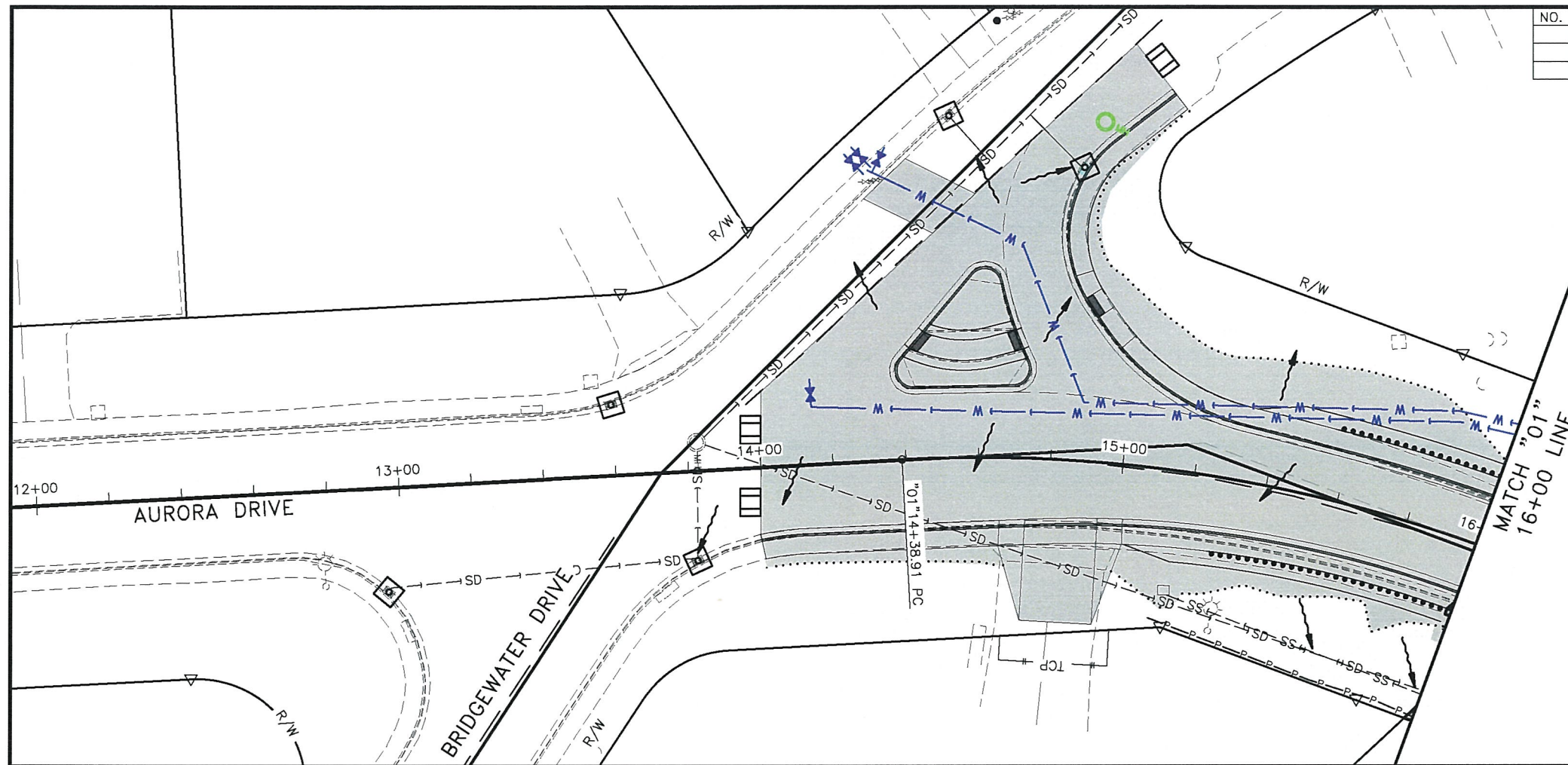
-  PARCEL BOUNDARY
-  SURFACE WATER FLOW DIRECTION
-  INLET PROTECTION (SEE BMP 08.00 DOT&PF SWPPP GUIDE)
-  VELOCITY DISSIPATOR (RIPRAP CLASS II OR FUNCTIONAL EQUIVALENT)
-  WETLANDS
-  UPLANDS
-  DITCH LINE
-  APPROXIMATE LIMITS OF EARTH DISTURBANCE
-  PERIMETER CONTROL
-  VEHICLE TRACKING ENTRANCE/EXIT



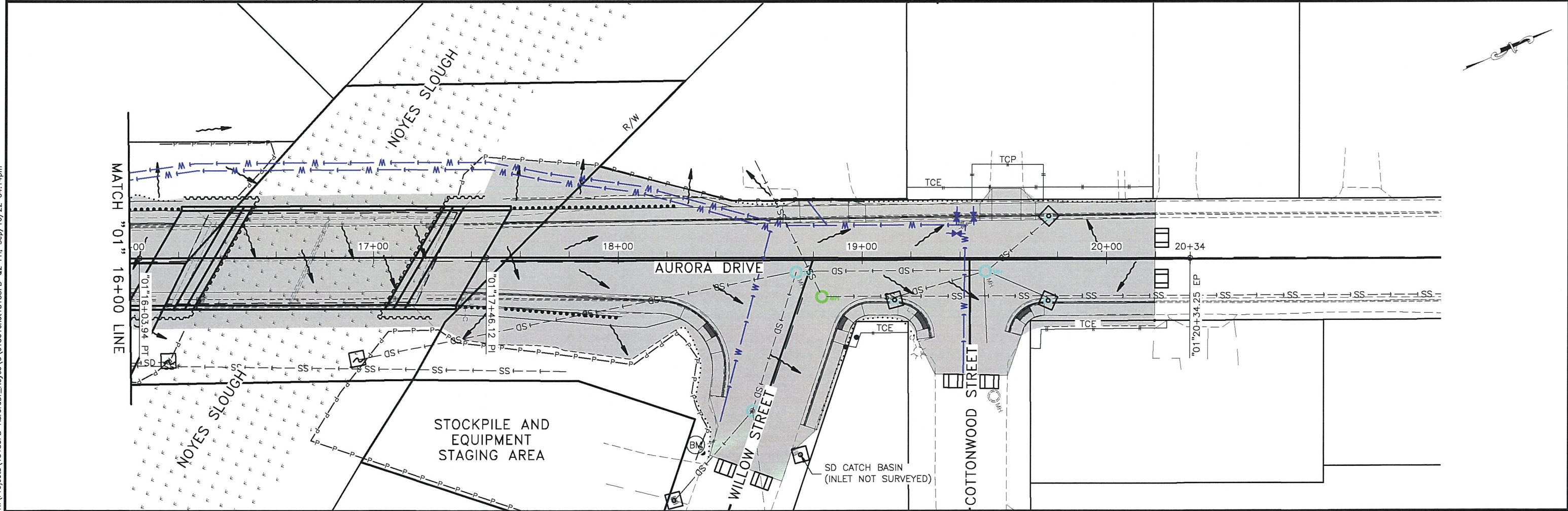
PROJECT LOCATION

EROSION AND SEDIMENT CONTROL NOTES

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHwy00124	2022	Q2	Q2



ESCP PLAN



PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AECC163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
 N:\Projects\18185FB-AuroraDr-Noyes\18185FB-C2-Fri\_Sep16122\_04:14pm



ADDENDUM NO. 1, ATTACHMENT NO. 2





NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWHY00124	2022	T1	T2



GENERAL TRAFFIC CONTROL / PHASING NOTES:

1. REFERENCE 643 SPECIFICATIONS FOR ALLOWED CLOSURES AND TRAFFIC RESTRICTIONS,
2. THESE TRAFFIC CONTROL PLANS ARE GENERIC IN NATURE. CONTRACTOR TO PROVIDE DETAILED TRAFFIC CONTROL PLAN TO ENGINEER FOR APPROVAL.
3. COORDINATE WITH MACS TRANSIT PRIOR TO ANY ROAD CLOSURE.
4. DRIVEWAYS ADJACENT TO AN EXCAVATION SHALL BE RAMPED TO PROVIDE ACCESS. DELINEATE WITH COMES.
5. ACCESS SHALL BE PROVIDED TO COMMERCIAL PROPERTIES DURING THEIR BUSINESS HOURS AND TO RESIDENTIAL PROPERTIES CONTINUOUSLY. CLOSURES SHALL NOT OCCUR WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER. MINIMUM OF 48 HOURS PRIOR TO IMPLEMENTATION OF AN APPROVED CLOSURE.
6. INSTALL SAFETY FENCING AROUND ALL OPEN EXCAVATION AT NIGHT.

LEGEND:

-  PROJECT CONSTRUCTION LIMITS
-  SIGN LOCATION
-  SIGN DESCRIPTION (SEE DESCRIPTION KEY, SHEET T2)
-  VEHICLE DETOUR

AURORA DRIVE DETOUR

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHwy00124	2022	T2	T2

ADDENDUM NO. 1, ATTACHMENT NO. 3

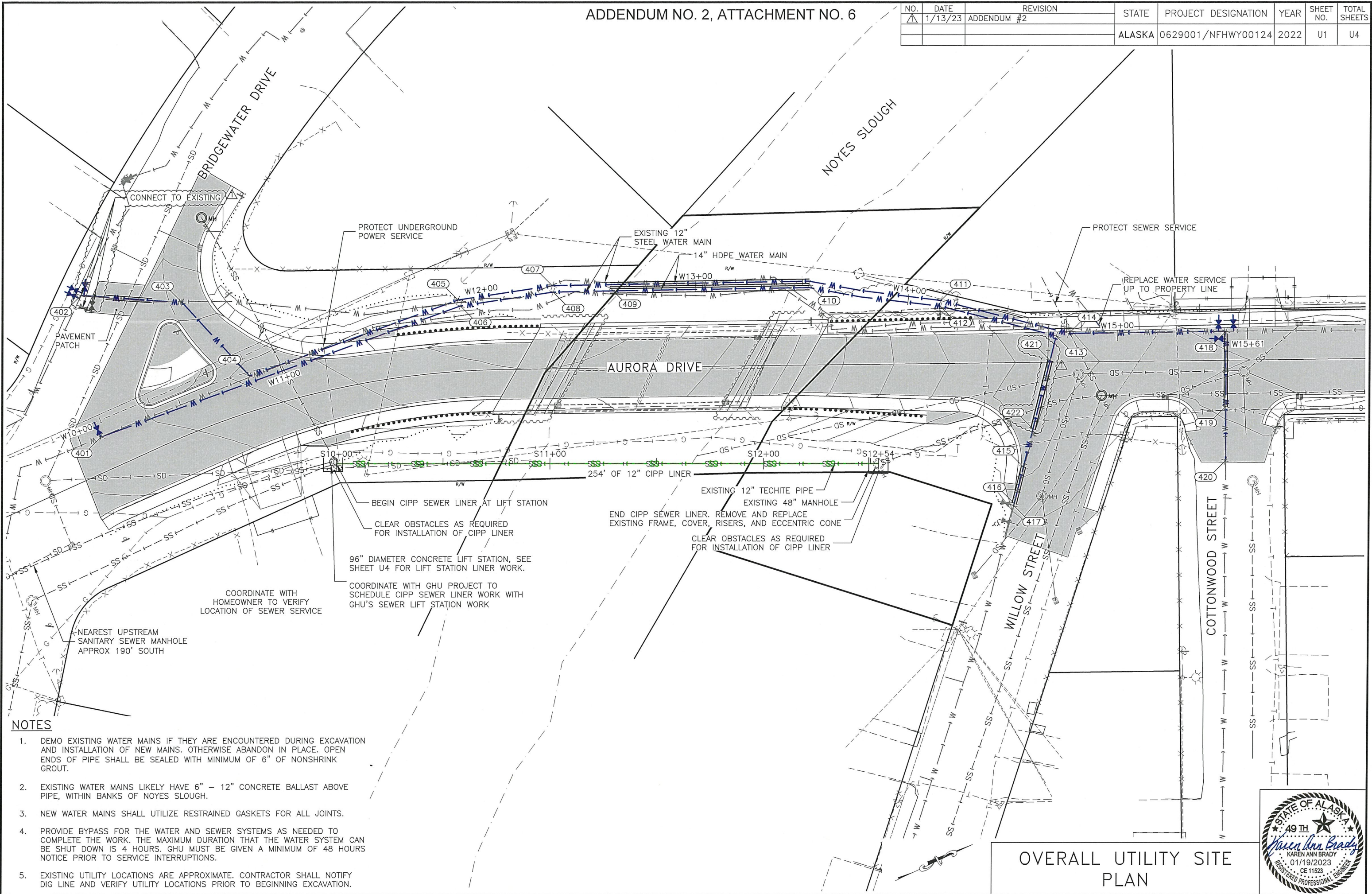
SIGN DESCRIPTION KEY				
SIGN KEY	SIGN GRAPHIC	SIGN DESIGNATION	SIGN SIZE	COMMENT
①		SPECIAL	-	8B LETTERS
②		M4-9	48" X 36"	-
③		M4-9R	48" X 36"	-
④		M4-9L	48" X 36"	-
⑤		M4-8A	48" X 36"	-
⑥		R11-4	60" X 36"	-
		SPECIAL	-	8B LETTERS
⑦		SPECIAL	-	8B LETTERS
⑧		SPECIAL	-	8B LETTERS
⑨		CW20-3	48" X 48"	-
	USED WITH 	CW1-6L	24" X 8"	-
	OR 	CW1-6R	24" X 8"	-

PLANS DEVELOPED BY: RESPEC COMPANY, LLC. CERT. OF AUTHORIZATION NO.: AECC163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
N:\Projects\18185FB-AuroraDr\_Noyes\C:\600const\18185FB-T2\_Thu\_Jan/05/23\_08:58am

TRAFFIC CONTROL SIGN  
DETAILS

ADDENDUM NO. 2, ATTACHMENT NO. 6

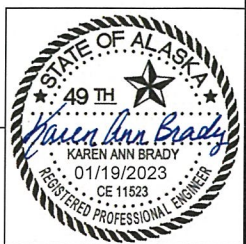
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
1	1/13/23	ADDENDUM #2	ALASKA	0629001/NFHWY00124	2022	U1	U4



- NOTES**
1. DEMO EXISTING WATER MAINS IF THEY ARE ENCOUNTERED DURING EXCAVATION AND INSTALLATION OF NEW MAINS. OTHERWISE ABANDON IN PLACE. OPEN ENDS OF PIPE SHALL BE SEALED WITH MINIMUM OF 6" OF NONSHRINK GROUT.
  2. EXISTING WATER MAINS LIKELY HAVE 6" - 12" CONCRETE BALLAST ABOVE PIPE, WITHIN BANKS OF NOYES SLOUGH.
  3. NEW WATER MAINS SHALL UTILIZE RESTRAINED GASKETS FOR ALL JOINTS.
  4. PROVIDE BYPASS FOR THE WATER AND SEWER SYSTEMS AS NEEDED TO COMPLETE THE WORK. THE MAXIMUM DURATION THAT THE WATER SYSTEM CAN BE SHUT DOWN IS 4 HOURS. GHU MUST BE GIVEN A MINIMUM OF 48 HOURS NOTICE PRIOR TO SERVICE INTERRUPTIONS.
  5. EXISTING UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL NOTIFY DIG LINE AND VERIFY UTILITY LOCATIONS PRIOR TO BEGINNING EXCAVATION.

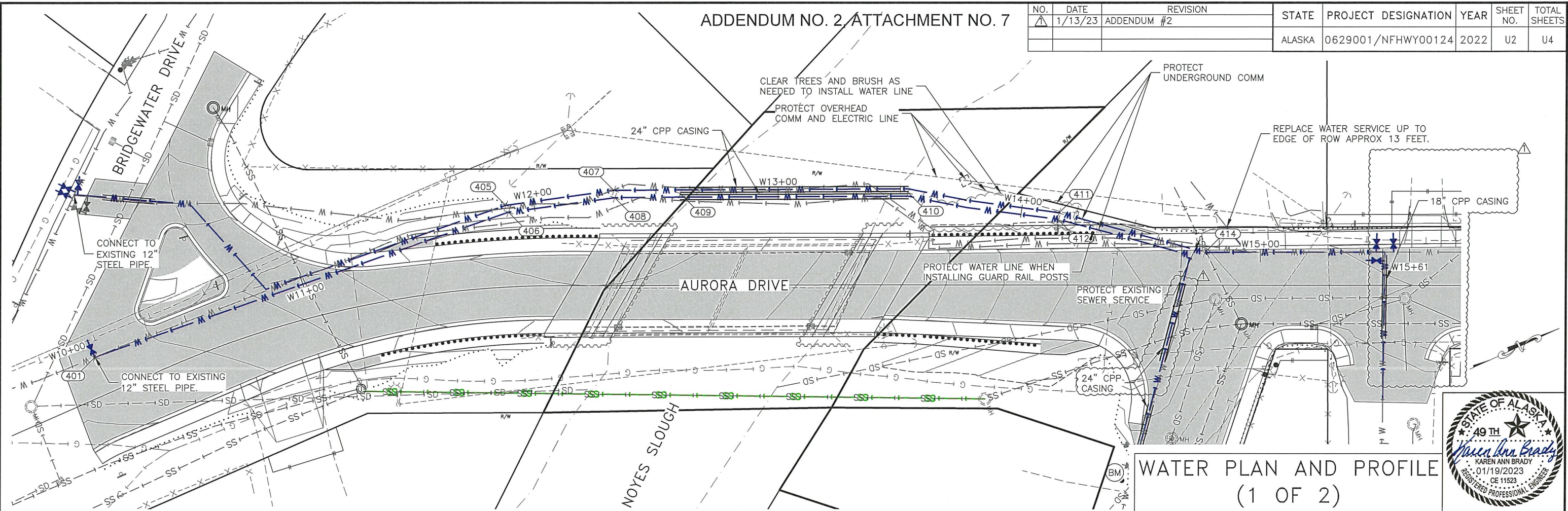
PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AEC0163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
 N:\Projects\18185FB-AuroraDr-Noyes\18185FB-U1\_Thu, Jan/19/23 01:46pm

OVERALL UTILITY SITE PLAN

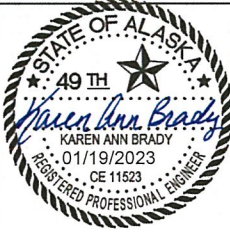


ADDENDUM NO. 2 ATTACHMENT NO. 7

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
1	1/13/23	ADDENDUM #2	ALASKA	0629001/NFHWY00124	2022	U2	U4

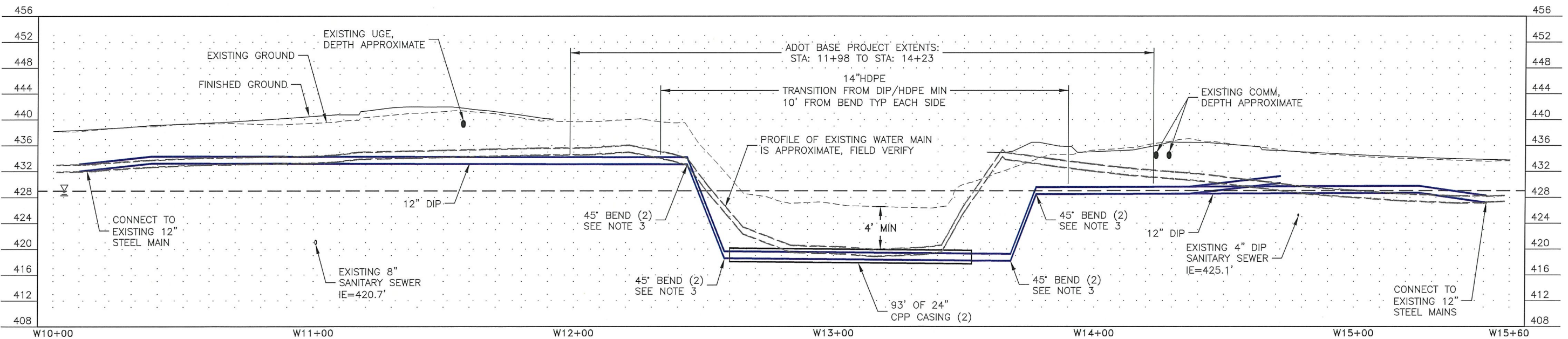


WATER PLAN AND PROFILE  
(1 OF 2)



NOTES

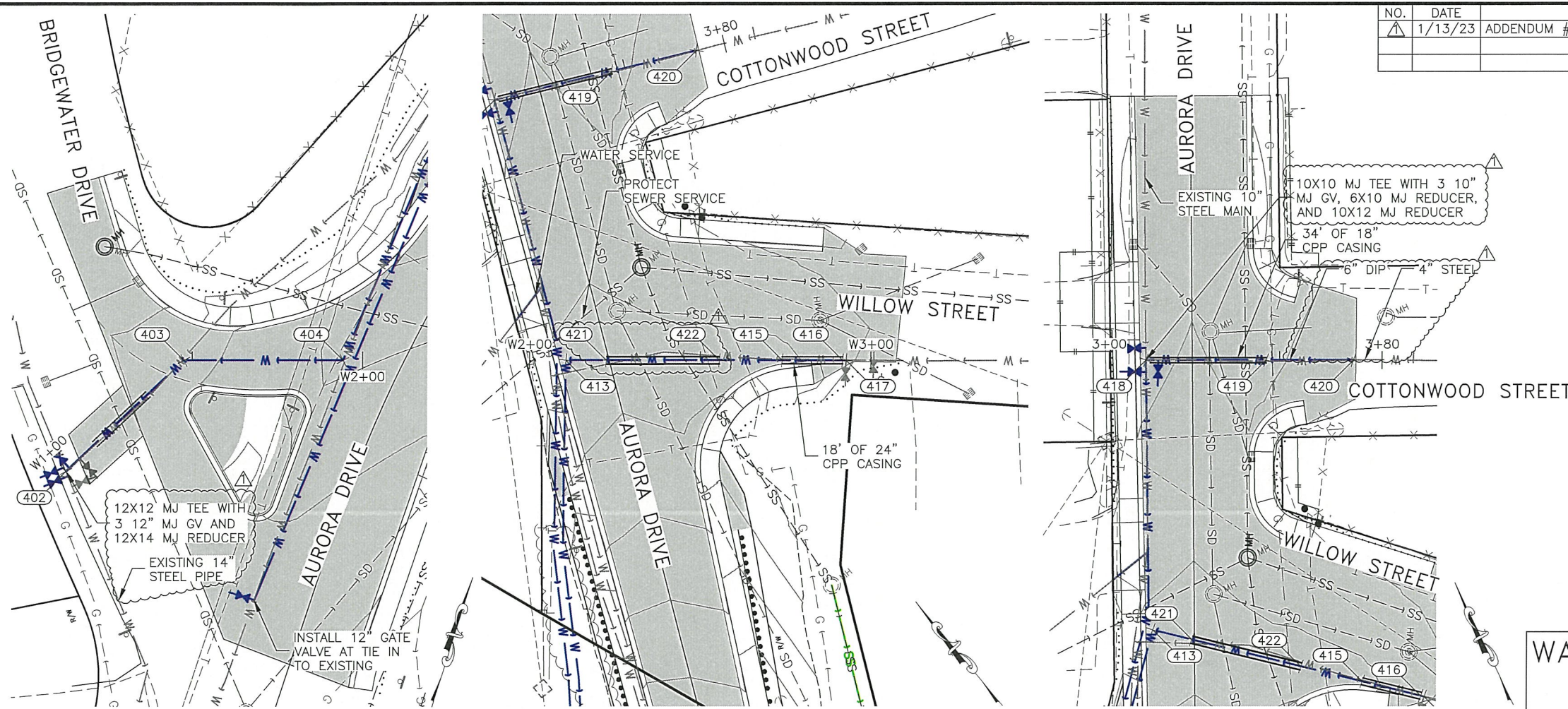
- GROUND WATER LEVEL OF 429.0' SHOWN IS BASED ON MEASUREMENTS TAKEN AT NOYES SLOUGH ON JULY 16, 2020. WATER LEVEL IS EXPECTED TO BE SIGNIFICANTLY LOWER IN THE EARLY SPRING. SEE SLOUGH CROSSING DETAIL ON SHEET U4.
- DEPTH AND LOCATION OF EXISTING UTILITIES ARE SKETCHED FROM ASBUILTS AND LIMITED SURVEY AND ARE APPROXIMATE IN NATURE. VERIFY UTILITY CONFLICTS PRIOR TO BEGINNING EXCAVATION.
- CONTRACTOR MAY OMIT 45° BENDS IF A SUITABLE PLAN FOR BENDING HDPE PIPE IS PROVIDED.
- ADOT BASE PROJECT EXTENTS CONSISTS OF WATER MAIN REPLACEMENT BETWEEN STA: 11+98 AND STA: 14+23 AND RELINING OF SEWER MAIN.



