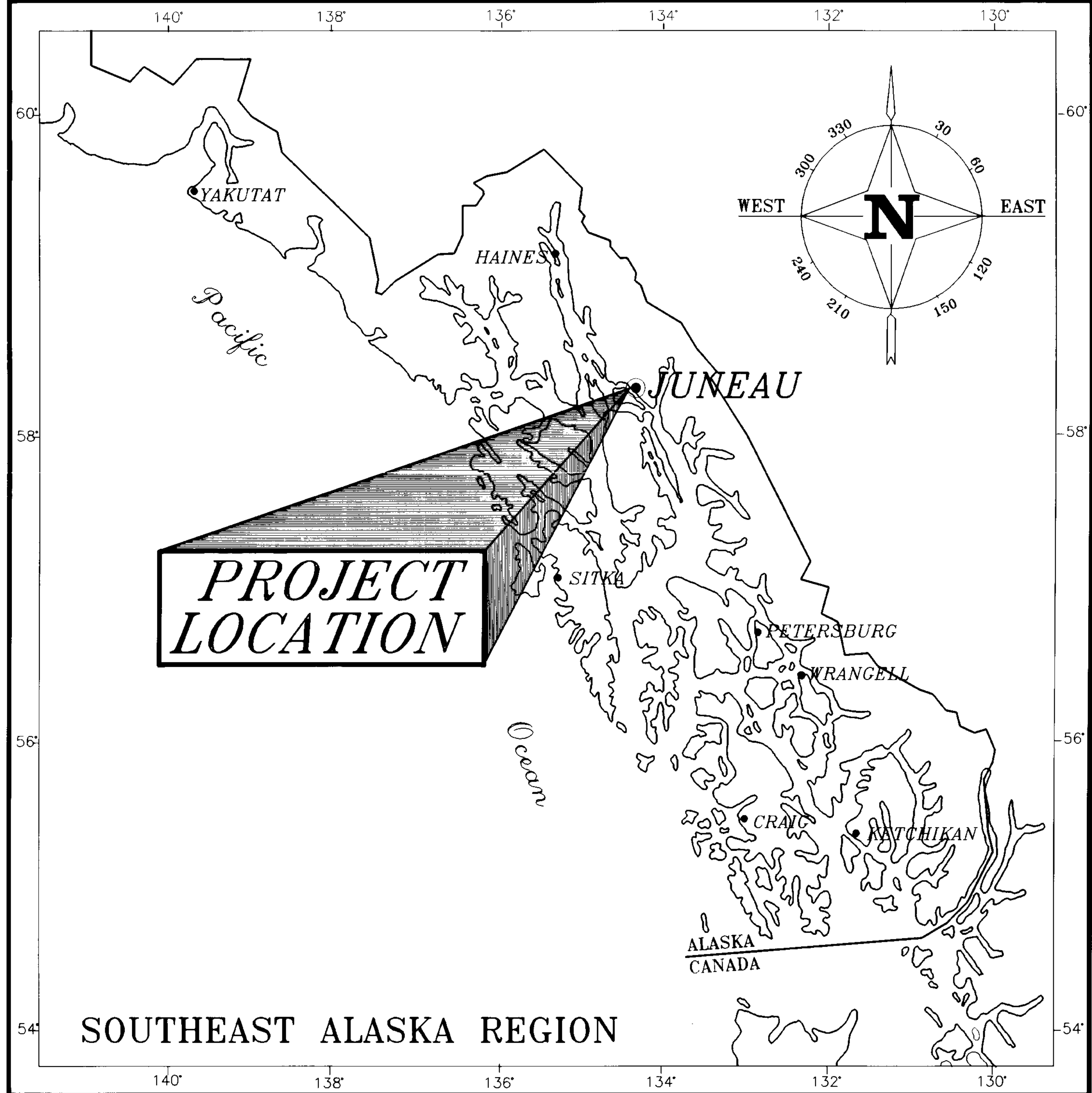
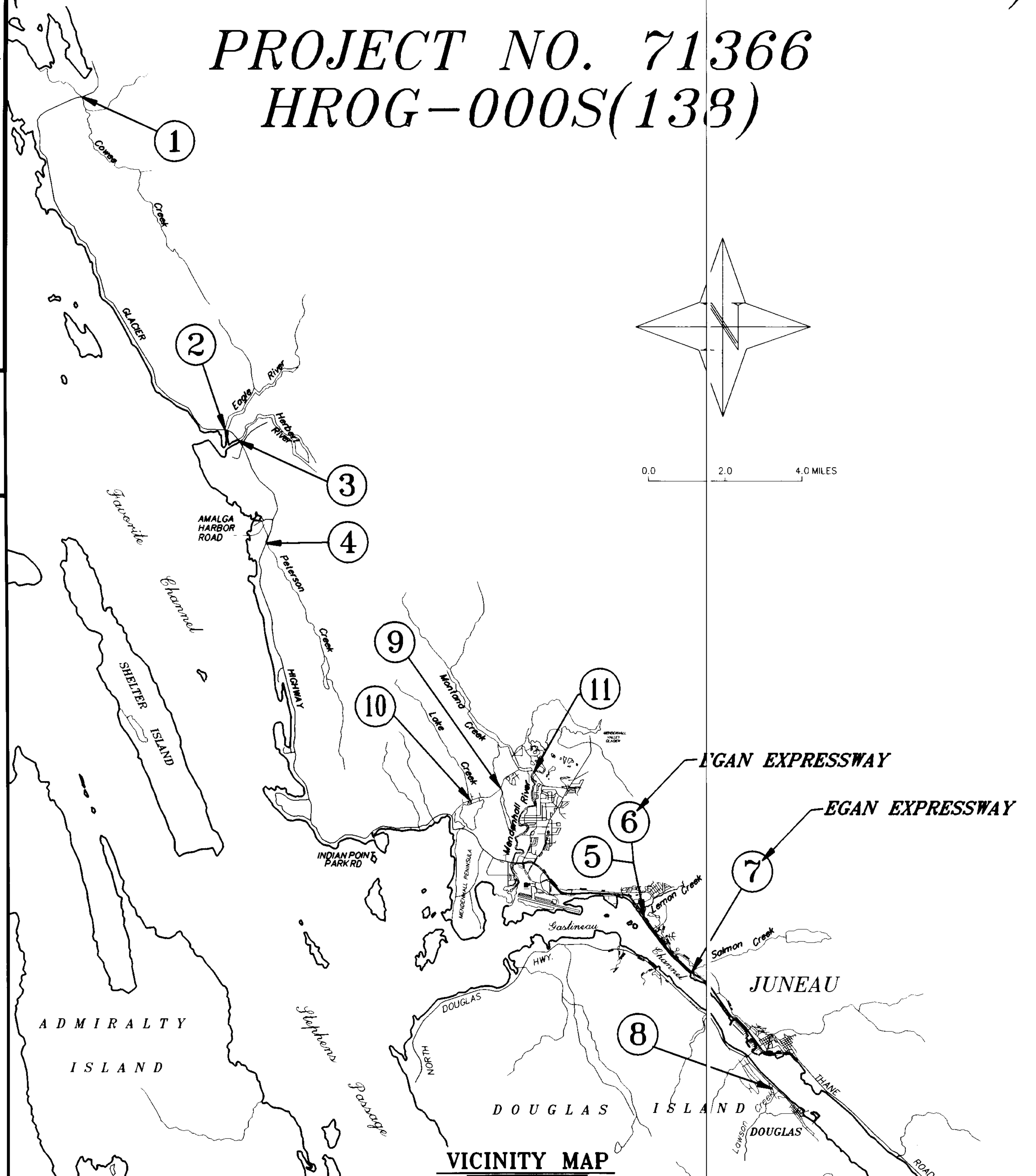


