

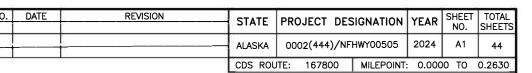
# STATE OF ALASKA DEPARTMENT OF TRANSPORTATION PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT

0002(444)/NFHWY00505

NORTHERN REGION ADA IMPROVEMENTS - NOME: STEADMAN STREET

GRADING, DRAINAGE, AND PAVING



	INDEX OF SHEETS					
ĺ	SHEET NO.	DESCRIPTION				
	A1	TITLE SHEET				
3	A2	HWYS LEGEND				
9	A3	ALIGNMENT GEOMETRY				
1	A4 SURVEY CONTROL					
	B1 TYPICAL SECTIONS					
	C1	ESTIMATE OF QUANTITIES				
Ñ	D1	SUMMARY TABLES				
N	E1-E6	MISCELLANEOUS DETAILS				
U	F1-F3	PLAN & PROFILE				
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4	H1-H4	SIGNING & STRIPING				
Z	Q1-Q3 EROSION SEDIMENT CONTROL PLANS					
	U1-U3	UTILITIES				
	V1-V2	COF STANDARD DETAILS				
	V3-V20	STANDARD PLANS				



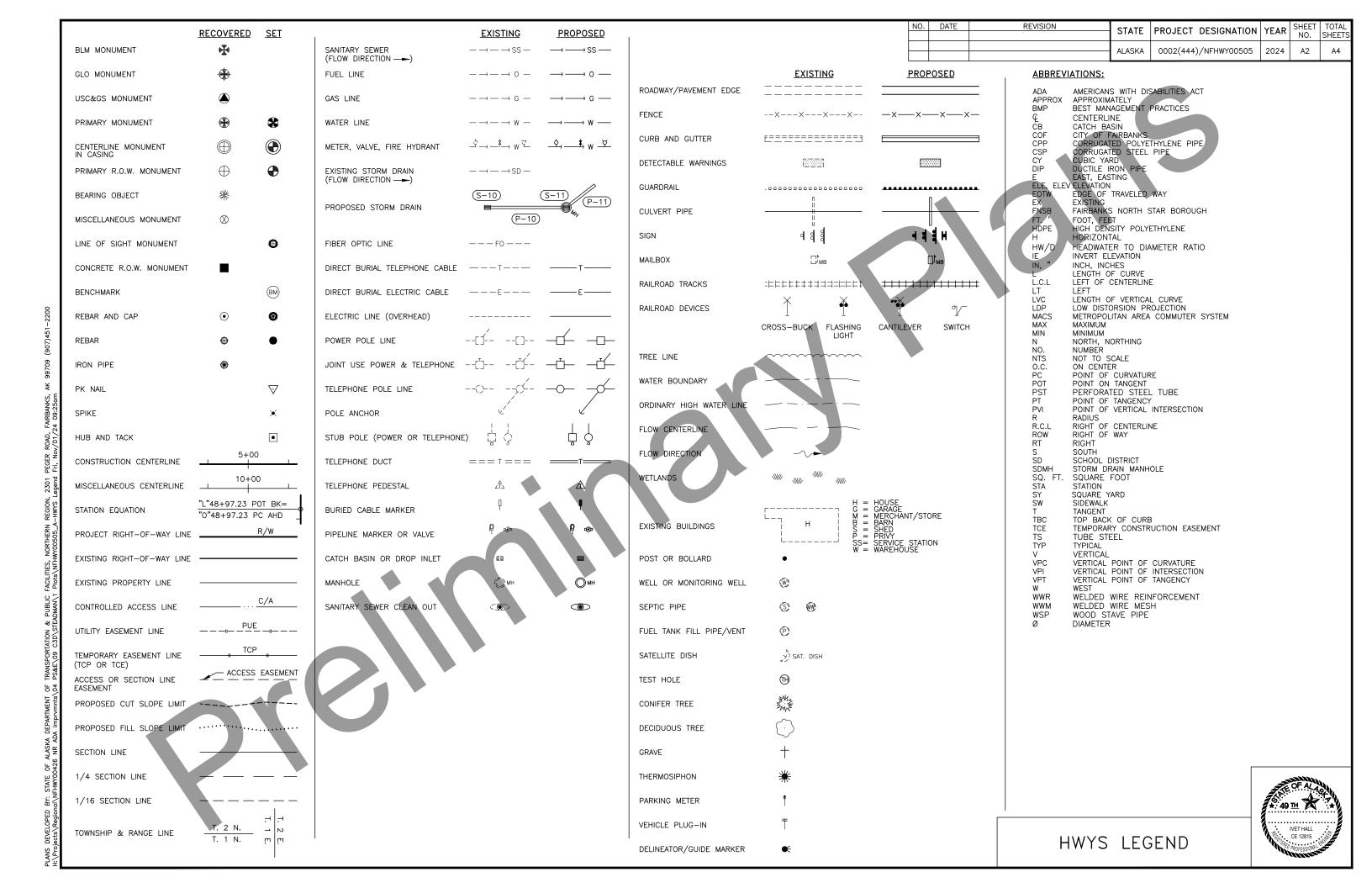
THE FOLLOWING STANDARD PLANS APPLY TO THIS PROJECT: C-06.00, D-01.02, D-04.22, D-09.00, M-20.15, M-23.13, S-00.12, S-01.02, S-05.02, S-30.05, T-20.04,

PROJECT SUMMARY					
AREA OF SIDEWALK	501.3 SY				
WIDTH OF SIDEWALK	5 FT				
LENGTH OF CURB AND GUTTER	2582.2 LF				
NUMBER OF CURB RAMPS	8				

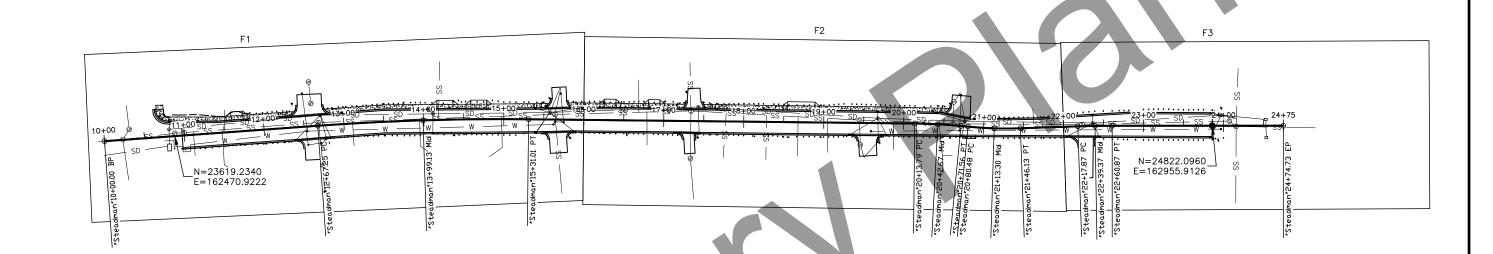
IVET HALL, P.E., PROJECT MANAGER ADINA KEIRN, DESIGNER ROBERT H. PRISTASH, P.E.

## STATE OF ALASKA DEPARTMENT OF TRANSPORTATION PUBLIC FACILITIES APPROVED BY:

Albert Beck, P.E.
Acting Preconstruction Engineer, Northern Region
ACCEPTED FOR CONSTRUCTION:



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002(444)/NFHWY00505	2024	A3	A4

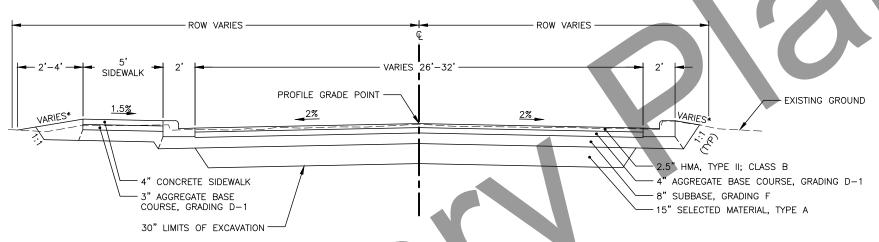


STEADMAN	STREEET	ΑL	.IGNMENT	COC	ORDINATES	
DESCRIPTION	STATION	Ť	NORTHING		EASTING	
BP	10+00.00		23535.6538		162443.1465	
PC	12+67.25		23789.2501		162527.4377	
PT	15+31.01		24035.8106		162620.9055	
PC	20+13.79		24479.6731		162810.8211	7
PT	20+71.56		24531.7613		162835.7798	
PC	20+80.48		24539.6356		162839.9667	
PT	21+46.13		24599.4197		162866.9705	
PC	22+17.87		24666.5778		162892.2074	
PT	22+60.87		24706.5748		162907.9882	
EP	24+74.73		24904.1094		162989.9407	
·	·					

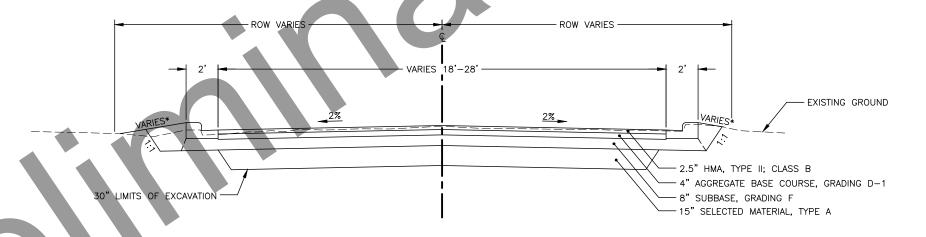
- ALIGNMENT GEOMETRY NOTES:

  1. FOR SURVEY CONTROL INFORMATION, SEE SURVEY CONTROL DRAWINGS ON SHEET A4.
- THE DESIGN CENTERLINE ALIGNMENT SHOWN ON THE PLANS IS DIFFERENT FROM THE ROW MAP CENTERLINE. USE THE ROW MAP TO SURVEY AND STAKE ROW, TEMPORARY CONSTRUCTION EASEMENT, AND TEMPORARY CONSTRUCTION PERMIT LIMITS.





TYPICAL SECTION
STEADMAN STREET - NOME
FRONT ST. TO W. 4TH AVE.



\* SLOPE VARIES. 4:1 (H:V) MAX. UNLESS OTHERWISE NOTED, SLOPE SHALL BE AS FLAT AS POSSIBLE AND MATCH TO EXISTING WITHIN 2' OF THE ROW OR TCE.

TYPICAL SECTION

DEVELOPED BY: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES, NORTHERN REGION, 2301 PEGER ROAD, ects\Regiona\\NFHWY00426 NR ADA Impromnts\04 PS&E\09 C3D\STEADMAN\1 Plots\00505\_B-B1 Fri, Nov\01\24 09:25am

STEADMAN STREET - NOME W. 4TH AVE. TO 5TH AVE.



TEM NUMBER	DESCRIPTION	PAY UNIT	QUANTITY
202.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	ALL REQUIR
202.0002.0000	REMOVAL OF PAVEMENT	SY	4,803.00
202.0003.0000	REMOVAL OF SIDEWALK	SY	403.11
202.0009.0000	REMOVAL OF CURB AND GUTTER	LF	2,517.00
202.2029.0000	RESOLUTION OF CONFLICTS	CS	ALL REQUIR
203.0003.0000	UNCLASSIFIED EXCAVATION	CY	4,100.00
203.0006.0000	BORROW	TON	4,410.00
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	TON	1,036.00
304.0001.000F	SUBBASE, GRADING F	TON	2,468.00
401.0001.002B	HMA, TYPE II; CLASS B	TON	662.00
401.0004.0000	ASPHALT BINDER, GRADE PG 52E-40	TON	36.00
401.0008.002B	HMA PRICE ADJUSTMENT, TYPE II; CLASS B	CS	ALL REQUIR
401.0009.0000	LONGITUDINAL JOINT DENSITY PRICE ADJUSTMENT	CS	ALL REQUIR
401.0012.002B	HMA, DRIVEWAY, TYPE II; CLASS B	TON	12.00
401.0013.0000	JOB MIX DESIGN	EACH	1.00
401.0015.0000	ASPHALT MATERIAL PRICE ADJUSTMENT	CS	ALL REQUIR
604.0004.0000	ADJUST EXISTING MANHOLE	EACH	6.00
604.0005.000A	INLET, TYPE A	EACH	5.00
607.0003.0000	CHAIN LINK FENCE	LF	50.00
608.0001.0004	CONCRETE SIDEWALK, 4 INCHES THICK	SY	319.00
608.0001.0004	CONCRETE SIDEWALK, 6 INCHES THICK	SY	193.00
608.0006.0000	CURB RAMP	EACH	8.00
	CURB AND GUTTER, ALL TYPES	LF	
609.0002.0ALL			2,621.00
615.0001.0000	STANDARD SIGN	SF	192.00
618.0005.0000	SEEDING	LS	20,000.00
639.0002.0000	DRIVEWAY, RESIDENTIAL	EACH	6.00
639.0003.0000	DRIVEWAY, COMMERCIAL	EACH	9.00
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQUIF
640.0004.0000	WORKER MEALS AND LODGING, OR PER DIEM	LS	ALL REQUIF
641.0001.0000	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LS	ALL REQUIF
641.0003.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	LS	ALL REQUIF
641.0004.0000 641.0006.0000	TEMPORARY EROSION SEDIMENT AND POLLUTION CONTROL ADDITIVES WITHHOLDING	CS CS	ALL REQUIF
641.0007.0000	SWPPP MANAGER	LS	ALL REQUIR
641.0008.0000	SWPPPTRACK	CS	ALL REQUIF
642.0001.0000	CONSTRUCTION SURVEYING	LS	ALL REQUIF
642.0003.0000	THREE PERSON SURVEY PARTY	HR	40.00
643.0002.0000	TRAFFIC MAINTENANCE	LS	ALL REQUIF
643.0023.0000	TRAFFIC PRICE ADJUSTMENT	CS	ALL REQUIF
643.0025.0000	TRAFFIC CONTROL	cs	ALL REQUIR
643.2005.0000	PUBLIC INFORMATION PROGRAM	LS	ALL REQUIF

ESTIMATED LUMP SUM QUANTITIES					
ITEM NO.	PAY ITEM	TOTAL QUANTITY			
201.0009.0000	CLEARING AND GRUBBING	107 SY			
644.0006.0000	VEHICLE	2			

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YFAR	SHEET	TOTAL
			SIAIL	TROSECT DESIGNATION	ILAN	NO.	SHEETS
			ALASKA	0002(444)/NFHWY00505	2024	C1	C1
		· · · · · · · · · · · · · · · · · · ·	ALASKA	0002(444)/ NFHW100303	2024		

ESTIMATING FACTORS						
ITEM NO.	DESCRIPTION	FACTOR				
203.0006.0000	BORROW	2 TONS/ CUBIC YARD				
301.0001.00D1	AGGREGATE BASE COURSE, GRADE D-1	2 TONS/ CUBIC YARD				
401.0001.002B	HMA, TYPE II; CLASS B	150 LBS/ CUBIC FOOT				
401.0004.0000	ASPHALT BINDER, GRADE PG 52E-28	6% OF ITEM 401.0001.002B				

#### **GENERAL NOTES:**

- 1. PERFORM ALL WORK WITHIN THE EXISTING ROW OR TEMPORARY CONSTRUCTION PERMIT OR EASEMENT. STAKE THE ROW LINE FOR ANY WORK BEHIND THE EXISTING BACK OF SIDEWALK TO AVOID TRESPASSING. SEE 642 SPECIFICATIONS.
- 2. ANY APPURTENANCES DAMAGED AS A RESULT OF CONTRACTOR OPERATIONS SHALL BE REPAIRED OR REPLACED TO PREEXISTING CONDITIONS AT THE CONTRACTOR'S EXPENSE.
- 3. REMOVAL AND DISPOSAL OF EXISTING ASPHALT PAVEMENT, CURB AND GUTTER, AND CONCRETE SIDEWALK SHOWN ON THE PLANS WILL BE PAID FOR UNDER PAY ITEM 202.0001.0000 REMOVAL OF STRUCTURES AND OBSTRUCTIONS. DELIVER ALL REMOVED ASPHALT TO THE NOME DOT M&O FACILITY AT 3.5 MILE CENTER CREEK ROAD.
- 4. THE REMOVAL OF STRUCTURES AND OBSTRUCTIONS NOT SHOWN ON PLANS WILL BE PAID FOR UNDER PAY ITEM 202.0001.0000 REMOVAL OF STRUCTURES AND OBSTRUCTIONS.
- 5. PAY ITEM QUANTITIES SHOWN IN CURB RAMP TABLES FOR SIDEWALK AND CURB AND GUTTER INCLUDE LOWER LANDING, RAMP RUN AND UPPER LANDING SECTIONS OF THE CURB RAMPS.
- 6. NOTIFY THE CITY OF NOME EMERGENCY SERVICES DISPATCH AT 907-443-8522 A MINIMUM OF 24 HOURS PRIOR TO INTERSECTION CLOSURES AND CHANGES TO TRAFFIC CONTROL THAT WILL IMPACT EMERGENCY SERVICE RESPONSE.

#### PAVING NOTES:

- 1. WHERE NEW PAVEMENT IS TO BE MATCHED TO EXISTING PAVEMENT, A STRAIGHT SAWCUT SHALL BE MADE AND THE EXISTING PAVEMENT EDGE SHALL BE CLEANED AND PAINTED WITH STE-1 ASPHALT FOR TACK COAT. IF DAMAGE OCCURS AS A RESULT OF SAWCUTTING, THE CONTRACTOR IS RESPONSIBLE FOR REPAIR OR REPLACEMENT COSTS. THIS WORK IS SUBSIDIARY TO 401.0001.002B.
- 2. BRING ALL MONUMENT CASES AND UTILITY LIDS TO FINISHED GRADE PRIOR TO PAVING. DEPRESS LIDS 3/8 INCH BELOW PAVEMENT SURFACE.

#### APPROACH & DRIVEWAY NOTES:

 AT DRIVEWAYS, THE RESURFACED ROADWAY GRADE AND CROSS SLOPE SHALL TRANSITION INTO THE EXISTING DRIVEWAY SURFACE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS EXPECTED TO MODIFY GRADING AT DRIVEWAYS TO MEET TRANSITION REQUIREMENTS WHILE MAINTAINING POSITIVE DRAINAGE.

#### **UTILITY NOTES:**

- 1. UNDERGROUND UTILITIES EXIST WITHIN THE PROJECT CORRIDOR. CONTACT UTILITY OWNERS AND GET LOCATES PRIOR TO ANY EXCAVATION.
- 2. PROTECT, OR REMOVE AND REPLACE IN SAME LOCATION OR TO THE SIDE OF ROADWAY, EXISTING MARKER POSTS FOR UTILITIES THAT ARE DISTURBED DURING CONSTRUCTION. THIS IS SUBSIDIARY TO OTHER BID ITEMS CAUSING THE DISTURBANCE.



	639.0001.0000 DRIVEWAY SUMMARY								
NO.	CENTERLINE STATION	SIDE	CURB CUT WIDTH (FT)	LENGTH (FT)	DRIVEWAY AREA (SY)	REMARKS			
D1	11+68	LT	15	5	12				
D2	14+27	LT	20	5	15				
D3	14+69	LT	20	5	15				
D4	16+33	LT	14	5	12				
D5	16+88	LT	14	5	12				
D6	18+72	LT	34	5	23				
				TOTAL	89				

639.200	0.0000 /	APPROACH	, SIDE STREETS
STATION	OFFSET	QTY (EACH)	REMARKS
12+60.00	RT	1	EAST 1ST STREET
12+61.00	LT	1	WEST 1ST STREET
15+69.75	LT	1	WEST 3RD STREET
15+69.75	RT	1	EAST 3RD STREET
17+27.00	RT	1	EAST KING PLACE
17+42.50	LT	1	WEST KING PLACE
19+54.50	RT	1	EAST 4TH STREET
20+73.00	LT	1	WEST 4TH STREET
22+27.25	RT	1	EAST TOBUK STREET
	TOTAL	9	

202.00	002.000	OO REMOVAL OF PAVEMENT
STREET NAME	QTY (SY)	COMMENTS
STEADMAN	4803	INCLUDES REMOVAL FROM MAINLINE AND SIDE STREETS

202.0003.00	00	REMOVAL	OF	SIDEWALK
STREET NAME		QTY (SY)		COMMENTS
STEADMAN		403		

	608.0006.0000 CURB RAMP										
RAMP NUMBER	MAIN STREET	CROSS STREET	CORNER LOCATION	RAMP TYPE	QTÝ (ÉA)	COMMENTS					
CR1	STEADMAN	FRONT STREET	NW	PARALLEL	1						
CR2	STEADMAN	1ST STREET	SW	DIRECTIONAL	1						
CR3	STEADMAN	2ND STREET	NW	DIRECTIONAL	1						
CR4	STEADMAN	3RD STREET	SW	DIRECTIONAL	1	7					
CR5	STEADMAN	4th STREET	NW	DIRECTIONAL	1						
CR6	STEADMAN	KING PLACE	SW	DIRECTIONAL	1						
CR7	STEADMAN	KING PLACE	NW	DIRECTIONAL	1						
CR8	STEADMAN	4TH STREET	SW	DIRECTIONAL	1						
				TOTAL	8						

202.0009.0000 &	609.0002.0001 CURB AND GUTTER
REMOVAL OF CURB AND GUTTER 202.0009.0000 (LF)	CURB AND GUTTER, TYPE ?1? COMMENTS
2517	2621

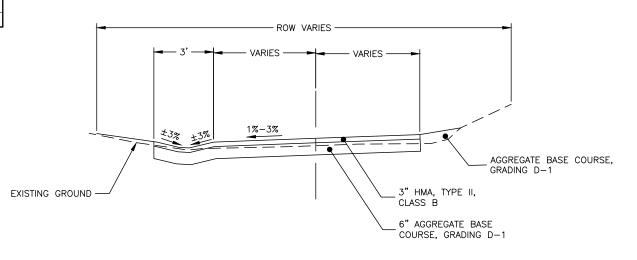
608.0001.0004	CONCR	RETE SIDEWA	ALK, 4 INCHES THICK
STREET NAME		AREA (SY)	COMMENTS
STEADMAN		319	

608.0001.0006	CONCRETE SIDEWALK,	6 INCHES THICK
STREET NAME	AREA (SY)	COMMENTS
STEADMAN	193	AT CURB RAMPS AND DRIVEWAYS

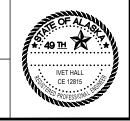


#### **DRIVEWAY NOTES:**

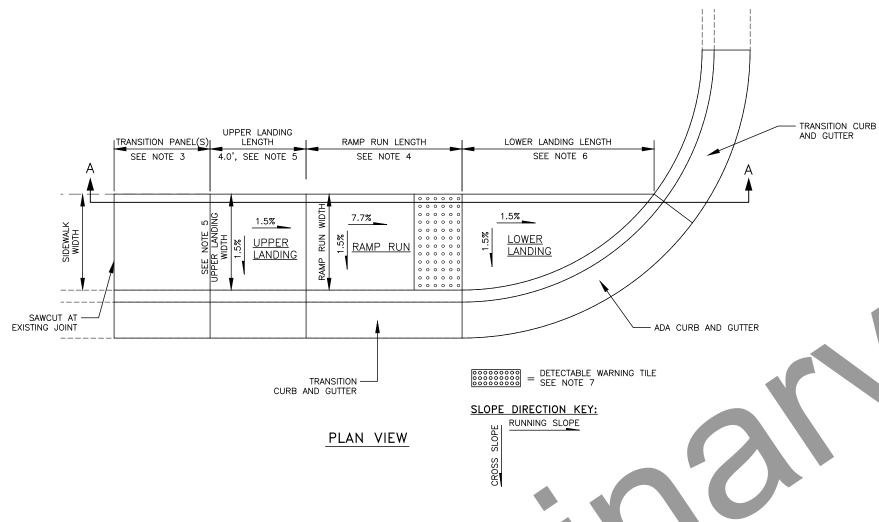
- 1. DRIVEWAY DIMENSIONS AND LOCATIONS MAY BE FIELD ADJUSTED BY THE ENGINEER.
- 2. BEYOND THE PAVING LIMIT, WARP EMBANKMENT SLOPES FROM 6:1 (H:V) TO 3:1 (H:V) OVER 50 FT AND FROM 4:1 (H:V) TO 3:1 (H:V) OVER 25 FT OR AS APPROVED BY THE ENGINEER. GRADING OF SLOPES IS SUBSIDIARY TO EMBANKMENT CONSTRUCTION.
- 3. BLEND AND GRADE FOR A SMOOTH TRANSITION BETWEEN THE DRIVEWAY AND THE EXISTING GROUND.
- 4. ENSURE POSITIVE DRAINAGE AWAY FROM THE ROADWAY AND DRIVEWAY EMBANKMENTS.
- 5. STAKE EACH DRIVEWAY AND PROVIDE THE ENGINEER WITH GRADING DETAILS FOR DRIVEWAY LANDING, TRANSITIONS, AND SIDE SLOPES; OBTAIN ENGINEER APPROVAL PRIOR TO CONSTRUCTION OF ANY DRIVEWAY.