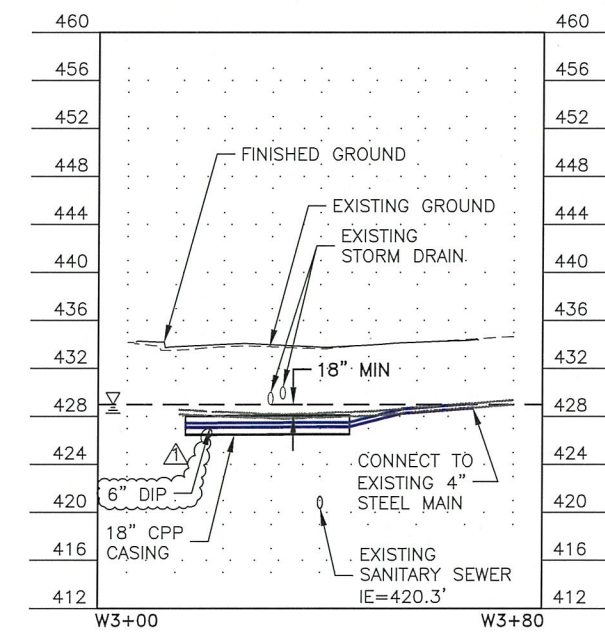
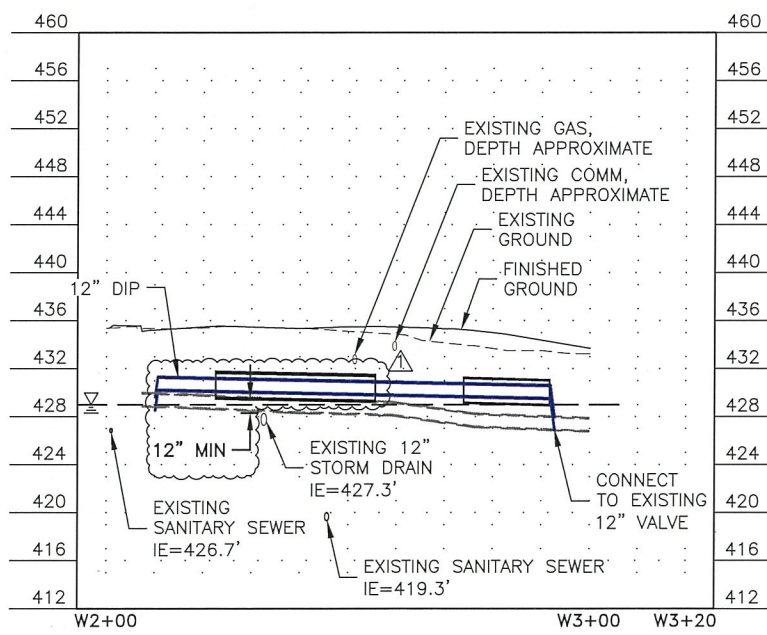
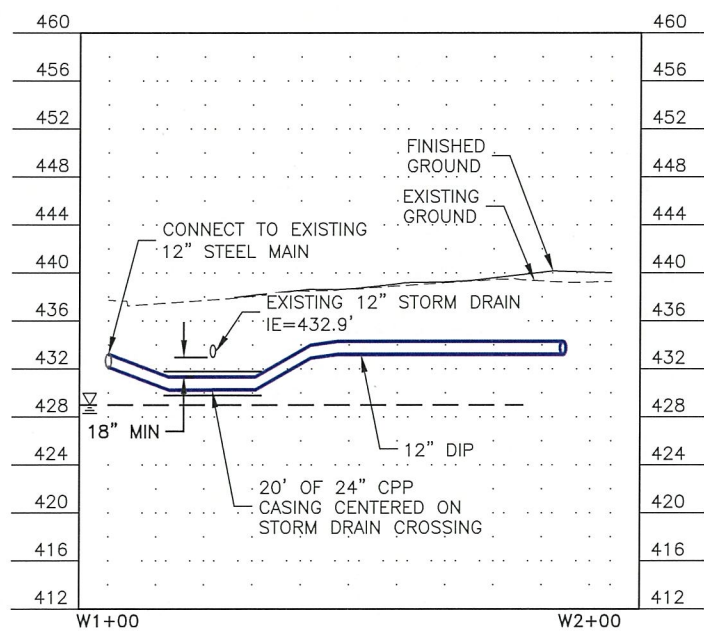
PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AECC163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
 N:\Projects\18185FB-AuroraDr-Noyes\18185FB-U2\_Thu, Jan/19/23 01:46pm

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
1	1/13/23	ADDENDUM #2	ALASKA	0629001/NFHWY00124	2022	U3	U4

ADDENDUM NO. 2, ATTACHMENT NO. 8



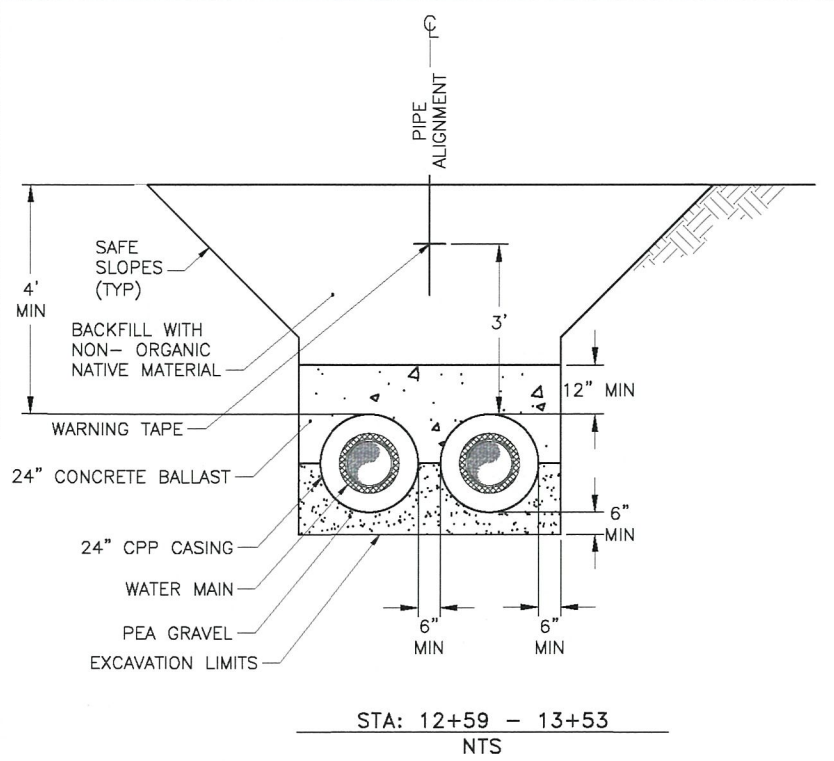
WATER PLAN AND PROFILE  
(2 OF 2)



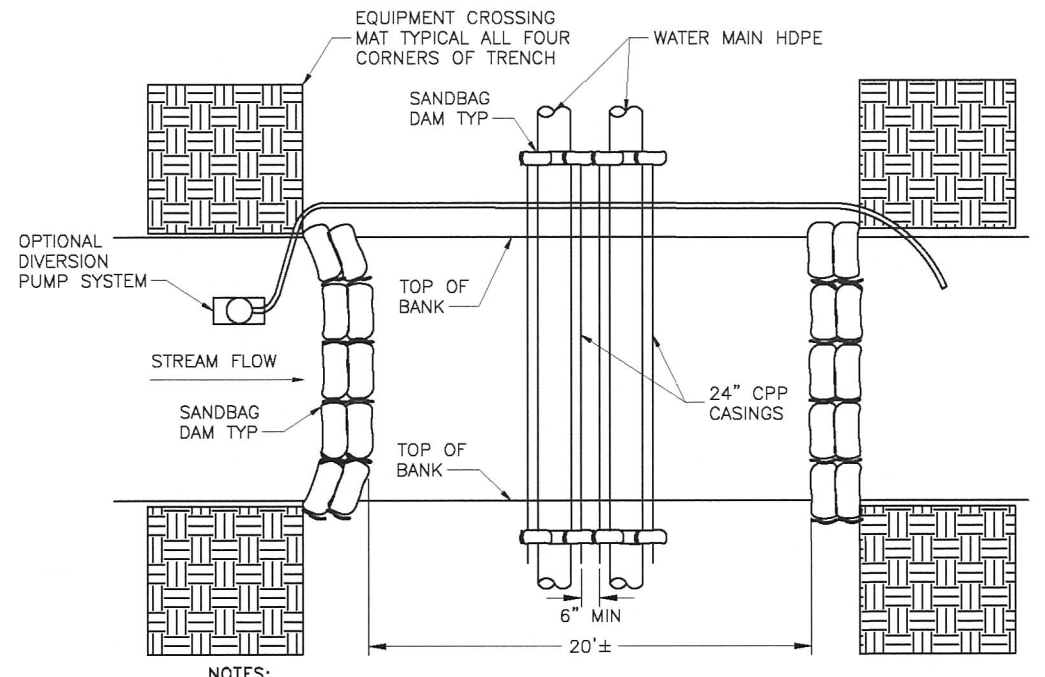
WATER MAIN CONTROL					
POINT NO.	STATION	NORTHING	EASTING	ELEVATION	DESCRIPTION
401	W10+09.99	204730.97	671095.16		CONNECT TO EX, NEW 12" GV
402	W1+00.00	204750.73	671031.04		CONNECT TO EX
403	W1+47.56	204792.16	671054.35		45° BEND
404	W1+94.32	204806.03	671099.01		67.5° BEND
405	W11+88.86	204909.36	671108.49		11.25° BEND
406	W11+89.21	204909.14	671111.48		11.25° BEND
407	W12+33.07	204952.04	671121.26		11.25° BEND
408	W12+33.23	204951.09	671124.15		11.25° BEND
409	W12+59.90	204976.04	671133.68	418.09	END OF CASING
410	W13+53.11	205060.96	671172.12	417.74	END OF CASING
411	W14+15.14	205113.46	671205.31		11.25° BEND
412	W14+15.56	205112.03	671207.77		11.25° BEND
413	W2+10.71	205155.12	671243.52		90° BEND
414	W14+77.34	205161.00	671244.94		11.25° BEND
415	W2+74.08	205115.14	671292.68	428.81	END OF CASING
416	W2+91.75	205103.98	671306.39	428.33	END OF CASING
417	W2+92.75	205103.36	671307.16		CONNECT TO EX
418	W3+10.76	205227.93	671275.43	426.50	12"x10"x4" TEE, VALVE CLUSTER, END OF CASING
419	W3+46.09	205212.84	671307.38	426.56	END OF CASING
420	W3+71.61	205201.95	671330.45		CONNECT TO EX
421	W2+22.53	205147.66	671252.69		END OF CASING
422	W2+55.60	205126.80	671278.34		END OF CASING

PLANS DEVELOPED BY: RESPEC COMPANY, LLC. CERT. OF AUTHORIZATION NO.: AECC163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414

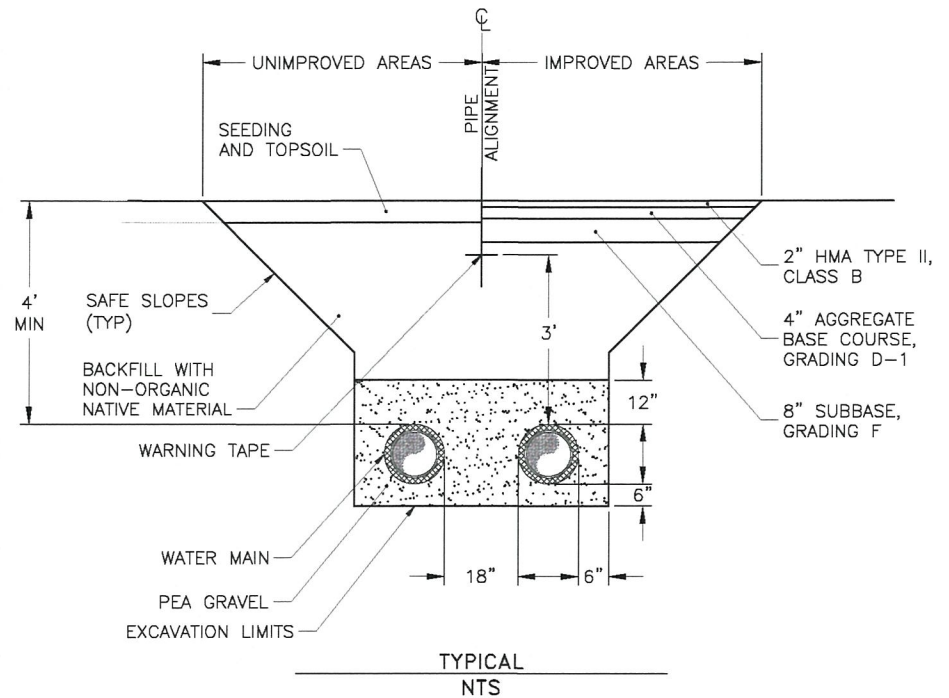
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0629001/NFHWY00124	2022	U4	U4



STA: 12+59 - 13+53  
NTS

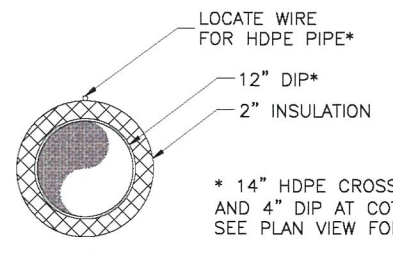


NOTES:  
1. TRENCHING ACROSS NOYES SLOUGH SHALL BE COMPLETED WHILE FROZEN, PRIOR TO SPRING BREAKUP.  
SLOUGH CROSSING  
NTS



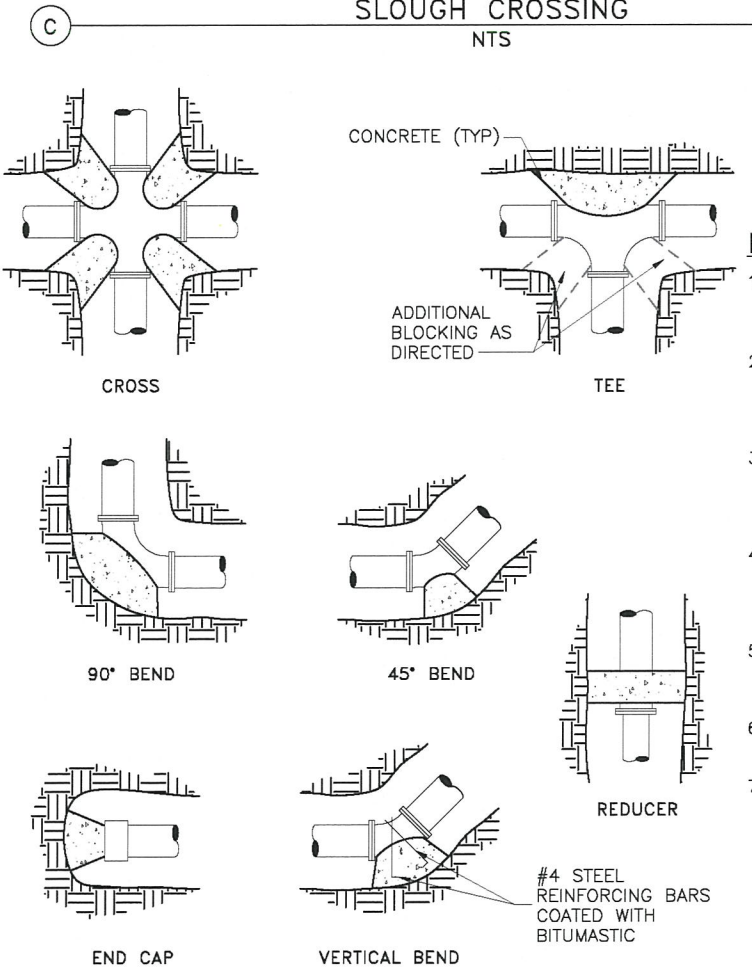
TYPICAL  
NTS

A TYPICAL TRENCH SECTION  
NTS



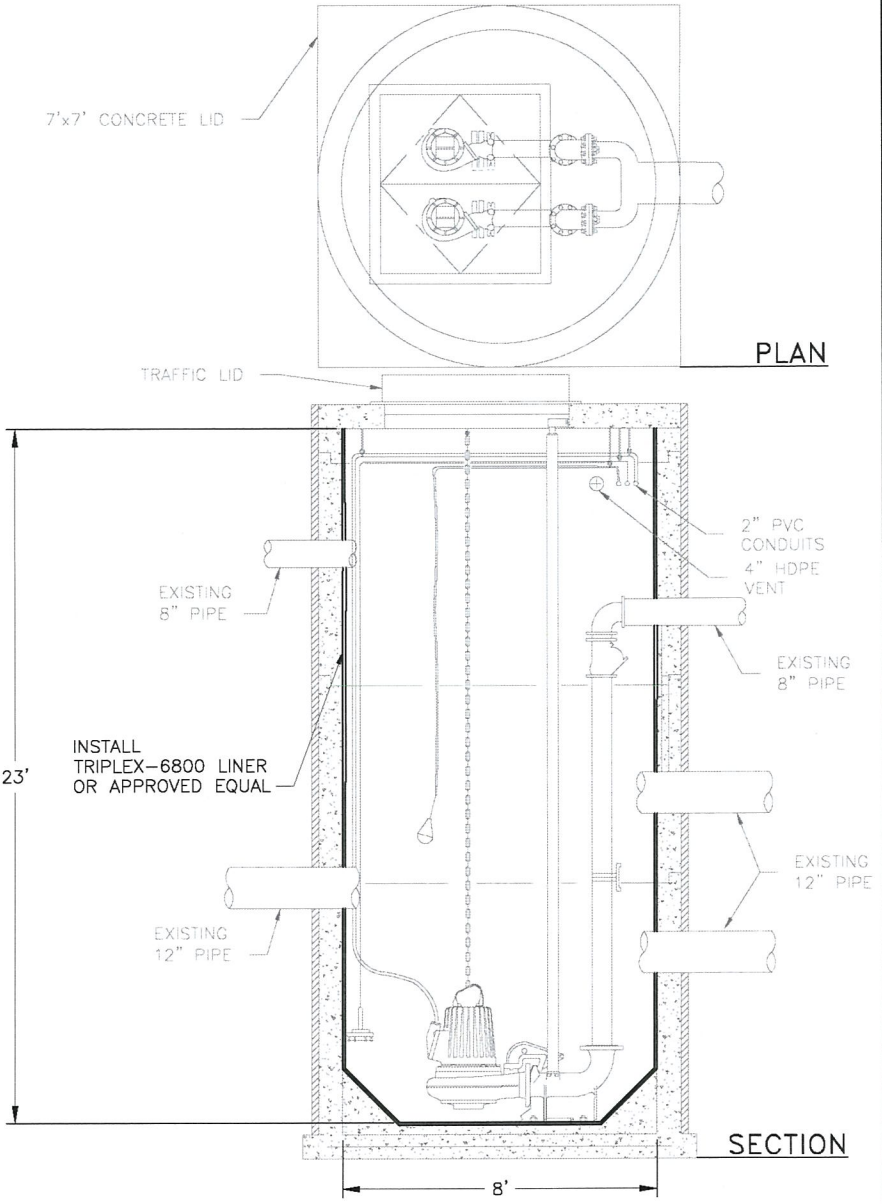
\* 14" HDPE CROSSING NOYES SLOUGH, AND 4" DIP AT COTTONWOOD STREET SEE PLAN VIEW FOR EXTENTS.

B WATER PIPE MAIN  
NTS



PIPE Ø	HORIZONTAL TO END MINIMUM BEARING AREA, SF					VERTICAL BEND MIN VOL, CY			
	DEAD END TEE	90°	45°	22 1/2°	END CAP	CROSS EACH WAY	90°	45°	22 1/2°
12"	18	26	14	7	18	7	9.6	5.2	2.6

D THRUST BLOCK DETAILS  
NTS



E LIFT STATION DETAILS  
NTS

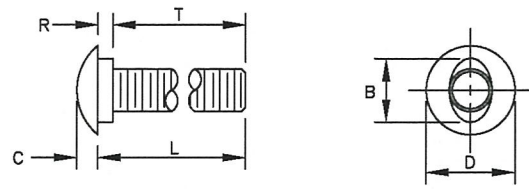
NOTES

- REMOVE ALL PUMPS, PIPES, SWITCHES, CONTROLS AND BRACKETING.
- STRIP EXISTING LINER, SEAL CRACKS, CLEAN AND PREPARE SURFACE AS NEEDED PER LINER MANUFACTURER'S RECOMMENDATIONS.
- CUT OFF ALL PIPES TO WITHIN 2" OF WALL TO PREPARE FOR LINING.
- IF INSULATION OR WATER PROOFING IS DISTURBED DURING CLEANING AND RELINING WORK, REPLACE WITH 2" INSULATION AND 3 LAYERS OF 6 MIL POLYETHYLENE SHEETING ALL AROUND (TYP).
- ALL LIFT STATION PIPING, PUMPS, CONTROLS AND BRACKETING IS TO BE DESIGNED AND INSTALLED BY OTHERS.

UTILITY DETAILS

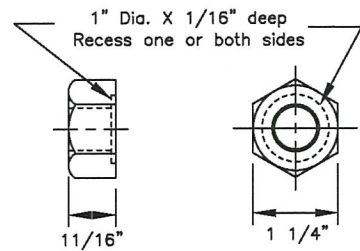


PLANS DEVELOPED BY: RESPEC COMPANY, LLC, CERT. OF AUTHORIZATION NO.: AEC0163270, 1028 AURORA DRIVE, FAIRBANKS, AK 99709, (907)452-1414  
N:\Projects\18185FB-AuroraDr.-Noyes\18185FB-04\_Thu\_Sep/01/22 11:27am

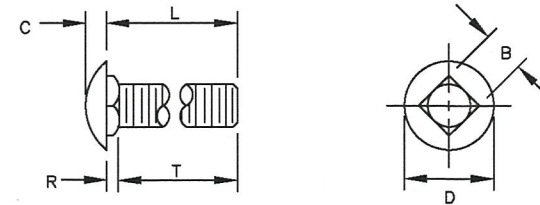


B	C	D	L (Length)	R	T (Thread Length)
15/16"	5/16"	1 5/16" or 1 7/16"	As Required	7/32"	As Required

5/8" BUTTONHEAD BOLT  
(FBB01-05)

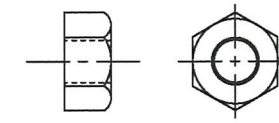


5/8" Dia. RECESSED HEX NUT  
(FBB01-05)



B	C	D	L (Length)	R	T (Thread Length)
5/8"	5/16"	1 5/16"	As Required	3/16"	As Required

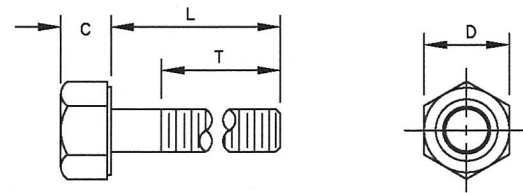
5/8" Dia. CARRIAGE BOLT  
(FBC10-20)



STANDARD HEX NUT

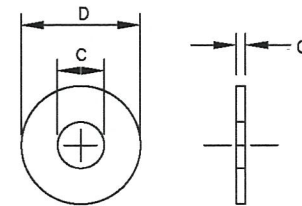
**GENERAL NOTES:**

- All covered hardware shall comply with the Task Force 13 (TF13) Guide to Standardized Roadside Safety Hardware online publication. Designators given when possible in parentheses.



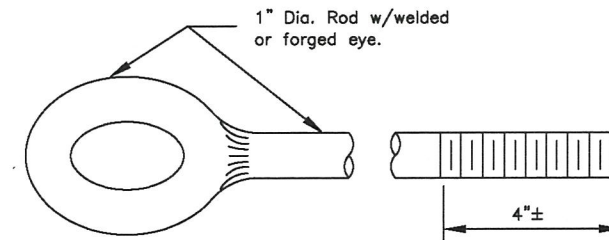
Bolt Size	C	D	L (Length)	T (Thread Length)
5/16"	—	—	1 1/2"	7/8"
5/16"	—	—	1"	1"
3/8"	—	—	7 1/2"	1 1/2"
1/2"	—	—	1 1/2"	1 1/2"
1/2"	—	—	1 1/4"	1 1/4"
5/8" H.S.	5/16"	7/8"	8"	1 1/2"
5/8"-11	—	—	1 1/2"	1 1/2"
3/4"	—	—	1 1/2"	1 1/2"
3/4"	—	—	As Required	2"
3/4" H.S.	15/32"	1 1/4"	2"	1 1/2"

STANDARD HEX BOLTS

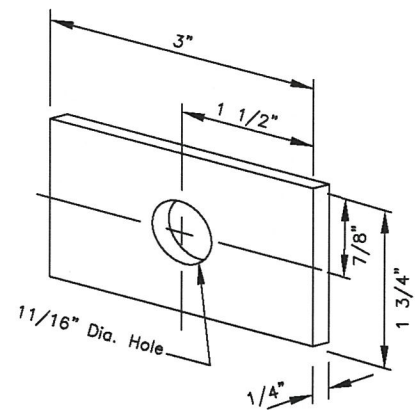


For Bolt #	C	D	G
3/8"	7/16"	1"	5/64"
1/2"	17/32"	1 1/16"	3/32"
1/2" H.S.	17/32"	1 1/16"	3/32"
5/8"	11/16"	1 3/4"	9/64"
3/4"	13/16"	1 15/32"	9/64"
3/4" H.S.	13/16"	2"	5/32"
1"	1 1/16"	2"	9/64"

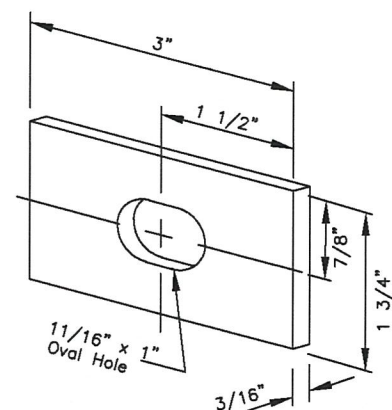
STANDARD STEEL WASHERS



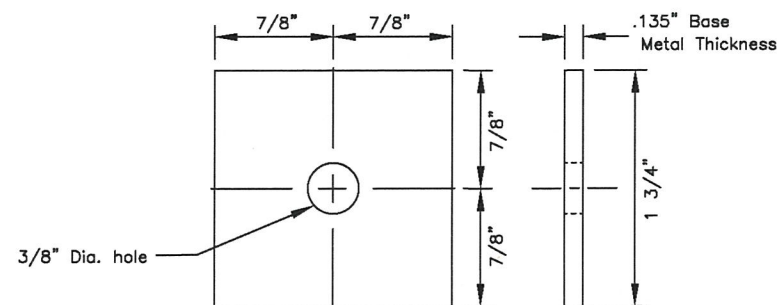
EYE BOLT



FLAT PLATE WASHER



RECTANGULAR POST BOLT WASHER  
(FWR03)



SQUARE STEEL WASHER  
(FWR01)

State of Alaska DOT&PF  
ALASKA STANDARD PLAN

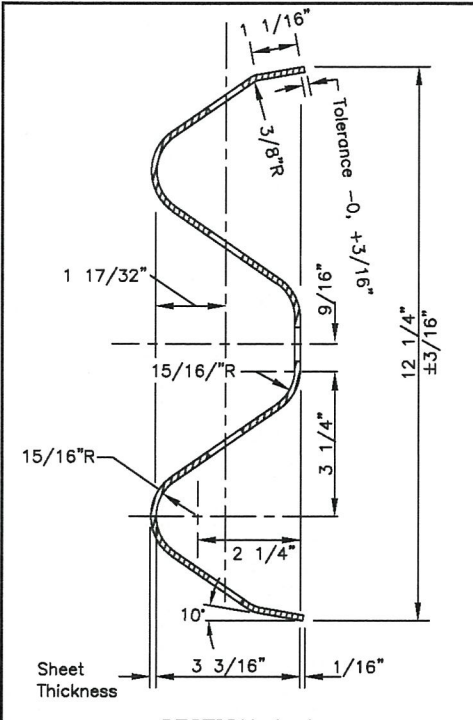
STANDARD GUARDRAIL  
HARDWARE  
(NUTS, BOLTS & WASHERS)

Adopted as an Alaska  
Standard Plan by: *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

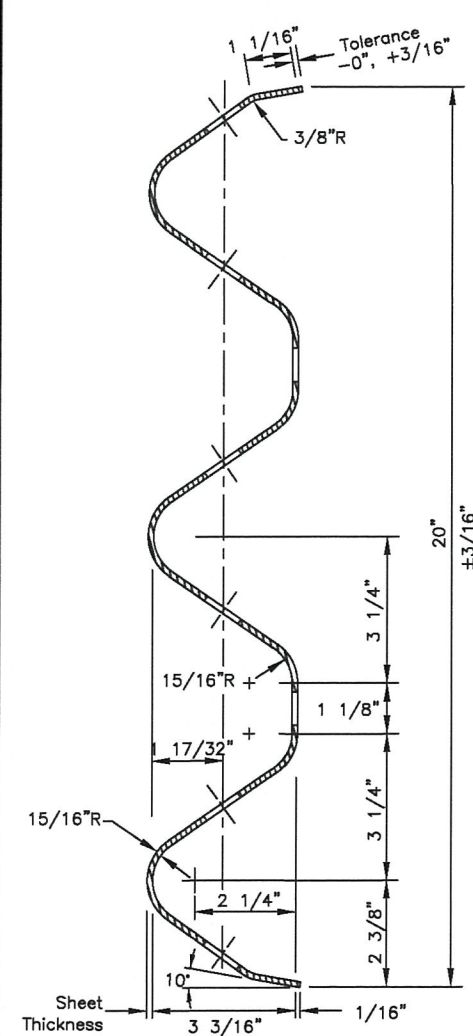
Adoption Date: 7/17/2020

Last Code and Stds. Review  
By: KLK Date: 7/8/2020

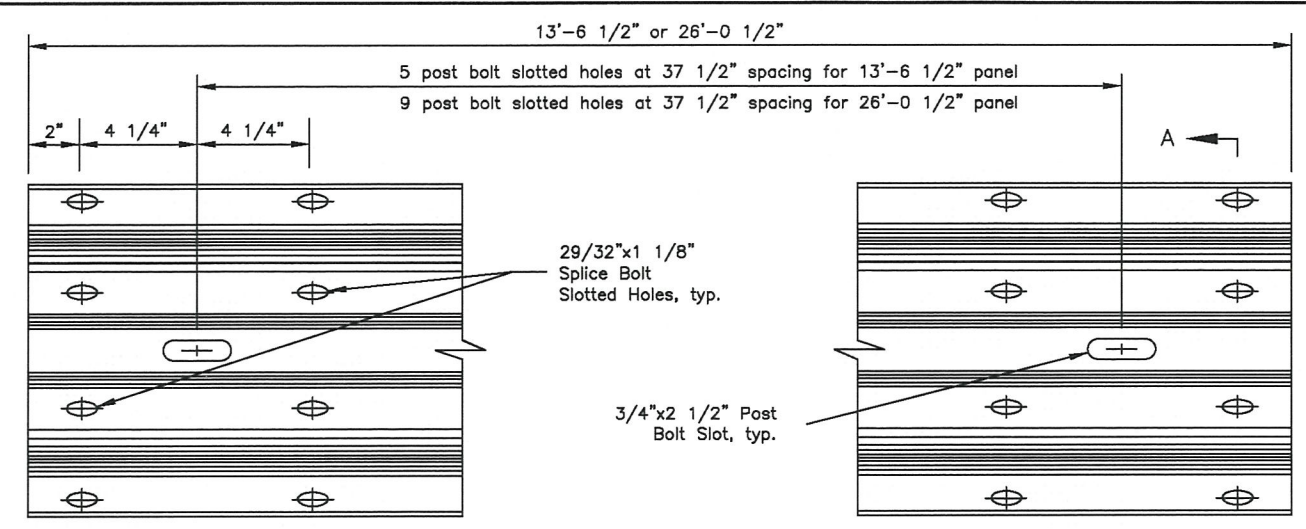
Next Code and Standards Review Date: 7/8/2030