BRIDGE KEY	BRIDGE NUMBER	SHEET NUMBER
(1) COWEE CREEK	1220	4
(2) EAGLE RIVER	735	5
(3) HERBERT RIVER	736	7
(4) PETERSON CREEK	734	6
(5) LEMON CREEK SO.	1197	8
(6) LEMON CREEK NO.	1863	8
(7) SALMON CREEK	1188	5
(8) LAWSON CREEK	788	9
(9) MONTANA CREEK	264	8
(10) LAKE CREEK	873	7
(11) MENDENHALL RIVER	217	6

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION
DESIGN AND CONSTRUCTION DIVISION

JNU–ROADSIDE BARRIER IMPROVEMENTS
(BRIDGE AND TRANSITION RAIL UPGRADE)
PROJECT NO. 71366
HROG-000S(138)



VICINITY MAP

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3	ESTIMATE OF QUANTITIES/SIGNING SUMMARY
4–9	BRIDGE & APPROACH LAYOUT PLANS
10	BRIDGE RAIL TRANSITION BRACKET
11	LAKE CREEK BRIDGE
12	EAGLE RIVER BRIDGE
13	HERBERT RIVER BRIDGE
14–15	COWEE CREEK, SALMON CREEK & LEMON CREEK (NB & SB) PLANS AND DETAILS
16–17	LAWSON CREEK BRIDGE
18–19	TRAFFIC CONTROL PLAN

The following Standard Drawings apply to this project : A-1, C-01.03, C-02.01, C-03.01, C-05.00, D-01.02, D-04.10, D-05.10, G-04.04S, G-04.05W, G-09.01S, G-09.01W, G-14.04S, G-14.04W, G-15.00, G-18.00S, G-18.00W, G-25.10S, G-25.10W, G-27.01S, G-27.01W, G-29.01S, G-29.01W, G-45.01, S-00.00, S-05.00, S-20.001S, S-30.01.