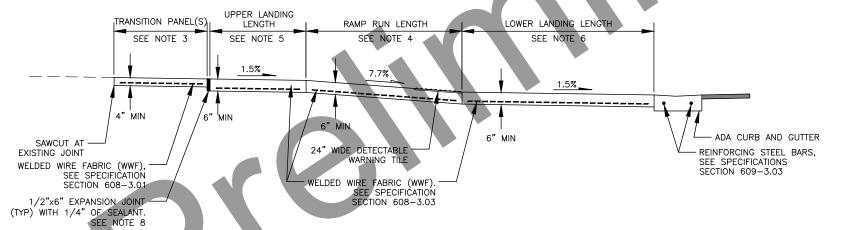


SIDE STREET TYPICAL



SUMMARY TABLES





PROFILE A-A

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002(444)/NFHWY00505	2024	E1	E6

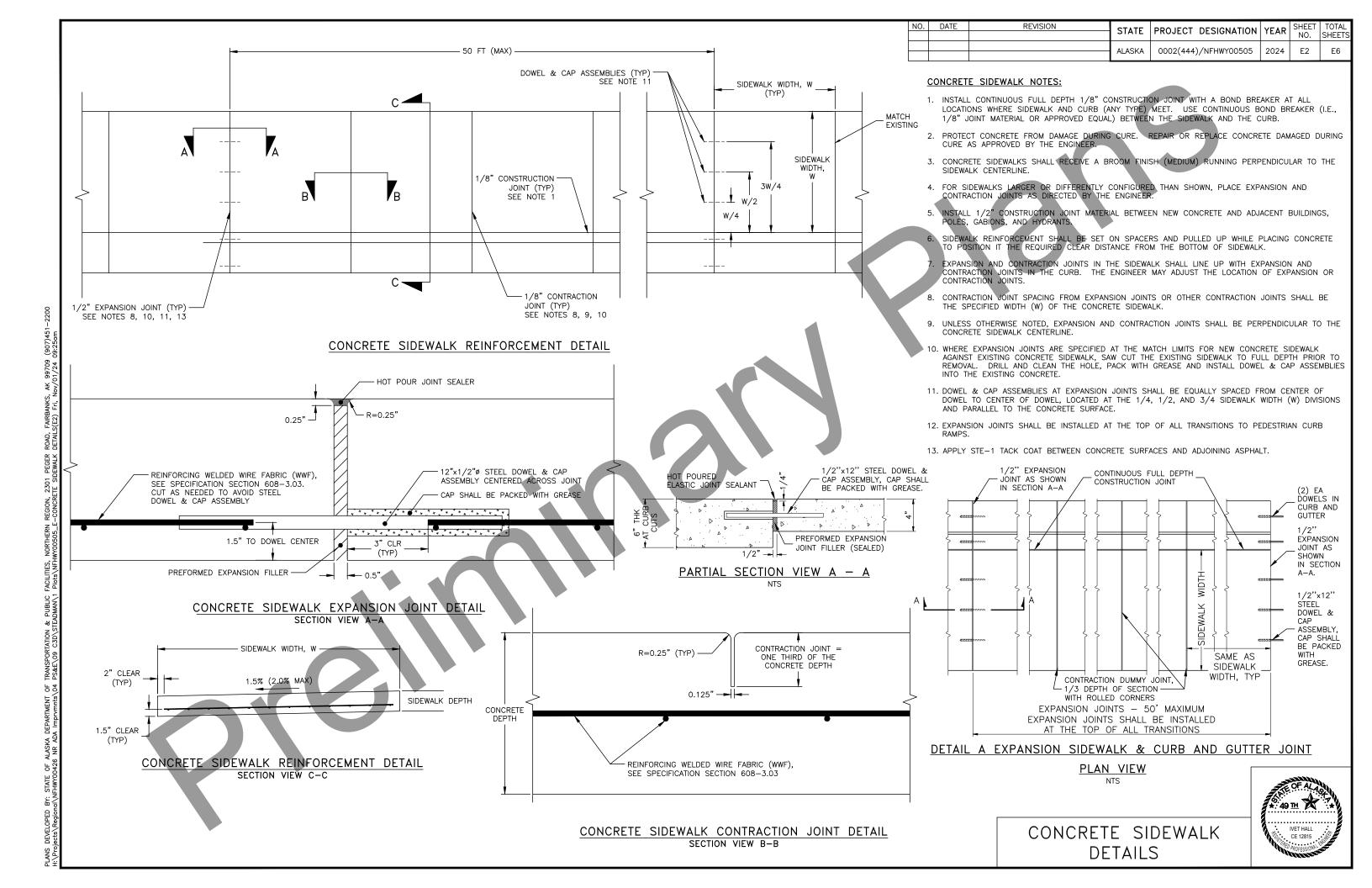
#### NOTES:

- 1. CONSTRUCT RAMP RUN AND BOTH UPPER AND LOWER LANDING OF 6" CONCRETE WITH COARSE BROOM FINISH IN THE DIRECTION OF THE CROSS SLOPE.
- 2. NOTIFY THE ENGINEER PRIOR TO CONCRETE PLACEMENT IF MAXIMUM OR MINIMUM GRADES CANNOT BE CONSTRUCTED. UNLESS PREVIOUSLY APPROVED BY THE ENGINEER, ANY FEATURE EXCEEDING MINIMUM OR MAXIMUM ALLOWABLE SLOPES WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
- 3. TRANSITION PANEL(S): WHEN CONNECTING INTO EXISTING SIDEWALK, REPLACE ADJACENT SIDEWALK PANEL(S) LABELED AS TRANSITION PANEL(S), AS REQUIRED FOR CROSS SLOPE TRANSITION FROM THE EXISTING SIDEWALK TO THE NEW UPPER LANDING TO ENSURE THE UPPER LANDING IS CONSTRUCTED WITH A COMPLIANT CROSS SLOPE.
- 4. RAMP RUN LENGTH: SURVEY PRIOR TO CONSTRUCTION TO VERIFY RAMP RUN LENGTH REQUIRED FOR COMPLIANT SLOPES. ADJUST THE RAMP RUN LENGTH AS NEEDED TO ENSURE COMPLIANT RAMP RUN RUNNING SLOPE.
- 5. <u>UPPER LANDING LENGTH:</u> CONSTRUCT UPPER LANDING LENGTH TO 4.0 FEET. UPPER LANDING LENGTH MAY BE DECREASED TO 3 .0 FEET IF APPROVED BY THE ENGINEER. <u>UPPER LANDING WIDTH:</u> UPPER LANDING WIDTH SHALL MATCH OR EXCEED THE MAXIMUM WIDTH OF THE RAMP RUN.
- 6. <u>LOWER LANDING LENGTH:</u> LENGTH OF LOWER LANDING DEPENDS ON RAMP RUN WIDTH AND CURB RADII. ENSURE LOWER LANDING HAS A 5-FT DIAMETER TURNING SPACE.
- 7. <u>DETECTABLE WARNING TILE:</u> INSTALL 24" DETECTABLE WARNING TILES FOR THE FULL WIDTH OF THE RAMP RUN.
- 3. JOINTS: INSTALL CONTINUOUS MINIMUM 6 INCH DEEP 1/2" WIDE EXPANSION JOINT AT ALL LOCATIONS WHERE SIDEWALK, CURB RAMP, OR CURB AND GUTTER (ANY TYPE) MEET. SEAL ALL EXPANSION JOINTS WITH HOT POURED ELASTIC TYPE JOINT SEAL CONFORMING TO SPECIFICATIONS 705-2.02 JOINT SEALANT. EXPANSION AND DUMMY JOINTS IN THE SIDEWALK AND CURB RAMP SHALL LINE UP WITH EXPANSION AND DUMMY JOINTS IN THE CURB AND GUTTER.

SLOPES GUIDE								
PREFERRED MINIMUM MAXIMUI								
UPPER LANDING RUNNING SLOPE	1.5%	1.0%	5.0%					
UPPER LANDING CROSS SLOPE	1.5%	1.0%	2.0%					
RAMP RUN RUNNING SLOPE	7.7%	N/A	8.3%					
RAMP RUN CROSS SLOPE	1.5%	1.0%	2.0%					
LOWER LANDING RUNNING SLOPE*	1.5%	1.0%	2.0%					
LOWER LANDING CROSS SLOPE*	1.5%	1.0%	2.0%					

<sup>\*</sup> LOWER LANDING CROSSSLOPE SHALL NOT EXCEED 2.0% IN ANY DIRECTION.







#### **GENERAL NOTES:**

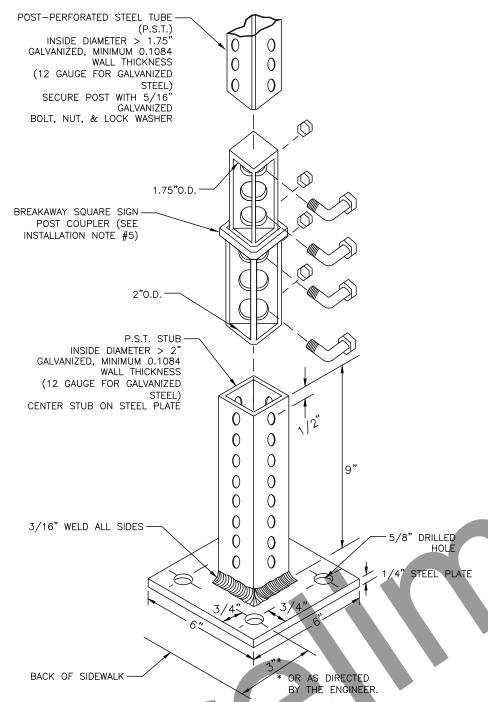
- 1. SAWCUT ALL MATCH POINTS WHERE NEW CONSTRUCTION OF PAVEMENT, SIDEWALK OR CURBING ABUTS EXISTING. SAWCUTS SUBSIDIARY TO RESPECTIVE PAY ITEMS.
- 2. ALL WORK IS TO BE PERFORMED WITHIN EXISTING RIGHT OF WAY (ROW).
- 3. PROTECT EXISTING FENCES, RETAINING WALLS AND IMPROVEMENTS ADJACENT TO PROJECT LIMITS. PAYMENT FOR PROTECTION OF FENCES, RETAINING WALLS AND OTHER EXISTING IMPROVEMENTS SUBSIDIARY TO SIDEWALK INSTALLATION.
- 4. FOR ALL DRIVEWAYS (CURB CUTS), CONTRACTOR TO VERIFY MATCH POINT BEHIND BACK OF SIDEWALK TO PROVIDE SLOPE OF 1:12 (8.33%) OR LESS. REPAVING DEPTH WILL VARY, AS SHOWN IN THE DRIVEWAY SUMMARY AND AS DÉTERMINED BY CONTRACTOR VERIFICATION OF
- 5. REPAVE MATERIALS BEHIND CURB CUTS SHALL MATCH DRIVEWAY.
- 6. PAVEMENT STRUCTURE FOR CONCRETE DRIVEWAY SHALL BE 6" CONCRETE OVER 4" D-1 OR AS
- 7. ALL NEW SIDEWALK CURB FACE SHALL MATCH EXISTING CURB FACE.
- 8. CONTRACTOR RESPONSIBLE FOR STORING REMOVED SIGNS SO THAT THEY ARE PROTECTED FROM DAMAGE OR THEFT UNTIL RE-INSTALLED.
- 9. SIDEWALK MOUNT ALL SIGNS THAT NEED TO BE REMOVED AND REPLACED DURING CONSTRUCTION. USE BREAKAWAY SIGN COUPLER (REFERENCE THIS SHEET AND SPECIAL PROVISION SECTION 615).

#### STORM DRAIN NOTES:

SEVERAL CURB RAMPS ARE TO BE INSTALLED WHERE CATCH BASINS HOODS WILL BE LOCATED IN TRANSITION SECTIONS. MODIFY HOOD AND BOLTS SO THAT TOP OF HOOD IS FLUSH WITH

#### **UTILITY NOTES:**

- NUMEROUS UNDERGROUND UTILITIES EXIST WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL CONTACT UTILITY OWNERS AND GET LOCATES PRIOR TO ANY EXCAVATION.
- PRIOR TO REMOVAL, REFERENCE MARKER LOCATION FOR BURIED CABLE, OR STORM DRAIN, SUBSIDIARY TO OTHER ITEMS OF WORK. WHEN REQUIRED, OBTAIN PERMISSION OF UTILITY OWNER PRIOR TO TEMPORARY MARKER POST REMOVAL.
- 3. WORK IS REQUIRED UNDER EXISTING OVERHEAD CABLES. PROTECT EQUIPMENT AND PERSONNEL AS REQUIRED SUBSIDIARY TO THOSE WORK ITEMS.

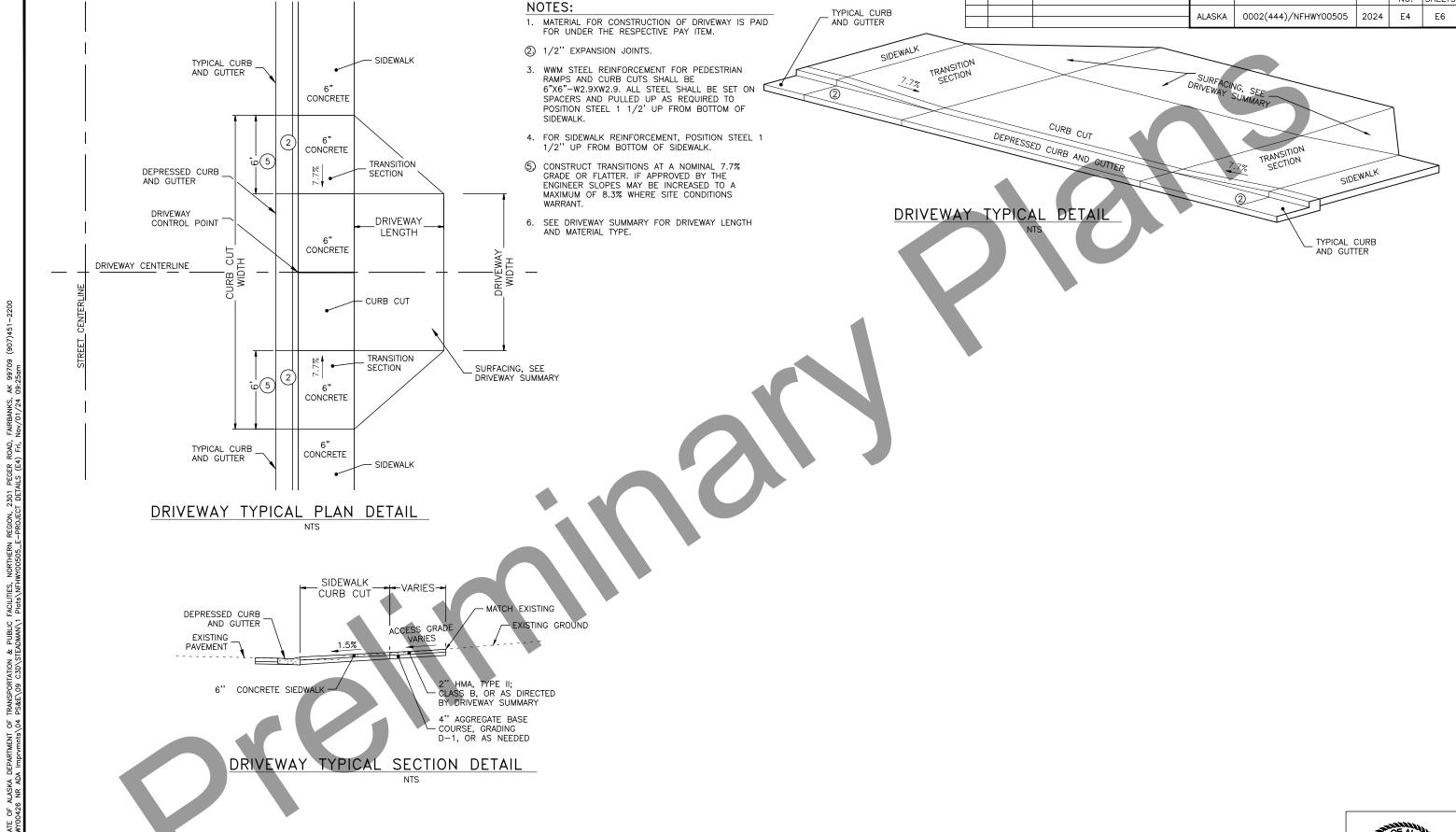


#### **INSTALLATION NOTES**

- DRILL FOUR (4) 1/2" HOLES IN SIDEWALK USING PLATE AS TEMPLATE. (DEPTH AS REQUIRED)
   INSTALL STUB AND PLATE WITH FOUR (4) HILTI EXPANSION ANCHORS CAT. NO. HDI 3/8" OR APPROVED EQUAL. USE FOUR (4) 3/8" GALAVANIZED BOLTS AND FLAT WASHERS.
   DO NOT SHIM BASE, PLUMB STUB BY HEATING AT PLATE.
   INSTALL STUBS FOR NO PARKING SIGNS AT 45" FACING TRAFFIC.
   COUPLER SPECIFICATIONS IN SPECIAL PROVISIONS, SECTION 615-2.01.

SIDEWALK MOUNTING STUB FOR SIGN POSTS NOT TO SCALE

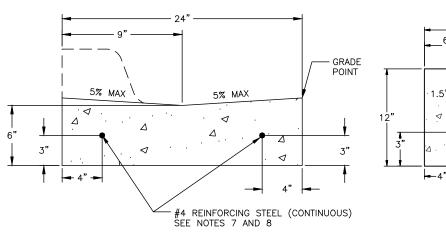




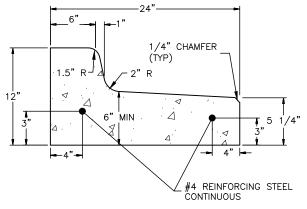
NO. DATE

REVISION

STATE PROJECT DESIGNATION YEAR



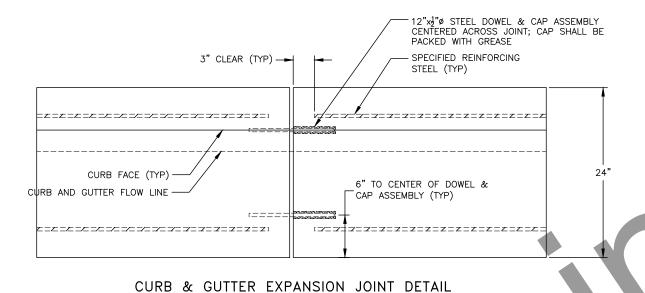
ADA CURB GUTTER DETAIL



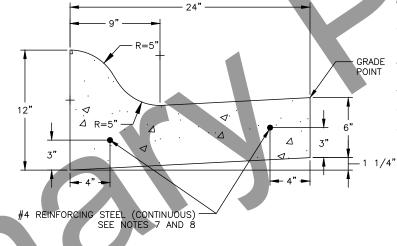
1/4" CHAMFER (TYP) \_\_ 4" |\_ #4 REINFORCING STEEL CONTINUOUS

STANDARD CURB AND GUTTER

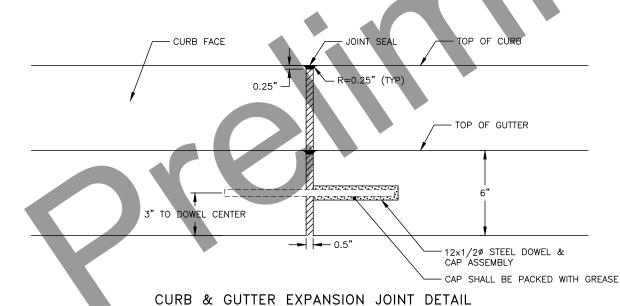
#### STANDARD CURB AND GUTTER SPILL CATCH



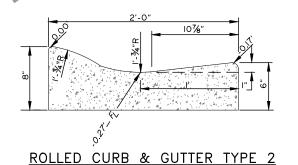
PLAN VIEW



MOUNTABLE CURB & GUTTER DETAIL



ELEVATION VIEW



**CONCRETE CURB AND GUTTER NOTES:** 

REVISION

NO. DATE

1. INSTALL CONTINUOUS FULL DEPTH 1/8" CONSTRUCTION JOINT AT ALL LOCATIONS WHERE SIDEWALK AND CURB (ANY TYPE) MEET. USE CONTINUOUS BOND BREAKER (I.E., 6 MIL PLASTIC OR APPROVED EQUAL) BETWEEN THE SIDEWALK AND THE CURB

ALASKA

STATE PROJECT DESIGNATION YEAR

0002(444)/NFHWY00505

E5

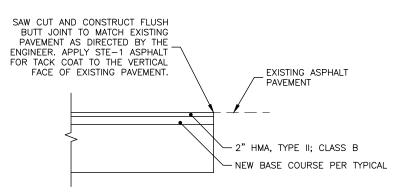
E6

2024

- 2. PROTECT CONCRETE FROM DAMAGE DURING CURE. REPAIR OR REPLACE CONCRETE DAMAGED DURING CURE AS APPROVED BY THE ENGINEER.
- 3. EXPANSION AND CONTRACTION JOINTS IN THE CURB & GUTTER SHALL LINE UP WITH EXPANSION AND CONTRACTION JOINTS IN AN ADJACENT SIDEWALK. MAXIMUM SPACING BETWEEN EXPANSION JOINTS IS 50 FT. THE ENGINEER MAY ADJUST THE LOCATION OF EXPANSION OR CONTRACTION
- 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 AND GUTTER, USE THE SAME SPACING CONSISTENT WITH THE CURB AND GUTTER ADJACENT TO SIDEWALK ELSEWHERE ON THE PROJECT OR AS OTHERWISE APPROVED BY THE ENGINEER.
- 5. UNLESS OTHERWISE NOTED, EXPANSION AND CONTRACTION JOINTS SHALL BE PERPENDICULAR TO
- 6. EXPANSION JOINTS SHALL BE INSTALLED AT THE TOP OF ALL TRANSITIONS TO PEDESTRIAN CURB
- 7. CURB AND GUTTER REINFORCING STEEL SHALL BE PLACED AND SPLICED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 503.
- GRADE 8. CURB AND GUTTER REINFORCING STEEL SHALL BE ASTM A615, GRADE 60; OR ASTM A706, POINT GRADE 60. GRADE 60.
  - 9. APPLY JOINT SEALER EVENLY TO COMPLETELY SEAL ALL EXPANSION JOINTS.
  - 10. APPLY STE-1 TACK COAT BETWEEN CONCRETE SURFACES AND ADJOINING ASPHALT.
  - 11. CONTRACTOR SHALL ENSURE THAT THE REINFORCING BARS REMAIN PERPENDICULAR TO THE EXPANSION JOINT AFTER CONCRETE PLACEMENT.