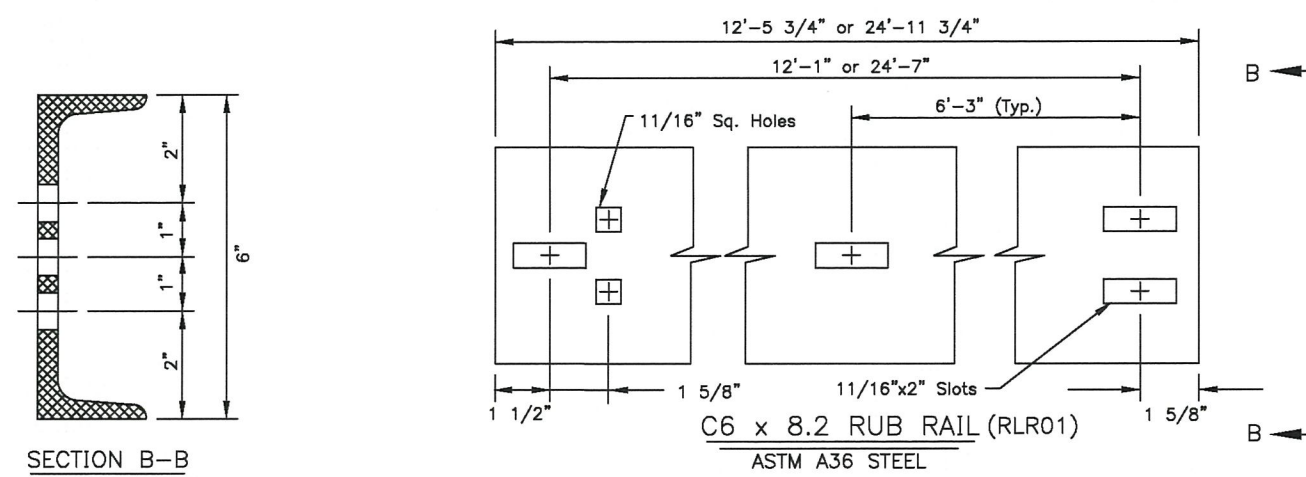
**SECTION A-A**  
(cross section same as RWM02a-b)



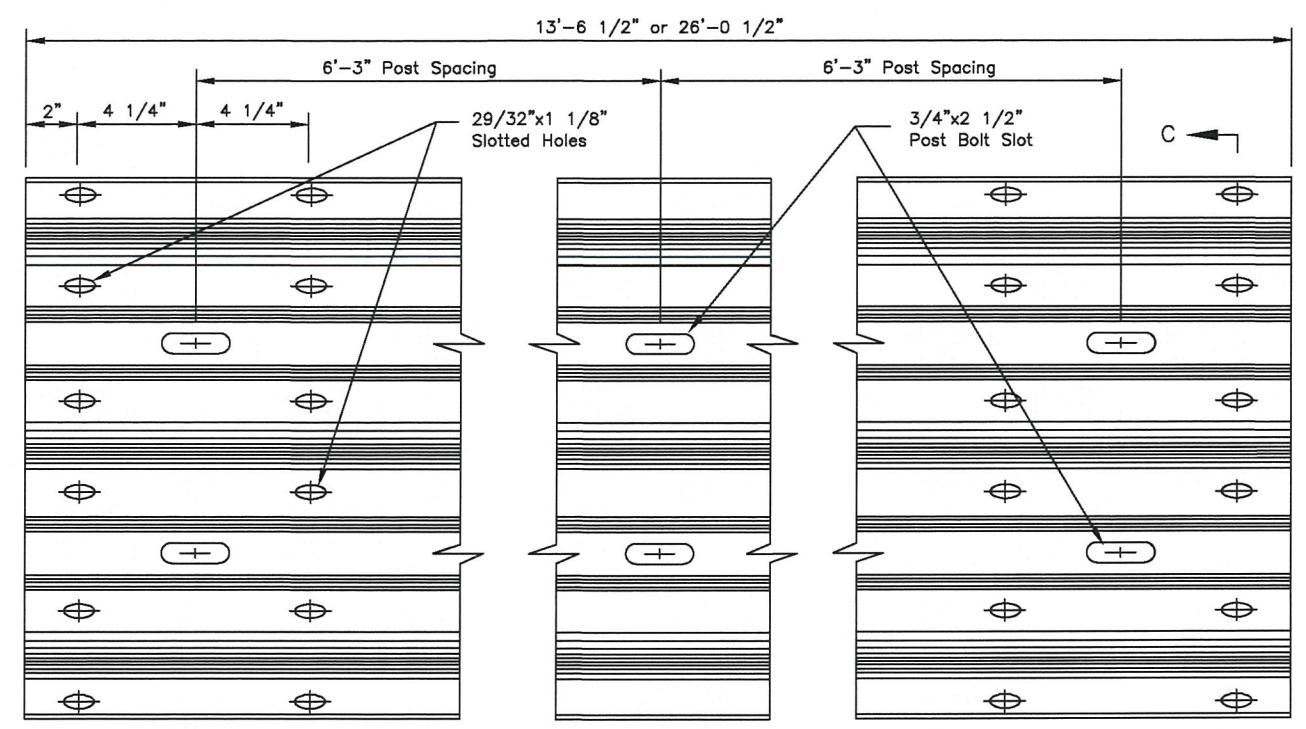
**SECTION C-C**  
(RTM01a-02b)



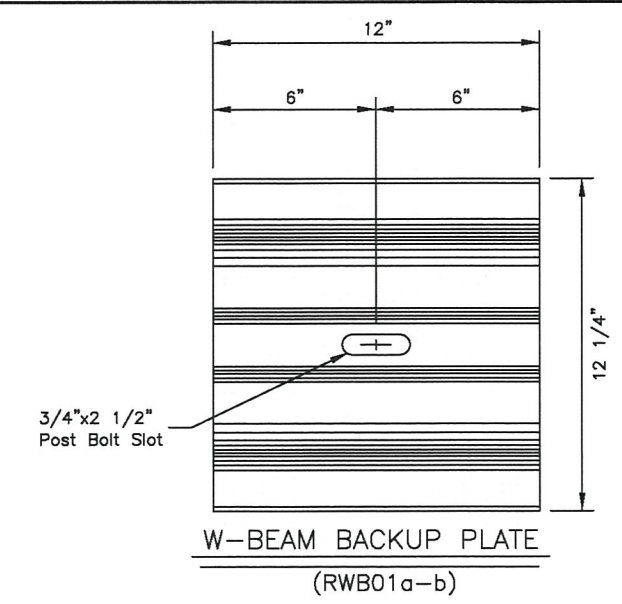
**STANDARD W-BEAM PANEL (RWM04a-b)**



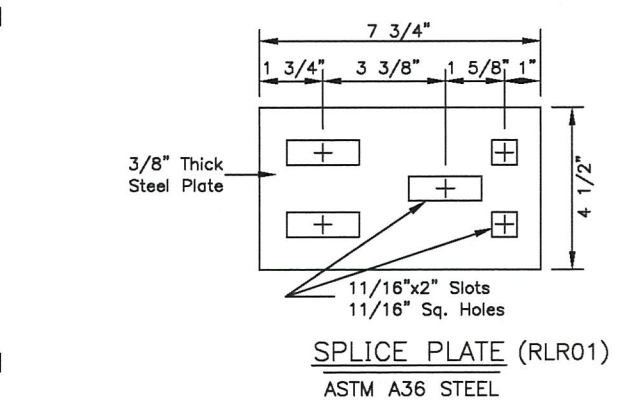
**C6 x 8.2 RUB RAIL (RLR01)**  
ASTM A36 STEEL



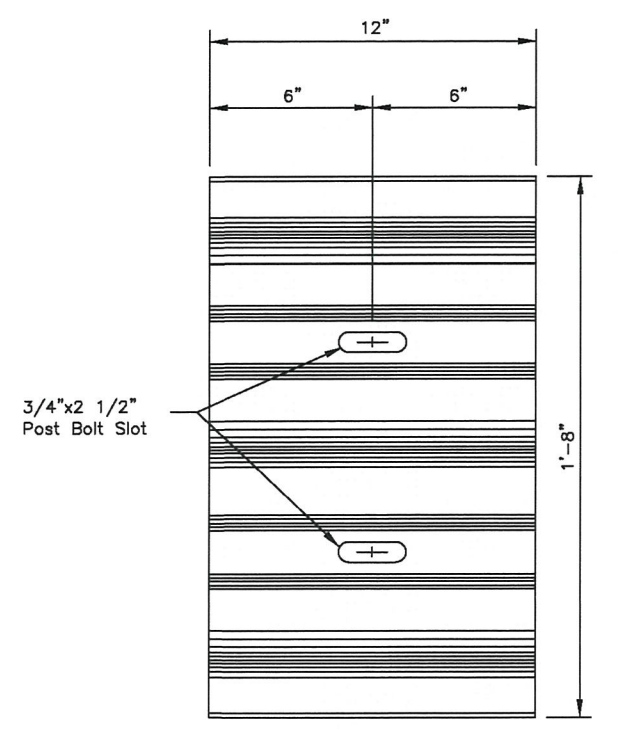
**STANDARD THRIE BEAM PANEL (RTM01a-02b)**



**W-BEAM BACKUP PLATE (RWB01a-b)**



**SPLICE PLATE (RLR01)**  
ASTM A36 STEEL



**THRIE BEAM BACKUP PLATE (RTB01a-02b)**

- GENERAL NOTES:**
- All covered hardware shall comply with the Task Force 13 (TF13) Guide to Standardized Roadside Safety Hardware online publication. Designators given when possible in parentheses.
  - Install back-up plates between blockouts and w-beam or thrie-beam rail at intermediate (non-splice) posts when steel blockouts are used but not with wood, rubber, plastic, or other approved blockouts.

State of Alaska DOT&PF  
ALASKA STANDARD PLAN

**STANDARD GUARDRAIL  
HARDWARE  
(RAILS AND SPLICES)**

Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

Adoption Date: 7/17/2020

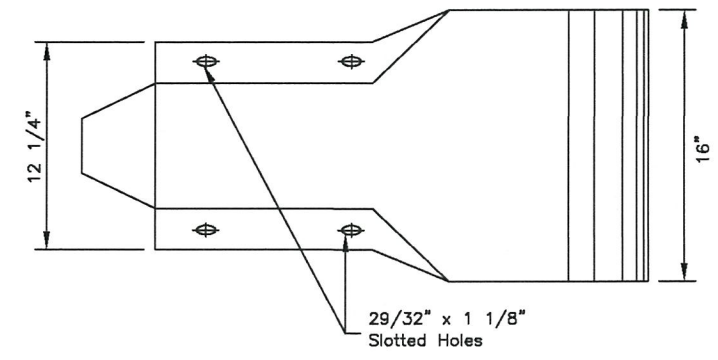
Last Code and Stds. Review  
By: KLK Date: 7/8/2020  
Next Code and Standards Review Date: 7/8/2030

G-00.05

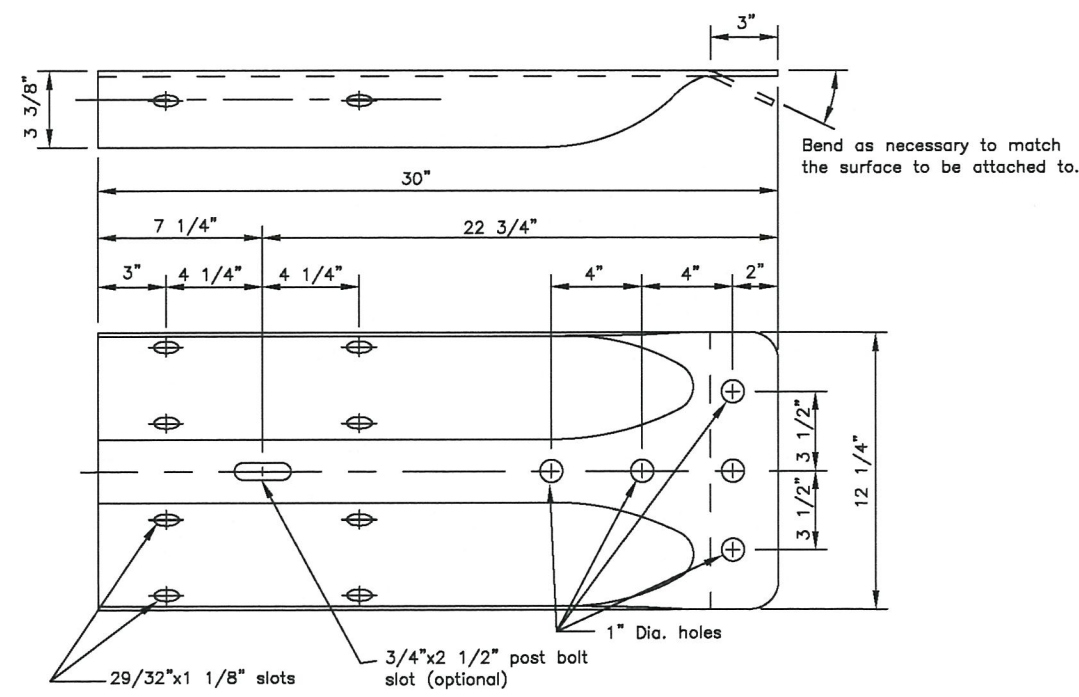


**GENERAL NOTES:**

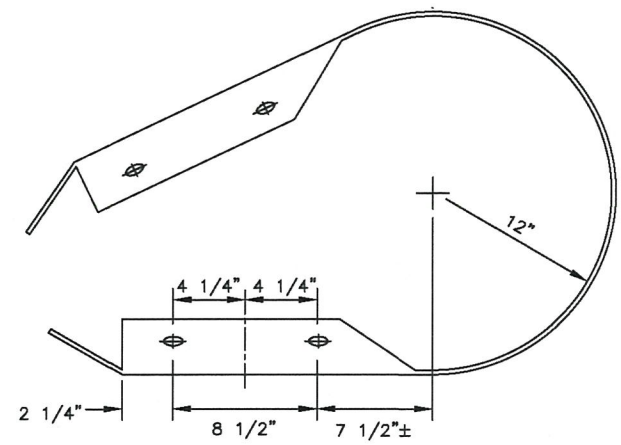
1. W-Beam and Thrie Beam Terminal Connectors shall conform to AASHTO M 180, Class B, Type II.
2. W-Beam end sections shall conform to AASHTO M 180, Class A, Type II.
3. All covered hardware shall comply with the Task Force 13 (TF13) Guide to Standardized Roadside Safety Hardware online publication. Designators given when possible in parentheses.



PROFILE

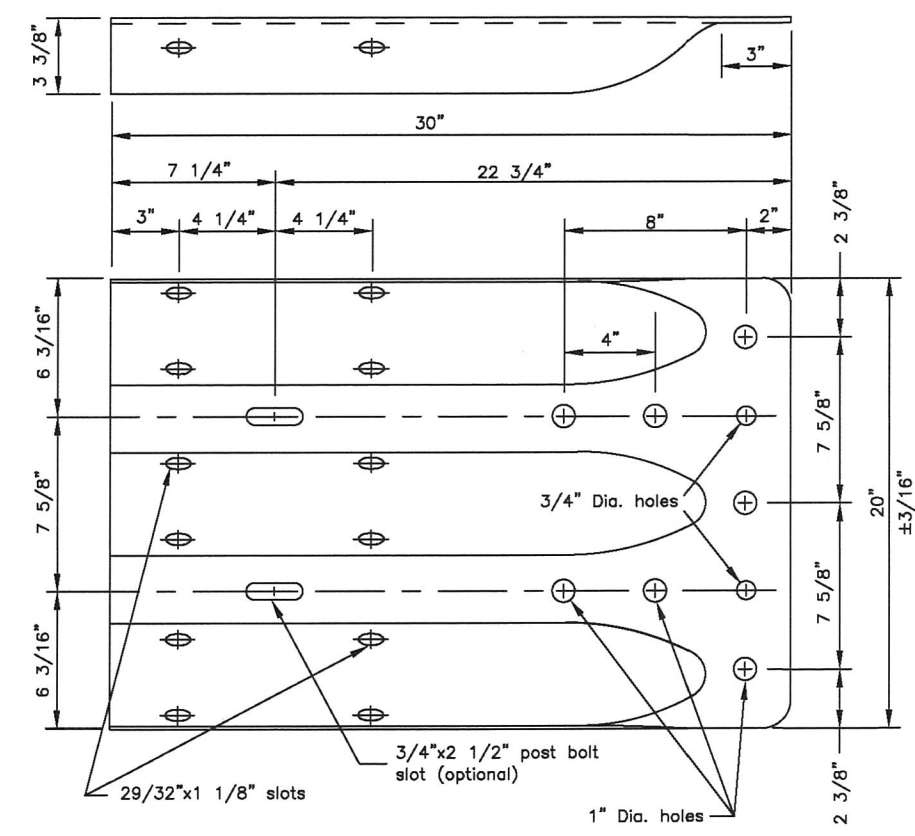


STANDARD W-BEAM TERMINAL CONNECTOR  
(RWE02)



W-BEAM PLAN VIEW  
\*Radius to be specified on the plans

STANDARD W-BEAM END SECTION  
(RWE06)



STANDARD THRIE BEAM TERMINAL CONNECTOR  
(RTE01b)

State of Alaska DOT&PF  
ALASKA STANDARD PLAN

**STANDARD GUARDRAIL  
HARDWARE  
(TERMINAL CONNECTORS)**

Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

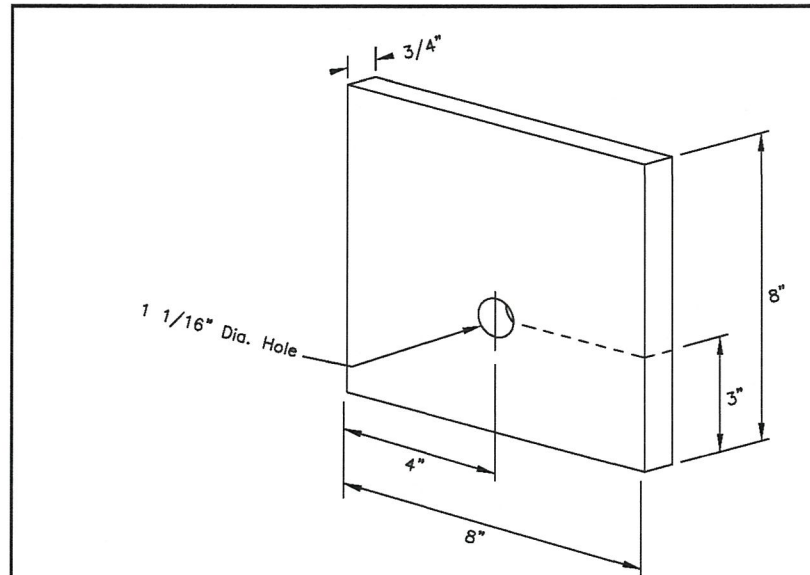
Adoption Date: 7/17/2020

Last Code and Stds. Review  
By: KLK Date: 7/8/2020  
Next Code and Standards Review Date: 7/8/2030

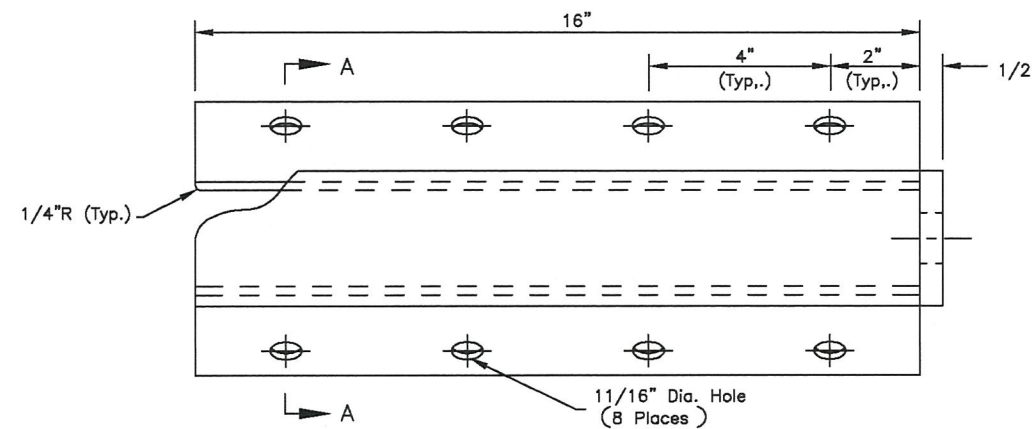
G-00.05

**GENERAL NOTES:**

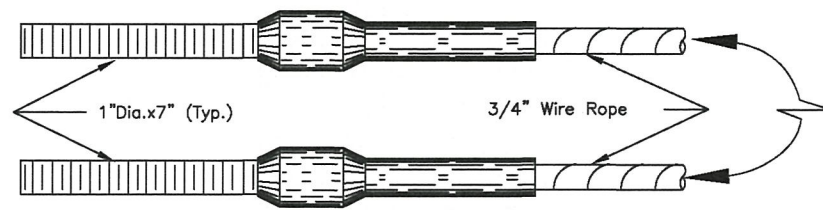
1. Cable Anchor Plate may be formed in single unit or welded fabrication.
2. Anchor Cable Assembly must conform to AASHTO M 30 with Type II Wire Rope.
3. Provide Sleeve for Wood Posts meeting the requirements of ASTM A53 and made of 2-inch galvanized standard pipe. Sleeve shall be a tight, pressed fit in post.
4. Attach radius ID plates to all shop-bent guardrail sections. Bolt the ID plates to the back side of the guardrail panel with the lower splice bolt nearest the P.C. of the radius.
5. Show the Rail bend radius, in feet, as "XX" on the radius ID plate. Digits shall be etched or stamped and have a min. height of 1 1/2" and a max. width of 3/4". Galvanize the plate after the digits are marked.
6. All covered hardware shall comply with the Task Force 13 (TF13) Guide to Standardized Roadside Safety Hardware online publication. Designators given when possible in parentheses.



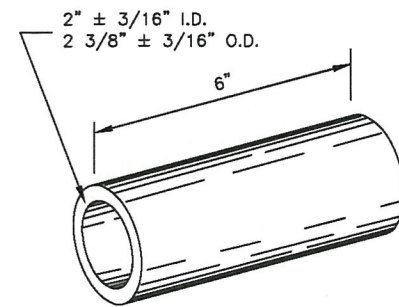
BEARING PLATE for CRT TERMINAL ANCHOR  
(FPB01)



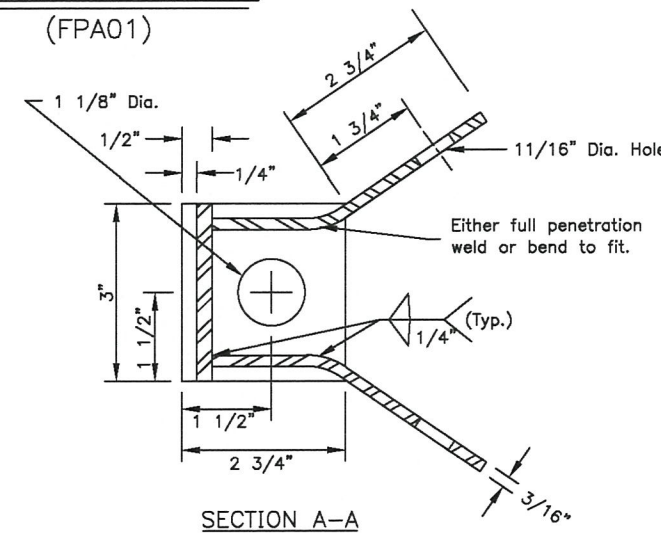
CABLE ANCHOR PLATE  
(FPA01)



SWAGED FITTING DETAIL  
(FCA01-02)

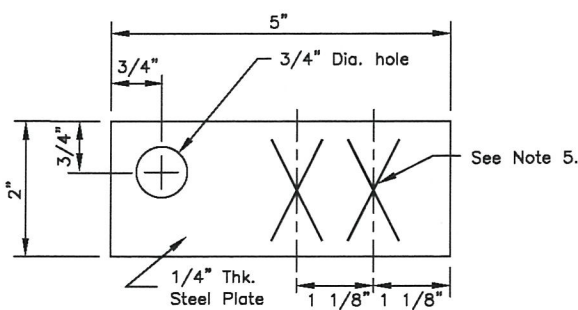


SLEEVE DETAIL  
(FMM02)

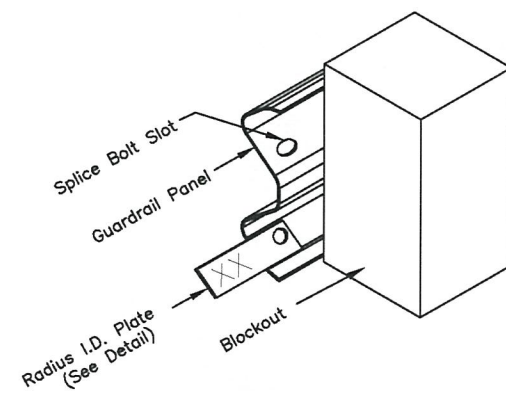


SECTION A-A

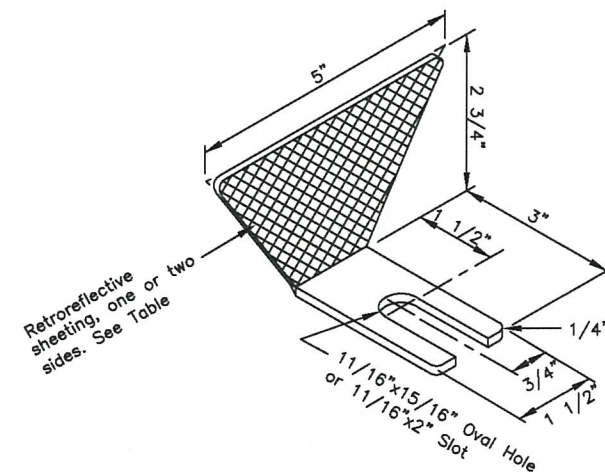
CONTROLLED RELEASE TERMINAL HARDWARE DETAILS



RADIUS I.D. PLATE



RADIUS I.D. PLATE MOUNTING DETAIL



GUARDRAIL REFLECTOR

Guardrail Reflector Table		
Type	Color	Reflectorized
A	White	Front & Rear
B	White	Front
C	Yellow	Front
D	Yellow	Front & Rear

State of Alaska DOT&PF  
ALASKA STANDARD PLAN

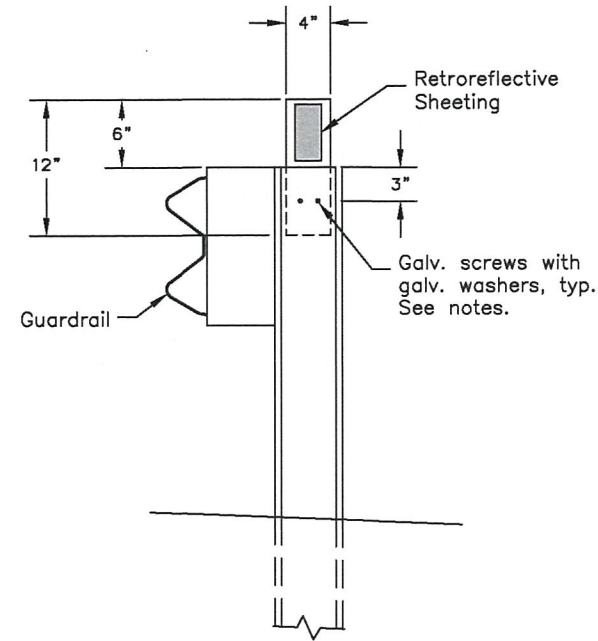
**STANDARD GUARDRAIL HARDWARE (MISCELLANEOUS)**

Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review By: KLK Date: 7/8/2020

Next Code and Standards Review Date: 7/8/2030



**GUARDRAIL FLEXIBLE DELINEATOR DETAIL**  
(Steel post shown – similar for wood post)

**CONSTRUCTION NOTES**

1. Install guardrail flexible delineators where shown on the plans.
2. Install guardrail flexible delineators at 50 foot spacing, unless otherwise noted on the plans. Install not less than 2 delineators per guardrail run.
3. Use 3" x 5" white/yellow/red retroreflective sheeting as required per Standard Plan T-05. Install retroreflective sheeting on both sides of delineator on two-way roads.
4. Attach 4" x 12" flexible delineators to the top of new guardrail posts, on the trailing side of the posts relative to the adjacent lane's direction of travel.
5. Use 2 each 1/4" dia. x 1-1/2" long galvanized lag screws for attaching to wood posts and 2 each 1/4" dia. x 3/4" long galvanized self-drilling fasteners for steel posts. Install a galvanized washer between the fastener head and the flexible delineator.