"AS - BUILTS"

PROJECT ENGINEER: Soc Kreuzenstein
CONTRACTOR: Arete Construction Inc.,
BEGIN DATE: May 3, 1994
END DATE: April 22, 1995

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN SECTION

APPROVED ______ Date 9/16/93
Regional Preconstruction Engineer

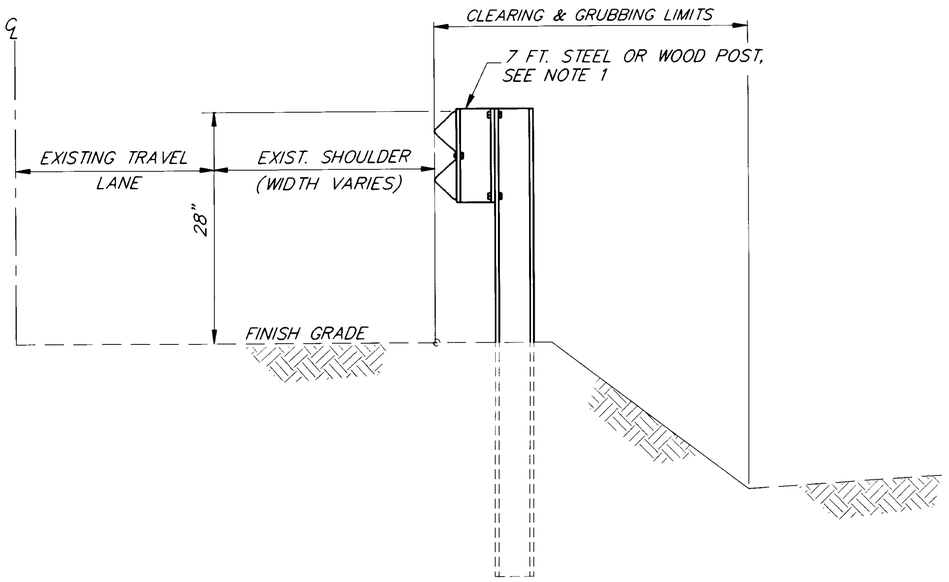
APPROVED ______ Date 9/16/93
For Director, S.E. Region Design & Construction

AS-BUILT
BY: B.A. DATE: 9-8-96

PROJECT NUMBER: 71366
DATE: SEPT. 1993
SHEET 1 OF 19

ENGINEER'S SEAL: STATE OF ALASKA, 49th, Allan John Steininger, CE-6440, REGISTERED PROFESSIONAL ENGINEER