IVET HALL CE 12815

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002(444)/NFHWY00505	2024	E6	E6



### MATCH EXISTING PAVEMENT DETAIL

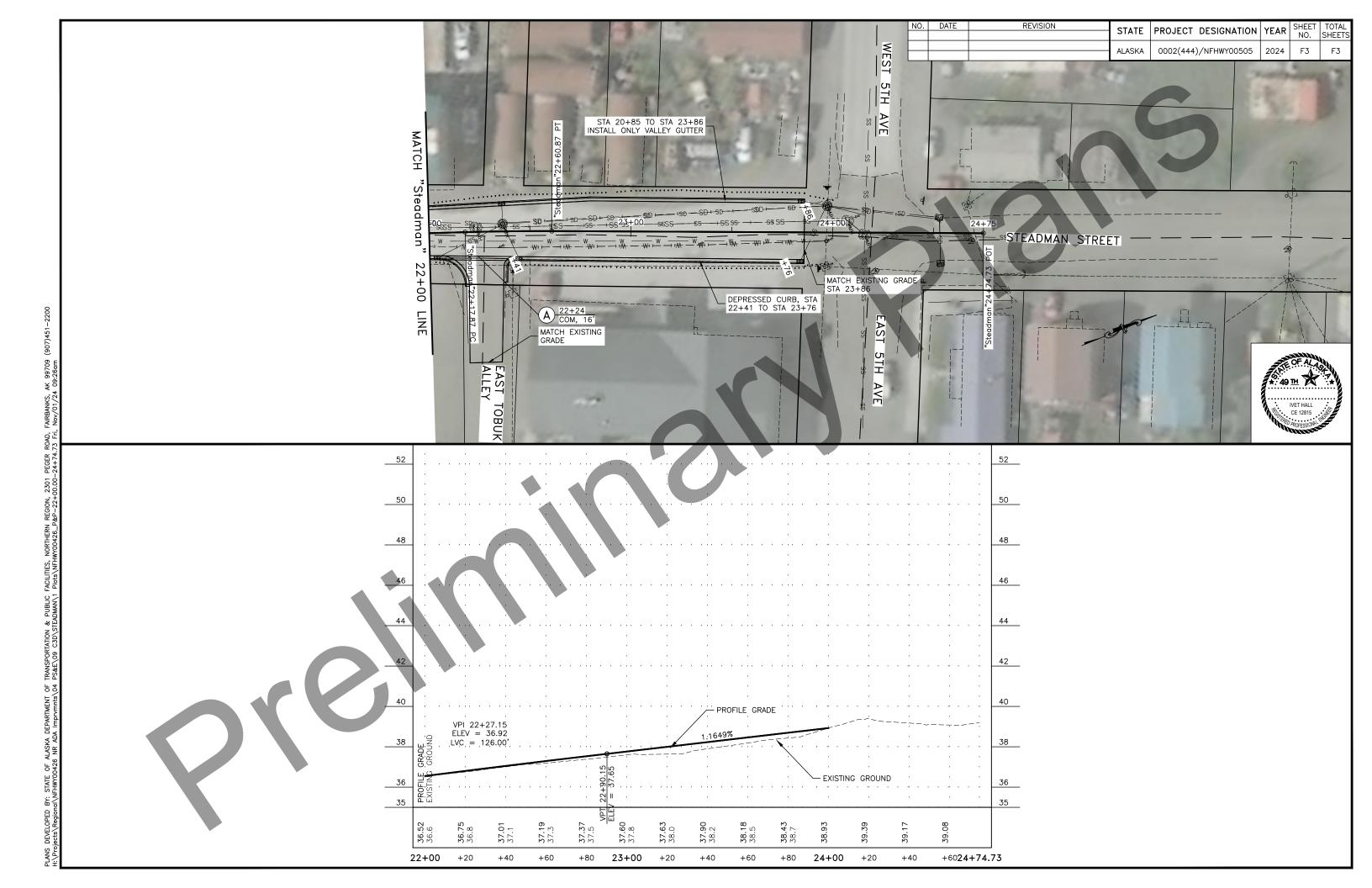
# EXISTING ASPHALT, GRAVEL SECITONS TRANSITION TYPICAL ASPHALT SECTION FINISH GRADE VARIES BOTTOM OF PAVEMENT STRUCTURE

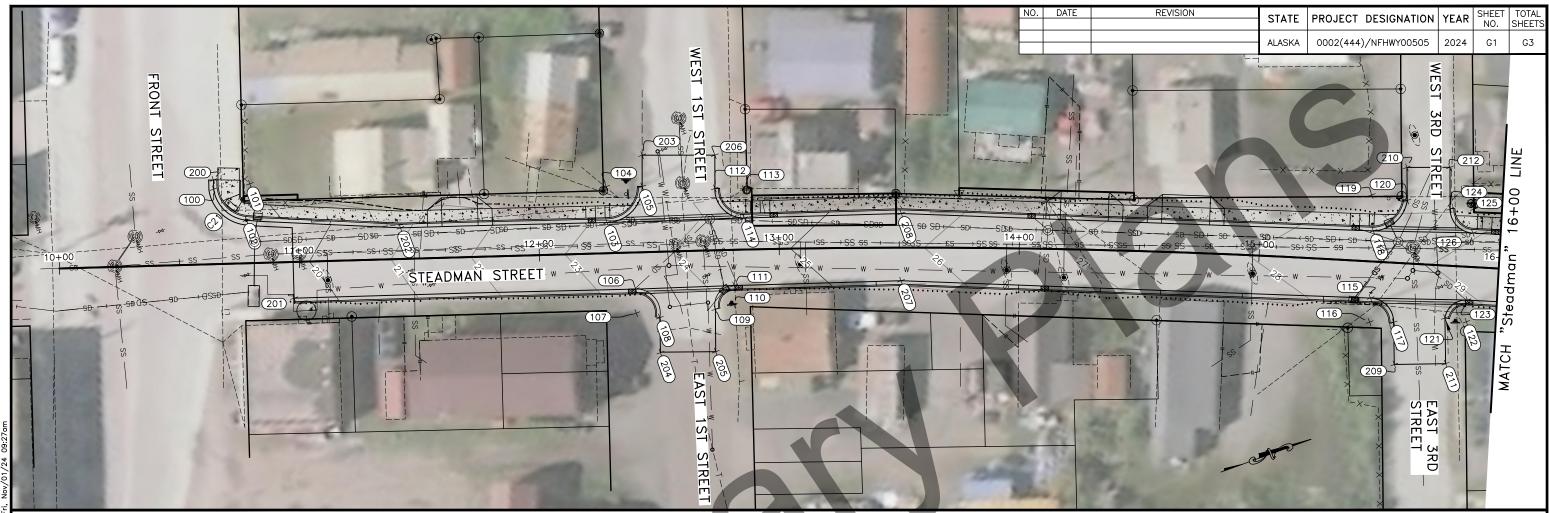
#### TYPICAL TRANSITION TO EXISTING PAVEMENT/GRAVEL DETAIL

#### NOTES:

1. PAVEMENT SAW CUTTING AND WORK ASSOCIATED WITH THIS TASK IS SUBSIDIARY TO 401 PAY ITEM.





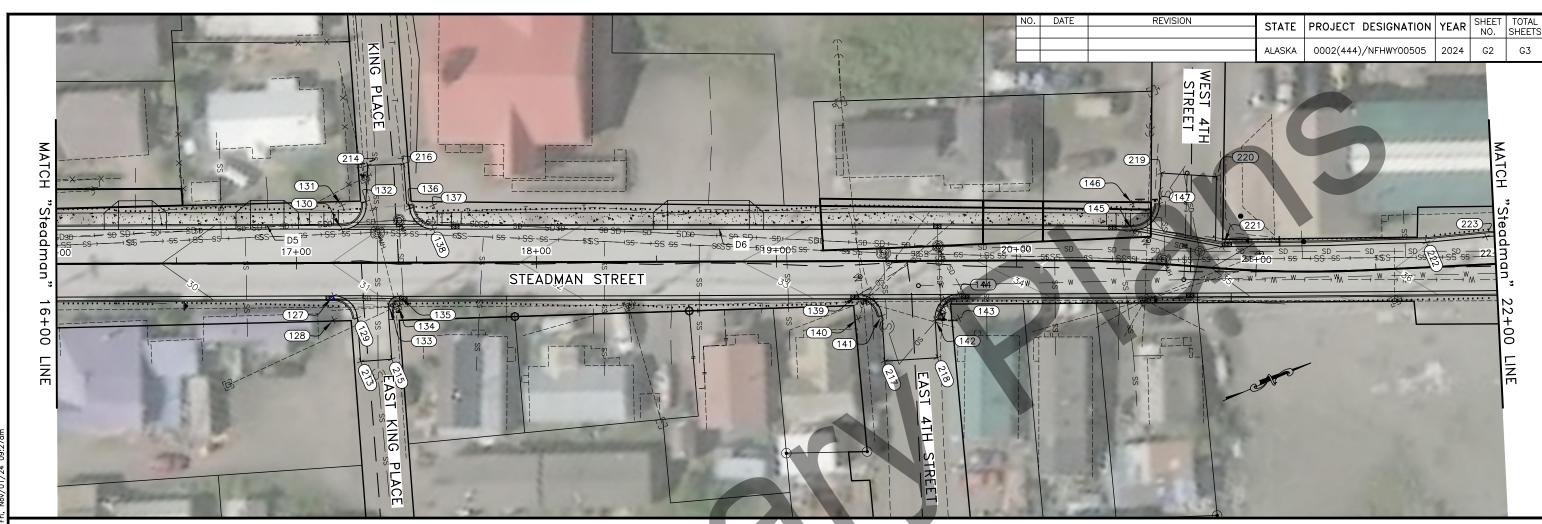


		STEADMAN	STREET CUR'	VE LAYOUT	POINTS		
CURVE NO.	POINT NO.	DESCRIPTION	STATION	OFFSET	ELEVATION	NORTHING	EASTING
	100	PC	10+65.14	31.24 LT		23607.3228	162434.0462
C1	101	RP	10+80.26	33.06 LT		23622.2410	162437.0853
	102	PT	10+78.43	17.94 LT		23615.7416	162450.8530
	103	PC	12+28.60	12.79 LT	23.160	23756.6209	162503.1021
C2	104	RP	12+28.65	27.79 LT		23761.4022	162488.8846
	105	PT	12+43.65	27.38 LT		23775.5037	162493.9982
	106	PC	12+39.75	15.25 RT	23.362	23758.3561	162533.2267
C3	107	RP	12+39.71	25.26 RT		23755.1632	162542.7105
	108	PT	12+49.47	27.45 RT		23763.7347	162547.8747
	109	PC	12+72.74	24.58 RT		23786.6834	162552.4779
C4	110	RP	12+80.62	22.90 RT		23794.6331	162553.3736
	111	PT	12+80.82	14.90 RT	24.237	23797.3775	162545.8590
	112	PC	12+74.07	27.47 LT		23804.4544	162503.5405
C5	113	RP	12+85.74	25.12 LT		23814.8607	162509.5162
	114	PT	12+85.81	13.12 LT	24.370	23811.0731	162520.9027
	115	PC	15+47.33	15.26 RT	28.368	24044.8126	162641.3847
C6	116	RP	15+47.52	25.25 RT		24041.0542	162650.6515
	117	PT	15+57.51	24.81 RT		24050.4125	162654.1760
	118	PC	15+46.98	12.74 LT	28.414	24055.5065	162615.5066
C7	119	RP	15+47.47	27.67 LT		24059.9881	162601.1917
	120	PT	15+60.40	26.20 LT		24073.1385	162608.4075
	121	PC	15+78.75	21.81 RT		24071.1277	162659.7707
C8	122	RP	15+87.75	22.89 RT		24078.9806	162664.3027
	123	PT	15+87.68	13.86 RT	28.939	24082.4638	162655.9697
	124	PC	15+78.38	23.66 LT		24088.6679	162617.8141
C9	125	RP	15+88.41	24.14 LT		24098.0778	162621.3171
	126	PT	15+88.42	14.14 LT	28.943	24094.1565	162630.5162

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POINT N	ю.	NOR	THING	EASTING	;  E	LEVATION.	DESC	RIPTION	STATION	OFFSET
200		236	08.55 -	<del>16</del> 2430.3	9	0.00+-		LG	10+65.15	35.09 LT
201		236	23.33	162488.1	6	19.52		LG	10+97.39	15.06 RT
202		236	74.98	162475.7	7	20.87		LG	11+42.50	12.98 LT
203		237	79.95	162481.7	4	0.00		LG	12+44.47	57.65 LT
204		237	58.99	162561.6	4	0.00		LG	12+49.31	42.01 R
205_		237	30.78_	162569.1	5-	<del> </del> 0.00_ <del> </del>		LG	12+72.34	47.26_R
206		238	08.43	162492.0	7	0.00		LG	12+74.07	27.47 LT
207		238	3.45	162567.7	7	25.55		LG	13+50.75	13.79 RT
208		238	73.13	162541.4	8	25.55		LG	13+50.90	14.23 LT
209		240	14.68	162670.7	9	0.00		LG	15+58.89	37.33 R
210		240	77.67	162595.4	2	0.00		LG	15+60.40	26.20 LT
212		240	94.53	162601.4	9	0.00		LG	15+77.02	46.93 LT
211		240	64.91	162677.7	8	0.00		LG	15+82.24	55.29 R

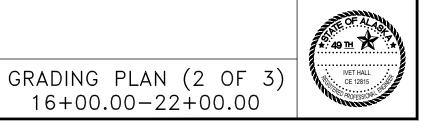


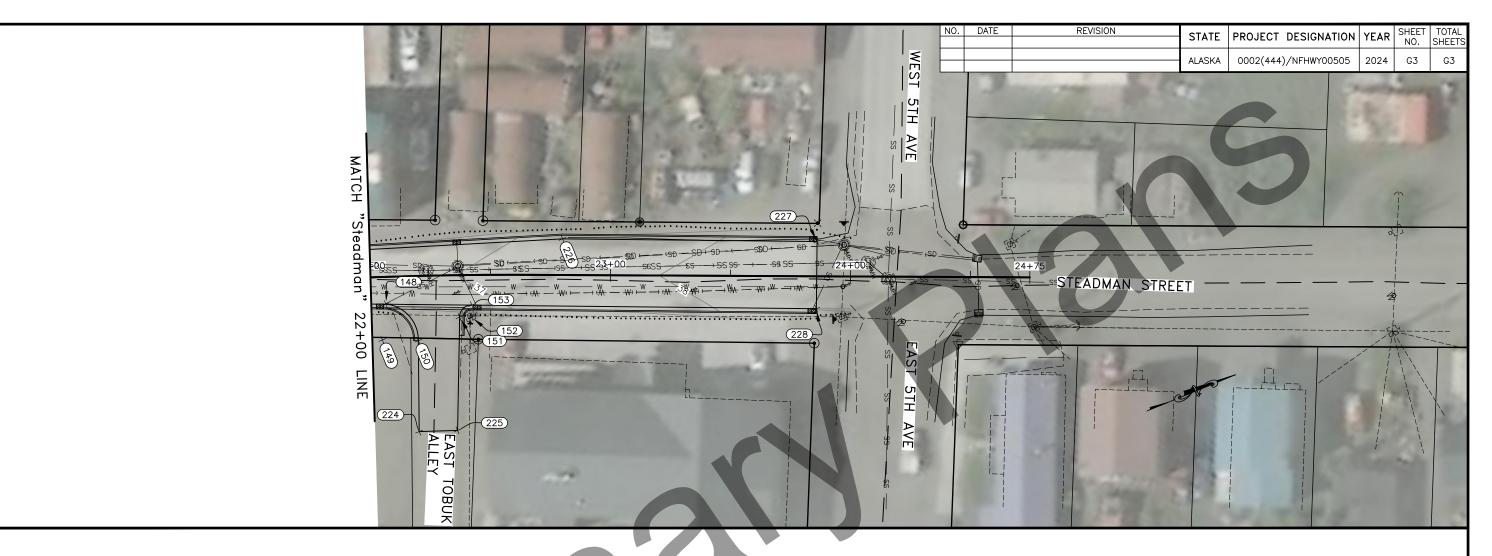
GRADING PLAN (1 OF 3) 10+00.00-16+00.00



		STEADMAN S	STREET CUR	VE LAYOUT	POINTS		
CURVE NO.	POINT NO.	DESCRIPTION	STATION	OFFSET	ELEVATION	NORTHING	EASTING
	127	PC	17+15.36	13.70 RT	30.737	24199.9213	162706.0396
C10	128	RP	17+15.38	23.70 RT		24195.9999	162715.2387
	129	PT	17+25.35	22.98 RT		24205.4503	162718.5082
	130	PC	17+19.07	13.99 LT	30.783	24214.2148	162682.0397
C11	131	RP	17+19.19	23.98 LT		24218.2557	162672.9012
	132	PT	17+29.05	25.44 LT		24227.8994	162675.4382
	133	PC	17+38.37	18.07 RT		24219.3522	162719.1130
C12	134	RP	17+42.37	18.02 RT		24223.0487	162720.6414
	135	PT	17+42.52	14.03 RT	31.100	24224.7559	162717.0240
	136	PC	17+47.18	24.01 LT		24244.0050	162683.8871
C13	137	RP	17+57.18	23.95 LT		24253.1743	162687.8776
	138	PT	17+57.14	13.95 LT	31.288	24249.2049	162697.0560
	139	PC	19+34.00	14.05 RT	33.222	24400.7938	162792.3534
C14	140	RP	19+34.01	24.05 RT		24396.8726	162801.5526
	141	PT	19+43.93	22.76 RT		24406.4960	162804.2711
	142	PC	19+66.08	24.60 RT		24426.1405	162814.6744
C15	143	RP	19+76.06	24.00 RT		24435.5569	162818.0407
	144	PT	19+76.04	14.00 RT	33.649	24439.4749	162808.8402
·	145	PC	20+47.86	13.38 LT	34.372	24516.5320	162812.9767
C16	146	RP	20+47.43	24.38 LT		24520.9584	162802.9010
	147	PT	20+58.04	24.96 LT		24531.0619	162807.2816

CONTROL POINTS										
POINT NO. NORTHING EASTING ELEVATION DESCRIPTION STATION OF										
213	24199.51	162735.67	0.00	LG	17+24.30	36.34 RT				
214	24234.61	162661.82	0.00	LG	17+29.91	32.64 LT				
215	24211.80	162739.92	0.00	LG	17+41.51	38.76 RT				
216	24248.60	162667.18	0.00	LG	17+45.37	33.83 LT				
217	24400.03	162822.12	0.00	LG	19+44.84	37.73 RT				
218	24420.74	162829.53	0.00	LG	19+66.80	36.39 RT				
219	24536.86	162795.83	0.00	LG	20+56.16	49.88 LT				
220	24557.38	162806.36	0.00	LG	20+79.98	43.19 LT				
221	24548.25	162834.22	34.87	LG	20+85.47	9.10 LT				
222	24626.87	162866.19	35.98	LG	21+71.55	10.38 LT				
223	24650.58	162873.84	36.27	LG	21+96.44	11.55 LT				





		STEADMAN	STREET CURV	/E LAYOUT	POINTS		
CURVE NO.	POINT NO.	DESCRIPTION	STATION	OFFSET	ELEVATION	NORTHING	EASTING
	148	PC	22+06.09	11.37 RT	36.401	24651.5645	162898.6909
C17	149	RP	22+04.20	26.24 RT		24644.5703	162911.9532
	150	PT	22+19.20	26.94 RT		24658.3393	162917.8700
	151	PC	22+36.91	17.49 RT		24677.9668	162915.2934
C18	152	RP	22+41.98	17.56 RT		24682.5915	162917.1941
	153	PT	22+42.08	12.56 RT	36.825	24684.5335	162912.5866

CONTROL POINTS										
POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION	STATION	OFFSET				
224	24644.31	162953.06	0.00	LG	22+18.44	64.82 RT				
225	24659.30	162958.66	0.00	LG	22+35.30	64.67 RT				
226	24730.01	162901.37	37.23	LG	22+79.97	15.09 LT				
228	24816.85	162968.36	38.49	LG	23+85.86	13.50 RT				
227	24827.73	162942.55	38.48	LG	23+86.02	14.50 LT				



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0002(444)/NFHWY00505	2024	H1	H4