**State of Alaska DOT&PF**  
**ALASKA STANDARD PLAN**

**STANDARD GUARDRAIL**  
**HARDWARE**  
**(FLEXIBLE DELINEATORS)**

Adopted as an Alaska  
Standard Plan by: *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

Adoption Date: 7/17/2020

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Last Code and Stds. Review  
By: KLK Date: 7/8/2020  
Next Code and Standards Review Date: 7/8/2030

G-00.05

# G-05.11S

SHEET  
| of |

### CONSTRUCTION NOTES:

1. Provide hardware compliant with the Task Force I3 (TFI3) Guide to Standardized Roadside Safety Hardware.
2. See Standard Plan G-00 for hardware details not shown on this drawing.
3. See Standard Plan G-10 for post lengths corresponding to different combinations of slope and behind-post embankment width.
4. Typical post spacing is 6'-3" center to center.
5. Attach guardrail reflector to guardrail using a 5/8" button head bolt with 5/8" recessed head hex nut and steel washer at location shown in the Typical Elevation. Install reflectors every 25' on tangents and every 12.5' on curves starting 100' before the P.C. and ending 100' after the P.T.
6. Use wood or synthetic blockouts designed, tested, and passed per MASH for use with steel posts. Either bolt hole on the blockout may be used for attachment.
7. Use a 25 linear foot transition to match differing height of existing or new rail elements and end treatments - see Standard Plan G-II.
8. W6x8.5 steel post may be substituted for W6x9 steel post.
9. Install flexible delineators on guardrail posts when called for in the contract. See Standard Plan G-00 for guardrail flexible delineator details.

### DESIGN NOTES:

1. No fixed objects allowed within 36" of the back side of guardrail post.
2. This barrier is acceptable under MASH Tests 3-10 and 3-11.

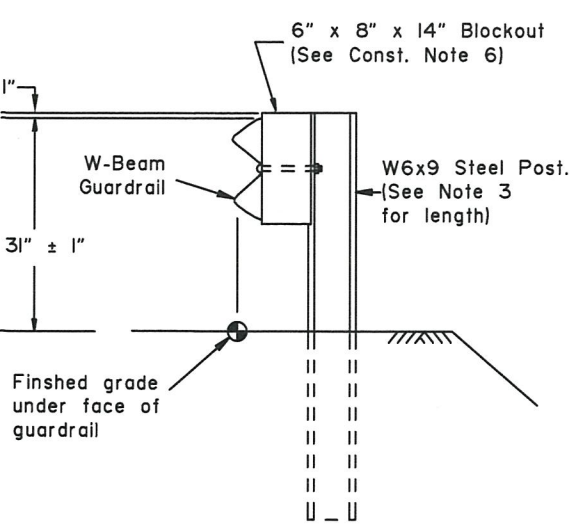
State of Alaska DOT&PF  
ALASKA STANDARD PLAN  
**STEEL POST W31  
GUARDRAIL**

Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

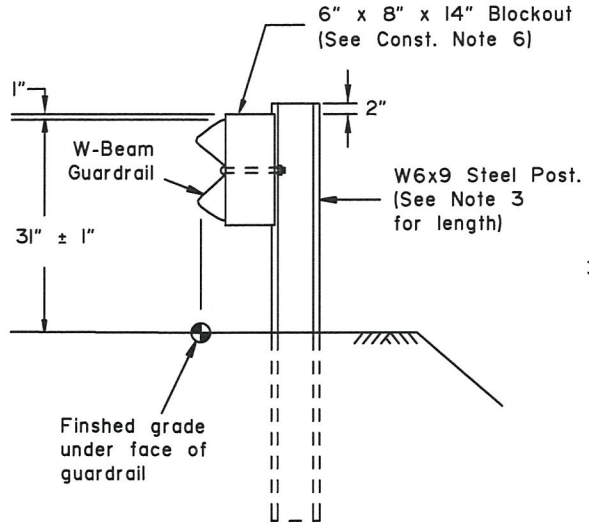
Adoption Date: 05/15/2019

Last Code and Stds. Review  
By: LRG Date: 5/15/2019  
Next Code and Standards Review date: 5/15/2029

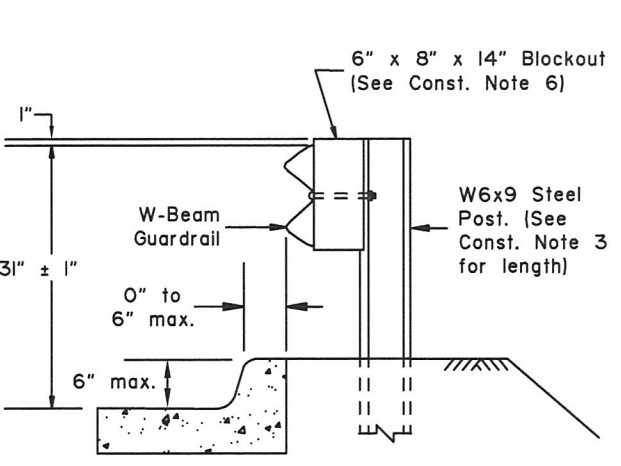
G-05.11S



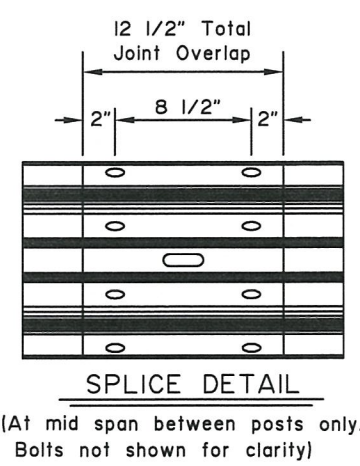
TYPE I POST INSTALLATION



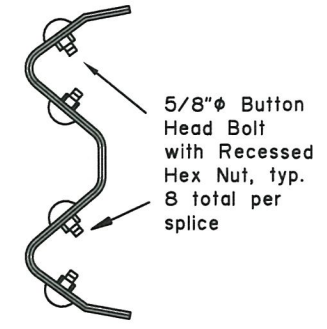
TYPE II POST INSTALLATION  
(Facilitates raising rail for future overlays.)



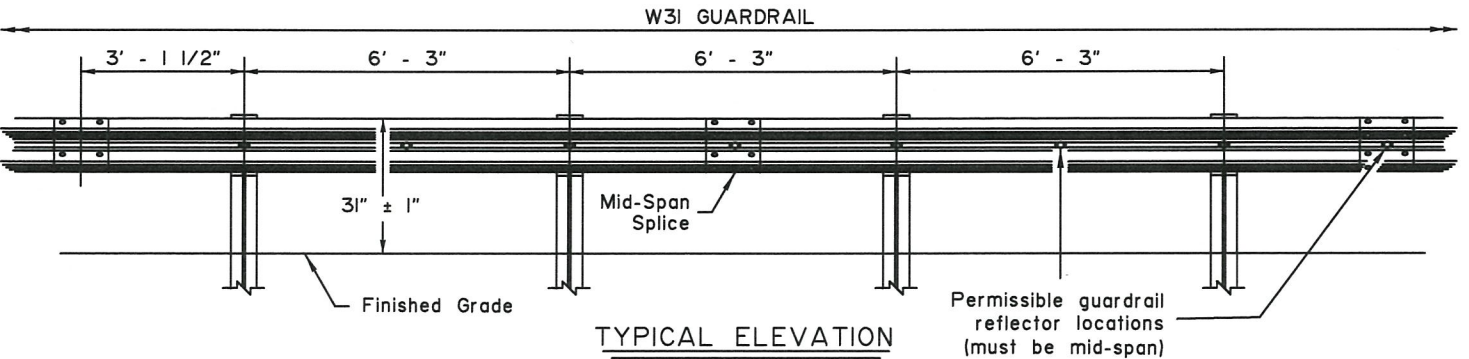
TYPE III POST INSTALLATION



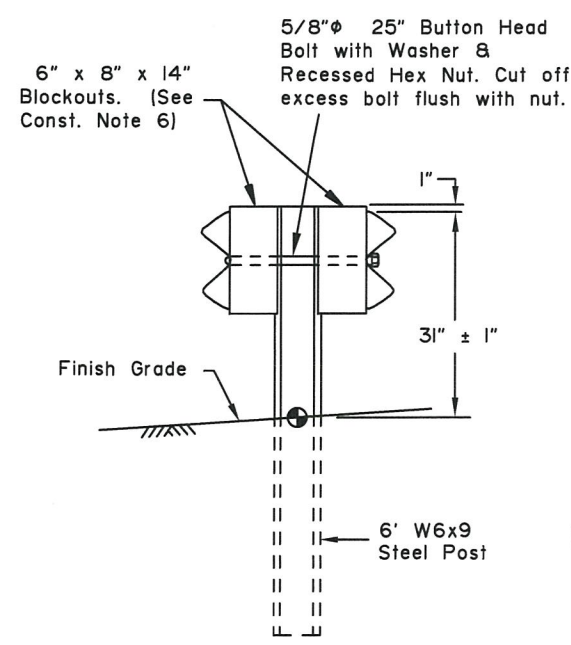
SPLICE DETAIL  
(At mid span between posts only.  
Bolts not shown for clarity)



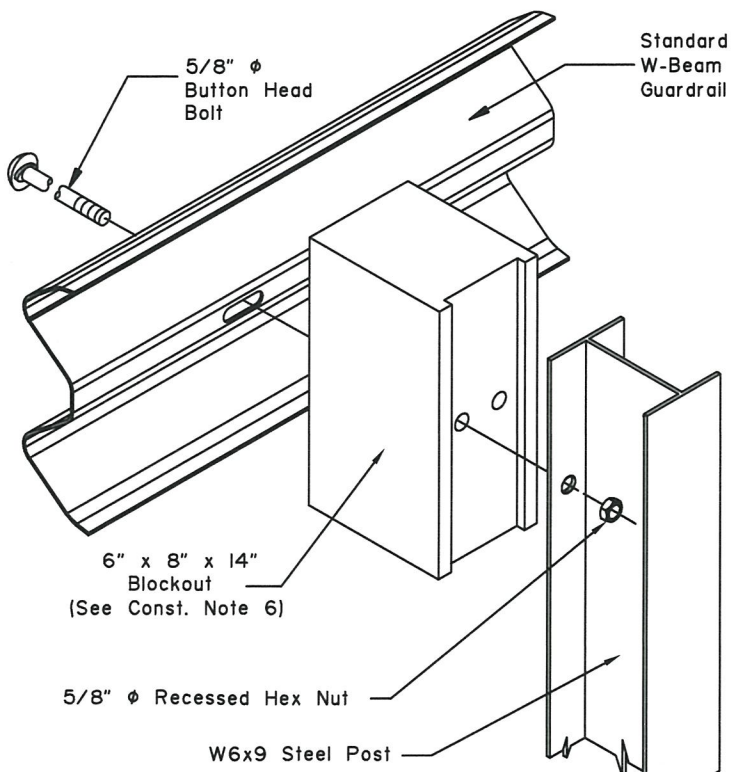
SPLICE CROSS-SECTION



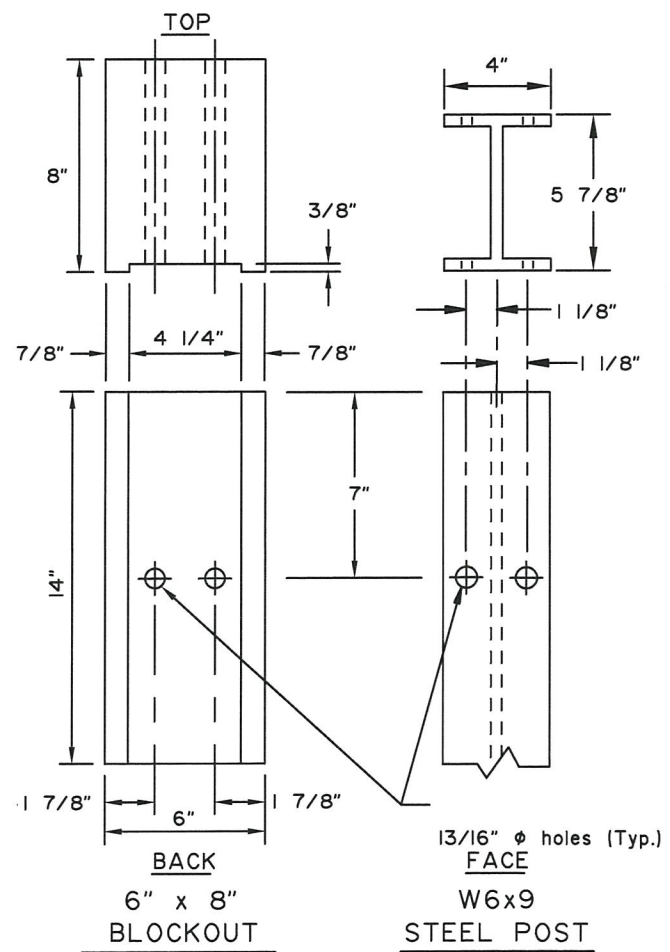
TYPICAL ELEVATION



TYPE IV DOUBLE SIDED INSTALLATION



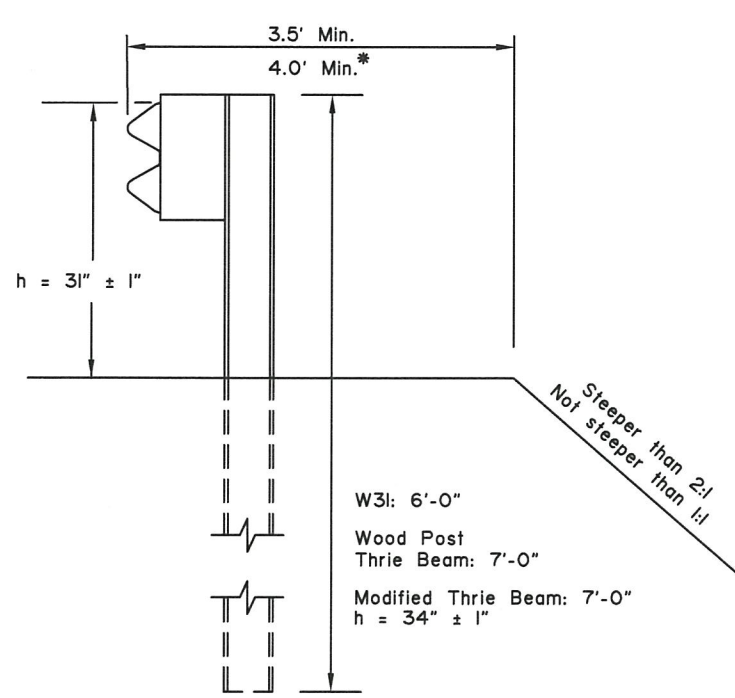
ASSEMBLY DETAIL  
(Type I post shown)



BACK  
6" x 8" BLOCKOUT  
FACE  
W6x9 STEEL POST  
13/16" φ holes (Typ.)

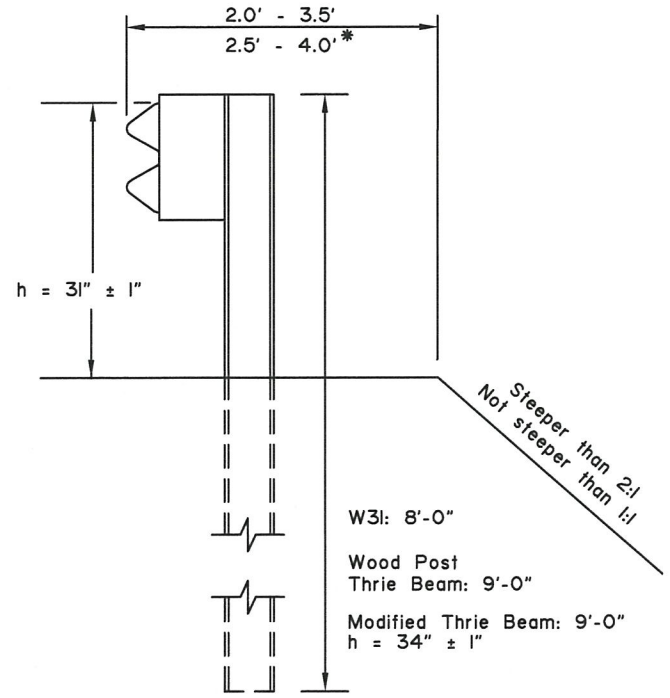
**GUARDRAIL REFLECTOR**

(See Const. Note 5)



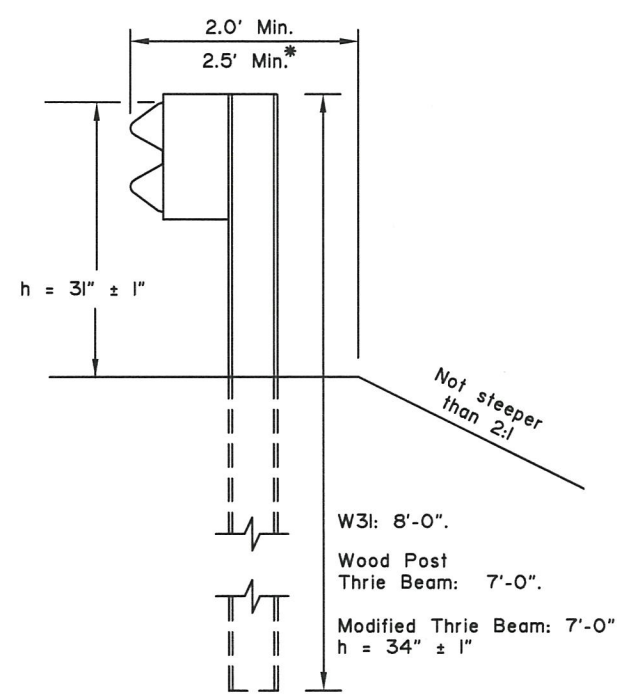
CASE 1

\* with Modified Thrie Beam

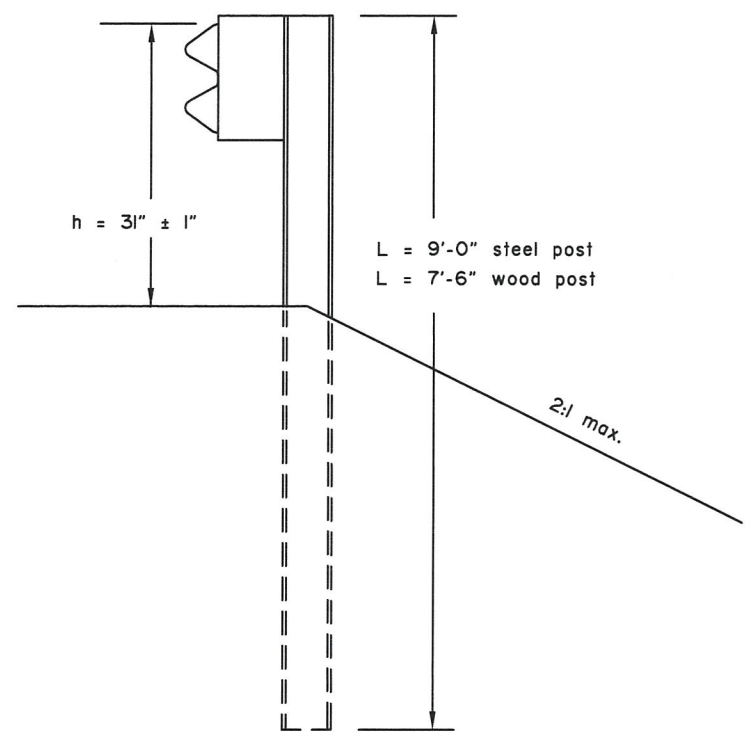


CASE 2

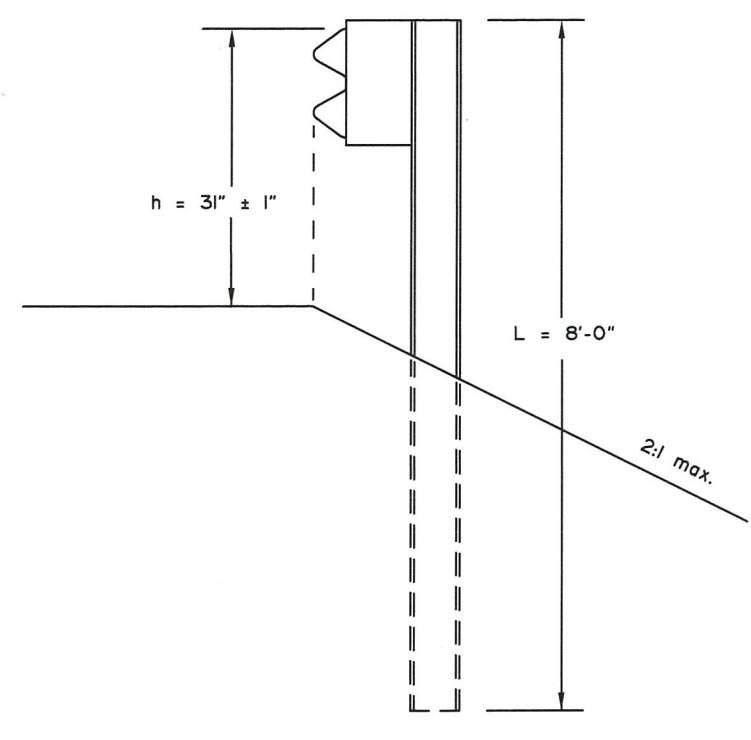
\* with Modified Thrie Beam



CASE 3



CASE 4  
(See Note 5)



CASE 5  
(See Note 5)


**CONSTRUCTION NOTES:**

1. This drawings is to be used for post length determination only. See Plans for slopes and behind-post embankment widths.
2. To determine post length, identify the case that matches site conditions and read the length corresponding to the pertinent guardrail type.
3. These dimensions apply to both curbed and uncurbed section.
4. Case 1, 2 and 3 are shown with steel posts. Wood posts may be substituted when allowed by specifications. Wood Post Thrie Beam installations must use wood posts only.
5. Case 4 and 5 apply to W31 guardrail only.

**DESIGN NOTES:**

1. No fixed objects allowed within 36" of the back of post for Cases 1, 2 & 3.
2. No fixed objects allowed within 48" of the back of post for Cases 4 & 5.