P:\JNU\71366\DR\TSH1 1=1



NEW GUARDRAIL INSTALLATION TYPICAL

SEE BRIDGE APPROACH SUMMARY TABLES

DITCH RECONDITIONS SUMMARY

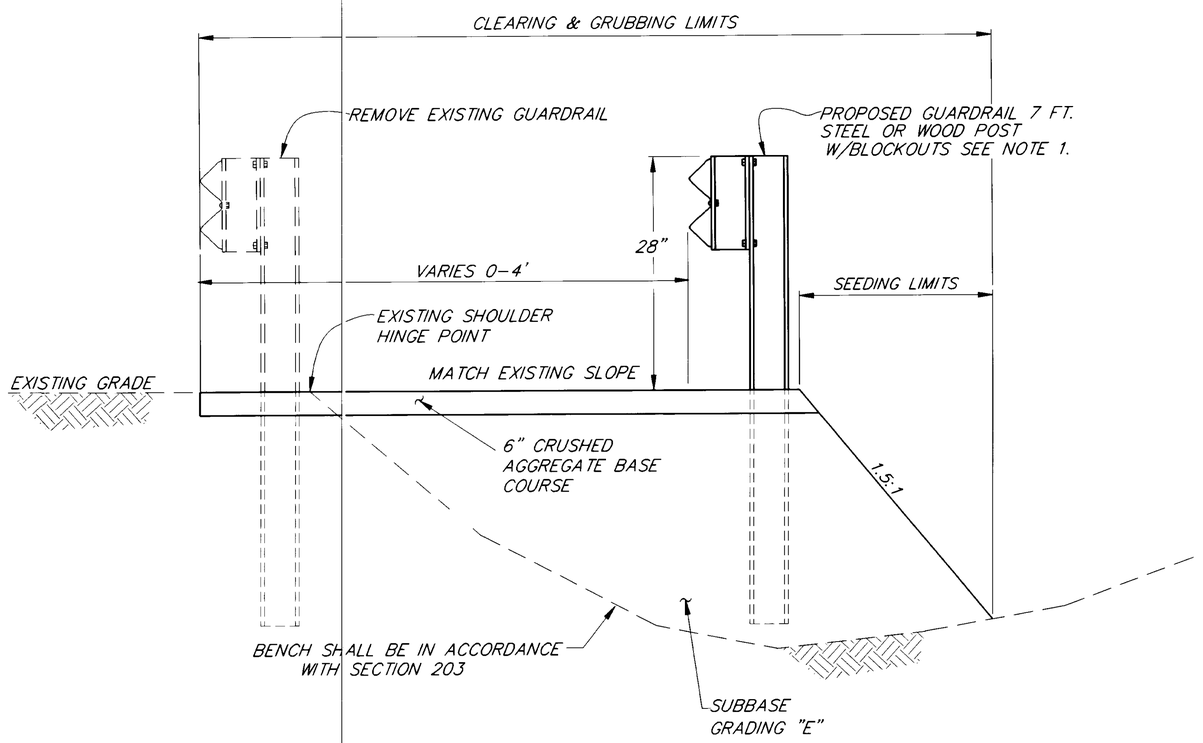
BRIDGE	WORK ZONE	LENGTH	REMARKS
LAWSON CREEK	(2)	160 LF	
TOTAL		160 LF	

BASIS OF ESTIMATE

ITEM NO.	ESTIMATING FACTOR
301(1)	2.0 TONS PER CUBIC YARD
304(1)	1.8 TONS PER CUBIC YARD

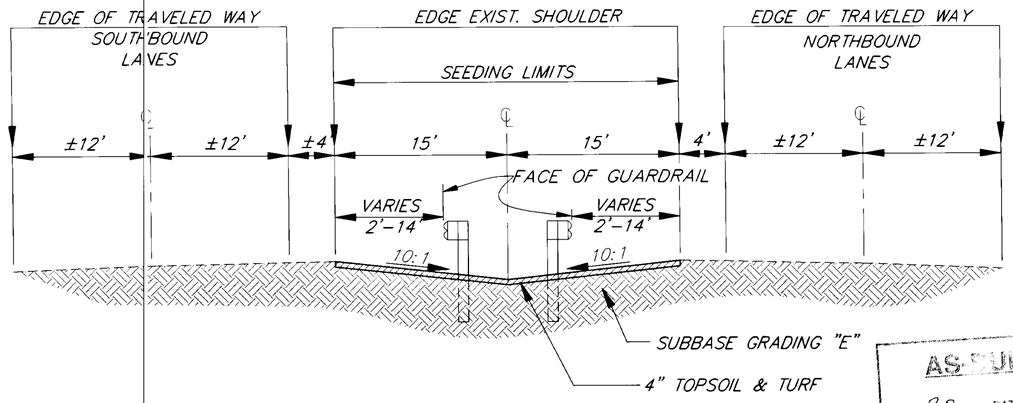
NOTE:

1. SEE BRIDGE APPROACHES FOR LOCATIONS, SHEETS 4 THRU 9.



NEW GUARDRAIL & FLARE TYPICAL

SEE STD, DWG. G-14.04S & G-14.04W



AS-BUILT
BY: B.A. DATE 4-8-96

MEDIAN TYPICAL SECTION

SEE PLAN SHEET No. 8

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA
Akan John Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER

PATH: P:\JNU\GUARDRAIL\WORK\BTYP 1-1

BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — ALASKA

JNU-ROADSIDE BARRIER IMPROVEMENTS
PROJECT NO. 71366
HROG-000S(138)
TYPICAL SECTIONS

DESIGNED BY: P. JONES	PROJECT NO. 71366
DRAWN BY: W.D.A.	DATE: SEPT. 1993
CHECKED BY: A. STEININGER	SHEET 2 OF 19

ESTIMATE OF QUANTITIES

Item No.	Item	Unit	Cowee Creek 1220	Eagle River 735	Herbert River 736	Peterson Creek 734	Lemon Creek 1863 & 1197	Salmon Creek 1188	Lawson Creek 788	Montana Creek 264	Lake Creek 873	Mendenhall River 217	Total	
120 (1)	DBE Adjustment	C.S.											All Req'd.	
201 (3B)	Clearing and Grubbing	L.S.				(SEE BRIDGE ESTIMATE TABLES, SHEETS 4 THRU 9)							All Req'd.	
301 (1)	Crushed Aggregate Base Course	Ton	40	32	32	16			20	14	16	20	~~190~~	45.45
304 (1)	Subbase, Grading "E"	Ton	70	70	110	75			50	35	35	40	~~485~~	462.47
507 (1)	Metal Bridge Railing	L.F.	385				725	243	304				1,657	
507 (4)	Concrete Bridge Railing	L.F.							302				302	
606(5A)	Removal & Disposal Concrete Encase Guardrail	L.S.											All Req'd.	
603 (17-18)	18 - Inch Pipe	L.F.							50				~~50~~	55
606 (1)	W-Beam Guardrail	L.F.	375	475	675	312.5	850	37.5	381.25	275	268.75	175.0	~~3,825~~	4,131.25
606 (2)	Thrie Beam Guardrail	L.F.	75	75	75	93.75	150	75	75	75	75	75	~~843.75~~	850
606 (5)	Removal and Disposal of Guardrail	L.F.	350	224	212	262.5	715	56.25	451	314	232	243.75	~~3,060.50~~	3,307.5
606 (6)	End Anchorages	Each	4	4	4	4	4	1	3	4	4	3	~~35~~	41
606 (8)	Buried Anchor Terminal	Each							1				1	
606 (12)	Guardrail/Bridge Rail Bracket	Each	4			4	4	4	2	4		4	~~26~~	30
606 (13)	Bridge Rail Retrofit	L.F.		441	300						122		863	
606 (14)	Thrie Beam Connectors	Each							2				2	
615 (1)	Standard Signs	Sq. Ft.	14	14	16	36	27	33	30	18	14	45	247	
618 (1)	Seeding	L.S.				(SEE BRIDGE ESTIMATE TABLES, SEE SHEET 4 THRU 9)							All Req'd.	
640 (1)	Mobilization and Demobilization	L.S.											All Req'd.	
606(15A)	Additional Bridgerail Retrofit	L.S.											All Req'd.	
641 (1)	Temporary Erosion & Pollution Control	C.S.											All Req'd.	
642 (1)	Construction Surveying	L.S.											All Req'd.	
643 (2)	Traffic Maintenance	L.S.											All Req'd.	
643 (4)	Construction Sign	Each Per Day											~~2,000~~	1,536
643 (6)	Type III Barricade	Each Per Day											~~80~~	82
643 (7)	Traffic Cone	Each Per Day											~~5000~~	2,524
643 (8)	Drum	Each Per Day											~~2,500~~	1,573
643 (11)	Portable Concrete Barrier	Each											~~250~~	348
643 (12)	Temporary Crash Cushion	L.S.											All Req'd.	
643 (15)	Flagging	Hour											~~800~~	790
606(15B)	Additional Rail Modifications	L.S.											All Req'd.	