					SI	GN	IIN	G	SUN	имағ	RY.									
							SIZE		BRAC	ING/		MTG.			POST					
LOC.	STATION	LOCA	MOITA	ASDS	LEGEND		X		FRAI		AREA		DIR.	TYPE	SIZE	NO.	REMARKS			
NO.		LT.	RT.	CODE		(1)	NCHE	S)	BRACED	FRAMED	(SQ.FT.)	(FT.)			(INCHES)					
1	10+77	×		D3-1	FRONT ST	8	Х	24	X		1.33		S	TS	3					
				D3-1	STEADMAN ST	+	. X				3.00									
				R1-1	STOP	36	5 X	36			9.00									
									1					1						
2	12+37	X		D3-1	W 1ST AVE	+	X		X		1.33			TS	3					
				D3-1	STEADMAN ST.	_	: X				3.00									
				R1-1	STOP	36	S X	36			9.00									
3	12+80	Х		D3-1	E 1ST AVE	8	X	24	Х		1.33			TS	3					
				D3-1	STEADMAN ST	12	. X	36			3.00									
		1		R1-1	STOP	+	5 X				9.00									
				,	3.01	1 00					0.00									
4	15+57		X	D3-1	W 3RD AVE	8	X	24	Х		1.33			TS	3					
				D3-1	STEADMAN ST	+	. X		.,		3.00			"						
				R1-1	STOP	+	5 X				9.00									
						1														
5	15+83	Х		D3-1	E 3RD AVE	8	X	24	Х		1.33			TS	3					
				D3-1	STEADMAN ST	12	: X	36			3.00									
				R1-1	STOP	36	5 X	36			9.00									
		•																		
6	16+54		Х	CW5-1	ROAD NARROWS	36	5 X	36	X		9.00			TS	3					
				R1-1	STOP	36	5 X	36			9.00									
7	17+28		Х	D3-1	W KING PL	8	Χ	24	Х		1.33									
				D3-1	STEADMAN	12	: X	36			3.00									
				R1-1	STOP	36	5 X	36			9.00			TS	3					
		1							1							$\overline{}$				
8	17+43	X		D3-1	E KING PL	_	Χ		X		1.33			TS	3					
				D3-1	STEADMAN ST.	_	. X				3.00									
				R1-1	STOP	36	5 X	36			9.00									
						Τ.								\ 						
9	19+70		X	D3-1	E 4TH AVE	_	X		X					TS	3					
				D3-1	STEADMAN ST	_	: X	$\overline{}$												
				R1-1	STOP	36	S X	36			9.00									
10	20+59		X	D1 1	STOP	7.6	5_X	7.6	×		9.00			TS	3					
10	20+39		_ ^ _	R1-1	310P	36		36	_		9.00			13	3					
11	20+56	X		D3-1	W 4th AVE	Я	X	24	×		1.33			TS	3					
'	20100	^		D3-1	STEADMAN ST	_	^ ! X		^		3.00			13	3					
				R1-1	STOP		· ^				9.00									
		1			3,51			30												
12	20+96		X	R1-1	STOP	36	S X	36	X		9.00			TS	3					
-			,	R1-4	ALL WAY	_	X		.,		2.00									
		1							<u> </u>	<u> </u>	I		I							
13	22+41		X	D3-1	E TOBUK ALLEY	8	Х	30	Х		1.67			TS	3					
		1		D3-1	STEADMAN ST	_	: X				3.00									
			4	R1-1	STOP	36	5 X	36			9.00									
		'							SUBT	DTAL=	165.33									

PLANS DEVELOPED BY: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITES, NORTHERN REGION, 2301 PEGER ROAD, FAIRBANKS, AK 99709 (907)451-2200 H:\Projects\Regional\NFHWY00426 NR ADA Impromnts\04 PS&E\09 C3D\STEADMAN\1 PIOts\NFHWY00505\_H\_-SIGNING SUMMARY Fri, Nov/01/24 09:27am

	SIGNING SUMMARY															
						s	SIZE BRACING/		ING/		MTG.			POST		
LOC.	STATION	LOCA	TION	ASDS	LEGEND	н	x v	/ FRAMING		AREA	HGT.	DIR.	TYPE	SIZE	NO.	REMARKS
NO.		LT.	RT.	CODE		(INC	CHES)	BRACED	FRAMED	(SQ.FT.)	(FT.)			(INCHES)		
14	23+94	Х		D3-1	E 5th AVE	8	X 24	Х		1.33			TS	3		
				D3-1	STEADMAN ST	12	X 36			3.00						
				R1-1	STOP	36	X 36			9.00						
											•					
15	23+97	X		D3-1	W 5th AVE	8	X 24	X		1.33			TS	3		
				D3-1	STEADMAN ST	12	X 36			3.00						
				R1-1	STOP	36	X 36			9.00						
								SUBT	OTAL=	26.67						
									TOTAL =	192						

#### POST TYPE LEGEND:

PST = PERFORATED STEEL TUBE
TS = TUBE STEEL (SQUARE STRUCTURAL STEEL TUBING)
W\_X\_ = WIDE FLANGE



#### **SIGNING NOTES:**

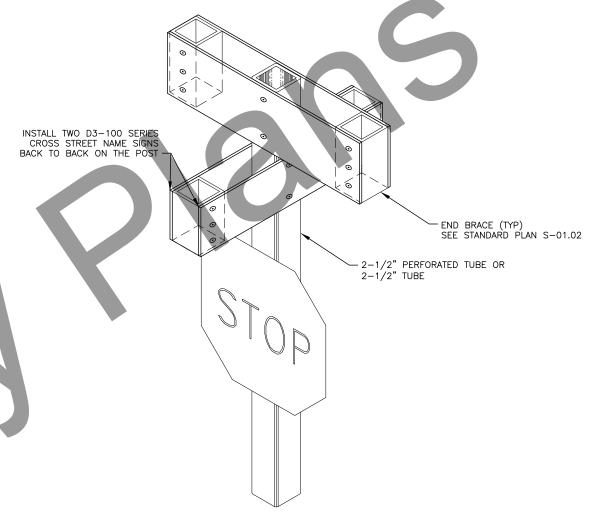
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- 1. REMOVE AND DISPOSE OF ALL EXISTING SIGNS AND SIGN FOUNDATIONS WITHIN THE PROJECT LIMITS, EXCEPT THOSE DESIGNATED FOR REINSTALLATION, SALVAGE OR OTHERWISE NOTED.
- 2. MOUNTING HEIGHTS ARE PER STANDARD PLAN S-05.02 UNLESS OTHERWISE NOTED.
- 3. DETERMINE POST LENGTHS IN THE FIELD. DO NOT EXTEND POSTS ABOVE TOP OF SIGN.
- 4. INSTALL PST SIGN POSTS WITH SLEEVE TYPE CONCRETE FOUNDATION. EMBED PST IN SLEEVE 12"-24" PER STANDARD PLAN S-30.05. ATTACH THE SIGN POST TO THE SLEEVE USING GALVANIZED 3/8" BOLT, NUT, SPLIT LOCK WASHER AND TWO FLAT WASHERS.
- 5. 1/4" X 1 1/2" ALUMINUM ALLOY 6061-T6 BAR MAY ALSO BE USED TO FABRICATE SIGN BRACES AS SHOWN ON STANDARD PLAN S-01.02
- 6. 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.
- 7. 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.
- 8. ALL FASTENER HARDWARE SHALL MEET THE REQUIREMENTS OF THE "FASTENER SPECIFICATION TABLE" UNDER SUBSECTION 730-2.07.
- 9. STOP (R1-1) AND YIELD (R1-2) SIGN LOCATIONS, ESPECIALLY THOSE AT LARGE RADIUS INTERSECTIONS, MAY NEED ADJUSTMENT IN THE FIELD. THE ENGINEER WILL APPROVE FINAL LOCATIONS.
- 10. 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.
- 11. D3-100 SERIES SIGNS REQUIRE TWO SEPARATE SINGLE SIDED PANELS. END-BRACE PANELS PER SMALL STREET NAME SIGN BRACING DETAILS IN STANDARD PLAN S-01.02.
- 12. MAINTAIN EXISTING SIGNS UNTIL NEW SIGNS ARE INSTALLED. DO NOT LEAVE DUPLICATE OR CONFLICTING SIGNING UP AT ANY TIME.
- 13. ALL SIGNS NOTED FOR REMOVAL AND REINSTALLATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE IF THEY ARE DAMAGED DURING THE RELOCATION EFFORT.
- 14. USE SERIES C LETTERS FOR D3-100 SERIES SIGNS UNLESS OTHERWISE NOTED. USE 4.5" FOR DIMENSION "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.
- 15. 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.
- 16. 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.
- 17. DELIVER ALL SALVAGED SIGNS TO DOT M&O FACILITY AT MP 3.5 OF THE NOME—TELLER HWY. COORDINATE DELIVERY THROUGH THE PROJECT ENGINEER.
- 18. 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.
- 19. ADHESIVE TAPE IS NOT PERMITTED. THIS MODIFIES STANDARD PLAN S-00.12.

#### TRAFFIC MARKING NOTES:

- 1. IF NEW AND EXISTING LONGITUDINAL MARKINGS ARE NOT ALIGNED AT THE MATCH LINE, TRANSITION BETWEEN THE TWO USING A 100:10 TAPER.
- 2. DISTANCE BETWEEN CENTERLINE AND LANE EDGE IS 12 FEET UNLESS OTHERWISE NOTED; THIS DIMENSION IS TO THE CENTER OF STRIPE OR STRIPE GROUP.
- 3. THE PASS/NO-PASS ZONES WILL BE DETERMINED IN THE FIELD BY THE CONTRACTOR ACCORDING TO SECTION 670. THIS WORK IS SUBSIDIARY TO PAY ITEM 670.0001.0000 PAINTED TRAFFIC MARKINGS.
- 4. PAVEMENT MARKINGS WILL BE PLACED IN ACCORDANCE WITH STANDARD DRAWING T-21 AND SECTION 670.
- 5. LENGTH OF 4" DOUBLE YELLOW IS BASED ON A CONTINUOUS 4" DOUBLE YELLOW STRIPE THROUGH THE LENGTH OF THE DESIGNATED AREA. NO ADJUSTMENT WILL BE MADE TO THE 670.0001.0000 PAY ITEM FOR THE DIFFERENCES IN QUANTITY OF YELLOW STRIPE INSTALLED ACCORDING TO 670-3.05, PRELIMINARY SPOTTING.

670.0001	.0000 PAINTE	D TRAFFIC MARKINGS SUMMARY
DESCRIPTION	LENGTH (FT)	REMARKS
4" DOUBLE YELLOW	1300	

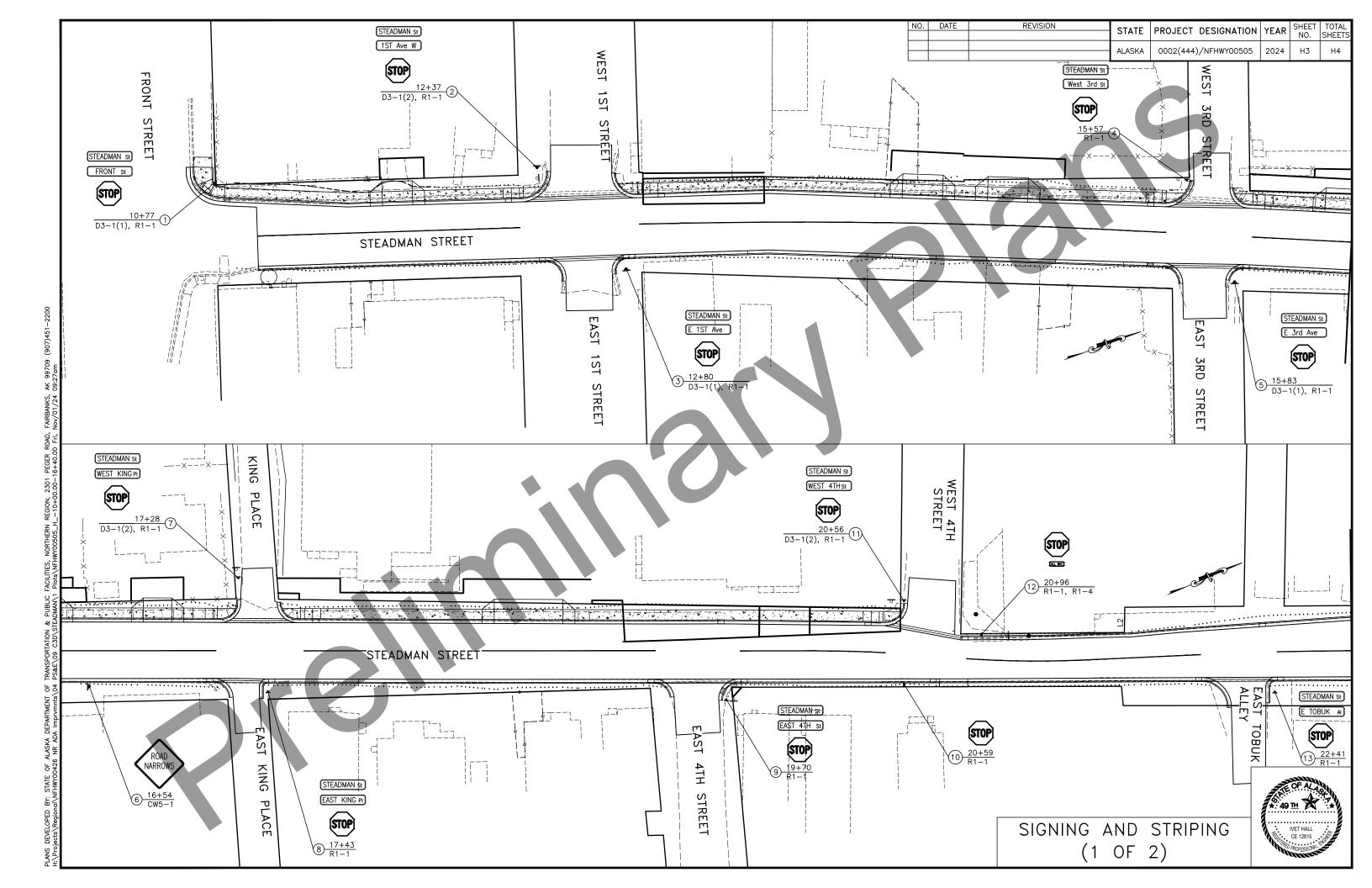


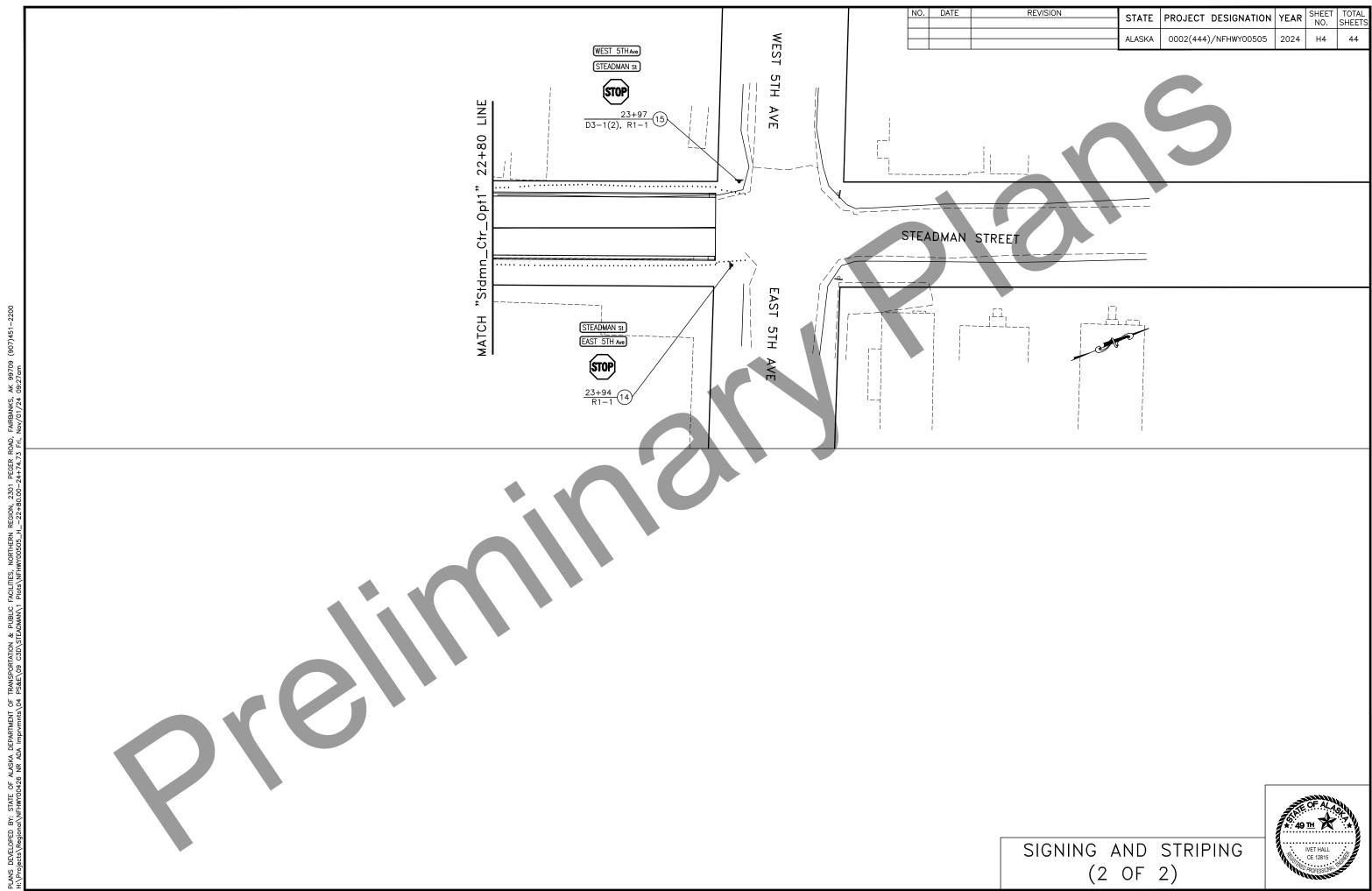
#### NOTES:

1. VERTICALLY SEPARATE R1-1 (STOP) SIGN AND ALL OTHER SIGN ASSEMBLIES MOUNTED ON THE SAME POST BY 2-1/2 INCHES.

STREET NAME SIGN MOUNTING DETAIL









	5. REFER TO APPENDIX A OF THE CONTRACT FOR ENVIRONMENTAL PERMIT INFORMATION. 6. REFER TO APPENDIX C OF THE CONTRACT FOR THE ESCP TEMPLATE.	LEGEND: WETLANDS
	ENVIRONMENTAL COMMITTMENTS:	WETLANDS  APPROACH
	1. THE AK SHPO'S CONCURRENCE IS CONDITIONED TO INCLUDE ARCHAEOLOGICAL MONITORING FOR THE NR ADA SIDEWALK IMPROVEMENTS—NOME:	CULVERT
-2200	STEADMAN STREET PROJECT BY A QUALIFIED PROFESSIONAL ARCHAEOLOGIST DUE TO THE POSSIBILITY THAT CULTURAL RESOURCES ASSOCIATED WITH NOM-158 COULD BE DISCOVERED. ADDITIONALLY, THE QUALIFIED MONITOR SHOULD PAY CLOSE ATTENTION, DURING THE PROJECT EXCAVATIONS, FOR THE POTENTIAL TO ENCOUNTER EVIDENCE OF THE OLD RAILROAD BED AT THE CROSSING OF STEADMAN ST. NEAR ITS	RIPRAP
(907)451-	INTERSECTION WITH 4TH AVE., AND FOR EVIDENCE OF A ONCE EXISTING BUILDING AT THE INTERSECTION OF FRONT ST. AND STEADMAN ST. IF THESE TWO RESOURCES ARE ENCOUNTERED AS PART OF THE MONITORING THE ARCHAEOLOGIST IS TO RECORD THEIR RESPECTIVE GPS LOCATIONS	REVEGETATIVE EFFORT
06) 6C	AND THE DEPTH OF THE HORIZON WHERE THEY WERE ENCOUNTERED, THIS INFORMATION IS TO BE PROVIDED TO THE CITY OF NOME'S MUSEUM AND LIBRARY COMMISSION.	PERIMETER CONTROL  INLET PROTECTION
K 9970	2. IN THE UNLIKELY EVENT THAT THE FIELD CREW ENCOUNTERS A POLAR BEAR, OR DISCOVERS EVIDENCE OF ONE, THEY WILL IMMEDIATELY REPORT THE DISCOVERY AND/OR TIME AND LOCATION OF THE SIGHTING TO THE CITY OF NOME'S POLICE DEPARTMENT. THEY WILL ALSO RELOCATE THE	OUTLET PROTECTION
NKS, A	FIELD PERSONNEL TÓ A SAFE AREA OR SHELTER UNTIL IT IS DETERMINED THAT IT'S SAFE FOR THEM TO RETURN. THE AWARDED CONTRACTOR SHOULD REVIEW USFWS' STANDARD POLAR BEAR INTERACTION GUIDELINES, WHICH MAY INFORM DEVELOPMENT OF AN AN INTERACTION PLAN, OR	EXISTING SURFACE
-AIRBAI Nov/C	SUBSTITUTE FOR A PROJECT—SPECIFIC INTERACTION PLAN, IN THE UNLIKELY EVENT A POLAR BEAR IS ENCOUNTERED DURING THE PROPOSED ACTIVITIES.	FLOW DIRECTION
OAD, F 1 Fri,		CHECK DAMS OR OTHER VELOCITY CONTROL BMPS
EGER F		CONSTRUCTION ENTRANCE
301 PI EGEND-		AND EXIT
SCP_L		
IN REG		
: PUBLIC FACILITIES, NORTHER ADMAN\1 Plots\NFHWY00505,	WEST 1st STREET FRONT STREET	
TION &		
SPORTA		
TRANS	BOP	EAS
ENT OF ints\04	STA. 10+97	12 [21]
PARTMI	T 1st STREE	TOBUK ALLEY
SKA DE	STREET STREET	ALLEY
F ALAS		` I
ELOPED BY: STATE OF Regional\NFHWY0042		
BY: S		
LOPED Region		
S DEVE ojects\		ESCP NOTES
Ϋ́		

**ESCP GENERAL NOTES:** 

VEGETATIVE BUFFER IS NOT RETAINED.

1. THIS ESCP IS A GENERAL PLAN FOR GUIDING THE DEVELOPMENT OF THE CONTRACTOR'S SWPPP. THE CONTRACTOR IS EXPECTED TO PROVIDE ADDITIONAL DETAILS AND BMPS BASED ON THE CONTRACTORS ACTUAL SCHEDULE AND CONSTRUCTION METHODS, AS REQUIRED TO COMPLY WITH THE CONSTRUCTION GENERAL PERMIT AND SECTION 641 OF THE PROJECT SPECIFICATIONS.

3. INSTALL PERIMETER CONTROL BMP WHEN WORKING WITHIN 25 FEET OF SURFACE WATERS AND ALONG WETLANDS WHERE A 25 FOOT

4. IF EXCAVATION DE-WATERING WILL OCCUR WITHIN 1,500FT OF AN ADEC IDENTIFIED CONTAMINATED SITE, THEN THE CONTRACTOR MUST OBTAIN ADEC EXCAVATION DE-WATERING PERMIT COVERAGE.