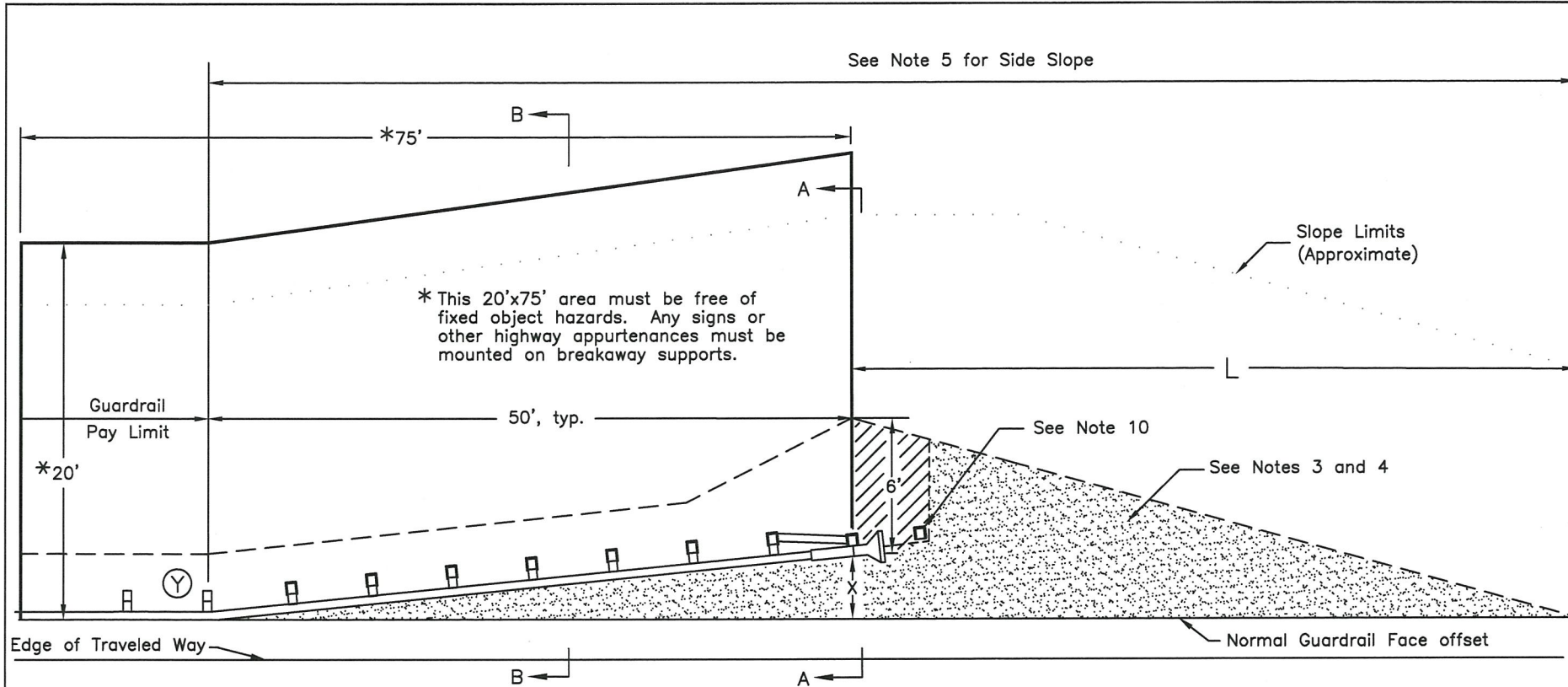
State of Alaska DOT&PF  
ALASKA STANDARD PLAN  
**GUARDRAIL  
POST INSTALLATION**

Adopted as an Alaska Standard Plan by:   
Kenneth J. Fisher, P.E.  
Chief Engineer

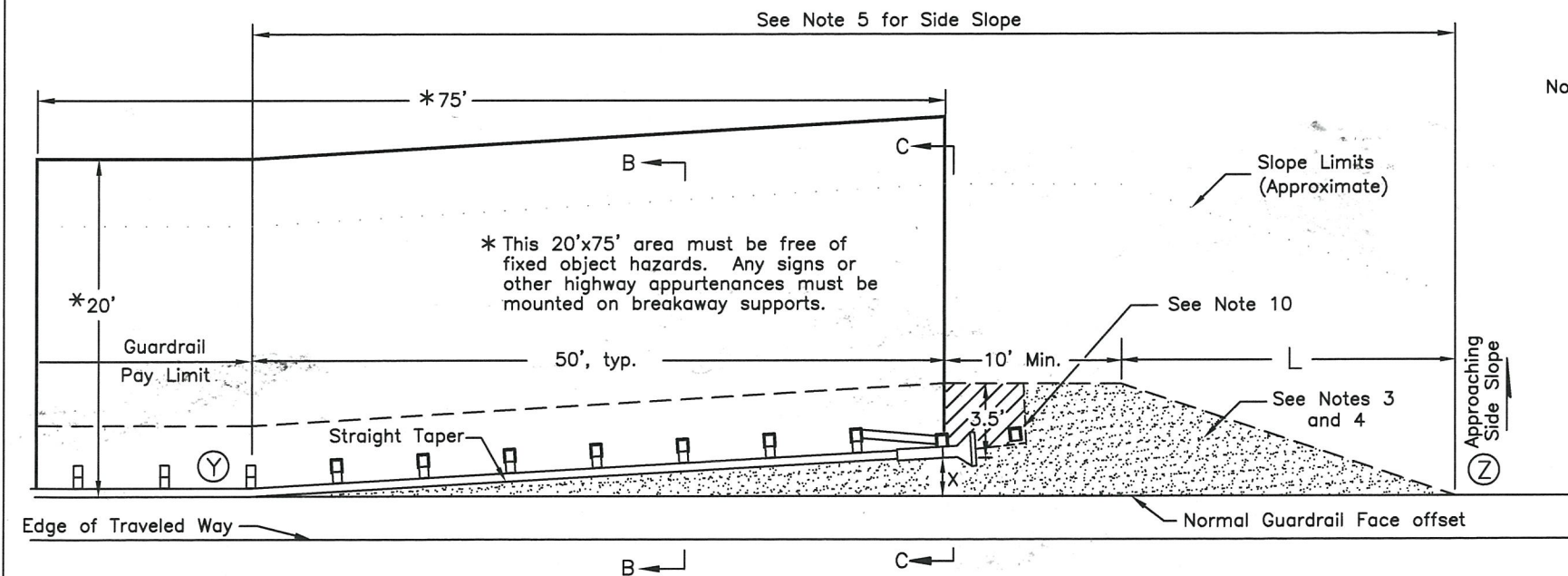
Adoption Date: 02/08/2019

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Last Code and Stds. Review  
By:                      Date:  
Next Code and Standards Review date: 02/08/2029



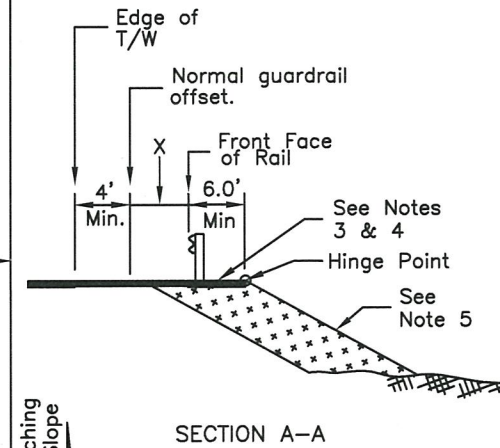
**STANDARD GUARDRAIL TERMINAL WIDENING DETAIL**



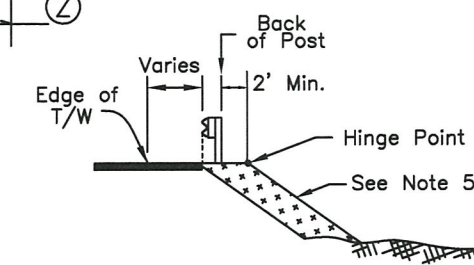
**ALTERNATE GUARDRAIL TERMINAL WIDENING DETAIL**

(USE ONLY WHEN LIMITED RIGHT-OF-WAY OR LIMITING SITE CONDITIONS MAKE THE STANDARD DETAIL INFEASIBLE)

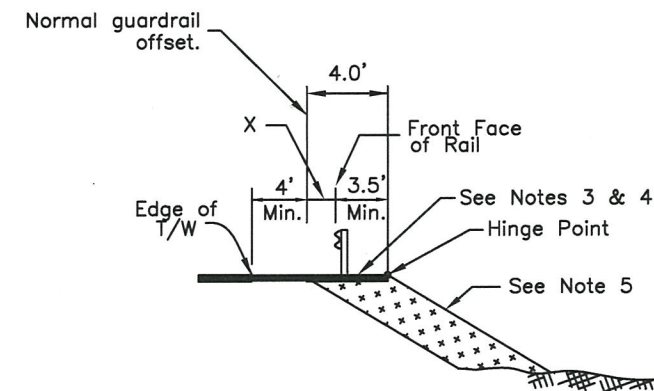
X=End offset. See manufacturer's information for the range of acceptable end offsets for each MASH compliant terminal.



SECTION A-A



SECTION B-B (Applies to both details)



SECTION C-C

GENERAL NOTES

1. This Std. Dwg. applies to all MASH approved guardrail end terminals (GETs). The alternate detail may only be used with parallel or tangent GETs. The terminal details shown are for illustration only - see manufacturer's drawings for actual post, rail, strut, etc. configuration and layout.
2. Use this Std. Widening Detail for all GETs except when limited right-of-way or limiting site conditions make the use of the Std. Widening Detail infeasible. In that case, the alternate detail is permissible.
3. Construct the shaded areas to match the slope of the adjacent shoulder. The slope may be increased to 10:1 if identified in the plans or when approved by the engineer. Match the slope when the shoulder slopes toward the road as well as away from the road.
4. On paved roads, the shaded areas shall be paved. On gravel roads, surface the shaded areas with the same materials used to surface the travel lanes.
5. From point Y to point Z make the side slope match the approaching side slope except where it is flatter than 4:1. In that case, the slope may be steepened to 4:1.
6. Attach a flexible marker at the beginning of each GET.
7. The max. allowable height for foundation tubes or other steel components of terminal post breakaway systems is 4" above the surrounding grade.
8. The details on this sheet do not apply to W31 Downstream End Anchors (Std Dwg G-14).
9. The details on this sheet apply to GETs on both the approach and downstream ends on two-way undivided roads and to any downstream MASH compliant GETs.
10. Some MASH GET systems have an additional post/anchor at the approximate location shown. If this post/anchor is present do not pave the diagonally hatched area. If not present, pave the diagonally hatched area also.

Taper Lengths (L) for Common End Offsets (X)		
End Offset	Standard Detail	Alternate Detail
0'	24.0'	13.0'
1'	26.0'	17.0'
1.5'	28.0'	19.0'
2'	30.0'	21.0'
2.5'	32.0'	22.0'
4'	37.0'	28.0'

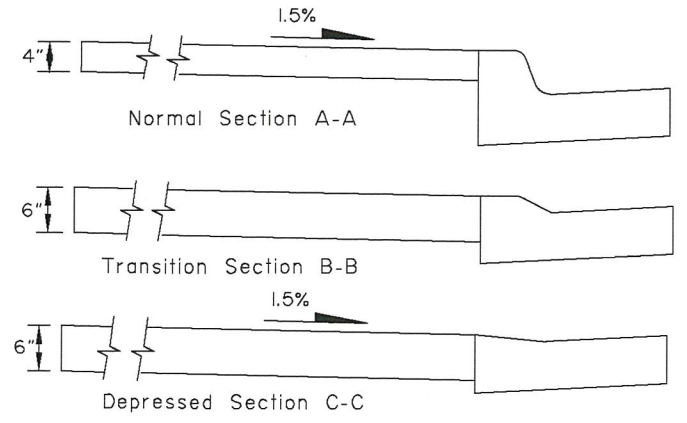
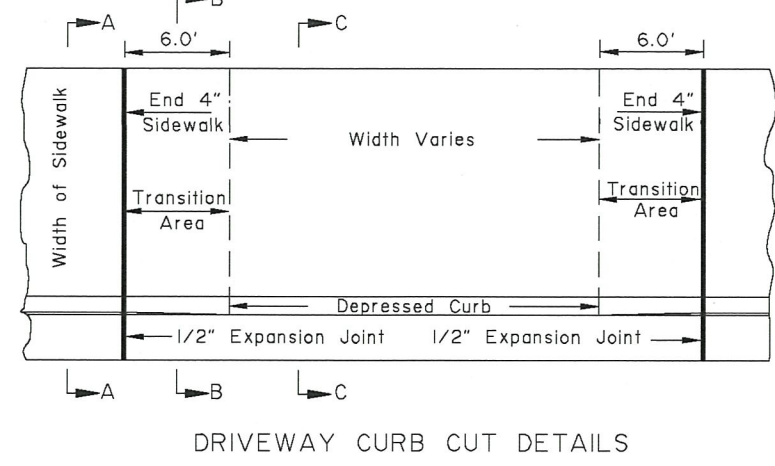
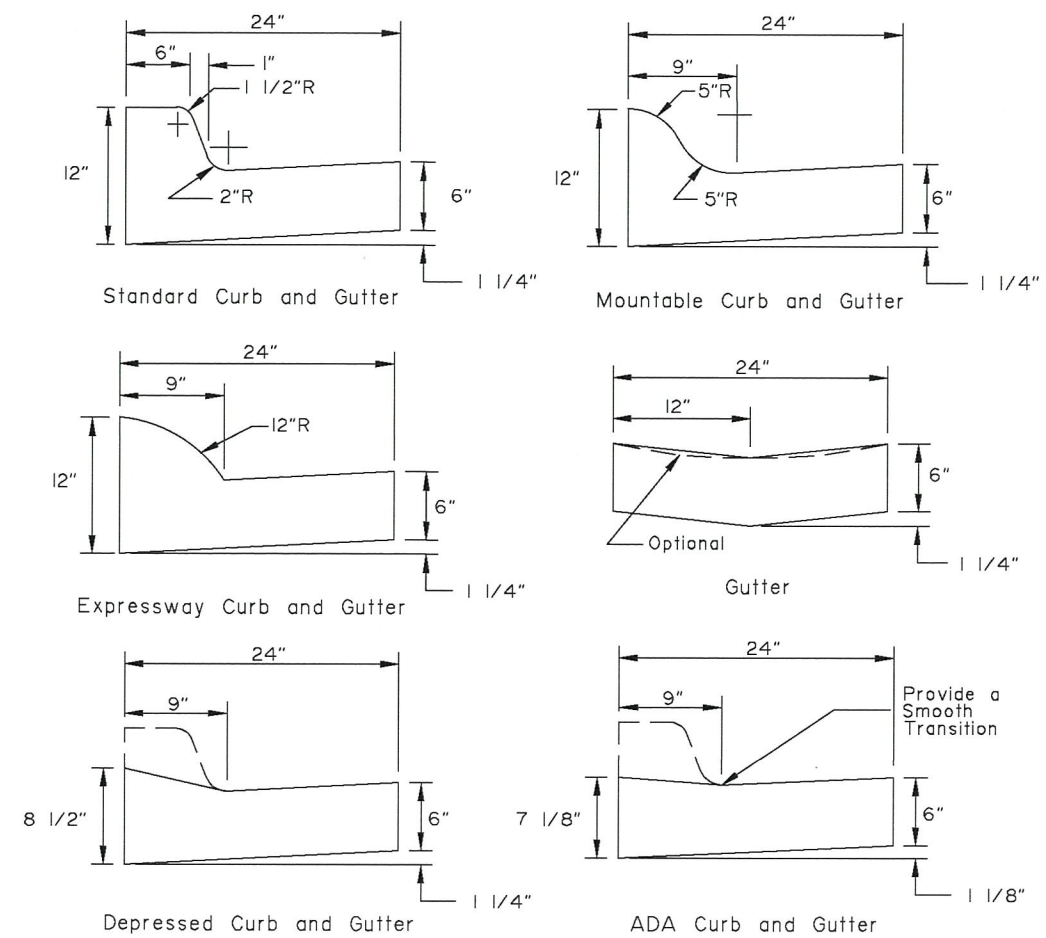
Interpolate if the end offset falls between table values

State of Alaska DOT&PF  
ALASKA STANDARD PLAN  
**WIDENING FOR GUARDRAIL END TERMINALS**

Adopted as an Alaska Standard Plan by: *Kenneth J. Fisher*  
Kenneth J. Fisher, P.E.  
Chief Engineer

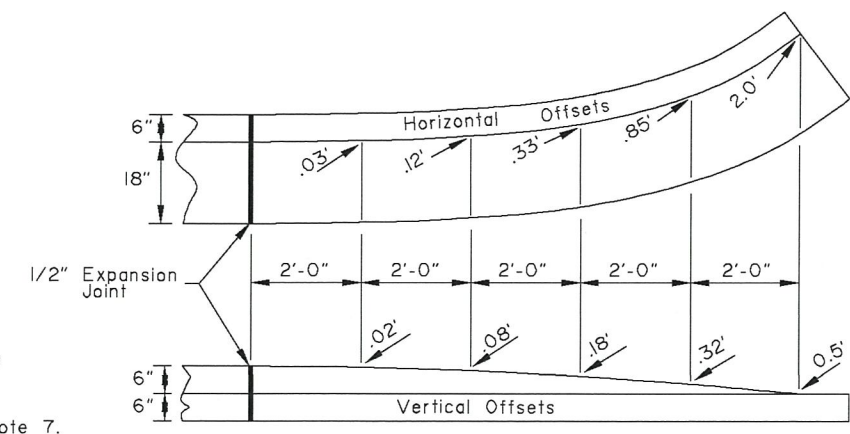
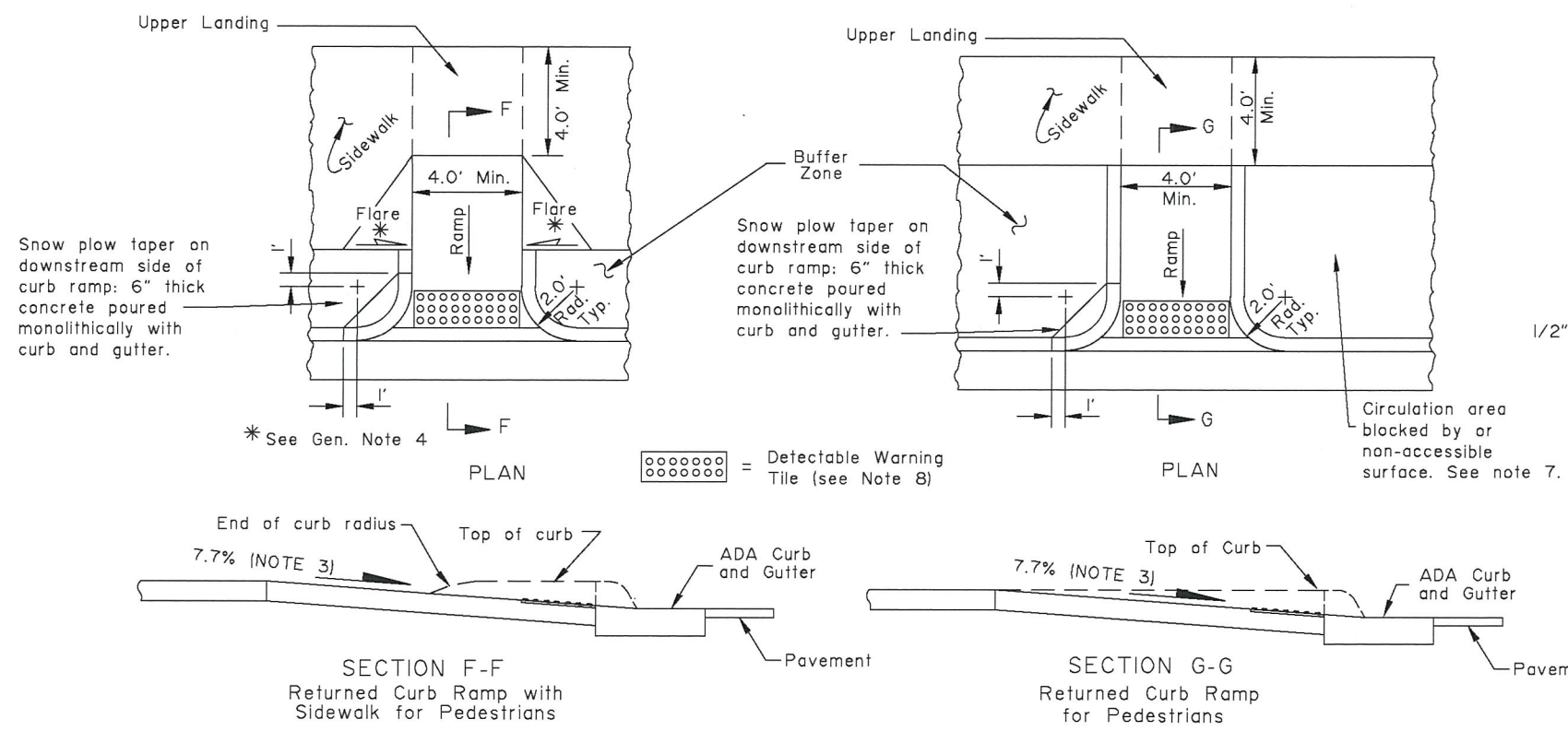
Adoption Date: 02/08/2019

Last Code and Stds. Review By: \_\_\_\_\_ Date: \_\_\_\_\_  
Next Code and Standards Review date: 02/08/2029



**CONSTRUCTION NOTES:**

1. Use the type of curb and gutter shown on the plans.
2. Construct ramp runs and landings of concrete, regardless of whether the sidewalk is asphalt or concrete.
3. Construct ramp slopes at a 7.7% nominal grade, or flatter. Ramp slopes may be increased to a maximum of 8.3% when site conditions warrant it. Ramp lengths should be increased to keep grades under the 8.3% maximum, but are not required to exceed 15.0 feet. The resulting ramp grade at a 15.0 foot ramp length is acceptable even if it exceeds 8.3%.
4. Construct flare slopes at 8.3% (measured parallel to the curb line) or flatter, sidewalk cross slopes at 1.5% nominal (1.0% min. and 2.0% max), and ADA Curb and Gutter gutter pan slopes at 4.7% nominal. Construct grade breaks perpendicular to ramp runs.
5. Do not construct flare slopes steeper than 10.0%, sidewalk cross slopes steeper than 2.0% and ADA Curb and Gutter gutter pan slopes steeper than 5.0%. These are the steepest slopes allowed under the 2006 ADA Standards for Transportation Facilities.
6. Provide a coarse broomed finish on ramp runs perpendicular to the ramp slope.
7. When approved by the Engineer, curb returns may be replaced with flares at locations where access to the side of a ramp run is free of poles, utility boxes, other obstructions, or non-accessible surfaces such as a dirt planter strips. See Standard Plan I-22 for flare details.
8. Install 24" wide detectable warning tiles for the full width of the ramp. Provide tiles with truncated domes meeting Section 705.1 of the 2006 ADA Standards for Transportation Facilities. Align truncated dome pattern in the predominant direction of wheelchair travel to permit wheels to roll between domes.
9. Maximum cross slope on upper landings, measured in any direction, is 2.0%. Maximum cross slope on ramps is 2.0% measured perpendicular to the ramp run.



State of Alaska DOT&PF  
**ALASKA STANDARD PLAN**

**CURB CUT  
 CURB & GUTTER  
 AND CURB RAMP DETAILS**

Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
 Carolyn Morehouse, P.E.  
 Chief Engineer

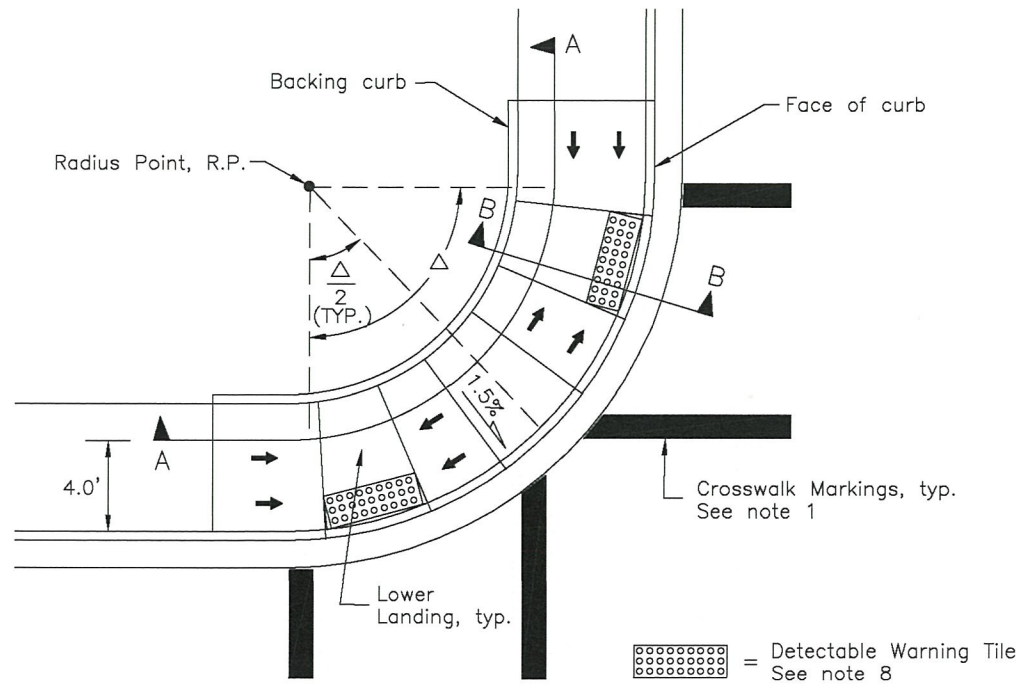
Adoption Date: 7/17/2020

Last Code and Stds. Review By: KLH Date: 7/8/2020  
 Next Code and Standards Review date: 7/8/2030

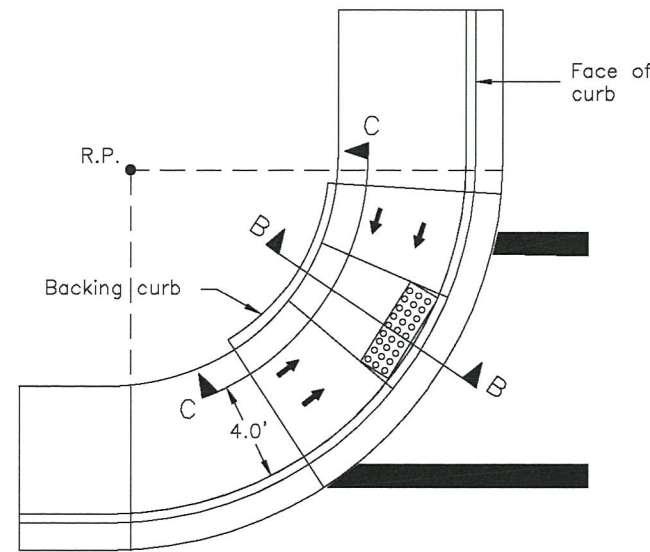
Note: Drawing not to scale

CONSTRUCTION NOTES:

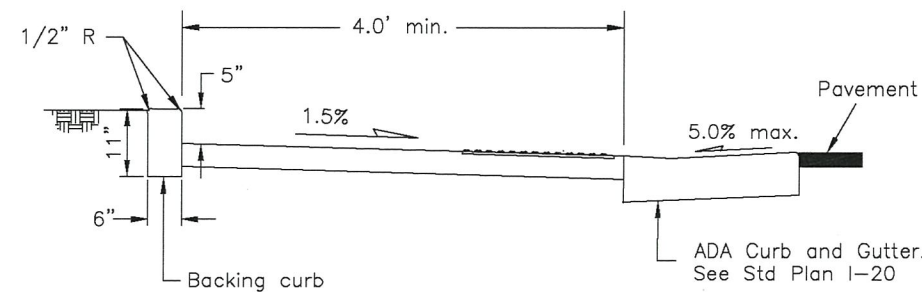
1. See plans for ramp type at specific locations. See striping plans for crosswalk layouts.
2. Construct ramp runs and landings of concrete, regardless of whether the sidewalk is asphalt or concrete.
3. When one parallel curb ramp will serve two directions, use the One Crossing Direction detail and refer to the striping plans for crosswalk layouts.
4. Ramp run lengths are shown for a flat sidewalk grade. For other sidewalk grades, increase or decrease ramp and flare lengths to maintain the slopes shown.
5. Construct ramp slopes at a nominal 7.7% grade, or flatter. Ramp slopes may be increased to a maximum of 8.3% when site conditions warrant it. Ramp lengths should be increased to keep grades under the 8.3% maximum, but are not required to exceed 15.0 feet. The resulting ramp grade at a 15.0 foot ramp length is acceptable even if it exceeds 8.3%.
6. Construct sidewalk cross slopes at 1.5% nominal (1.0% min. and 2.0% max).
7. Provide a coarse broomed finish running perpendicular to the curb on ramp runs and upper landings and parallel to the curb on lower landings.
8. Install 24" detectable warning tiles meeting Section 705.1 of the 2006 ADA Standards for Transportation Facilities for the full width of the ramp.
9. Maximum cross slope on lower landings is 2.0% as measured in any direction. Maximum cross slope on ramps is 2.0% measured perpendicular to the ramp run.
10. Provide 4" minimum thick concrete on ramps and landings.