GENERAL NOTES:

1. All guardrail locations are approximate only and subject to minor revision.
2. The Contractor shall remove and dispose of all waste to an approved waste site.
3. All useable hardware designated by the Engineer will be salvaged and become the property of the DOT/PF State Maintenance and shall be delivered to the ADOT/PF, 7 MILE, Maintenance yard.
4. Abbreviations:

(WP)	=	Existing wood guardrail post
(MP)	=	Existing metal guardrail post
★	=	Existing signs to be removed
(W)	=	Removal & disposal of guardrail
(X)	=	New W-beam guardrail
(XF)	=	37.5' parabola flare
(Z)	=	New thrie beam guardrail
EOP	=	Edge of pavement
△	=	Bridge rail length
BCT	=	Breakaway Cable Terminal
1 3 / BRIDGE / 2 4	=	General work zones

5. Holes and depressions resulting from the removal of existing guardrail and terminal end sections shall be backfilled with Subbase, Grading "E".
6. Horizontal control is based on the center of the individual existing bridge abutments.

SIGNING NOTES

1. Sign locations are approximate. Final location to be determined by the Engineer.
2. All metal sign posts shall be new telescoping, perforated, galvanized 2 1/2"X2 1/2" unless otherwise designated in accordance with Standard Drawing S-05.00.
3. All metal posts shall be installed with sleeve type embedment in accordance with Standard Drawing S-30.01.
4. All existing signs to be removed shall be delivered to ADOT & PF, 7 mile, Maintenance Yard.
5. All signs shall be installed 7 feet above the roadway elevation.

SIGN SUMMARY

Bridge No.	Offset Left	Offset Right	Code No. (2)	Legend	No. of Posts	Size	Area SF	Facing Traffic	Remarks
788		X	1-3	LAWSON CREEK	2	36"x60"	15.0	S.B.	8" U.C., 6" L.C.
788	X		1-3	LAWSON CREEK	2	36"x60"	15.0	N.B.	8" U.C., 6" L.C.
1188		X	1-3	SALMON CREEK	2~4"x4"	36"x66"	16.50	S.B.	8" U.C., 6" L.C.
1188	X		1-3	SALMON CREEK	2~4"x4"	36"x66"	16.50	N.B.	8" U.C., 6" L.C.
1197		X	1-3	LEMON CREEK	2~4"x4"	36"x54"	13.50	S.B.	8" U.C., 6" L.C.
1863	X		1-3	LEMON CREEK	2~4"x4"	36"x54"	13.50	N.B.	8" U.C., 6" L.C.
1220		X	1-3	COWEE CREEK	2	24"x42"	7.0	S.B.	6" U.C., 4.5" L.C.
1220	X		1-3	COWEE CREEK	2	24"x42"	7.0	N.B.	6" U.C., 4.5" L.C.