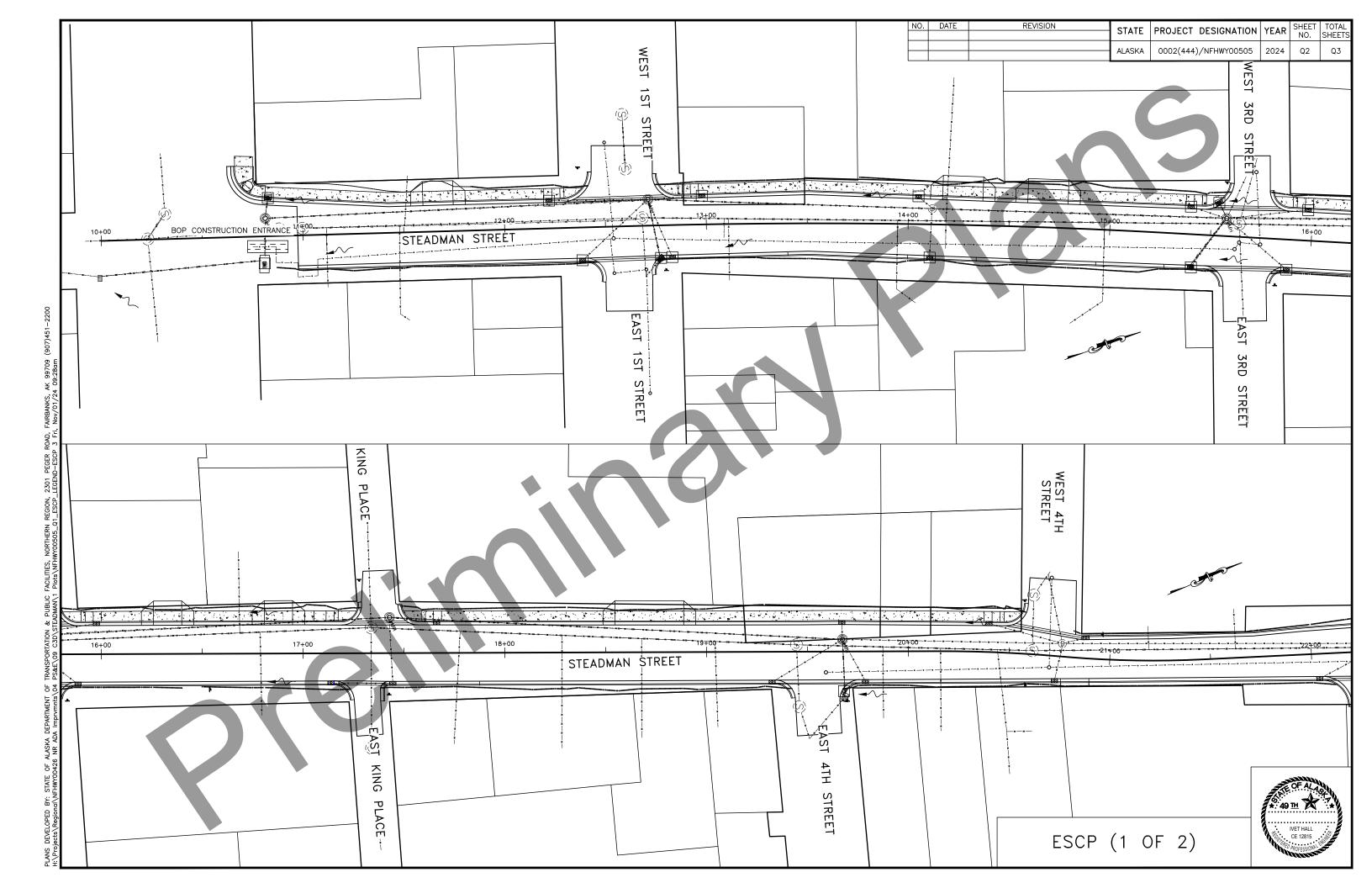
2. CONSTRUCTION ENTRANCE/EXIT MUST BE ESTABLISHED TO MINIMIZE OFF-SITE IMPACTS.

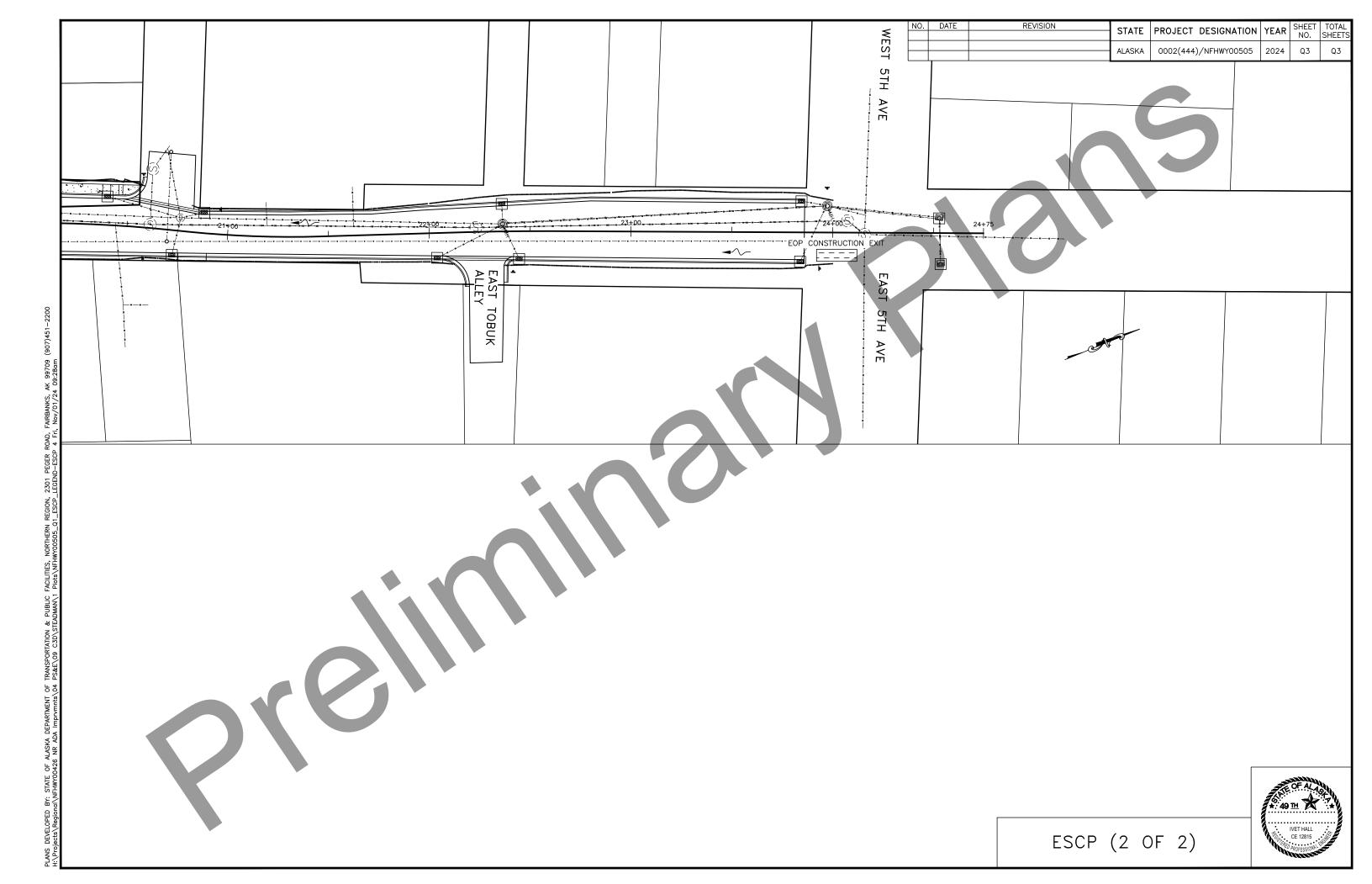
NO. DATE REVISION STATE PROJECT DESIGNATION YEAR ALASKA 0002(444)/NFHWY00505 2024 Q1 Q3

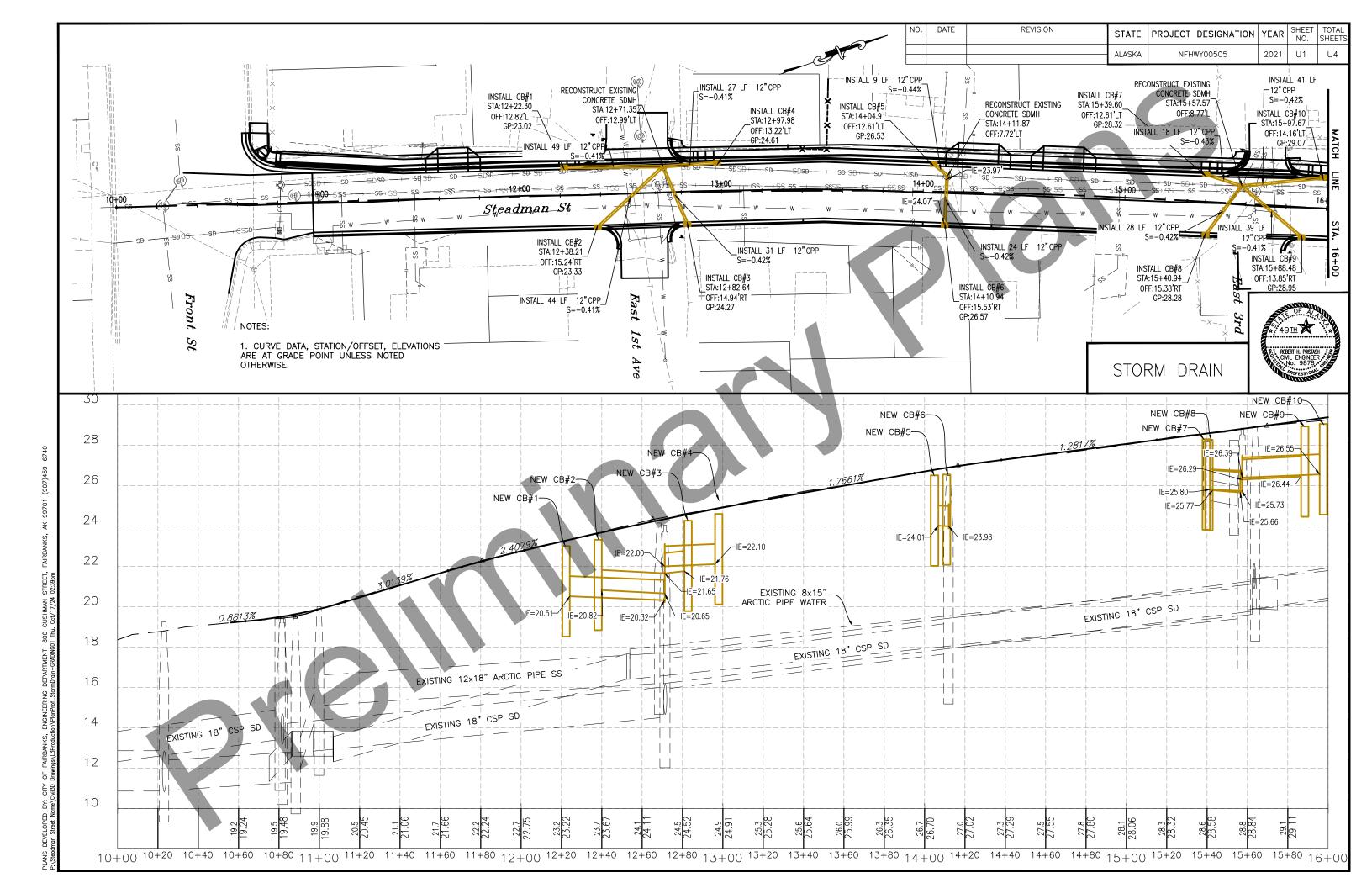


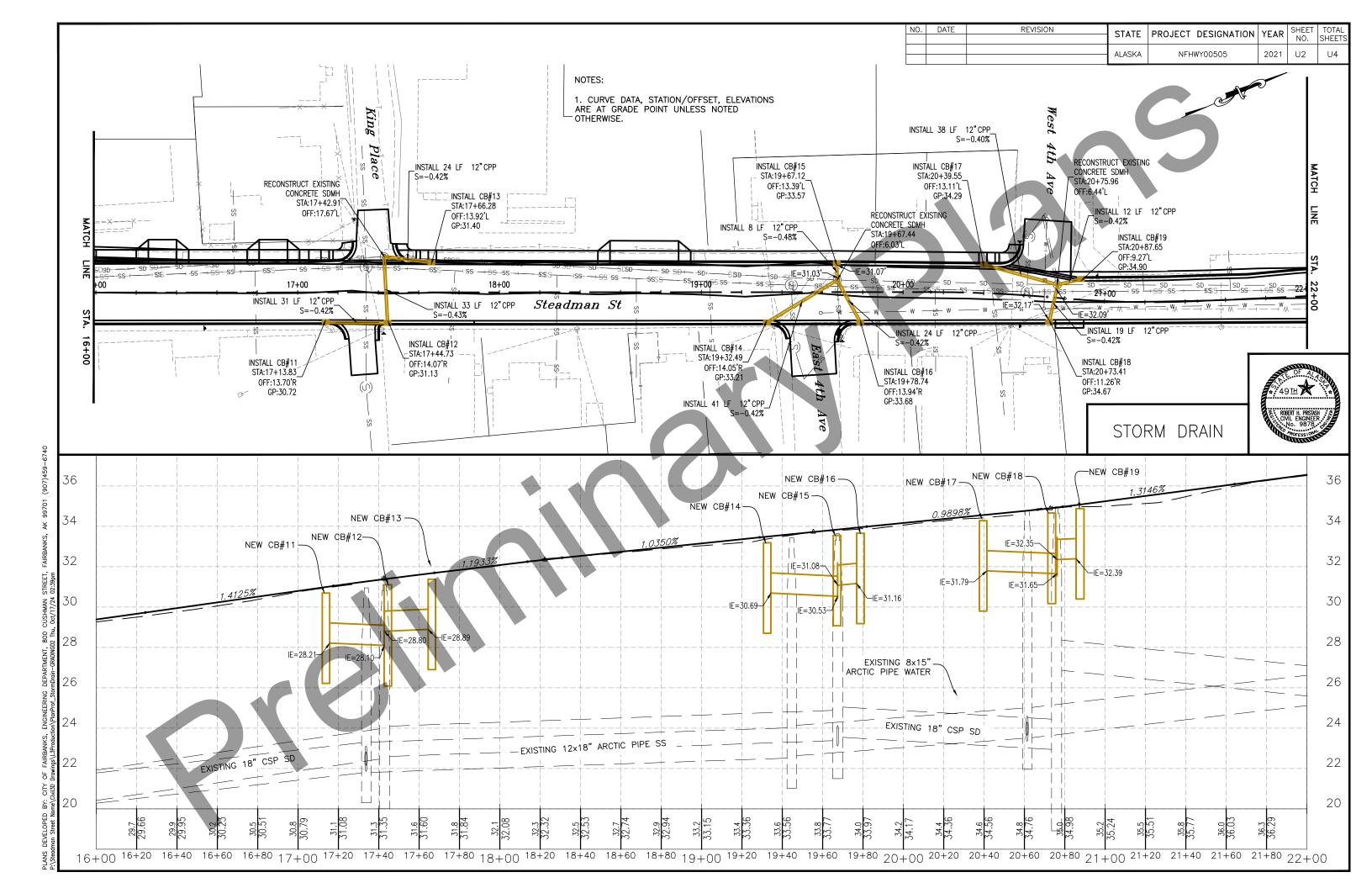


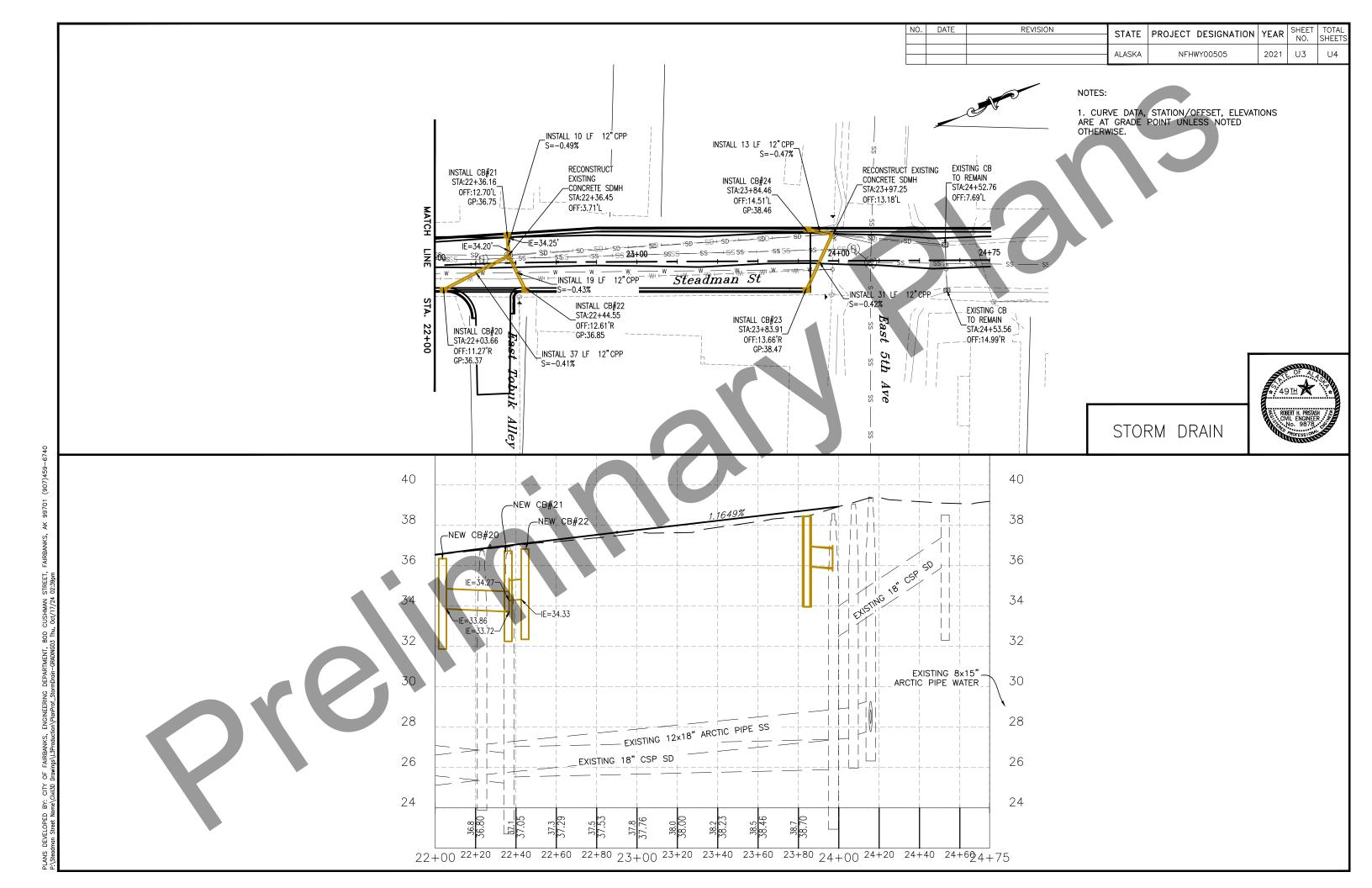
EOP STA. 23+86

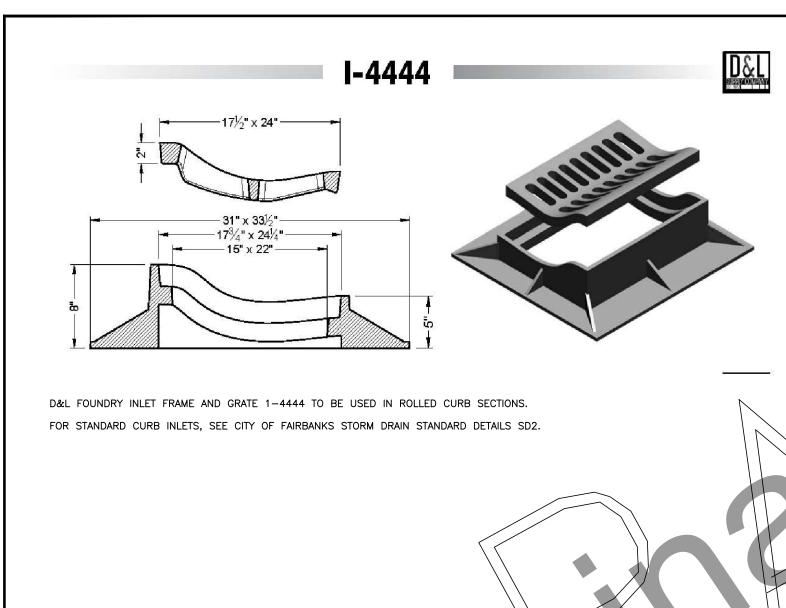






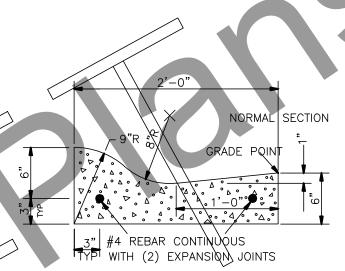




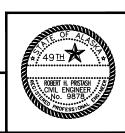


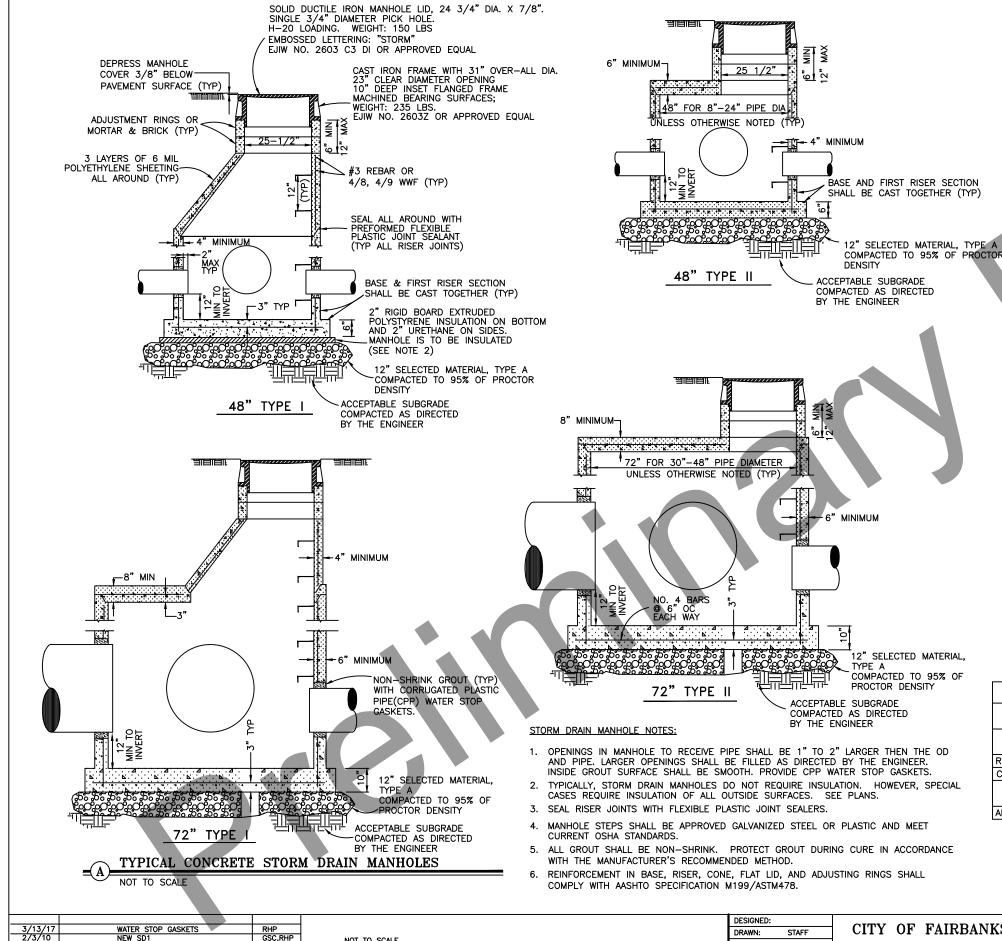
NO. DATE REVISION STATE PROJECT DESIGNATION YEAR SHEET NO. SHEETS

ALASKA NFHWY00505 2021 U4 U4



ROLLED CURB & GUTTER DETAIL



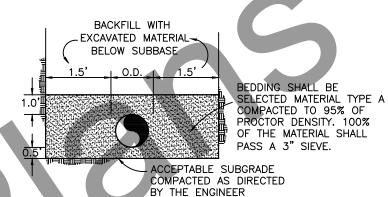


RHP GSC.RHP

RHP BY

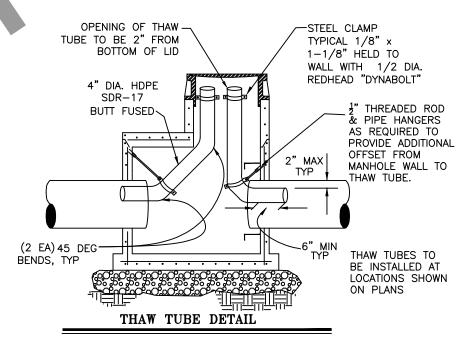
3/23/07 DATE

NOT TO SCALE



#### BEDDING DETAIL

NOT TO SCALE



MANHOLE R	EINFORCEMENT SC		
SECTION	MANHOLE	SIZE	(CLIALL COMPLY WITH ANGLITO
SECTION	48"	72"	(SHALL COMPLY WITH AASHTO M 199 /ASTM 478)
FLAT BASE	0.39 SQ IN/FT EACH WAY	0.39 SQ IN/FT EACH WAY	*CIRCUMFERENTIAL
RISER SECTION*	0.12 SQ IN/FT	0.18 SQ IN/FT	REINFORCING
CONE SECTION*	0.12 SQ IN/FT	0.18 SQ IN/FT	ALL AREAS ARE MINIMUM CROSS—SECTIONAL AREA OF
FLAT LID**	0.12 SQ IN/FT EACH WAY	0.12 SQ IN/FT EACH WAY	REINFORCEMENT PER FOOT OF SECTION.
ADJUSTING RING	0.024 SQ IN	0.024 SQ IN	