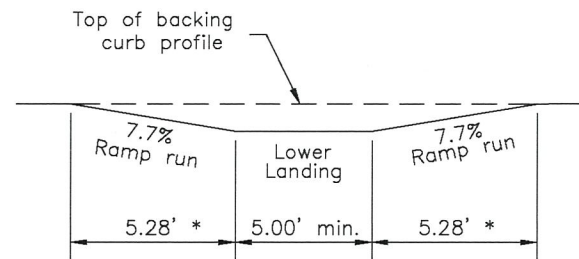
TWO CROSSING DIRECTIONS  
At corner



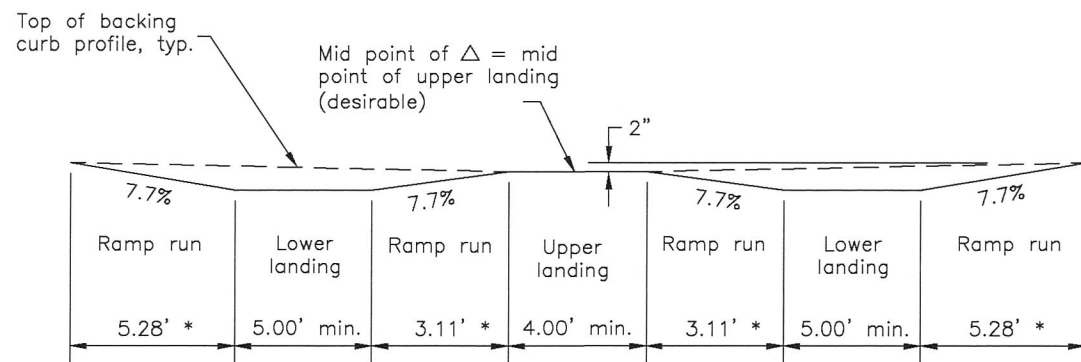
ONE CROSSING DIRECTION  
At corner - generic location shown



SECTION B-B

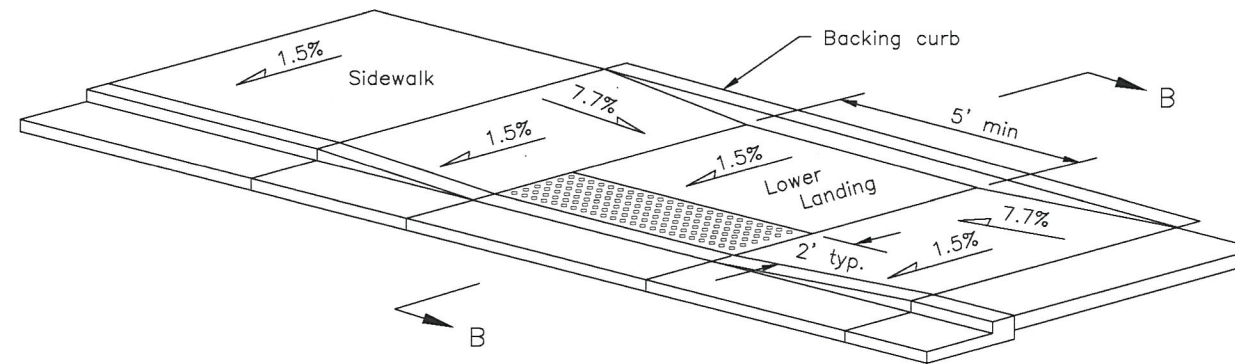


PROFILE C-C



\* See Const. Note 5

PROFILE A-A



MID-BLOCK

Note: Drawing not to scale

State of Alaska DOT&PF  
ALASKA STANDARD PLAN

PARALLEL CURB RAMP

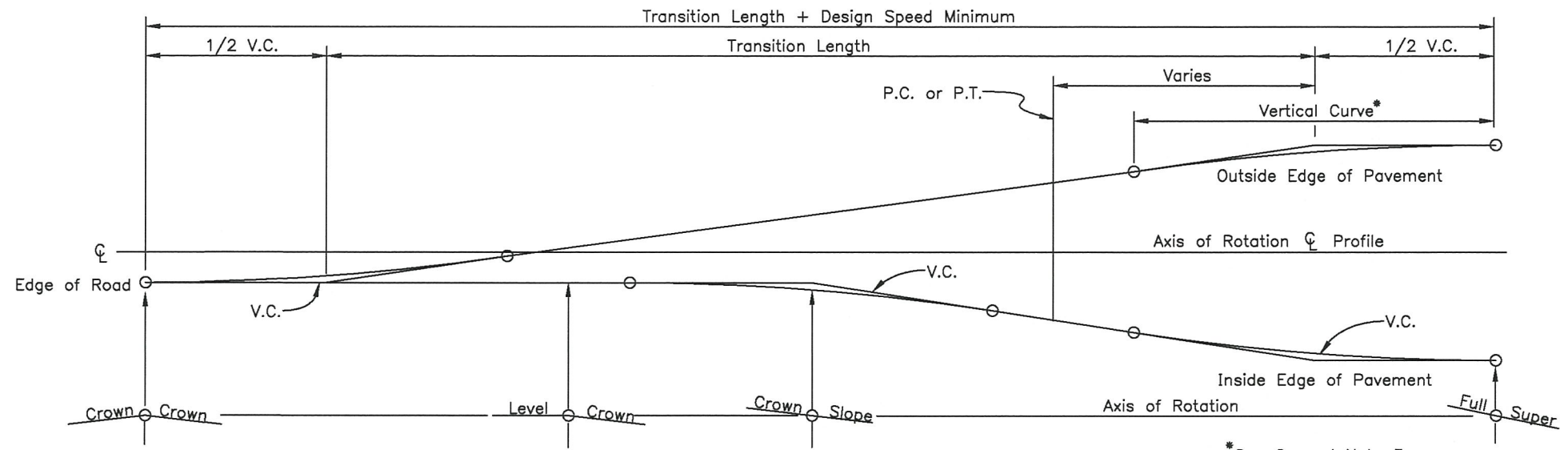
Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review  
By: KLH Date: 7/8/2020

Next Code and Standards Review date: 7/8/2030



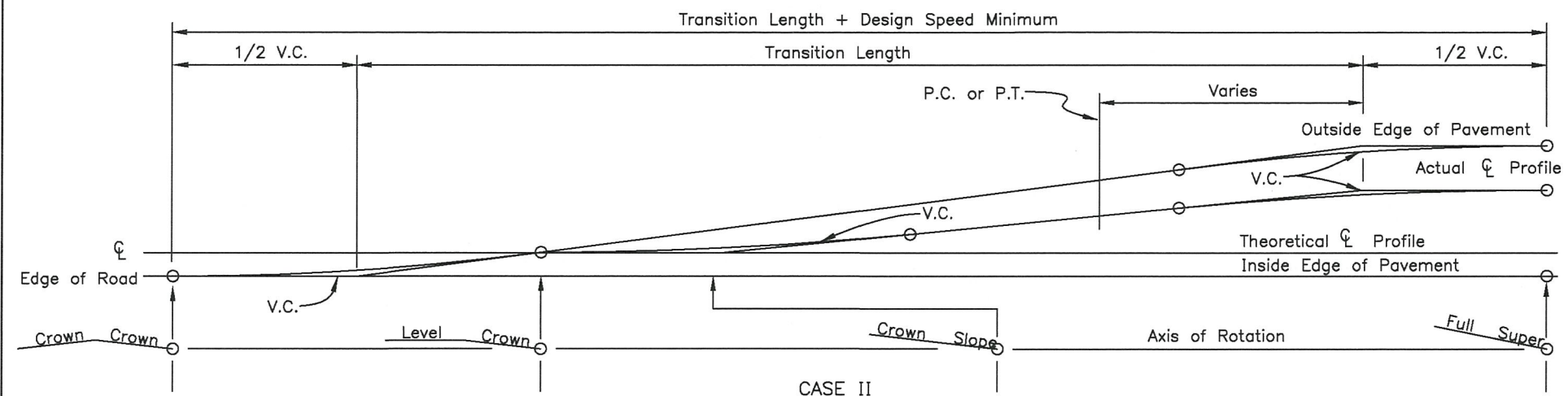


CASE I  
PAVEMENT REVOLVED ABOUT CENTERLINE

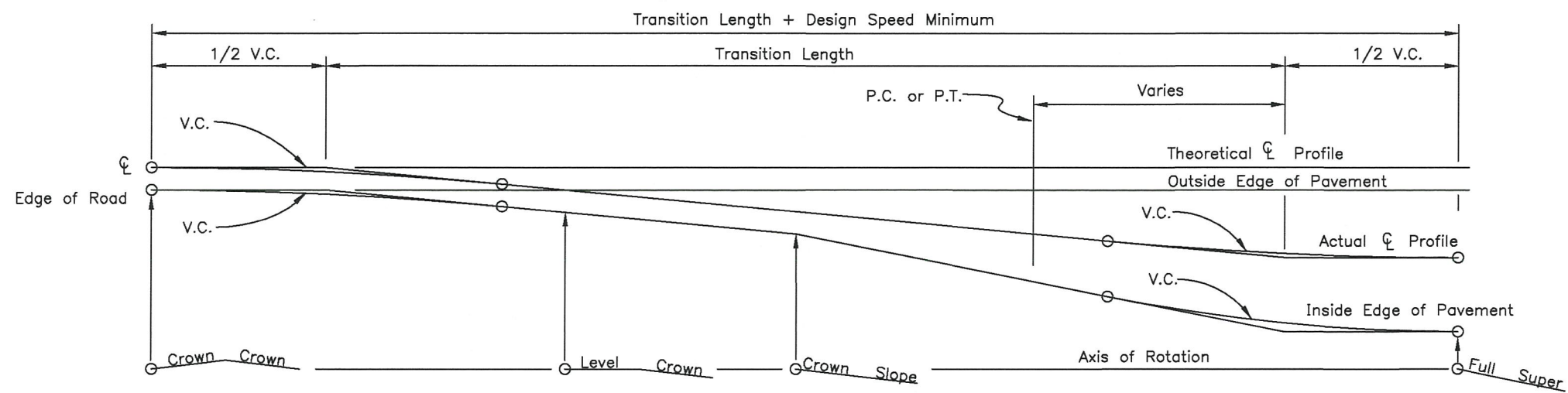
\*See General Note 3

GENERAL NOTES:

1. Location of transition length relative to horizontal curves will be shown on the plans or as directed by the Engineer.
2. Widening for guardrail or curvature will not change the location of the axis of rotation.
3. Minimum vertical curve length in feet shall be the numerical value of the design speed in M.P.H.
4. Superelevation shall be built into the subgrade and carried through the shoulders.



CASE II  
PAVEMENT REVOLVED ABOUT INSIDE EDGE  
TO BE USED WHERE DRAINAGE IS THE GOVERNING CONSIDERATION



CASE III  
PAVEMENT REVOLVED ABOUT OUTSIDE EDGE TO BE  
USED WHERE OVERALL APPEARANCE IS THE MAIN CONTROL

State of Alaska DOT&PF  
ALASKA STANDARD PLAN

SUPERELEVATION  
TRANSITION

Adopted as an Alaska  
Standard Plan by: *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

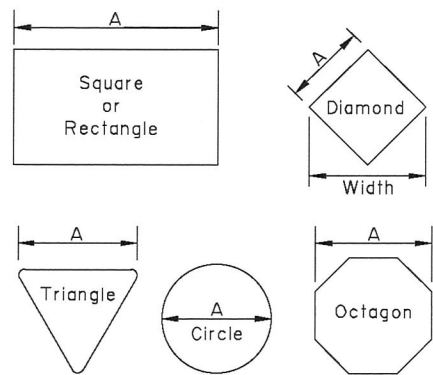
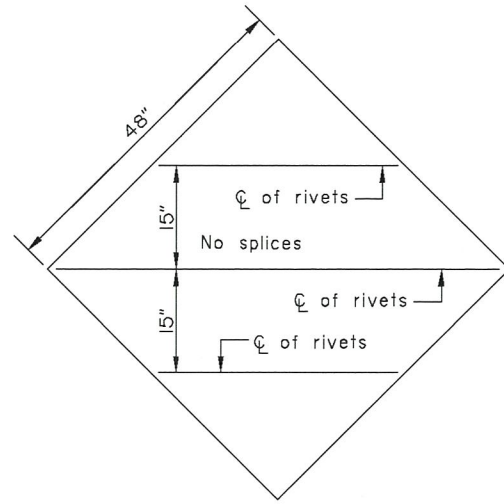
Adoption Date: 7/17/2020

Last Code and Stds. Review  
By: KLK Date: 7/8/2020  
Next Code and Standards Review Date: 7/8/2030

I-81.00

GENERAL NOTES

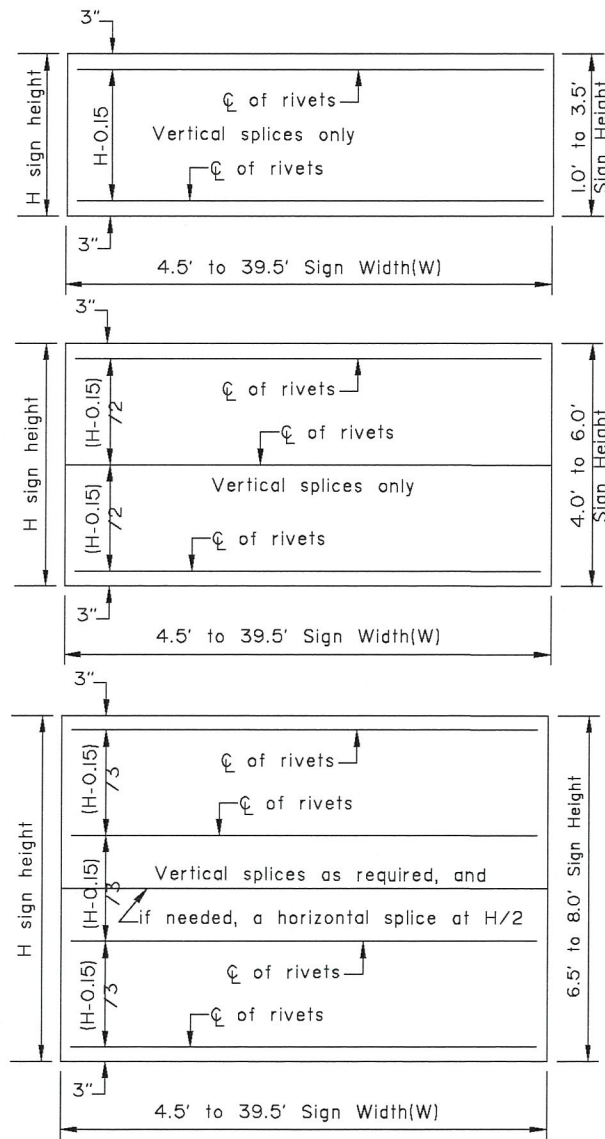
1. See the standard specifications for the aluminum alloys that you may use for sign sheeting and wind framing members.
2. Fabricate all signs from 0.125" thick aluminum sheeting.
3. Sign fabricators may use alternates to the zee shaped framing member with approval of the engineer, if the frame manufacturer certifies their design equals or exceeds the strength of the zee shaped design.
4. Install one piece wind framing members on all signs up to 23.5' wide. Use one splice in each wind frame on all signs wider than 23.5'. Locate splices at least 18" from all posts and panel edges. Stagger splices in adjacent framing members at least 8.0' apart.
5. Attach wind framing members with rivets or with an engineer approved, double sided, high strength, adhesive tape. Clean and handle sheeting and framing members and apply tape in accordance with the tape manufacturer's written instructions. Install two rivets in both ends of each framing member.
6. Use 3/16" diameter rivets conforming to aluminum alloy 6061-T6 for cold driven rivets, or aluminum alloy 6061-T43 for hot driven rivets.
7. Sign fabricators may use sign panels extruded with integral framing with approval of the engineer, if the manufacturer certifies their design equals or exceeds the strength of the 0.125" thick panel with framing attached to it.
8. Frame all signs taller than 8.0' with five wind framing members located (H-0.15)/4 spaces. If needed, make a horizontal splice at the middle wind frame.
9. Do not use round pipes for sign supports.



Maximum size unframed signs using 0.125" thick aluminum sheeting.	
Sign Shape	A
Squares, Shields, and Route Markers	48"
Rectangles	48"
Diamonds	48"
Triangles	48"
Rounds and Octagons	48"

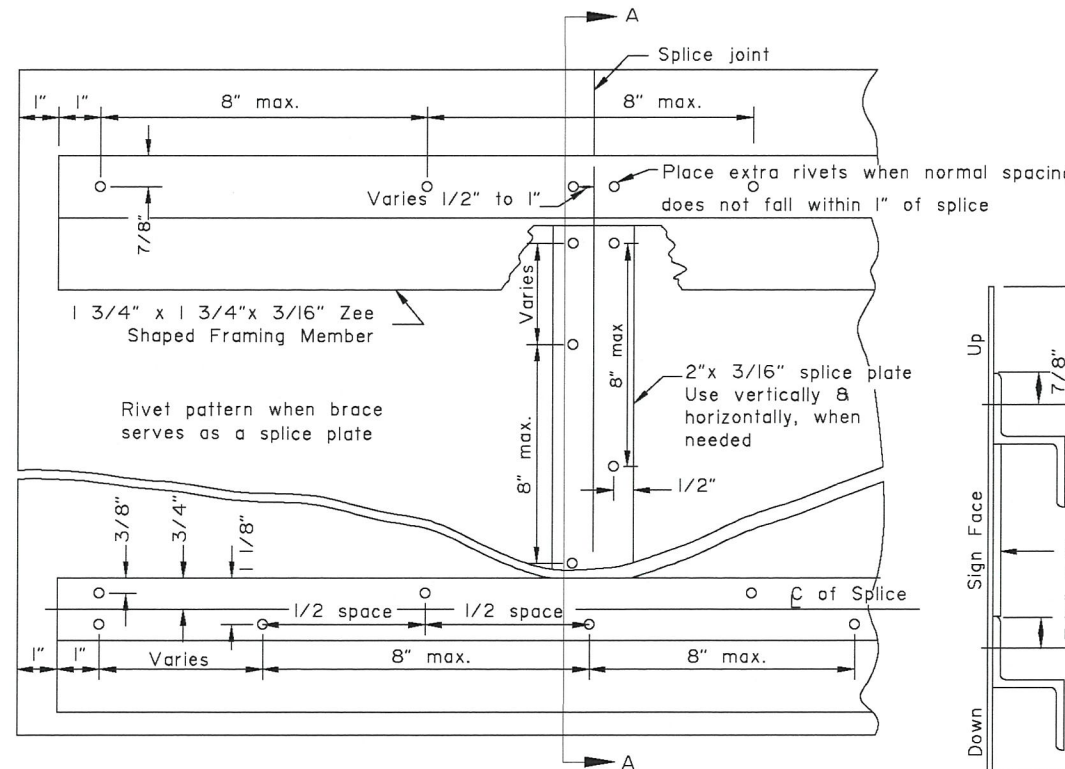
Install wind framing on all signs that exceed the dimensions listed.

LIGHT SIGNS

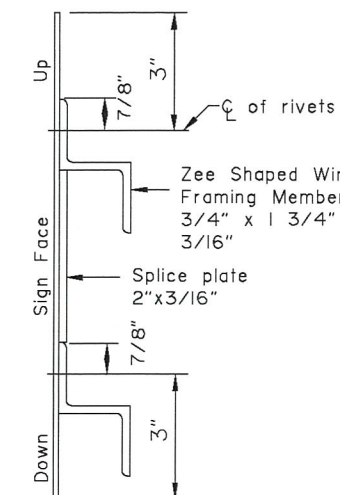


WIND FRAMING LOCATIONS

Note: Drawing not to scale



RIVET DETAIL FOR ZEE SHAPED WIND FRAMING & SPLICE PLATE



SECTION A-A

State of Alaska DOT&PF  
ALASKA STANDARD PLAN  
SIGN FRAMING

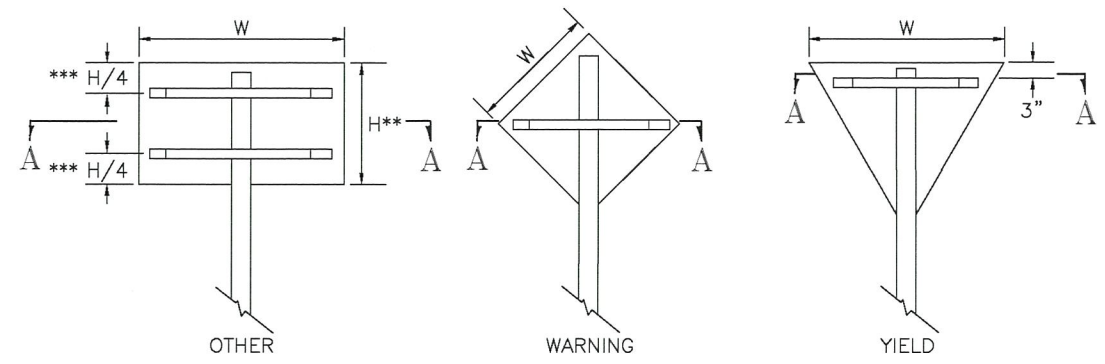
Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*

Carolyn Morehouse, P.E.  
Chief Engineer

Adoption Date: 7/17/2020

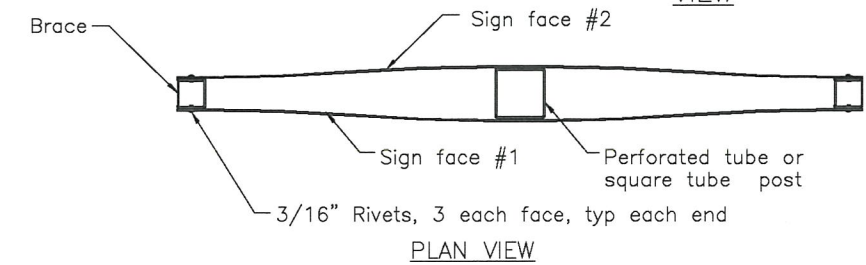
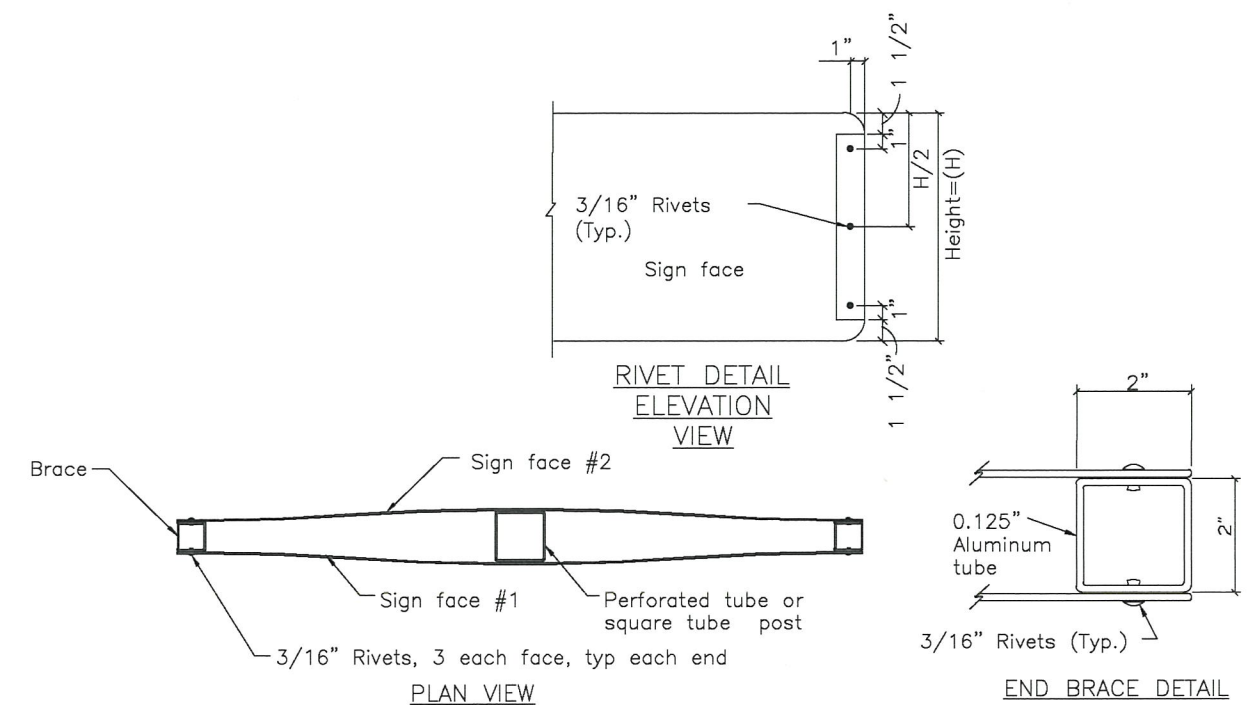
Last Code and Stds. Review  
By: WTH Date: 7/8/2020

Next Code and Standards Review date: 7/8/2030

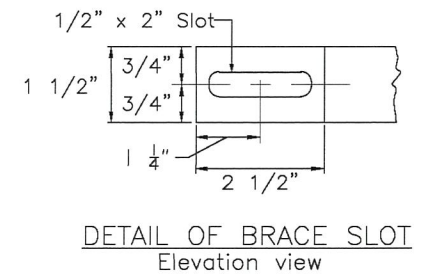


\*\*\* Use one brace when  $H \leq 18"$   
 Use two braces when  $18" < H < 48"$   
 Use three braces when  $H \geq 48"$   
 \*\* Position of brace may be varied to match  
 Pre-drilled mounting holes in panel

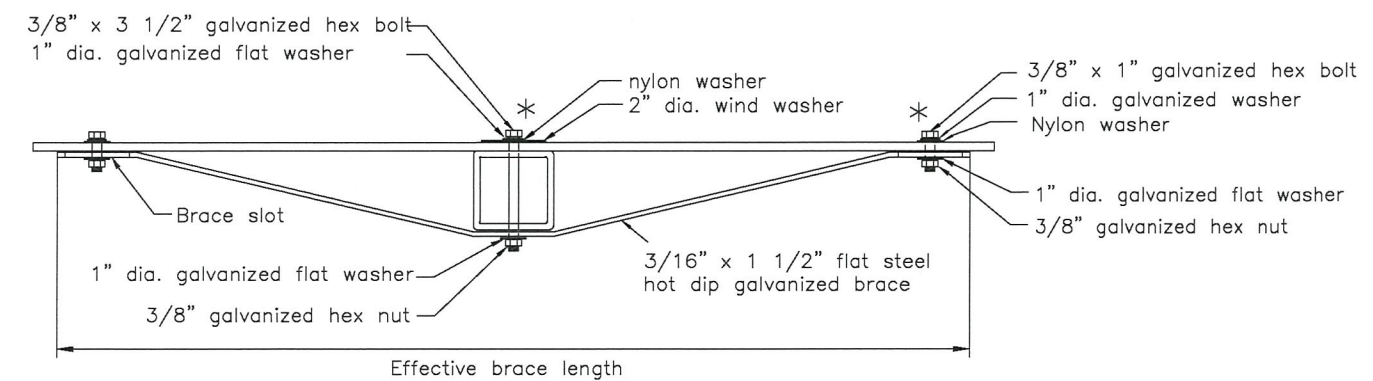
SIGN BRACING PLACEMENT



SMALL STREET NAME SIGN (D3-1, D3-1A, D3-1D) BRACING DETAILS



DETAIL OF BRACE SLOT  
Elevation view



TUBE POST SIGN BRACING SECTION A-A  
Plan view

\* Adjust location of bracing so that bolts and washers will miss the sign legend

Sign Width(W)	Effective Brace Length		
	Warning	Yield	Other
30"	36"	24"	24"
36"	42"	30"	30"
42"	48"	-	36"
48"	Two posts	36"	42"

< 30" No bracing required and use square tube

Note: Drawing not to scale

State of Alaska DOT&PF  
 ALASKA STANDARD PLAN  
 BRACING FOR SIGNS  
 MOUNTED ON SINGLE POST

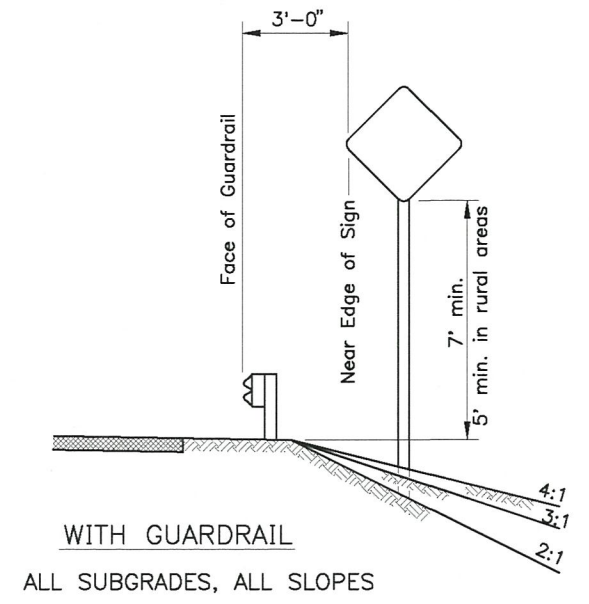
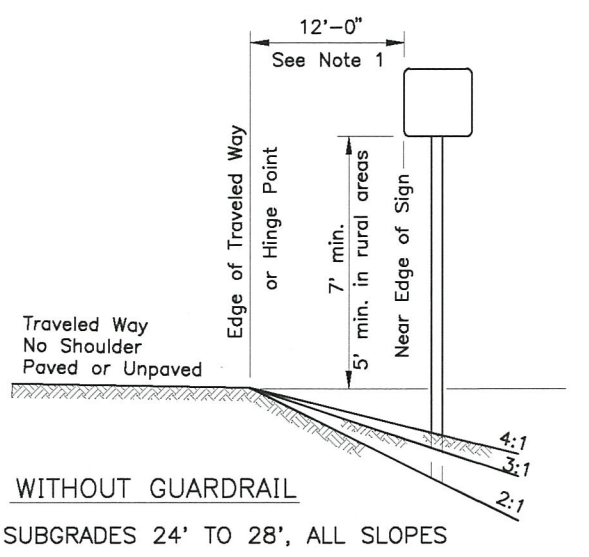
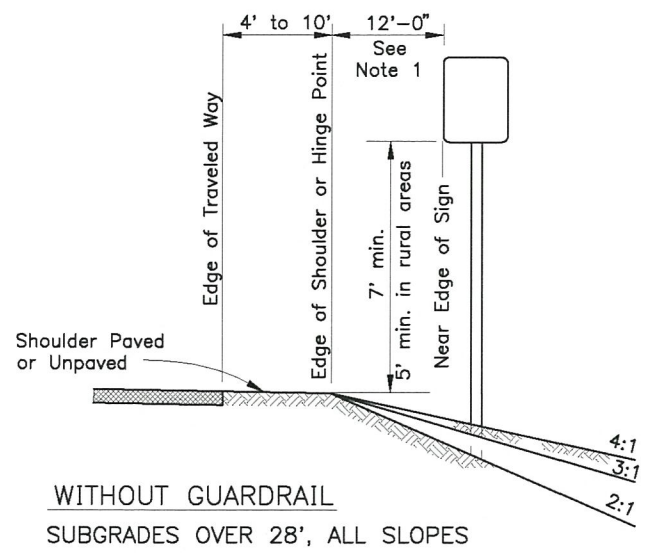
Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
 Carolyn Morehouse, P.E.  
 Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review  
 By: WTH Date: 7/8/2020