(2) SIGN IDENTIFICATION CODE IN ACCORDANCE WITH ALASKA SIGN DESIGN SPECIFICATIONS (ASDS)

SIGN SUMMARY

Bridge No.	Offset Left	Offset Right	Code No. (2)	Legend	No. of Posts	Size	Area SF	Facing Traffic	Remarks
735	X		1-3	EAGLE RIVER	2	24"x42"	7.0	S.B.	6" U.C., 4.5" L.C.
735		X	1-3	EAGLE RIVER	2	24"x42"	7.0	N.B.	6" U.C., 4.5" L.C.
736	X		1-3	HERBERT RIVER	2	24"x48"	8.0	S.B.	6" U.C., 4.5" L.C.
736		X	1-3	HERBERT RIVER	2	24"x48"	8.0	N.B.	6" U.C., 4.5" L.C.
734	X		1-3	PETERSON CREEK	2~4"x4"	36"x72"	18.0	S.B.	8" U.C., 6" L.C.
734		X	1-3	PETERSON CREEK	2~4"x4"	36"x72"	18.0	N.B.	8" U.C., 6" L.C.
217	X		1-3	MENDENHALL RIVER	2~4"x4"	36"X90"	22.5	SB	8" U.C., 6" L.C.
217		X	1-3	MENDENHALL RIVER	2~4"x4"	36"X90"	22.5	NB	8" U.C., 6" L.C.
264	X		1-3	MONTANA CREEK	2	24"x54"	9.0	S.B.	6" U.C., 4.5" L.C.
264		X	1-3	MONTANA CREEK	2	24"x54"	9.0	N.B.	6" U.C., 4.5" L.C.
873	X		1-3	LAKE CREEK	2	24"x42"	7.0	S.B.	6" U.C., 4.5" L.C.
873		X		LAKE CREEK	2	24"x42"	7.0	N.B.	6" U.C., 4.5" L.C.
					TOTAL		247'	SF	

AS-BUILT BY: B.B. DATE: 9-3-96

ENGINEER'S SEAL
STATE OF ALASKA
49th
ALAN J. STEININGER
Alan John Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER

PATH: P:\JNU\GUARDRL\DR\SUMMARY 1-1

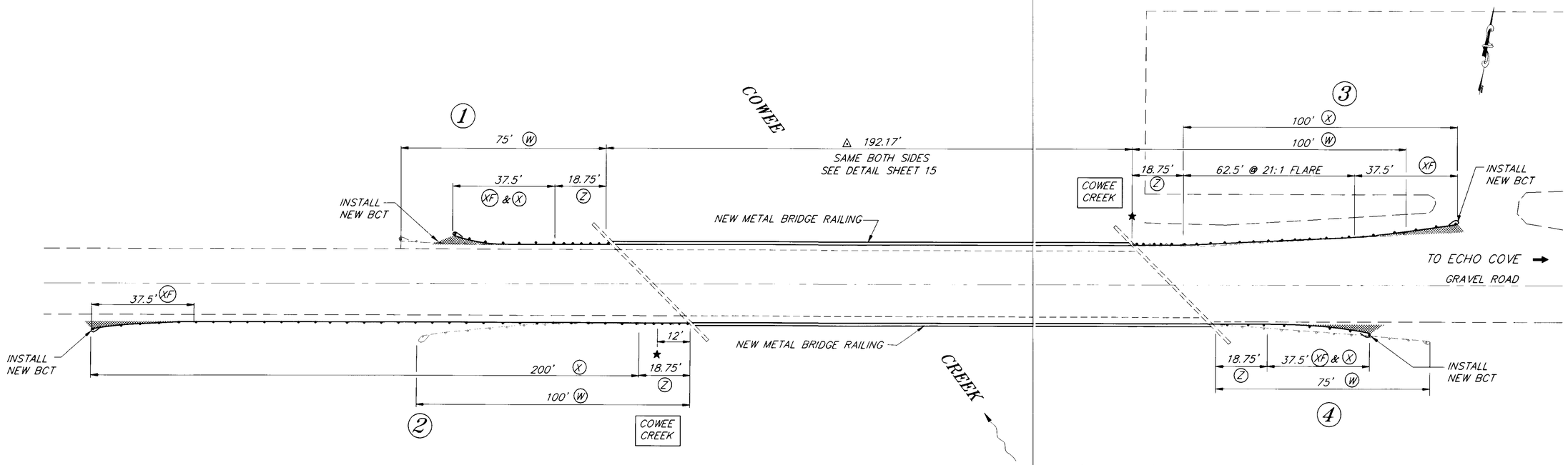
BY	DATE	DESCRIPTION OF CHANGE
	11366	

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU ROADSIDE BARRIER IMPROVEMENT 71366
HROG 0006(138)
ESTIMATE OF QUANTITIES/SIGNING SUMMARY

DESIGNED BY: P. JONES	PROJECT NO. 71366
DRAWN BY: B.W.B.	DATE: SEPT. 1993
CHECKED BY: A.J. STEININGER	SHEET 3 OF 19



Cowee Creek Bridge Railing & Approaches (#1220)

NOTE: 7' GUARDRAIL POST REQUIRED

#1220 Estimate of Quantities

Item No.	Item	Unit	1	2	3	4	Total
201 (3B)	Clearing & Grubbing	LS	(APPROX. 3,750 SF)				All Req'd
301 (1)	Crushed Aggregate Base Course	TON	10	10	10	10	40
304 (1)	Subbase, Grading "E"	TON	10	25	10	25	70
507 (1)	Metal Bridge Railing	LF					385
606 (1)	W-beam Guardrail	LF	37.5	200	100	37.5	375
606 (2)	Thrie Beam Guardrail	LF	18.75	18.75	18.75	18.75	75
606 (5)	Removal & Disposal of Guardrail	LF	75	100	100	75	350
606 (6)	End Anchoroges	EA	1	1	1	1	4
606 (12)	Guardrail/Bridge Rail Bracket	EA	1	1	1	1	4
615 (1)	Standard Sign	SF		7	7		14
618 (1)	Seeding	LS	(Approx. 3,750 SF)				All Req'd