\*\*OPENINGS IN FLAT LIDS SHALL BE ADDITIONALLY REINFORCED WITH A MINIMUM OF THE EQUIVALENT OF 0.2



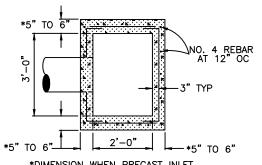
CITY	OF	FAIRBANKS,	ALASKA	
E	NGIN	EERING DIVISIO	N	

STAFF

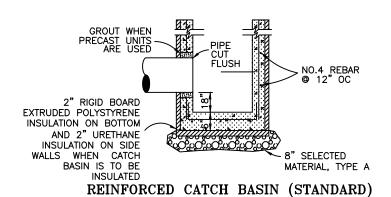
3/23/07

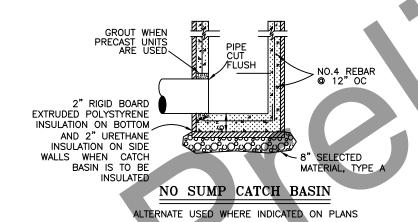
CHECKED: RHP,GSC

DATE:

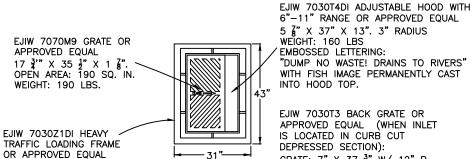


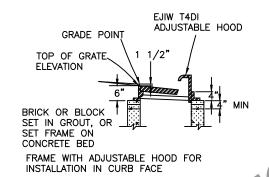
\*DIMENSION WHEN PRECAST INLET BOX WITH CONTINUOUS WWF 6x6 4/4 REINFORCEMENT IS USED



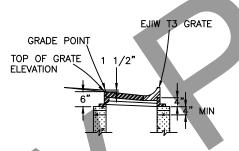


#### TYPICAL CURB INLET





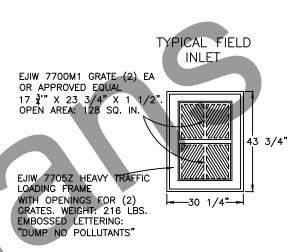
WEIGHT: 185 LBS.

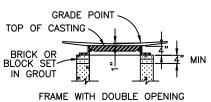


GRATE: 7" X 37 \( \frac{3}{4} \)" W/ 12" R

WEIGHT: 105 LBS.

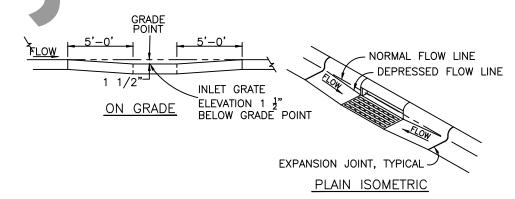
FRAME WITH BACK GRATE FOR INSTALLATION IN CURB CUT





#### INLET BOX/CATCH BASIN DETAILS

NOT TO SCALE



#### DEPRESSION IN FLOW LINE AT INLET

#### ATCH BASIN NOTES:

- 1. THE WORDS "INLET" AND "CATCH BASIN" SHALL BE INTERCHANGEABLE.
- 2. ALL GROUT SHALL BE NON-SHRINK. PROTECT GROUT DURING CURE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED METHOD.
- 4. TYPICALLY, CATCH BASINS ARE NOT INSULATED. HOWEVER, SPECIAL CASES RÉQUIRE INSULATION OF ALL OUTSIDE SURFACES. SEE PLAN NOTE TO INSULATE CB.
- 5. GROUT THE INSIDE FACE OF ALL JOINTS SMOOTH.



2/3/10	NEW SD2	GSC,RHP
3/23/07		RHP
DATE	REVISION	BY

NOT	то	SCALE

DESIGNED:	
DRAWN:	STAFF
CHECKED:	RHP,GSC
DATE:	3/23/07

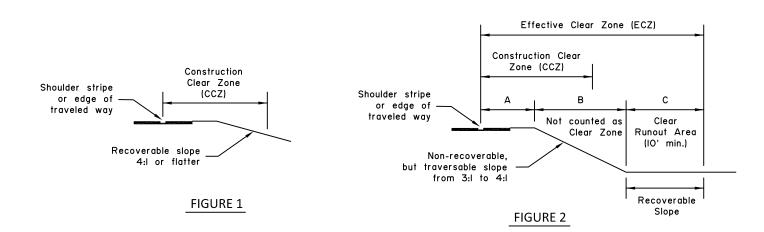


	Table 1 - Width of Construction Clear Zone (feet)											
		Posted Speed Limit (MPH)										
Hazard	AADT	<=30	MPH	35 to 4	IO MPH	45 to 5	55 MPH	>=60	MPH			
		6:1 or flatter	5:1 to 4:1	6:1 or flatter	5:1 to 4:1	6:1 or flatter	5:1 to 4:1	6:1 or flatter	5:1 to 4:1			
Fill (Fore) &	Under 750	5'	5'	6'	8'	8'	12'	12'	16'			
Cut (Back)	750 - 6,000	6'	10'	8'	12'	14'	18'	20'	26'			
Slopes	Over 6,000	10'	10'	12'	14'	16'	20'	22'	28'			
Fixed Objects	All	1	5'			3	0'					

Table 2 - Treatment for Hazards Within Con	struction Clear Zone
--	----------------------

Table 2 - Heading it for Hazards Within Construction Stear Zone									
Roadside Condition to be Treated	Category	Treatment							
Fill (Fore)	Steeper than 3:1 or water 3 ft. or deeper	Use Table 5 to select from the following two options:  1. Install rigid barrier or guardrail if the condition warrants barrier, or  2. Use drums or Type II barricades if the condition does not warrant barrier.							
Slopes, including trenches	3:1 to 4:1	Use drums or Type II barricades if 10 ft. of runout at the bottom of the slope is not clear of obstructions.     No traffic control devices are required if 10 ft. of runout at the bottom of the slope is clear of obstructions.     If water 3 ft. or deeper is at bottom of slope, use Table 5.							
	Flatter than 4 : 1	No traffic control devices are required, except when water 3 ft. or deeper is in construction clear zone use Table 5.							
Fixed Objects	All	Install rigid barrier or guardrail if called for by the plans or specifications.  Otherwise use SSHC Section 643-3.04.3 - Fixed Objects.							

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SHEET | of 3

#### **GENERAL NOTES:**

- I. The "Construction Clear Zone" (CCZ) may be called "Work Zone Clear Zone" or "Clear Zone in Work Zones" in other publications.
- 2. In the case of conflicts, this Standard Plan has lesser precedence than Section 643 (Traffic Maintenance) of the Standard Specifications for Highway Construction (SSHC).
- 3. During seasonal shutdown or if construction activity is scheduled for suspension for 45 days or more, treat hazards within a 30 foot CCZ width or within the permanent design clear zone (CZ) width.
- 4. These guidelines are not comprehensive and are not intended to limit the use of safety measures.
- 5. During pilot car operations, keep fixed objects and other hazards, 2 feet or farther, away from the edge of traveled way and delineate with channelizing devices as required by the Engineer.

#### INSTRUCTIONS FOR USING TABLES | THROUGH 5:

Use The following tables to determine how to treat roadside fixed object or slopes (including trenches, berms and moterial stockpiles) in construction clear zones.

- TABLE I: Use to determine whether the hazard in withing the CCZ
- TABLE 2: Use to determine the appropriate treatment for hazards within the CCZ. No treatment is required for fixed objects or slopes outside the CCZ.

TABLES 3a and 3b: Use to determine appropriate treatment for pavement edge dropoffs.

- TABLE 4: Use to determine barrier flare rates.
- TABLE 5: Use to determine whether drums or Type II barricades, or temporary barrier or guardrail, are required on fill slopes or for water hazards.

#### TABLE | NOTES:

- Measure CCZ from the shoulder stripe. If there is no shoulder stripe, measure from the edge of the traveled way. See Figure 1.
- 2. If CCZ include or ends on a slope of 3:1 to 4:1, use the Effective Clear Zone (ECZ) that extends beyond the bottom of the slope to proved a clear runout area of 10 foot minimum width. The ECZ width must equal or greater than the CCZ width from Table 1. See Figure 2 and verify that A+C ≥ CCA and C ≥ 10 feet.
- 3. If a CCZ includes or ends on a slope steeper than 3:1, the top of slope must be delineated by channelizing devices or protected by barrier.
- 4. The term "fixed objects" is defined in Section 643-1.02 of the SSHC.
- 5. AADT stands for Average Annual Daily Traffic. Use the higher of the as listed in the plans or the average of June/July/August ADT's, unless otherwise specified by the Engineer.

#### TABLE 2 NOTES:

- Eliminate non-traversable slopes (those steeper than 3:1) and fixed objects (as
  defined in Section 643-1.02 of the SSHC) within the CCZ when practicable.
  They should only be left in place and treated as treated as shown in this
  table when elimination is not practicable.
- Maintain a 2-foot minimum wide lateral buffer space between the edge of traveled way and work areas. This provides an area to install barriers or other delineation by channelizing devices.
- If necessary to treat multiple hazards on the same road segment (slopes and fixed objects), choose treatments from Table 2 that satisfy the requirements for the most significant of the multiple hazards.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

## ROADSIDE SAFETY TREATMENT FOR WORK ZONES

Adopted as an Alaska Carolyn H Worshouse
Standard Plan by:

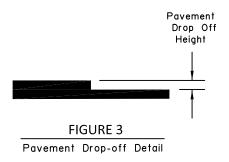
Carolyn Morehouse, P.E. Chief Engineer

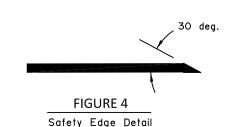
Adoption Date: 09/15/2022

Last Code and Stds. Review By: LRG Date: 09/15/2022

Next Code and Standards Review date: 09/15/2032

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#### Table 3a - Treatment for Pavement Edge Drop-offs for Posted Speeds > 30 MPH

Nominal Lift Thickness / Height of Pavement Edge Drop-off	Between Active Lanes of traffic moving in same direction	Between Active Lanes of traffic moving in opposing directions	Outside Pavement Edge (if within 3' of traveled way)	Outside Pavement Edge if more than 3' from traveled way and within the CCZ	Across Active Lane, and Entrance and Exit Ramps				
0 to 1.0"		No Edge Treatment or Signage Required							
More than 1.0" to 2.0"	UNEVEN L	.ANE Signs	Lowshou	LOW SHOULDER Signs					
More than 2.0" to 3.0"	UNEVEN LANES Signs - Use Channelizing Devices or Safety Edge	<b>UNEVEN LANES</b> Signs - Use Channelizing Devices	LOW SHOULDER Signs - Use Channelizing Devices - Consider Safety Edge	LOW SHOULDER Signs	Taper Drop-off at slope				
More than 3.0" to 6.0"	UNEVEN LANES Signs - Use Channelizing Devices and Use Safety Edge	<b>UNEVEN LANES</b> Signs - Use Channelizing Devices	SHOULDER DROP OFF Signs - Use Channelizing Devices and Safety Edge; or Use Barrier	SHOULDER DROP OFF Signs - Use Channelizing Devices or Barrier	of 15H:1V or flatter Use BUMP Sign				
More than 6"	Proh	ibited	Barrier - Installed on traffic side of drop-off	Channelizing Devices or Barrier according to Table 5					

Table 3b - Sign Numbers									
Legend	Number	ATM * Ref.							
UNEVEN LANES	W8-11	6F.45							
LOW SHOULDER	W8-9	6F.44							
SHOULDER DROP OFF (Symbol)	W8-17	6F.44							
SHOULDER DROP OFF (Plaque)	W8-17P	6F.44							
BUMP	W8-1	2C.28							
* ATM = Alaska Traffic Manu	al								

Table 4	- Barrier Fla	are Rates					
Speed	Flare Rate						
(mph)	Rigid	Semi-Rigid					
70	20:1	15:1					
60	18:1	14:1					
55	16:1	12:1					
50	14:1	11:1					
45	12:1	10:1					
40	10:1	8:1					
30	8:1	7:1					

#### TABLE 3 NOTES:

- I. This table applies to pavement edge drop-offs that are adjacent to traffic and left after the pavement shift ends and for posted speeds > 30 mph. Use engineering judgment for edge treatment for posted speeds ≤30 mph.
- 2. Use interim pavement markings and signs as required according to Standard Plan C-05 (for all conditions)
- 3. A Safety Edge is a formed pavement edge taper sloped at approximately 30°, but not more than 35° from horizontal.
- 4. Use a Safety Edge for longitudinal or diagonal pavement edge drop-offs more than 2 inches within a traveled lane. See Figure 3. Use a Safety Edge on longitudinal joints between lanes as required by Table 3a.
- 5. The "Across Active Lane, and Entrance and Exit Ramps" column applies to any location where motorists will cross pavement drop-offs (includes transverse construction joints) at an acute angle (45° or more). Taper may be reduced to 6:1 at posted speeds of 30 mph or less.
- 6. Signage applies to all posted speed for edge drop-offs as shown in Table 3a. For information on signs and locations, see SSHC Section 643-3.04 and the Alaska Traffic Manual (ATM). Signs should be place at the beginning and end points of each paved segment, and in locations between as specified. Also, see Table 3b.
- 7. "Channelizing Devices" means drums with steady-burn lights, candle, or cones.
- 8. Treatment for pavement edge drop-offs are in addition to Treatment for Hazards within Construction Clear Zones (CCZs) (i.e. fixed obstacle or slope protection may also be required).

#### BARRIER TERMINATION AND TABLE 4 NOTES:

- Terminate portable rigid barrier (concrete or metal) with one of the following methods:
- An NCHRP 350 or MASH TL-3 approved end treatment or crash cushion.
- An NCHRP 350 or MASH TL-3 approved buried-in-backslope treatment
- A Thrie-Beam transition according to Std. Plan G-32 (except attached to a rigid barrier instead of a bridge rail) and terminated with a MASH TL-3 end treatment.
- Terminate outside the CCZ by flaring barriers away from the roadway at the rate shown in Table 4 for rigid barriers (maximum IO:1 cross slope in front of the barrier).
- e) Sloped ends may be used to terminate barriers within the CZ when the regulatory (black on white sign) speed limit is 30 mph or below. For speeds more than 30 mph, the Engineer may approve sloped ends if they determine NCHRP 350 or MASH compliant end treatments are impracticable. See Std. Plan G-46 for concrete barrier sloped ends.
- 2. Terminate temporary W-Beam guardrail with one of the following methods:
  - a. With a MASH TL-3 approved end treatment
  - b. By burying it in a backslope according to Std. Plan G-16
  - c. By flaring the guardrail away from the road at the rate shown in Table 4 for semi-rigid barriers (maximum 10:1 cross slope in from of the auardrail).
  - d. Terminate outside the CZ.

State of Alaska DOT&PF ALASKA STANDARD PLAN

#### ROADSIDE SAFETY TREATMENT FOR WORK ZONES

Adopted as an Alaska Standard Plan by: Carolyn H Morehouse Carolyn Morehouse, P.E.

Adoption Date: 09/15/2022

Last Code and Stds. Review By: LRG Date: 09/15/2022

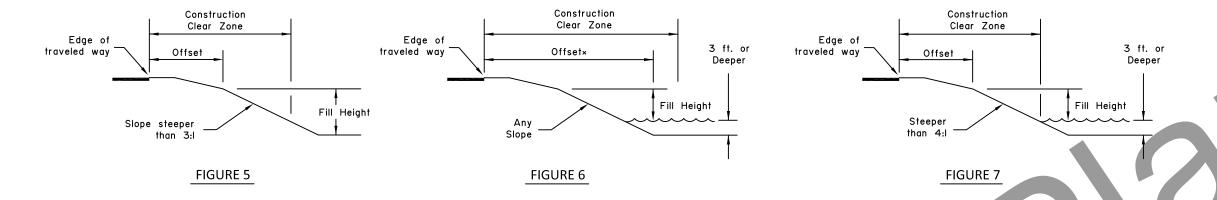
Next Code and Standards Review date: 09/15/2032

Chief Engineer

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## Table 5 - Minimum Fill Height at which Temporary Barrier Is Waranted

#### **Seasonal Traffic Volume - ADT** 0-750 751-1500 1501-6000 6001-15000 15001+ Posted WZ All Slopes slope slope Duration Offset Water Water Water Water 2.9:1 to 2:1-Water 2.9:1 to 1:1 to 2.9:1 to 2:1-1:1-2.9:1 to 2:1-1:1-1:1-(# days) (ft) Limit Condition 2.1:1 1.1:1 Vert. 2.1:1 1.1:1 Vert. 2.1:1 1.1:1 Vert. 1.1:1 Vert. 5-10 4-30 3-5 11' 11' 0-3 **30 MPH** 5-10 and 31-100 3-5 35' 11' 11' 11' 0-3 31' lower 5-10 35' 11' 11' 101+ 3-5 11' 11 35' 29' 0-3 11' 11' 31' 17' 8' 8' 6-12 4-30 3-6 10' 10' 10' 0-3 29' 6-12 35 to 45 10' 29' 10' 31-100 3-6 10' 10' 29' 0-3 19' 9' 9' 6-12 29' 27' 10' 10' 10' 101+ 3-6 28' 12' 10' 0-3 29' 18' 9' 9' 7' 6' 6' 9-18 4-30 3-9 8' 13' 0-3 9-18 8' 8' 45 to 55 13' 31-100 3-9 8' 13' 8' 8' MPH 0-3 13' 6' 6' 13' 9-18 13' 8' 8' 7' 7' 3-9 101+ 12' 7' 37' 6' 5' 5' 13' 0-3 7' 6' 6' 23' 5' 3' 3' 13-26 3-13 6' 6' 10' 6' 0-3 10' 60 MPH 13-26 10' 6' and 31-100 3-13 6' 10' 6' 6' 0-3 10' 40' 6' 5' 5' above 13-26 10' 6' 6' 6' 10' 6' 101+ 3-13 6' 30' 6' 4' 4' 6' 10' 6' 0-3 34'

#### TABLE 5 NOTES:

- Use this table for fill slopes steeper than 3:1 or water hazards that start within the Construction Clear Zone (CCZ). See Figures 5, 6, and 7.
- Near Lane AADT, as used in this table, means the higher of the AADT listed in the plans or the seasonal Average Daily Traffic (ADT) for June, July, and August in the lane nearest the slope or water hazard during the planned construction period. Assume an even distribution of traffic across lanes - i.e. if there is 6000 one-way AADT on three lanes, use 2000 AADT in each lane.
- 3. Duration is the estimated number of days traffic will be exposed to the fill (fore) slope or water hazard.
- 4. To use Table 5, fine the cell that corresponds to the speed limit, duration, offset, traffic volume, and the presence of a slope or water hazard.
  - a. If the cell is unshaded, a Temporary Barrier is required when the fill height equals or exceeds the height (in feet) shown in the
  - b. If the cell is shaded or fill height is less than the height shown in the cell, use drums or Type II barricades.
- 5. A water hazard is defined as:
  - a. Water 3 feet or deeper within the CCZ, or
  - b. Where a slope steeper than 4:1 starts within the CCZ and leads to water 3 feet or deeper.
- 6. Consider water depth to be the highest level anticipated during the duration period.
- 7. If both a water hazard and a slope steeper than 3:1 are present, install Temporary Barrier if warranted for either condition.
- 8. Temporary Barrier is rigid barrier (concrete or metal) or guardrail meeting NCHRP or MASH TL-3, or higher.

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

#### ROADSIDE SAFETY TREATMENT FOR WORK ZONES

Standard Plan by:

Adopted as an Alaska Carolyn H Morehouse

Carolyn Morehouse, P.E. Chief Engineer

Adoption Date: 09/15/2022

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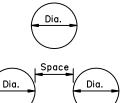


SHEET | of |

#### GENERAL NOTES:

- Sidefill shall be placed and compacted with care under haunches of pipe and shall be brought up evenly and simultaneously on both sides of pipe to I foot above the top of the full length of the pipe.
- Alternate installation methods may only be used when specified or approved by the Engineer.

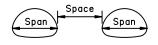
D = Nominal Pipe Diameter



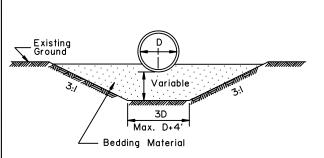
	MULTIPLE INSTALLATIONS
Dia.	Minimum Space Between Pipes
0" - 42"	24"
48" & Over	1/2 Dia. of pipe or 3', whichever is less.

S = Nominal Pipe Arch Span



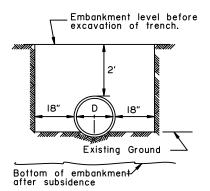


	MULTIPLE INSTALLATIONS
Dia.	Minimum Space Between Pipes
0" - 42"	24"
48" & Over	I/2 Span of pipe arch or 3', whichever is less.

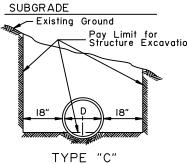


TYPE "A" FOUNDATION STABILIZATION

To be used in unstable areas as directed by the Engineer.