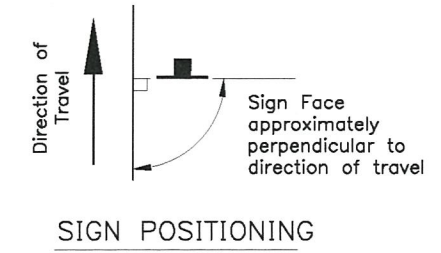
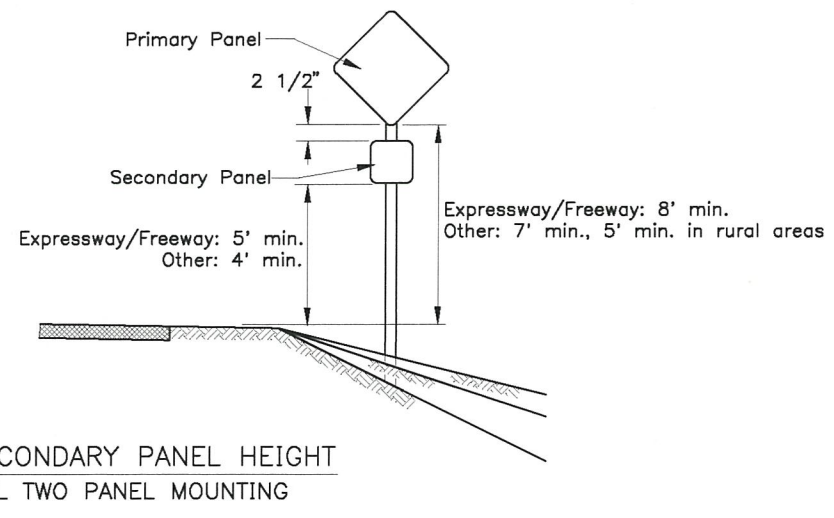
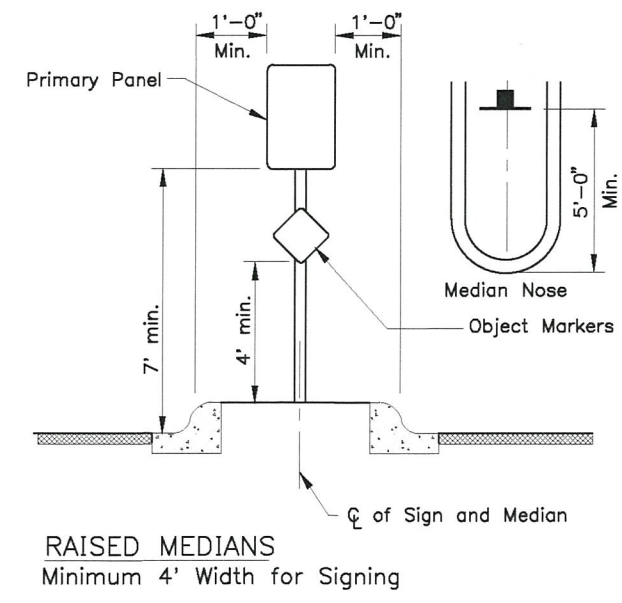
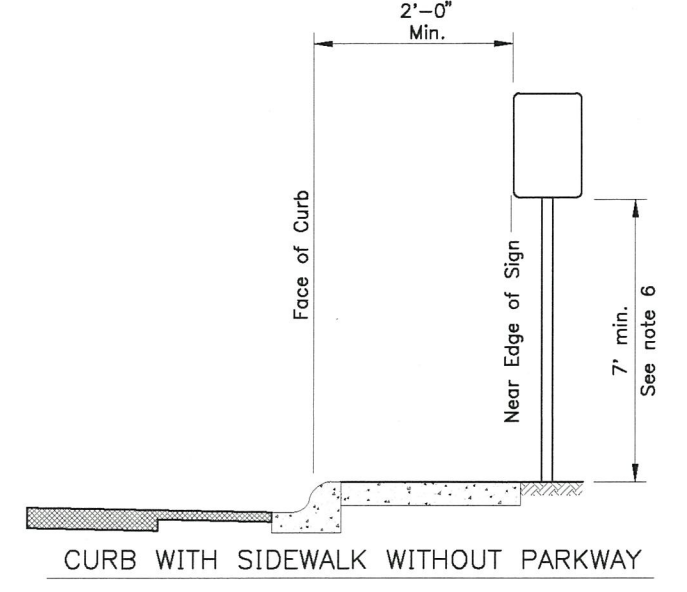
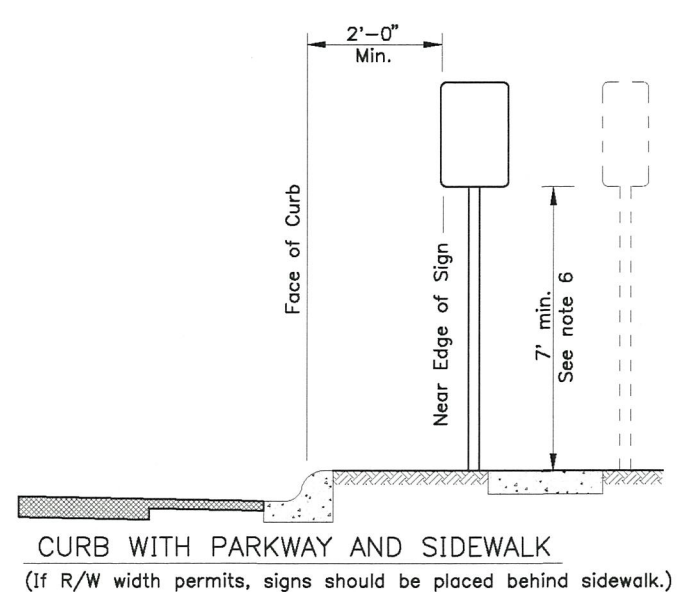
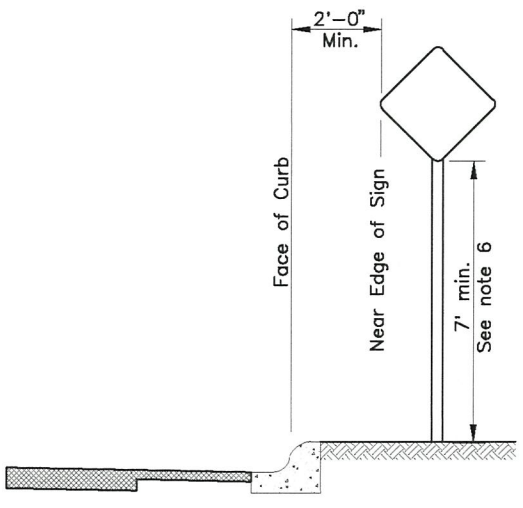
Next Code and Standards Review date: 7/8/2030

S-01.02



**GENERAL NOTES**

1. Unless shown otherwise on the plans, the standard sign offset is 12'. The minimum is 6' where shoulder width is 6' or greater.
2. Add 6" to mounting height on unpaved roads.
3. If signs extend over bike paths, the minimum vertical clearance is 8' 0".
4. When signs are placed 30' or more from the edge of traveled way, mount them with the bottom of the sign at least 5' above the road surface at the near edge of the road.
5. When multiple hinged sign supports are used, mount hinges at least 7' above the ground.
6. Minimum mounting height is 7'-0" where parking or pedestrian movements are likely to occur, or where signs extend over sidewalks.
7. For construction signs in rural areas, mounting height shall be 7' minimum.



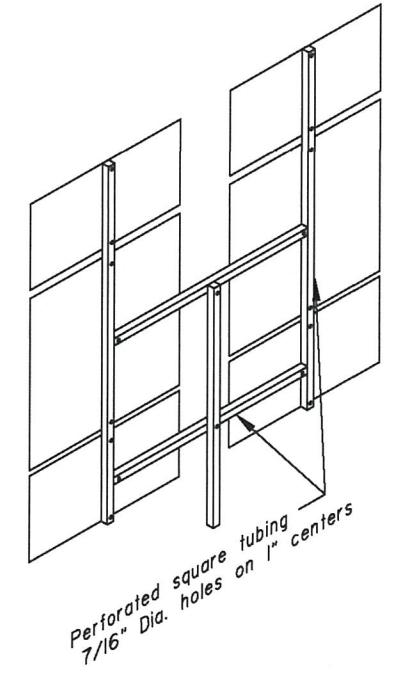
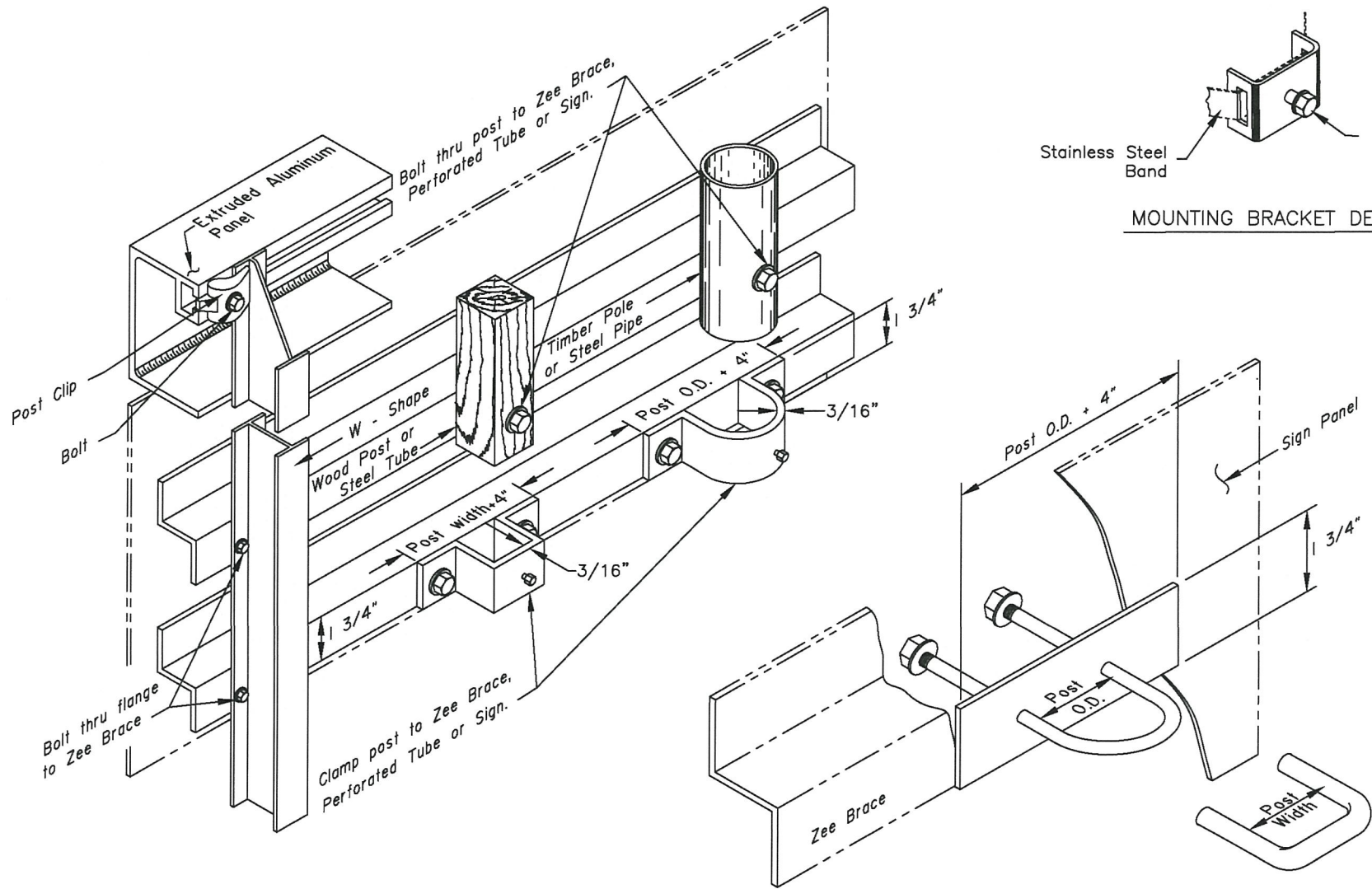
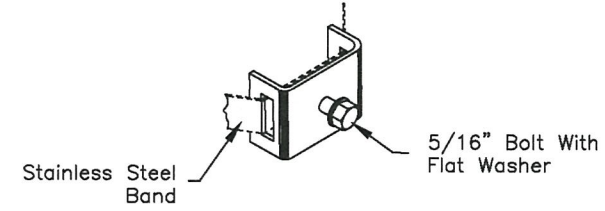
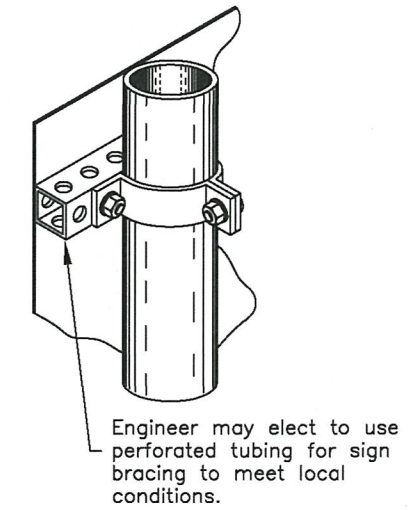
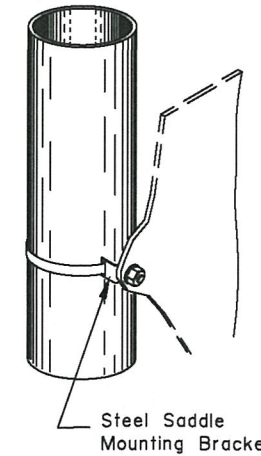
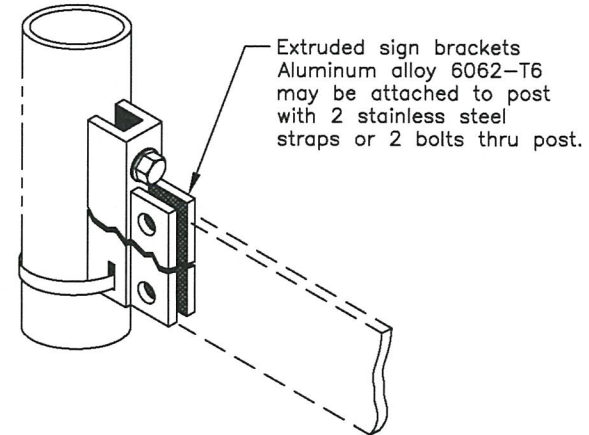
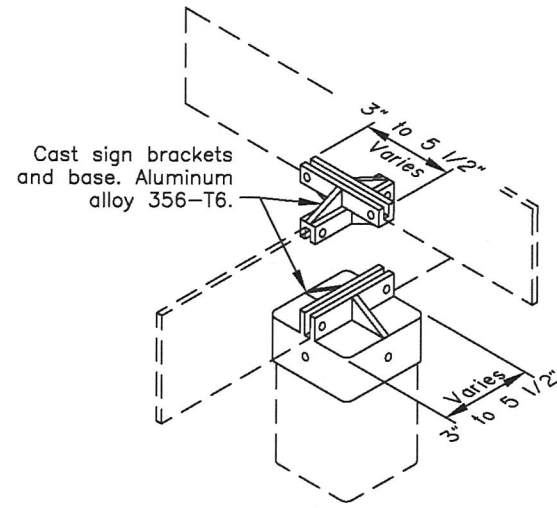
State of Alaska DOT&PF  
ALASKA STANDARD PLAN

POST MOUNTED SIGN  
OFFSET AND HEIGHT

Adopted as an Alaska Standard Plan by *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review  
By: KLK Date: 7/8/2020  
Next Code and Standards Review Date: 7/8/2030



**CONSTRUCTION NOTES**

1. Details shown indicate general design only. Dimensions and design may vary among manufacturers.
2. Install weather tight caps on all pipe and tube post (except perforated tubing).
3. Protect driven sign posts with drive caps during installation.
4. Bolt braces to posts at each point where they cross posts.
5. Install signs with top of post, mounting brackets, etc. with a minimum of 3" below top of sign.
6. Paint all sign mounting fasteners on sign face a color closely matching the sign face.
7. Attach all signs, zees and braces mounted to the posts with 5/16" bolts, nuts and washers.
8. Furnish all aluminum nuts, bolts and washers with anodized finish.

FASTENER SPECIFICATION TABLE (ALL REFERENCES ARE TO ASTM)				
FASTENERS		ALUMINUM	STEEL	STAINLESS STEEL
BOLTS	MACHINE	F468 2024-T4	A307	F593
	CARRIAGE "U"	F468 2024-T4	A307	A276 TYPE 304
NUTS	REGULAR	F467 6061-T6	A563	F594
	LOCKING	F467 2017-T4		
WASHERS		F468 2024-T4	F844	A480
POST CLIP		A356-T6	N/A	N/A

State of Alaska DOT&PF  
ALASKA STANDARD PLAN

**SIGN TO SIGN POST CONNECTION**

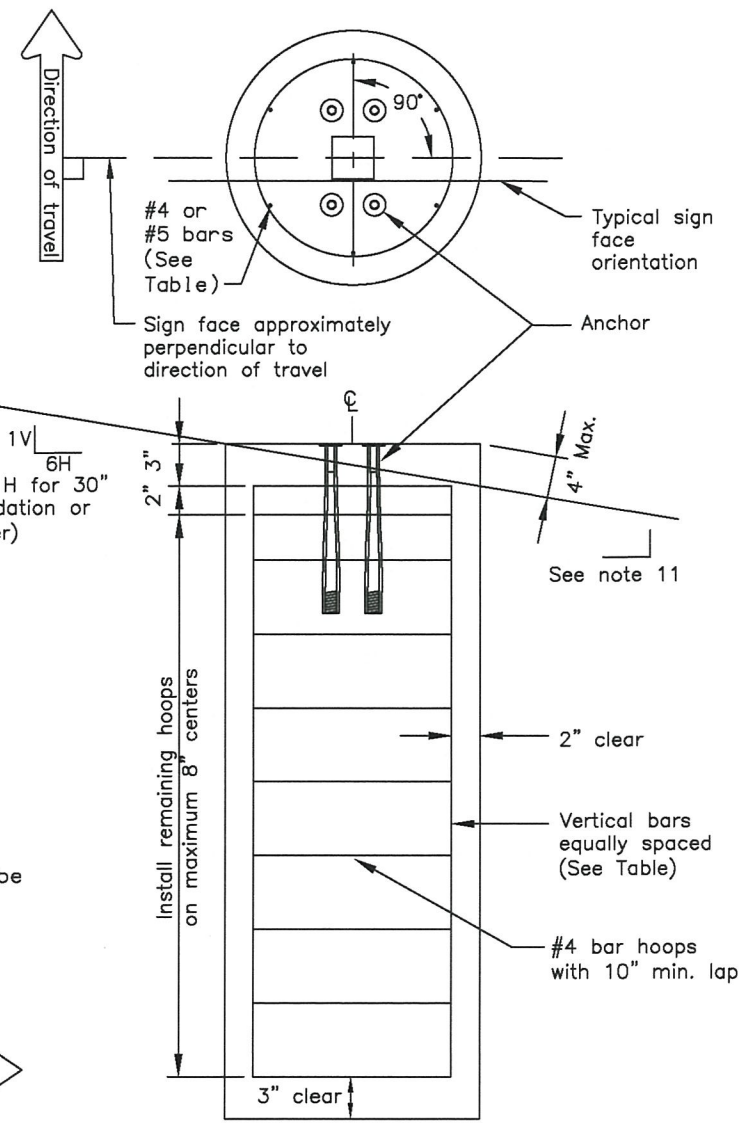
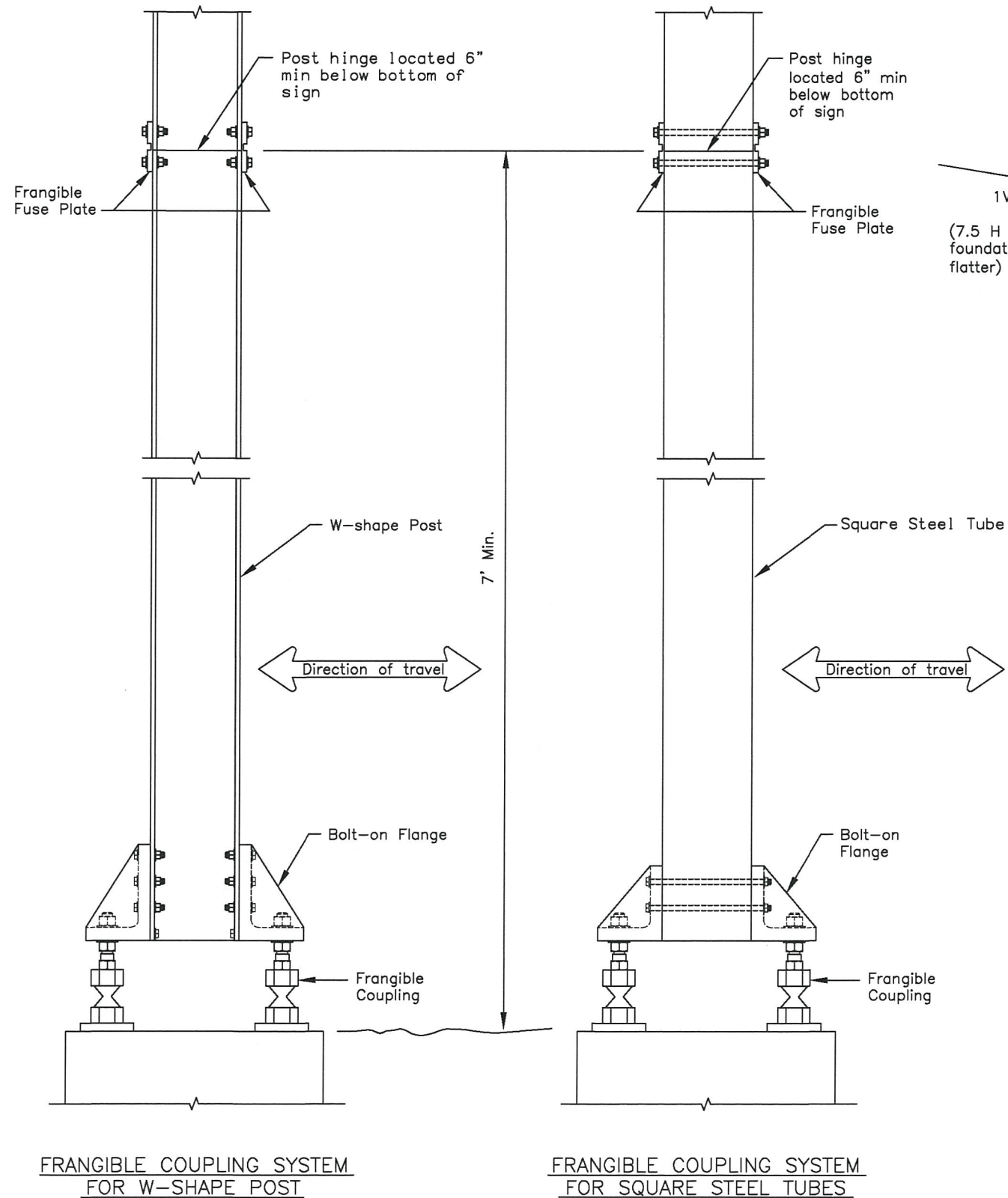
Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

Adoption Date: 07/30/2021

Last Code and Stds. Review  
By: LRG Date: 07/30/2021

Next Code and Standards Review date: 07/30/2031

**NOTE:**  
Install hinges when more than one post is used to support a sign. Do not install hinges on single post installations.



**SIGN POST FOUNDATION**  
See Table for depth and diameter

POST SIZE & TYPE	FOUNDATION *			REINFORCEMENT			
	DIA.	MIN. DEPTH	CY <sup>3</sup> CONC.	VERTICAL BARS QTY. SIZE	LGTH.	HOOPS QTY. SIZE	DIA.
2 1/2" TUBE	1'-6"	6'-0"	0.39	7 #5	5'-6"	10 #4	1'-2"
3" TUBE	1'-6"	6'-0"	0.39	7 #5	5'-6"	10 #4	1'-2"
3 1/2" TUBE	1'-6"	6'-0"	0.39	7 #5	5'-6"	10 #4	1'-2"
4" TUBE	2'-6"	6'-0"	1.09	8 #8	5'-6"	10 #4	2'-2"
4 1/2" TUBE	2'-6"	6'-0"	1.09	8 #8	5'-6"	10 #4	2'-2"
5" TUBE	2'-6"	6'-0"	1.09	8 #8	5'-6"	10 #4	2'-2"
W6 x 9	2'-6"	6'-0"	1.09	8 #8	5'-6"	10 #4	2'-2"
W6 x 12	2'-6"	6'-0"	1.09	8 #8	5'-6"	10 #4	2'-2"
W6 x 15	3'-0"	6'-6"	1.70	8 #11	6'-0"	12 #4	2'-8"
W6 x 30	3'-0"	7'-6"	1.96	8 #11	7'-0"	13 #4	2'-8"

**FOUNDATION TABLE**

\* Foundations sized for use where there are no loose, high moisture, or fine grained soils.

**GENERAL NOTES**

1. Furnish sign posts with NCHRP 350 compliant frangible couplings designed to break away safely when struck from any direction. There is no MASH compliant device at this time. See SPDR report for more info.
2. Furnish frangible coupling systems with bolt-on flanges.
3. Details on this sheet illustrate only the general components of a frangible coupling system, and are not intended to specify a particular product.
4. Install frangible fuse plates as specified by the manufacturer and hinged joints when multiple posts are used to support a sign. Do not use round pipes.
5. Install the components of the breakaway system, including hinges, in accordance with the written instructions of the system manufacturer.
6. Use Class A, B or W concrete conforming to Sections 501 or 550 of the Standard Specifications. Furnish ASTM A615 grade 60 steel bars for concrete reinforcement conforming to AASHTO M31.
7. Spiral reinforcing steel may be substituted for hoops in concrete foundation. Spiral option shall consist of #3 plain spiral with 6" pitch with three flat turns at the top and one flat turn at the bottom.
8. Install the concrete anchors using a rigid template. Locate the anchors on centers and within tolerances specified by the manufacturer.
9. Install the anchors in fresh concrete as recommended by the manufacturer. Adjust the template's final position until it is level. Remove and replace all foundations that need more than 2 shims under any 1 coupling or more than a total of 3 shims under any pair of couplings to plumb the post.
10. Drill the holes for attaching brackets before the sign posts are hot dip galvanized. Test fit templates in the holes to ensure the brackets can be installed square to the posts.
11. Special grading detail and/or shielding may be required to maintain 4" maximum clear distance.