Legend:

- (W) Removal & disposal of guardrail
- (X) New W-beam guardrail
- (XF) 37.5' parabola flare
- (Z) New thrie beam guardrail
- (WP) Existing wood post
- (MP) Existing metal post
- EOP Edge of pavement
- ★ Existing sign to be removed/ Install new, same locations
- △ Bridge rail length
- Crushed aggregate base course
- BCT Breakaway Cable Terminal
- 1 3 / BRIDGE / 2 4 General work zones

AS-BUILT
BY: B.A. DATE 4-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
Alvin John Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER

PATH: P:\JNU\GDRAIL2\DR\EST7 < 1=20 >

BY	DATE	DESCRIPTION OF CHANGE

RECORD OF REVISIONS

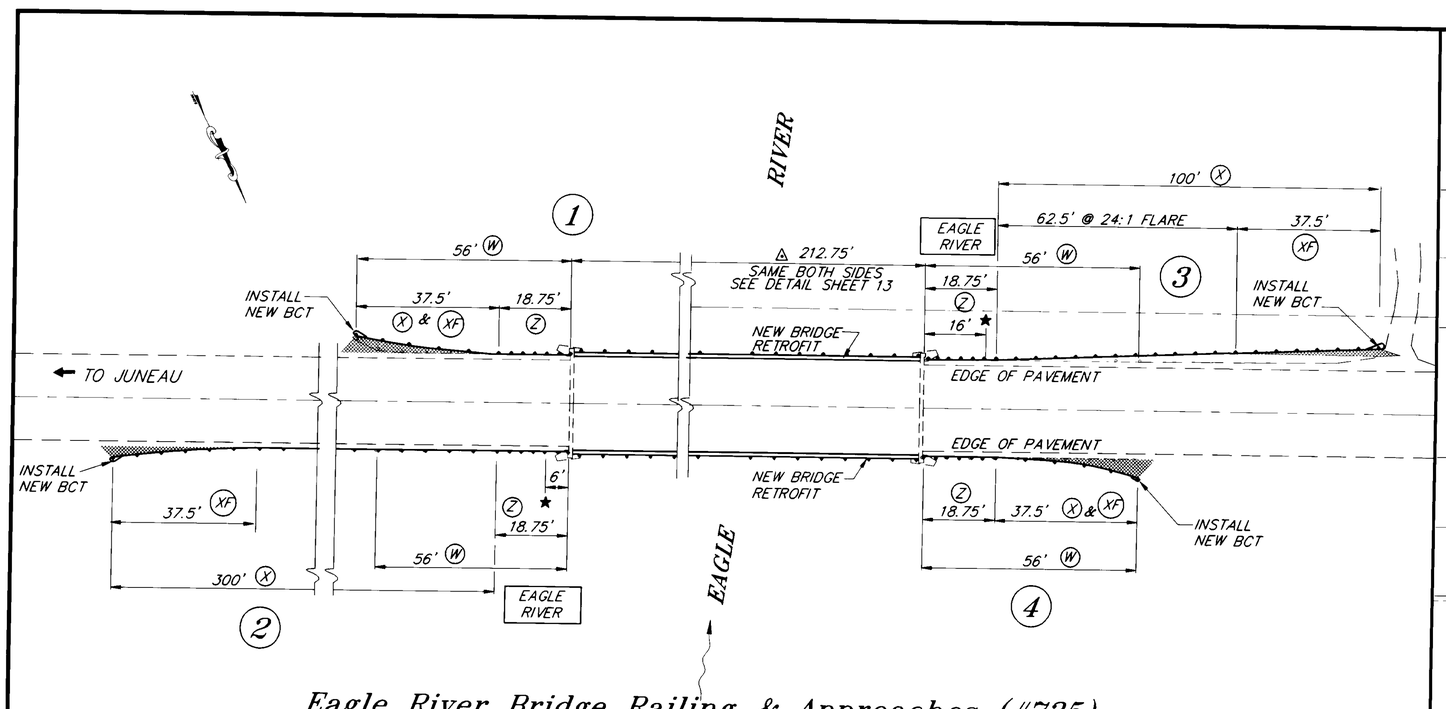
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU ALASKA

JNU-ROADSIDE BARRIER IMPROVEMENTS
PROJECT NO. 71366
HROG-0005(138)