TYPE "B"



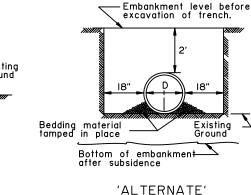
Pay Limit for Structure Excavation

Existing Unyielding Material 1/2" per ft. of cover -over pipe 12" Min. and 3/4 D Max. ∠ Bedding Material

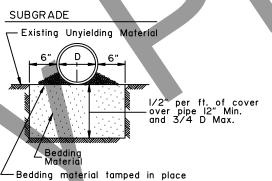
TYPE "D" ROCK OR UNYIELDING MATERIAL

SUBGRADE





SUBGRADE Existing Ground Pay Limit for Structure Excavation Bedding material tamped in place 'ALTERNATE'



'ALTERNATE' TYPE "D" ROCK OR UNYIELDING MATERIAL

Bedding material tamped in place Existing Ground Variable 3D Max. D+4" -Bedding Material 'ALTERNATE' TYPE "A"

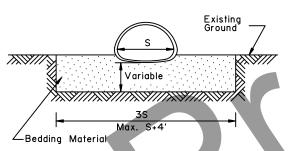
FOUNDATION STABILIZATION To be used in unstable areas as directed by the Engineer.

TYPE "B"

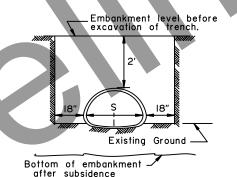


CULVERT PIPE

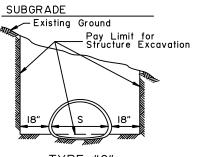
ARCH



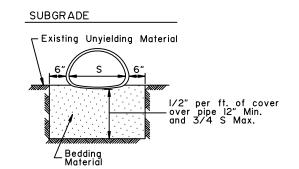
TYPE "A"
FOUNDATION STABILIZATION To be used in unstable areas as directed by the Engineer.



TYPE "B"



TYPE "C"



TYPE "D" ROCK OR UNYIELDING MATERIAL

State of Alaska DOT&PF ALASKA STANDARD PLAN CULVERT PIPE & ARCH

INSTALLATION DETAILS

Adopted as an Alaska Standard Plan by:

Kenneth J. Fisher, P.E. Chief Engineer

Adoption Date: 02/08/2019

Last Code and Stds. Review

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

D-04.22

SHEET | of 4

GENERAL NOTES:

All material	and w	orkmansl	nìp sh	all be	in
accordance	with th	ne State	of A	laska,	Standard
Specification	is for	Highway	Const	ruction	١.

2.	The	con	trac	tor	sh	all	sel	ect	only	pipes	that	meet
	spec	ific	heig	ght	of	CO	ver	cri	teria	shown	on	the
- 1	plans	or	in	the	sp	eci	ial	prov	vision	s.		

3.	No	more	than	one	type	of	pipe	may	bе	used	or
	any	single	e inst	allati	on or	in	stallat	tion o	rou	ping.	

- 4. All structural plate pipes shall be placed on a pre-shaped foundation conforming to the depth of the bottom plates with clearance for assembling to the adjacent plates allowed.
- 5. See Standard Plan D-OI "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
- 6. Minimum cover shall be measured from the top of pipe to the top of rigid pavement or to the bottom of flexible pavement subgrade. In all cases, the minimum cover shall not be less than 12". Minimum cover during construction shall be that required to protect the pipe from damage or deflection.
- 7. These tables have been developed for an HL-93 live load and for compacted soil weighing 120 lbs. per cubic foot or less. If compacted soil cover exceeds 120 lbs. per cubic foot, the contractor shall use the depth of cover shown in the plans for the specific pipe. Where compacted soil cover exceeds 120 lbs. per cubic foot and no specific cover requirements are provided in the plans, the contractor shall determine the required minimum pipe cover in accordance with Section 12 of the 2017 AASHTO "LRFD Bridge Design Specifications".

N		3. Maximi I" Alumi					9" X 2		imum Cover for Structural Plate	
	16	14	12	10	8	<del>  -</del>	Thickness		0.125	0.1
	0.060	0.075	0.105	0.135	0.164		Dia.	Min.	Max.	Мо
	Max.	Max.	Max.	Max.	Max.		(In)	(In)	(Ft)	(F
)	(Ft)	(Ft)	(Ft)	(Ft)	(Ft)		84	18	31	
	57	72	100+	100+	100+		90	18	27	
	47	60	84	100+	100+		96	18	27	
	40	51	72	96	100+		102	18	24	
	35	44	62	84	99		108	18	24	
	31	39	55	74	88		114	18	21	
	28	35	50	67	79		120	24	21	Í
	25	32	45	61	72		126	24	19	
	23	29	41	56	66		132	30	19	
		27	38	51	61		138	30	I8	
			35	48	56		144	30	18	`
_			33	44	52		150	30		2:
					49		156	30		2:
_			31	41			162	36		2
_				39	46		168	36		2
	l	l		37	43					

39

\*5.33 - 3/4" dia. steel bolts per

0.150

Max.

(Ft)

22

20

20

47 12 60 84 42 12 40 51 72 12 35 44 62 15 31 39 55 60 15 28 35 50 32 66 25 45 18 72 23 29 41 18 78 38 84 35 21 90 24 33 96 24 31 102 24 108 24 114 24

Gage

Thickness

Dia. Min. (In) (In)

120 24

12

30

CORRUGATED CIRCULAR ALUMINUM PIPE

CORRUGATED ALUMINUM PIPE-ARCH

					_							
	Minimum 8 Maximum Cover for 2 2/3"X I/2"Aluminum Pipe-Arch											
		2 Tons/Sf Bearing Pre										
Span (FtIn.)	Rise (FtIn.	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)							
17	13	3 4/8	16 (0.060)	12	13							
21	15	4 1/8	16 (0.060)	12	12							
24	18	4 7/8	16 (0.060)	12	12							
28	20	5 4/8	14 (0.075)	12	12							
35	24	6 7/8	14 (0.075)	12	12							
42	29	8 2/8	12 (0.105)	12	12							
49	33	9 5/8	12 (0.105)	15	12							
57	38	Į	10 (0.135)	15	12							
64	43	12 3/8	10 (0.135)	18	12							
71	47	13 6/8	8 (0,164)	18	12							

Minimum & Maximum Cover for

2 2/3" X I/2" Aluminum Pipe

(Ft)

100+

100+

78

62

0.075 0.105

100+ 100+

89 100+

69 97

Max. (Ft)

100+

100+

100+

87

73

62

54

48

16

0.060

(Ft)

100+

100

83

71

Gage

Thickness

12

12

12

12

Dia. (In) Min. (In)

12

15

18 12

21 12

27 12

36 12

42

48 12

54 15

30 12

60 15

66 18

72 18

14 | 12 | 10 | 8

0.135

Max.

(Ft)

100+

100+

100+

100+

100+

100+

94

80

70

62

52

100+

0.164

Max.

(Ft)

100+

100+

100+

100+

100+

100+

100+

100+

100+

85

76

64

52

43

Minimum 8 Maximum Cover for 3" x 1" Aluminum Pipe-Arch								
				2 Tons/Sf Corner Bearing Pressure				
Span (FtIn.)	Rise (FtIn.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)			
60	46	18 6/8	14 (0.075)	15	20			
66	51	20 6/8	14 (0.075)	18	20			
73	55	22 7/8	14 (0.075)	21	20			
81	59	20 7/8	12 (0.105)	21	16			
87	63	22 7/8	12 (0.105)	24	16			
95	67	24 3/8	12 (0.105)	24	16			
103	71	26 1/8	10 (0.135)	24	16			
II2	75	27 6/8	8 (0.164)	24	16			

	9" x 2 1/2	2" Aluminum	Multiplate	Pipe-Arch*	
Span {FtIn.}	Rise (FtIn.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	2 Tons/Sf Corner Bearing Pressure Max. Cover (Ft)
6-7	5-8	31.75	0.125	24	24
6-II	5-9	31.75	0.125	24	24
7-3	5-11	31.75	0.125	24	18
7-9	6-0	31.75	0.125	24	18
8-5	6-3	31.75	0.125	24	16
9-3	6-5	31.75	0.125	24	15
10-3	6-9	31.75	0.125	30	13
10-9	6-10	31.75	0.125	30	13
II-5	7-1	31.75	0.125	30	13
12-7	7-5	31.75	0.125	30	II
12-11	7-6	31.75	0.125	30	II
13-1	8-2	31.75	0.125	30	II
13-11	8-5	31.75	0.125	36	10
14-8	9-8	31.75	0.125	36	9
15-4	10-0	31.75	0.150	36	8
16-1	10-4	31.75	0.150	36	8
16-9	10-8	31.75	0.150	42	7
17-3	II-O	31.75	0.150	42	7
18-0	II-4	31.75	0.175	42	7
18-8	II-8	31.75	0.175	42	7

Minimum & Maximum Cover for

\*5.33 - 3/4" dia. steel bolts per foot.

State of Alaska DOT&PF ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

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

Minimum & Maximum Cover for 2 2/3" x 1/2" Steel Pine Gage 16 14 12 10 8 Thickness 0.060 0.075 0.105 0.135 0.164 
 Dia.
 Min.
 Max.
 <th 12 12 100+ 100+ 100+ 100+ 100+ 12 100+ 100+ 100+ 100+ 100+ 12 100+ 100+ 100+ 100+ 100+ 12 100+ 100+ 100+ 100+ 21 12 100+ 100+ 100+ 100+ 100+ 12 83 100+ 100+ 100+ 100+ 12 69 86 100+ 100+ 100+ 42 12 59 74 100+ 100+ 100+ 48 12 51 64 91 100+ 100+ 54 57 12 80 100+ 100+ 60 72 93 100+ 66 85 100+ 66 12 72 78 95 12 78 12 84 84 12 73

Minimum & Maximum Cover fo 3" x 1" Steel Pipe							
Gage   16   14   12   10   8							
Thick		0.060	0.075	0.105	0.135	0.164	
Dia.	Min.	Max.	Max.	Max.	Max.	Max.	
(In)	(In)	(Ft)	(Ft)	(Ft)	(Ft)	(Ft)	
36	12			100+	100+	100+	
42	12			100+	100+	100+	
48	12		74	100+	100+	100+	
54	12	53	66	93	100+	100+	
60	12	47	59	83	100+	100+	
66	12	43	54	76	98	100+	
72	12	39	49	69	89	100+	
78	12	36	45	64	82	100+	
84	12	33	42	59	77	94	
90	12	31	39	55	71	87	
96	12	29	37	52	67	82	
102	18	27	34	49	63	77	
108	18		32	46	59	73	
114	18		31	43	56	69	
120	18		29	41	53	65	
126	18			39	51	62	
132	18			37	48	59	
138	18			36	46	57	
144	18				44	54	

Minimum & Maximum Cover for 5" x I" Steel Pipe							
Go	ige	16	14	12	10	8	
Thic	kness	0.060	0.075	0.105	0.135	0.164	
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	
36	12	71	88	100+	100+	100+	
42	12	60	76	100+	100+	100+	
48	12	53	66	93	100+	100+	
54	12	47	59	82	100+	100+	
60	12	42	53	74	96	100+	
66	12	38	48	67	87	100+	
72	12	35	44	62	79	97	
78	12	32	40	57	73	90	
84	12	30	37	53	68	83	
90	12	28	35	49	63	78	
96	12	26	33	46	59	73	
102	18	24	31	43	56	69	
108	18		29	41	53	65	
114	18		27	39	50	61	
120	18		26	37	47	58	
126	18			35	45	55	
132	18			33	43	53	
138	18			32	41	50	
144	18				39	48	

num	8 M	laximum	Cover	for 6"	x 2" 5	Steel Mu	ıltiplate	Pipe*	
age		12	10	8	7	5	3	I	١.
kne	ess	0.111	0.140	0.170	0.188	0.218	0.249	0.280	"
	Min. (In)	Max. (Ft)	2						
	12	46	67	87	100	100+	100+	100+	-
	12	42	60	79	91	100+	100+	100+	3
	12	38	55	73	83	100+	100+	100+	ĺ
	12	35	51	67	77	93	100+	100+	ĺ
	12	32	47	62	71	86	100+	100+	4
	12	30	44	58	67	80	95	100+	1
	12	28	41	54	62	75	89	97	1
	18	27	39	51	59	71	84	91	_
	18	25	37	48	55	67	79	86	5
	18	24	35	45	52	63	75	82	
	18	22	33	43	50	60	71	77	6
	18	21	31	41	47	57	68	74	ľ
	18	20	30	39	45	54	64	70	Ī
	18	19	28	37	43	52	62	67	
	18	18	27	36	41	50	59	64	1

\*4 - 3/4" dia. steel bolts per foot.

SHEET 2 of 4

### GENERAL NOTES

- All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
- 2. The contractor shall select only pipes that meet specific height of
- cover criteria shown on the plans or in the special provisions.

  3. No more than one type of pipe may be used on any single installation or installation grouping.
- 4. All structural plate pipes shall be placed on a pre-shaped foundation conforming to the depth of the bottom plates with clearance for assembling to the adjacent plates allowed.
- See Standard Plan D-01 "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
- Minimum cover shall be measured from the top of pipe to the top of rigid pavement or to the bottom of flexible pavement subgrade. In all cases, the minimum cover shall not be less than 12". Minimum cover during construction shall be that required to protect the pipe from damage or deflecton.
- 7. These tables have been developed for an HL-93 live load and for compacted soil weighing 120 lbs. per cubic foot or less. If compacted soil cover exceeds 120 lbs. per cubic foot, the contractor shall use the depth of cover shown in the plans for the specific pipe. Where compacted soil cover exceeds 120 lbs. per cubic foot and no specific cover requirements are provided in the plans, the contractor shall determine the required minimum pipe cover in accordance with Section 12 of the 2017 AASHTO "LRFD Bridge Design Specifications".

CORRUGATED CIRCULAR STEEL PIPE

CORRUGATED STEEL PIPE-ARCH

			imum Cover Steel Pipe-∆		
			2 Tons	/Sf Corner Pressure	Bearing
Span	Rise	Corner	Min.	Min.	Max,
(FtIn.)	(FtIn.)	Radius (In)	Thickness (In)	Cover (In)	Cover (Ft)
17	13	3 4/8	16 (0.060)	12	
21	15	4 1/8	16 (0.060)	12	11
24	18	4 7/8	16 (0.060)	12	- 1
28	20	5 4/8	16 (0.060)	12	=
35	24	6 7/8	16 (0.060)	12	П
42	29	8 2/8	16 (0.060)	12	II
49	33	9 5/8	14 (0.075)	12	
57	38	II	12 (0.109)	12	11
64	43	12 3/8	12 (0.109)	12	II
71	47	13 6/8	10 (0.138)	12	II
77	52	15 1/8	10 (0.138)	12	II
83	57	16 4/8	8 (0.168)	12	II

	Minir		imum Cover I Pipe-Arch	for	
			2 Tons	/Sf Corner Pressure	Bearing
Span	Rise	Corner	Min.	Min.	Max.
(F tIn.)	(FtIn.)	Radius	Thickness	Cover	Cover
		(In)	(In)	(In)	(Ft)
53	41	10 2/8	14 (0.079)	12	10
60	46	18 6/8	14 (0.079)	15	29
66	51	20 6/8	14 (0.079)	15	29
73	55	22 7/8	14 (0.079)	18	18
81	59	20 7/8	14 (0.079)	18	15
87	63	22 7/8	14 (0.079)	18	15
95	67	24 3/8	14 (0.079)	18	15
103	71	26 1/8	14 (0.079)	18	14
112	75	27 6/8	14 (0.079)	21	14
117	79	29 4/8	12 (0.109)	21	14
128	83	31 2/8	10 (0.138)	24	14
137	87	33	10 (0.138)	24	14
142	91	34 6/8	10 (0.138)	24	13
150	96	36	10 (0.138)	30	13
157	96	38	10 (0.138)	30	13
164	105	40	10 (0.138)	30	14
171	110	41	10 (0.138)	30	13

			2 Tons	/Sf Corner Pressure	Bearing
Span (FtIn.)	Rise (FtIn.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)
53	41	10 2/8	14 (0.079)	12	10
60	46	18 6/8	14 (0.079)	15	29
66	51	20 6/8	14 (0.079)	15	29
73	55	22 7/8	14 (0.079)	18	18
81	59	20 7/8	14 (0.079)	18	15
87	63	22 7/8	14 (0.079)	18	15
95	67	24 3/8	14 (0.079)	18	15
103	71	26 1/8	14 (0.079)	18	14
II2	75	27 6/8	14 (0.079)	21	14
117	79	29 4/8	12 (0.109)	21	14
128	83	31 2/8	10 (0.138)	24	14
137	87	33	10 (0.138)	24	14
142	91	34 6/8	10 (0.138)	24	13
150	96	36	10 (0.138)	30	13
157	96	38	10 (0.138)	30	13
164	105	40	10 (0.138)	30	14
171	IIO	41	10 (0.138)	30	13

			imum Cover		
	Steel MI	интріате Рір	e-Arch 6"		
			2 Tons.	/Sf Corner	Bearing
				Pressure	
Span	Rise	Corner	Min.	Min.	Max.
(FtIn.)	(FtIn.)	Radius	Gage	Cover	Cover
		(In)	(In)	(In)	(Ft)
6-1	4-7	18	12 (0.111)	12	14
7-0	5-1	18	12 (0.111)	12	12
7-II	5-7	18	12 (0.111)	12	10
8-10	6-1	18	12 (0.111)	18	9
9-9	6-7	18	12 (0.111)	18	8
10-11	7-1	18	12 (0.111)	18	6
II-IO	7-7	18	12 (0.111)	18	5
12-10	8-4	18	12 (0.111)	24	5
13-3	9-4	31	10 (0.140)	24	11
14-2	9-10	31	10 (0.140)	24	10
15-4	10-4	31	10 (0.140)	24	9
16-3	10-10	31	10 (0.140)	30	8
17-2	11-4	31	10 (0.140)	30	8
18-1	11-10	31	10 (0.140)	30	7
19-3	12-4	31	10 (0.140)	30	7
19-11	12-10	31	10 (0.140)	30	6
20-7	13-2	31	10 (0.140)	36	6

\*4 - 3/4" dia. steel bolts per foot.

State of Alaska DOT&PF ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

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

Adoption Date: 7/17/2020

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

D-04.22

SHEET 3 of 4

## GENERAL NOTES

Maximum Cover for Type S Corrugated Polyethelene Pipe

Max. Cover (ft)

25

Size (in)

15

18 24

30

- All materials and workmanship shall be in accordance with the State of Alaska Standard Specifications for Highway Construction.
- For foundation and structural backfill details see Standard Plan D-OI "Culvert Pipe & Arch Installation Details".
- from top of the pipe to top of rigid pavement, or to the bottom of subgrade for flexible pavement. In all cases the minimum cover shall be no less than 2 ft. Where loads traverse the culvert during construction minimum cover shall be no less than 4 ft.

State of Alaska DOT&PF ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

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

D-04.22

SHEET 4 of 4

# GENERAL NOTES

- All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
- The contractor shall select only pipes that meet specific height of cover criteria shown on the plans or in the special provisions.
- No more than one type of pipe may be used on any single installation or installation
- All structural plate pipes shall be placed on a pre-shaped foundation conforming to the depth of the bottom plates with clearance for assembling to the adjacent plates allowed.
- See Standard Plan D-OI "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
- Minimum cover shall be measured from the top of pipe to the top of rigid pavement or to the bottom of flexible pavement subgrade. In all cases, the minimum cover shall not be less than 12". Minimum cover during construction shall be that required to protect the pipe from damage or deflecton.
- These tables have been developed for an HL-93 live load and for compacted soil weighing 120 lbs. per cubic foot or less. If compacted soil cover exceeds 120 lbs. per cubic foot, the contractor shall use the depth of cover shown in the plans for the specific pipe. Where compacted soil cover exceeds 120 lbs. per cubic foot and no specific cover requirements are provided in the plans, the contractor shall determine the required minimum pipe cover in accordance with Section 12 of the 2017 AASHTO "LRFD Bridge Design Specifications".

#### 33 26 18 13 13 40 31 21 13 46 36 24 13 53 24 41 13 60 46 24 66 24

Minimum & Maximum Cover for

Aluminum Spiral Rib Pipe-Arch\*

0.060

16

15

13

Min.

Cover

12

12

15

0.075

Max.

Cover

0.105

0.135

\*¾ x ¾ x 7½ in. Corrugations

Gage

Thickness

Span

20

23

27

Rise

(Ft.-In.)

16

19

21

## ALUMINUM SPIRAL

Minimum & Maximum Cover for Steel and Aluminized Steel Spiral Rib Circular Pipe*								
G	ıqe	16	14	12	10			
Thickness	ige -	0.064	0.079	0.109	0,138			
	Min.							
Dia. (In)	(In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)			
18	12	91	11.77	(1 17	(1 1)			
24	12	68	95	100+				
30	12	54	76	100+				
36	12	45	63	100+				
42	12	38	54	90				
48	12	33	47	79				
54	18	30	42	70				
60	18	27	38	63	92			
66	18	24	34	57	83			
72	18		31	52	76			
78	24		29	48	70			
84	24		27	45	65			
90	24			42	61			
96	24			39	56			
102	30			36	50			
108	30			32	45			

\*34 x 34 x 7½ in. Corrugations

Minimum & Maximum Cover for

Aluminum Spiral Rib Circular Pipe\*

0.079

Max.

(Ft)

61

52

45

36

30

25

0.064

Max.

(Ft)

43

38

33

26

21

12

0.109

Max.

(F t)

84

73

58

49

41

36

32

29

10

0.138

(F t)

69

59

51

46

41

37

34

Max.

Gage

Thickness

12

12

12

15

18

21

24

24

24

24

30

 $*34 \times 34 \times 7\%$  in. Corrugations

(In)

18

21

24

30

36

42

48

54

60

66

72

	Minimum 8 Maximum Cover for Steel Spiral Rib Pipe-Arch*								
	2 Tons/Sf Corner Bearing Pressure								
Thick	kness		0.064	0.079	0.109				
Span (FtIn.)	Rise (FtIn.)	Min. Cover (In)	Max. Cover (F†)						
20	16	12	13						
23	19	12	13						
27	21	12	II						
33	26	12	II						
40	31	12	II						
46	36	12	II						
53	41	18		Ш					
60	46	18		19					
66	51	18		19					
73	55	18			18				
81	59	18			15				
87	63	18			15				
95	67	18			15				

\*34 x 34 x 7½ in. Corrugations

State of Alaska DOT&PF ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

Adopted as an Alaska Carolyn Morehouse
Standard Plan by:

Carolyn Morehouse, P.E.