State of Alaska DOT&PF  
ALASKA STANDARD PLAN

**SIGN POST BASE AND FOUNDATION**

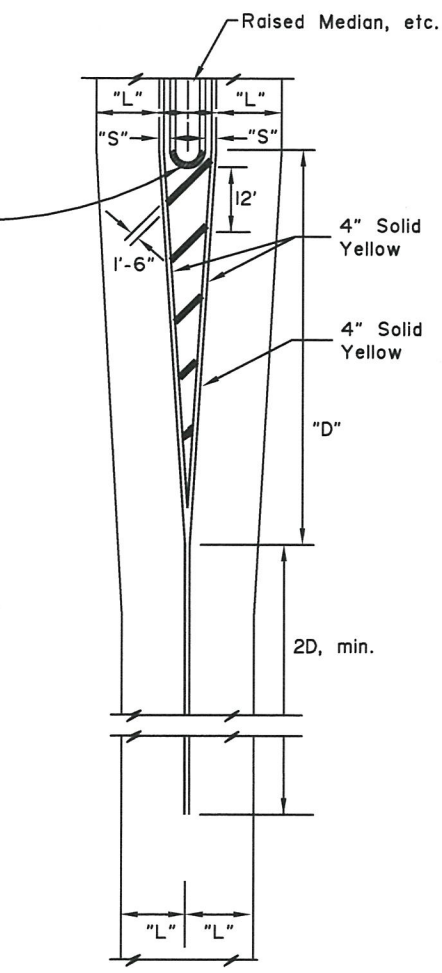
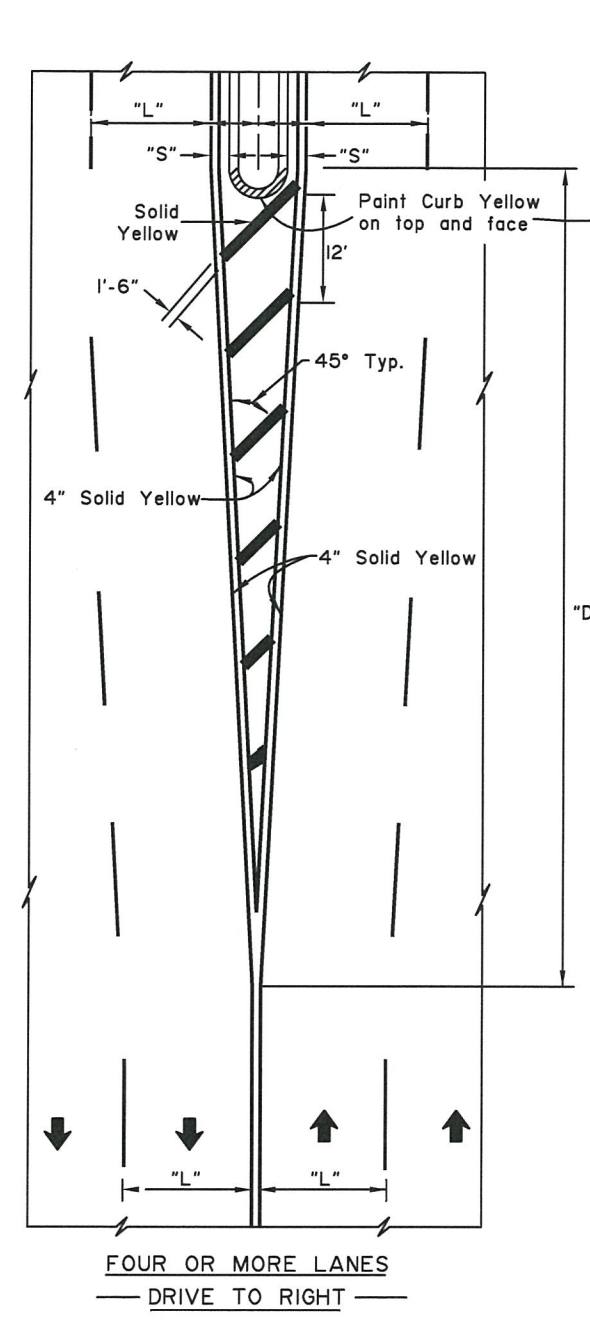
Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review  
By: KLK, MJM Date: 7/8/2020

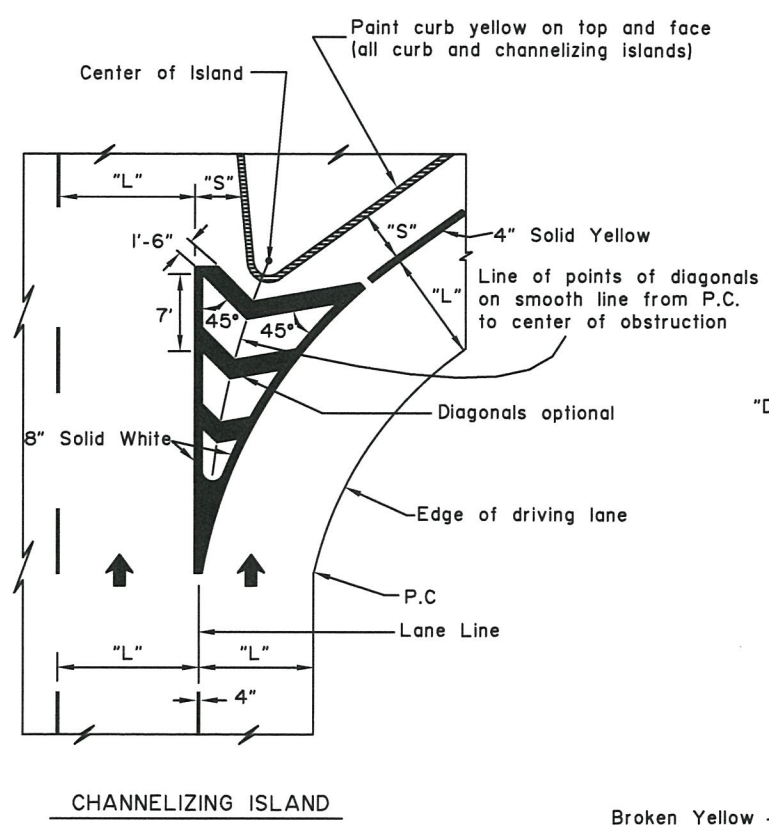
Next Code and Standards Review Date: 7/8/2030

S-31.02

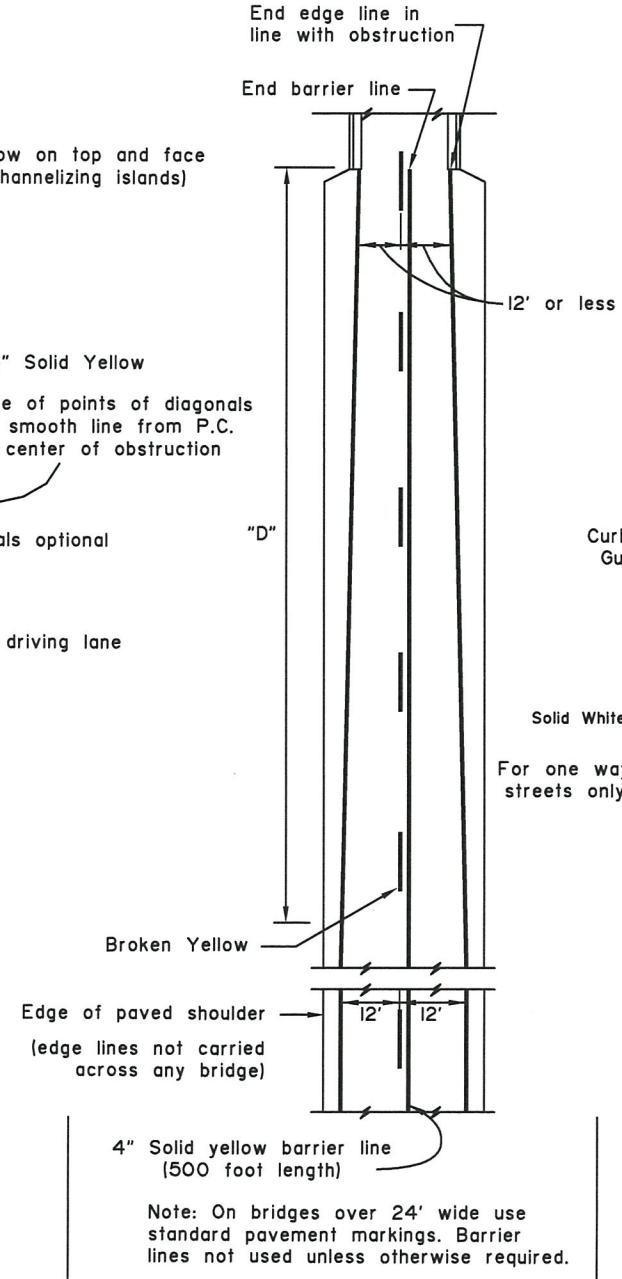


**TWO LANES DRIVE TO RIGHT**  
White longitudinal and diagonal markers identical to Four Lane Arrangement.

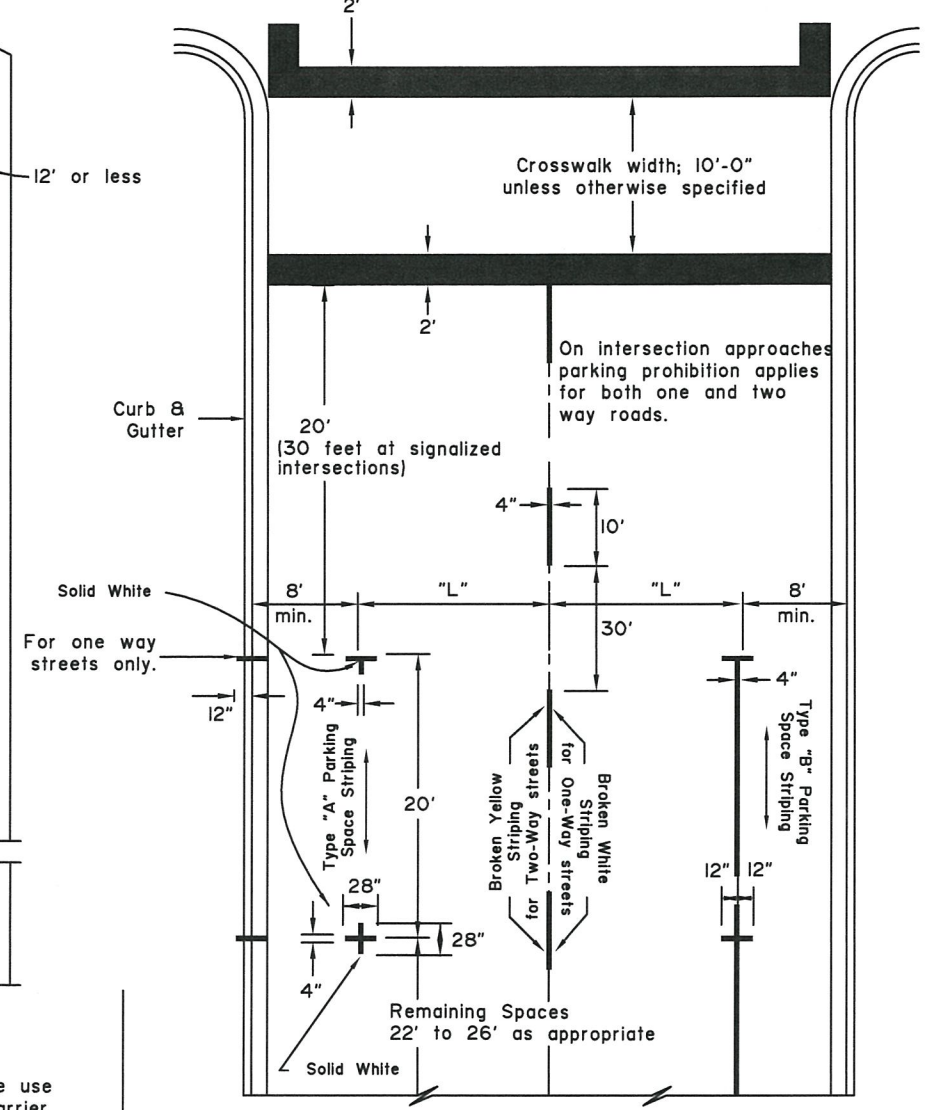
**NOTES:** "D" = Speed limit (mph) X "S" (offset width in feet) or as indicated on the plans. Minimum "D" = 100 feet urban, 200 feet rural.



**CHANNELIZING ISLAND**  
Center of Island  
Line of points of diagonals on smooth line from P.C. to center of obstruction  
Diagonals optional  
Edge of driving lane  
P.C.  
Lane Line



**EDGE LINE TRANSITION TO NARROW BRIDGE AND APPROACH BARRIER LINE**  
4" Solid yellow barrier line (500 foot length)  
Note: On bridges over 24' wide use standard pavement markings. Barrier lines not used unless otherwise required.

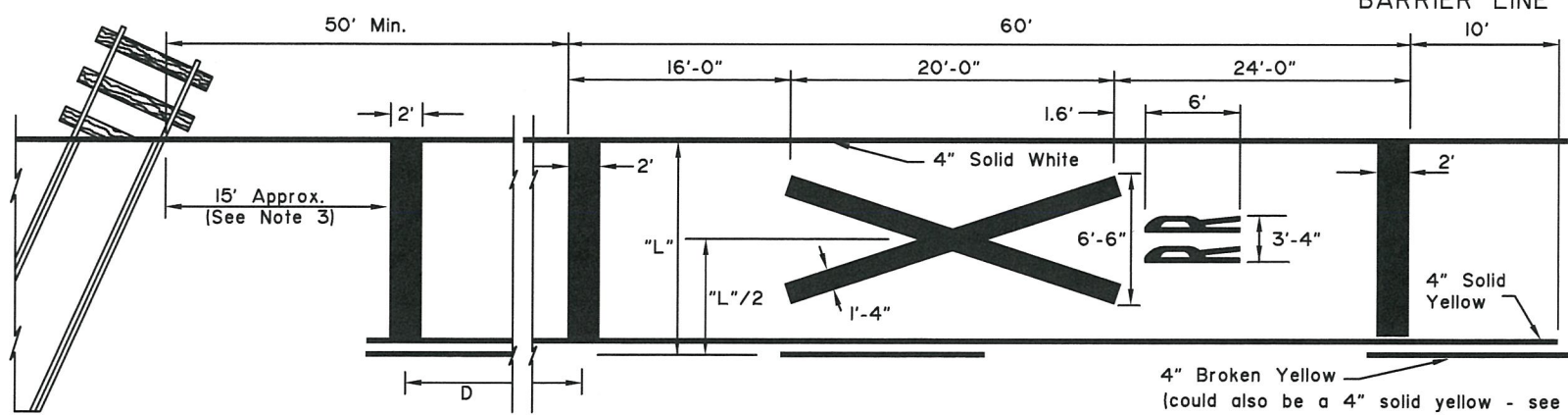


**CENTERLINES FOR TWO LANE TWO WAY URBAN ROADS-PARKING LIMIT LINES**  
Curb & Gutter  
20' (30 feet at signalized intersections)  
On intersection approaches parking prohibition applies for both one and two way roads.  
Type "A" Parking Space Striping  
Type "B" Parking Space Striping  
Remaining Spaces 22' to 26' as appropriate

**RAILROAD CROSSING NOTES:**

- All markings solid white unless indicated otherwise.
- On 4-lane roadways place railroad crossing approach markings in each lane of the approach.
- Locate Stop Bar 15' from railroad track or 8' from gate, if present.
- Place edge lines and lane lines on a uni-directional approach in a normal manner except that the lane line(s) shall be solid 4" white in lieu of broken for a distance of (D+60') in advance of the stop bands.

POSTED LIMIT	D
30 M.P.H.	225'
40	350'
50	475'
60	625'



**APPROACH TO RAILROAD CROSSING ON 2 LANE 2 WAY HIGHWAY**

**GENERAL NOTES:**

- "S" = offset distance as shown on the plans, otherwise 1 to 2 feet.
- "L" = driving lane width.
- See the Alaska Traffic Manual for additional guidance and/or restrictions on the use of traffic control devices.

NOT TO SCALE

State of Alaska DOT&PF  
**ALASKA STANDARD PLAN**  
**PAVEMENT MAKING APPLICATIONS**

Adopted as an Alaska Standard Plan by: *Kenneth J. Fisher*  
Kenneth J. Fisher, P.E.  
Chief Engineer

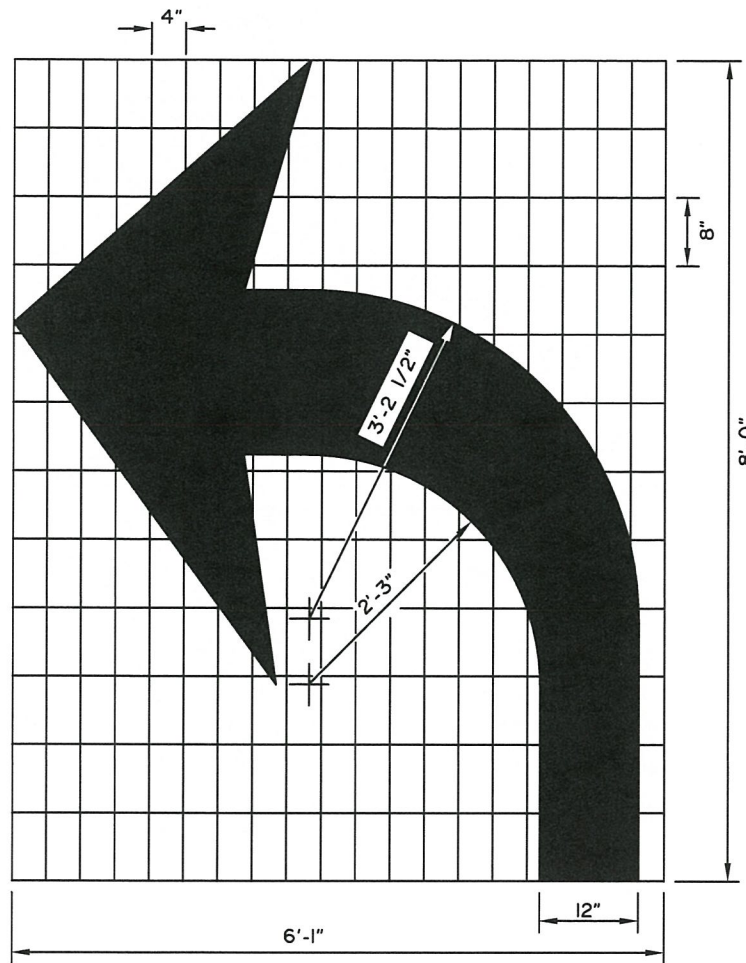
Adoption Date: 02/08/2019

Last Code and Stds. Review By: \_\_\_\_\_ Date: \_\_\_\_\_

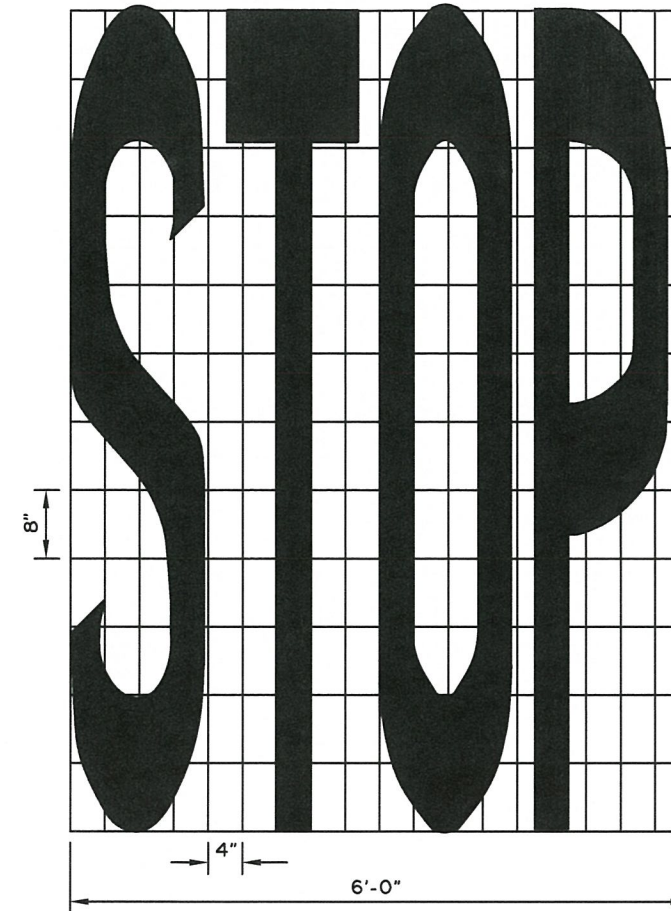
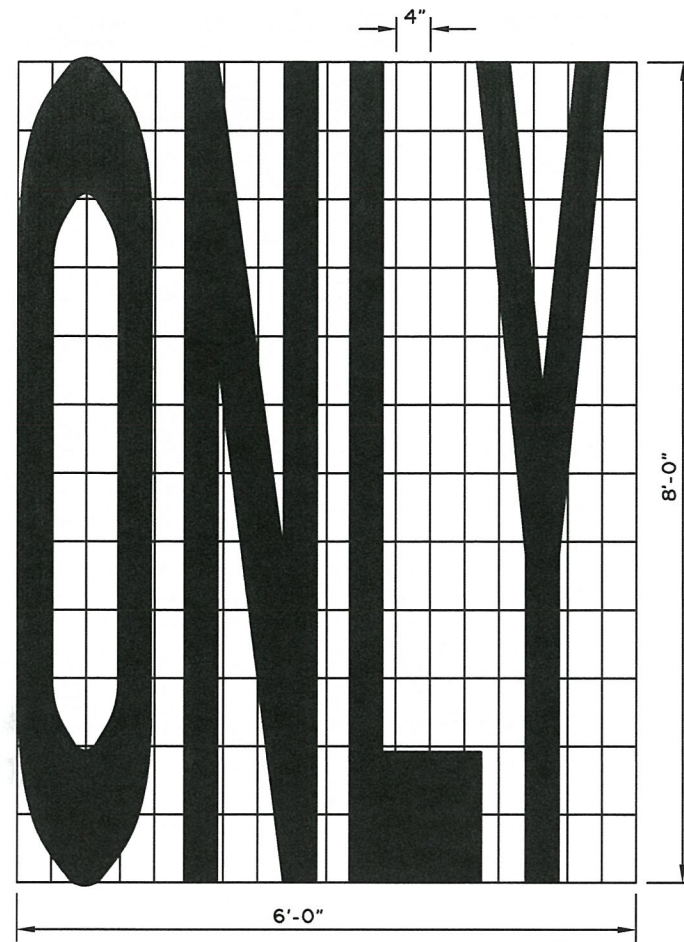
Next Code and Standards Review date: 02/08/2029

**GENERAL NOTES:**

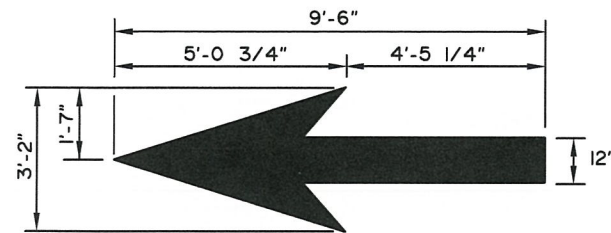
1. All symbols shown shall be white and reflectorized in accordance with the Special Provisions.
2. See the Alaska Sign Design Specifications (ASDS) for lettering and symbols for pavement marking details not provided on this drawing.



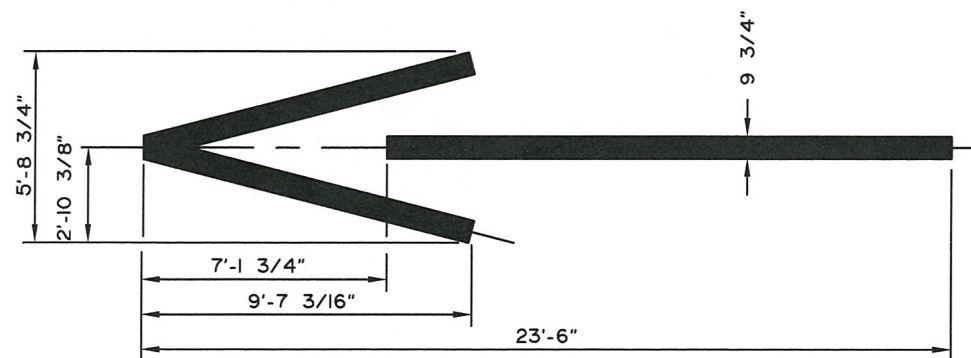
Right turn auxiliary lane usage markings identical except arrow symbol is reversed.



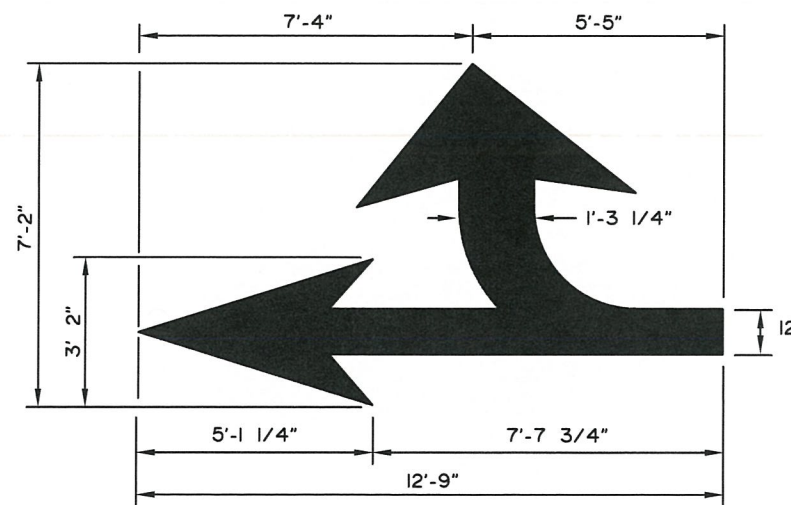
LAYOUT TEMPLATES FOR STENCILS



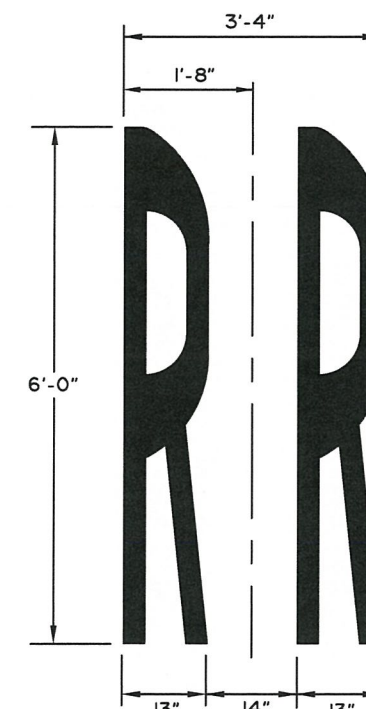
STRAIGHT AHEAD ARROW



WRONG WAY ARROW



COMBINATION ARROW



RAILROAD SYMBOL

State of Alaska DOT&PF  
ALASKA STANDARD PLAN  
PAVEMENT MARKING  
SYMBOL DIMENSIONS

Adopted as an Alaska Standard Plan by: *Kenneth J. Fisher*  
Kenneth J. Fisher, P.E.  
Chief Engineer

Adoption Date: 02/08/2019

Last Code and Sds. Review  
By: Date:

Next Code and Standards Review date: 02/08/2029