Chief Engineer

Adoption Date: 7/17/2020

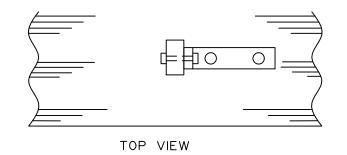
Last Code and Stds. Review By: KLH Date: 7/8/2020



### GENERAL NOTES:

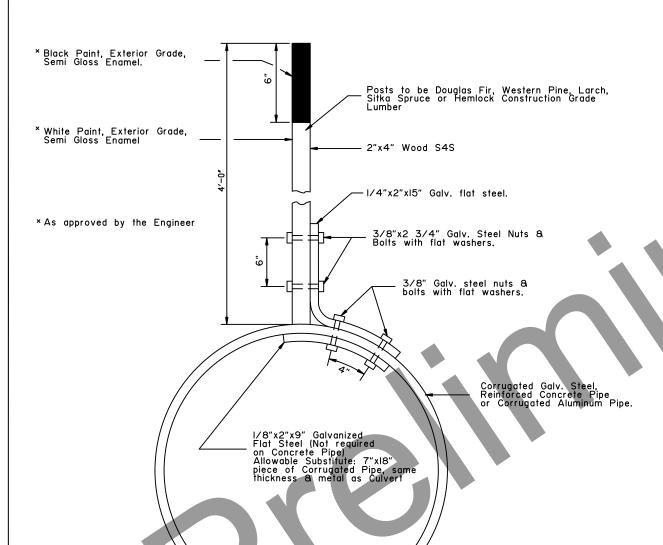
Culvert marker post shall be installed with galvanized steel hardware meeting the following requirements: Galvanizing for nuts and washers shall meet the requirements of ASTM A-153, Class C. Galvanizing for steel mounting supports shall meet the requirements of MIL-P-26915A, or ASTM A-153, Class C.

Sta. and size of Culvert to be stamped into a 2"x4"x0.064" thick brass plate, fastened, with No. 8 round head brass screws, to the marker post as shown. Plate to be on side of post facing traffic.

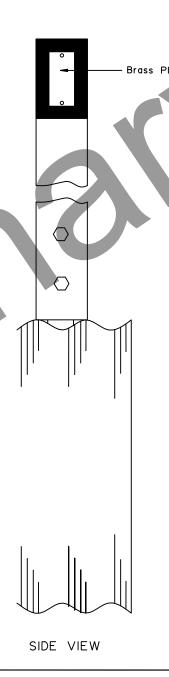


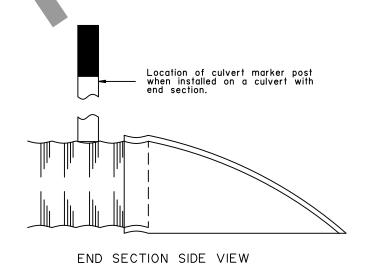
DIRECTION OF TRAFFIC

Shoulder of Road



END VIEW





State of Alaska DOT&PF ALASKA STANDARD PLAN

### CULVERT MARKER POST

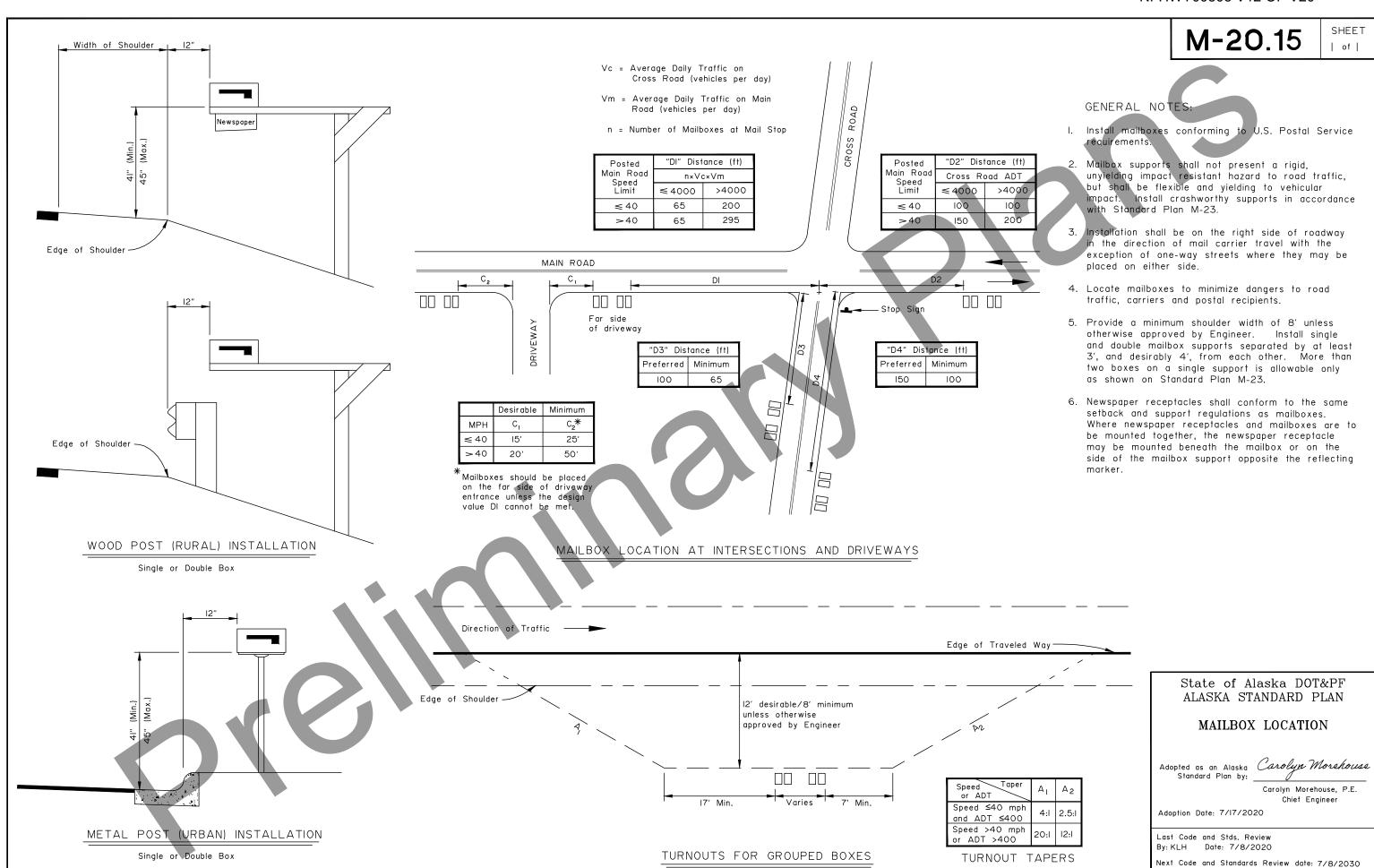
Adopted as an Alaska Standard Plan by: Junelly

By:

Kenneth J. Fisher, P.E. Chief Engineer

Adoption Date: 02/08/2019

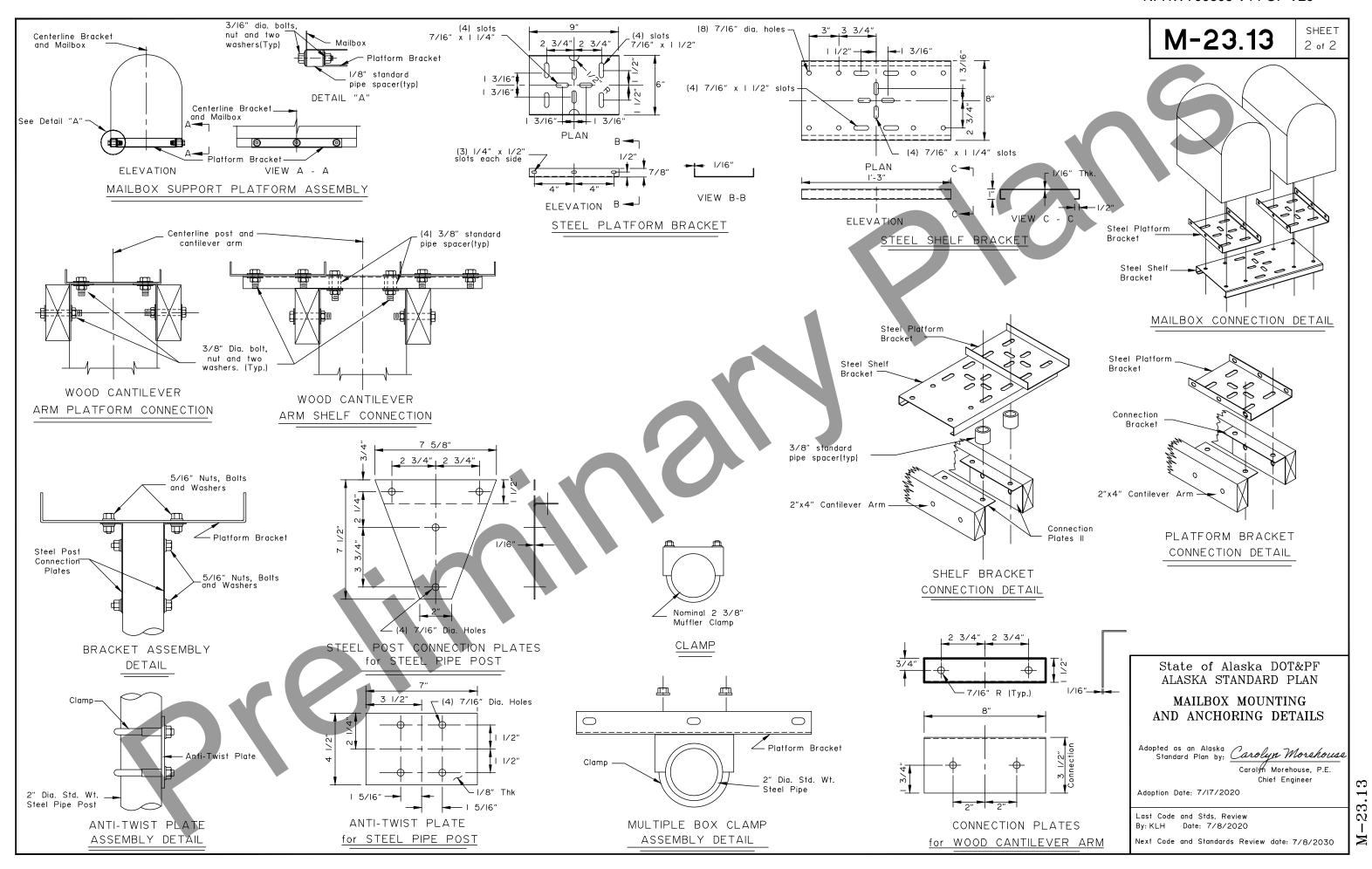
Last Code and Stds. Review



M-20.15

23.13

 $\mathbf{X}$ 

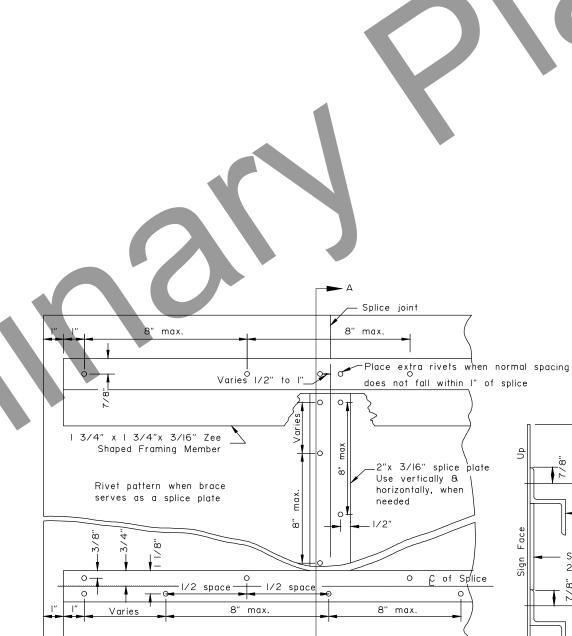


S-00.12

SHEET | of |

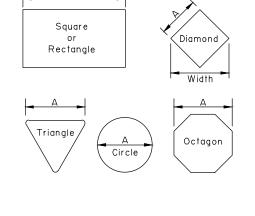
#### GENERAL NOTES

- I. 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
- 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.
- stall 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
- 9. Do not use round pipes for sign supports.



RIVET DETAIL FOR ZEE SHAPED

WIND FRAMING & SPLICE PLATE



Maximum size unframed signs	using
O.125" thick aluminum sheeting.	
Sign Shape	А
Squares, Shields, and Route	48"
Markers	10
Rectangles	48"
Diamonds	48"
Triangles	48"
Rounds and Octagons	48"

Install wind framing on all signs that exceed the dimensions listed

LIGHT SIGNS

Note: Drawing not to scale

Ç of rivets-

-φ of rivets

Ç of rivets —

No splices

¢ of rivets →

4.5' to 39.5' Sign Width(W)

Ç of rivets⊿

-Ç of rivets

4.5' to 39.5' Sign Width(W

Vertical splices as required, and

of rivets\_

4.5' to 39.5' Sign Width(W)

© of rivets

WIND FRAMING

LOCATIONS

needed, a horizontal splice at H/2

—⊊ of rivets

Vertical splices only

Vertical splices only

−Ç of rivets

height

(H-0.15)

<u></u>

3″\_

height

sign

I

Zee Shaped Wind Framing Member 3/4" x | 3/4" x 3/16" Splice plate 2"x3/l6"

SECTION A-A

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

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

Carolyn Morehouse, P.E.

Chief Engineer

State of Alaska DOT&PF

ALASKA STANDARD PLAN

SIGN FRAMING

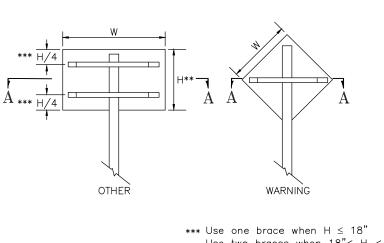
Adopted as an Alaska Carolyn Morehouse Standard Plan by:

-Ç of rivets

Adoption Date: 7/17/2020

SHEET | of |

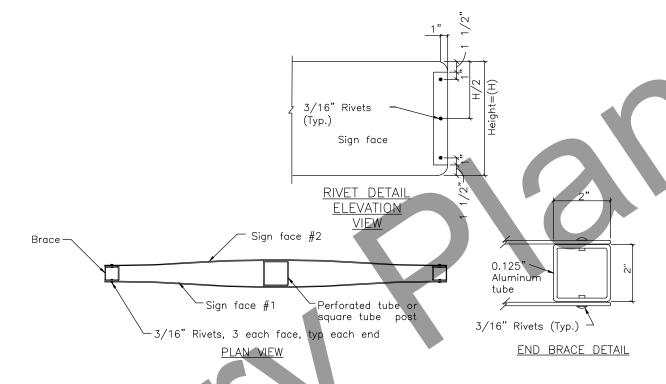
S-01.02



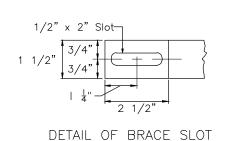
YIELD

- Use two braces when 18"< H < 48" Use three braces when H ≥ 48"
- \*\* Position of brace may be varied to match Predrilled mounting holes in panel

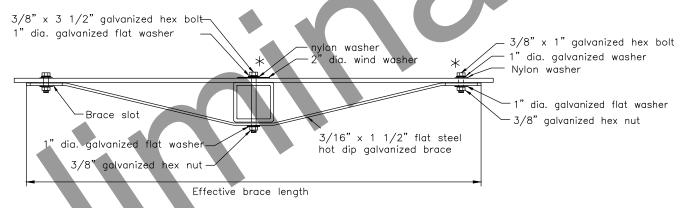
#### SIGN BRACING PLACEMENT



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



Elevation view



# TUBE POST SIGN BRACING SECTION A-A

Sign	Effective	Brace	Length
Width(W)	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

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

State of Alaska DOT&PF ALASKA STANDARD PLAN

BRACING FOR SIGNS MOUNTED ON SINGLE POST

Adopted as an Alaska Standard Plan by:

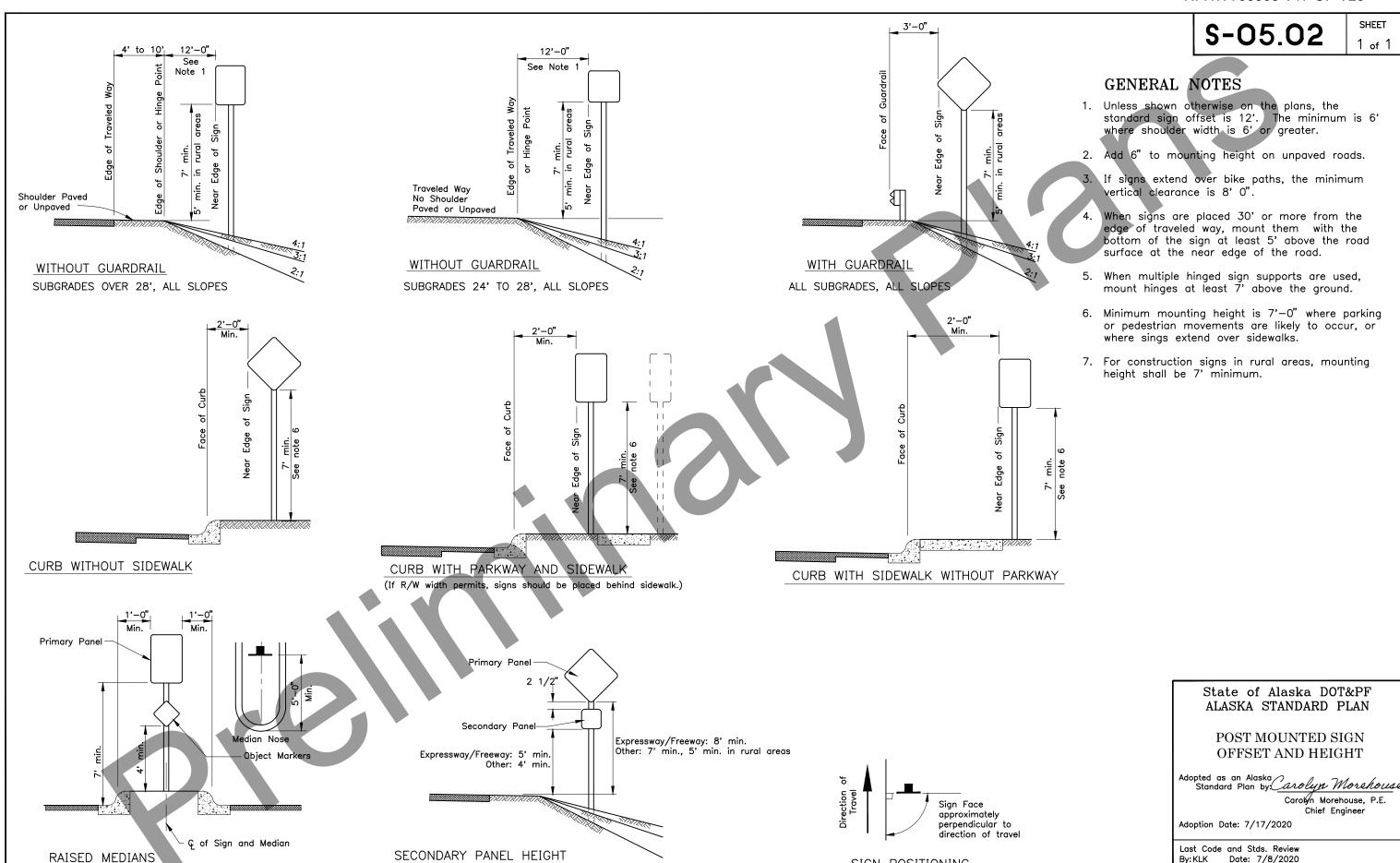
Carolyn Morehouse Carolyn Morehouse, P.E.

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

Note: Drawing not to scale



ALL TWO PANEL MOUNTING

Minimum 4' Width for Signing

SIGN POSITIONING

02

By: KLK Date: 7/8/2020

S-30.05

| of |

### GENERAL NOTES:

- Sign shall be placed symmetrically around posts and refer to Standard Plan S-00 for sign framing details.
- See plans for type of post, size and embedment type.
- To maintain crashworthiness, install no more than the number of P.S.T.s or wood posts specified in the tables within 7' of each
- Concrete shall be class B.
- 5. Do not use the supports on this drawing for multiple support signs if supports are separated by more than 7 feet.
- 6. Treat all field cuts and field drilled holes in wood posts in accordance with Section 730-2.04 of the Standard Specifications.

#### SIGN POST SPACING NOTES:

- I. Install sign support in accordance with the table below, unless otherwise required by plans or specifications.
- Exceptions:
- a. Use one post for all E5-1 gore signs, regardless of width. b. Use one 2.5" P.S.T. for all STOP signs. with or without street name signs.
- 3. Supports placed within 7' of each other must be acceptable for that use. See tables below for the sizes of wood posts and P.S.T.s that may be used within 7'. See Manufacturer's documentation for breakaway couplings and tubes that may be used within 7'.
- 4. See Standard Plan S-31 for frangible couplings, hinges, and foundations for tube and W-shape sign supports.

1/2" crown conform to s	lone — 3/8	3" Dia. Bolt, Nut d Flat Washers	
4" max.			0
	4" max.	12" min. 9" min.	4" max.
		9" min.	
48	Steel tube	P.S.T. Stub	0 0 0 0
			Embedment O O O
rilled hole in widest face, typ.  Top of foundation  or ground line.	Cover end to prevent concrete from entering steel tube	6", typ.	
or ground line.	I2" SLEEVE TYPE	SLEE	VE_TYPE*

WOOD SIGN POSTS										
SIZE	HOLE DIA.	EMBEDMENT*	NO. OF POSTS WITHIN 7 Ft. PATH							
4"x4"	NONE	4'-1"	2							
4"x6"	1 1/2"	5'-3"	2							
6"x6"	1 1/2"	4'-9"								
6"x8"	3"	4'-9"								

Embedment

Drilled hole in wide

Direction of Traffic

\* Embedment depth applies in both strong and weak soil

WOOD POSTS

PERFORATED STEEL TUBES (P.S.T.)									
POST SIZE	Embedment Depth	No. of P.S.T.s per- mitted within 7 ft path							
1 1/2" x 1 1/2"	4'-8"	2							
1 3/4" x 1 3/4"	4'-6"	2							
2" x 2"	4′-3"	2							
2 1/4" x 2 1/4"	5'-0"	I							
2 1/2" x 2 1/2"	4'-6"	I							

CONCRETE FOUNDATION

# Use 3"x3"x3/16" Stub for 2 1/2"x2 1/2" PST Applications.

TOBE SIGN POST SPACING								
Sign Width (feet) No. of		Distance Between Posts	Sign Overhang	Post Type			Notes	
Posts	P.S.T.			Wood	Steel Tube	W-Shape		
0.5 to 4.0	- 1	-	0.5W	X	X	×		See Note 2.
4.5 to 10.0	2	0.6W	0.2W	X	Х	X		See Note 3.
10.5 to 11.0	2	6	Varies	X	X	X		See Note 3.
II.5 to I3.0	2	8	Varies				X	
13.5 to 20.0	2	0.6W	0.2W				Х	
20.5 to 22.5	3	8	Varies				Х	
23.0 to 29.5	3	0.35W	0.15W				X	
30.0 to 31.5	4	8	Varies				Х	
32.0 to 40.0	4	0.25W	0.l25W				Х	

TUDE CICN DOCT CDACING

TUBE SIGN POST SPACING

PERFORATED STEEL TUBE (PST) POSTS

Note: Drawing not to scale

SOIL EMBEDMENT

State of Alaska DOT&PF ALASKA STANDARD PLAN

LIGHT SIGN STRUCTURE POST EMBEDMENT

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