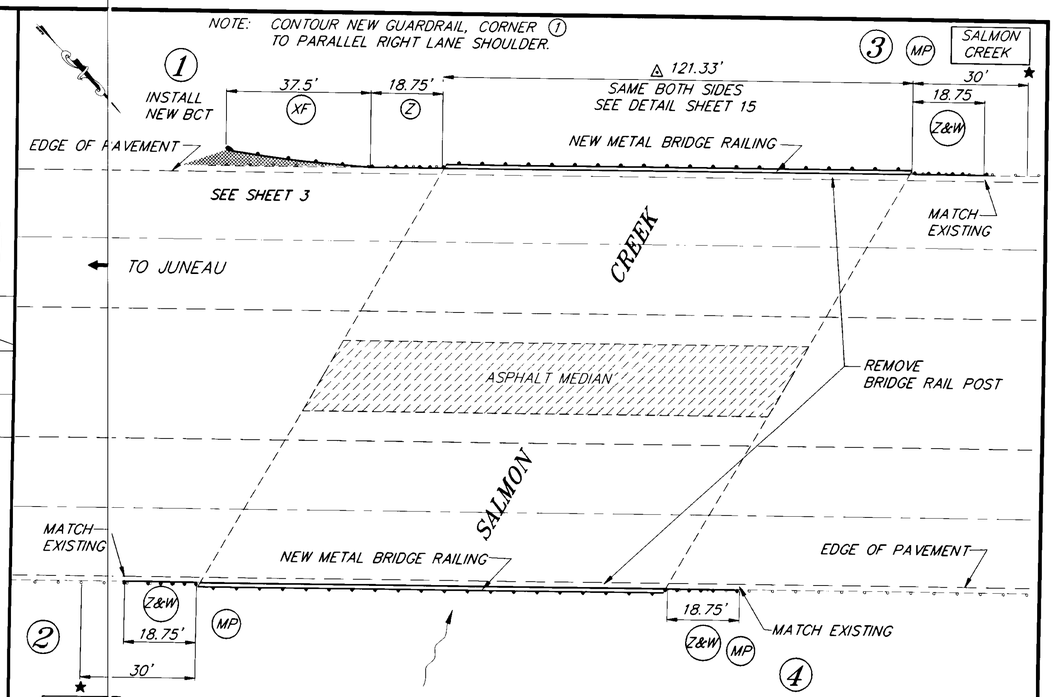
COWEE CREEK BRIDGE RAILING APPROACHES

DESIGNED BY: P. JONES	PROJECT NO. 71366
DRAWN BY: B.W.B.	DATE: SEPT. 1993
CHECKED BY: A.J. STEININGER	SHEET 4 OF 19



Eagle River Bridge Railing & Approaches (#735)

NOTE: 7' GUARDRAIL POST REQUIRED



Salmon Creek Bridge Railing & Approaches (#1188)

Legend:

W	Removal & disposal of guardrail
X	New W-beam guardrail
XF	37.5' parabola flare
Z	New thrie beam guardrail
WP	Existing wood post
MP	Existing metal post
EOP	Edge of pavement
★	Existing sign to be removed/ Install new, same locations
△	Bridge rail length
	Crushed aggregate base course
BCT	Breakaway Cable Terminal
1 3 / BRIDGE / 2 4	General work zones

#735 Estimate of Quantities

Item No.	Item	Unit	1	2	3	4	Total
201 (3B)	Clearing & Grubbing	LS	(APPROX. 3,500 SF)				All Req'd
301 (1)	Crushed Aggregate Base Course	TON	8	8	8	8	32
304 (1)	Subbase, Grading "E"	TON	10	25	25	10	70
606 (1)	W-beam Guardrail	TON	37.5	300	~~100~~ 75	37.5	~~475~~ 450
606 (2)	Thrie Beam Guardrail	LF	18.75	18.75	18.75	18.75	75
606 (5)	Removal and Disposal of Guardrail	LF	~~56~~ 50	~~56~~ 50	~~56~~ 50	~~56~~ 50	~~224~~ 200
606 (6)	End Anchorages	EA	1	1	1	1	4
606 (13)	Bridgerail Retrofit	LF					441
615 (1)	Standard Signs	SF		7	7		14
618 (1)	Seeding	LS	(APPROX. 3,500 SF)				All Req'd

#1188 Estimate of Quantities

Item No.	Item	Unit	1	2	3	4	Total
201 (3B)	Clearing & Grubbing	LS	(APPROX. 2,000 SF)				All Req'd
507 (1)	Metal Bridge Railing	LF					243
606 (1)	W-Beam Guardrail	LF	37.5	12.5			~~37.5~~ 50
606 (2)	Thrie Beam Guardrail	LF	18.75	18.75	18.75	18.75	75
606 (5)	Removal & Disposal of Guardrail	LF		18.75	18.75	18.75	56.25
606 (6)	End Anchorages	EA	1				1
606 (12)	Guardrail/Bridge Rail Bracket	EA	1	1	1	1	4
615 (1)	Standard Sign	SF		16.5	16.5		33

AS-BUILT
BY: B.B. DATE: 4-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\JNU\GDRAIL2\DR\EST6 < 1=20 >

BY	DATE	DESCRIPTION OF CHANGE

RECORD OF REVISIONS

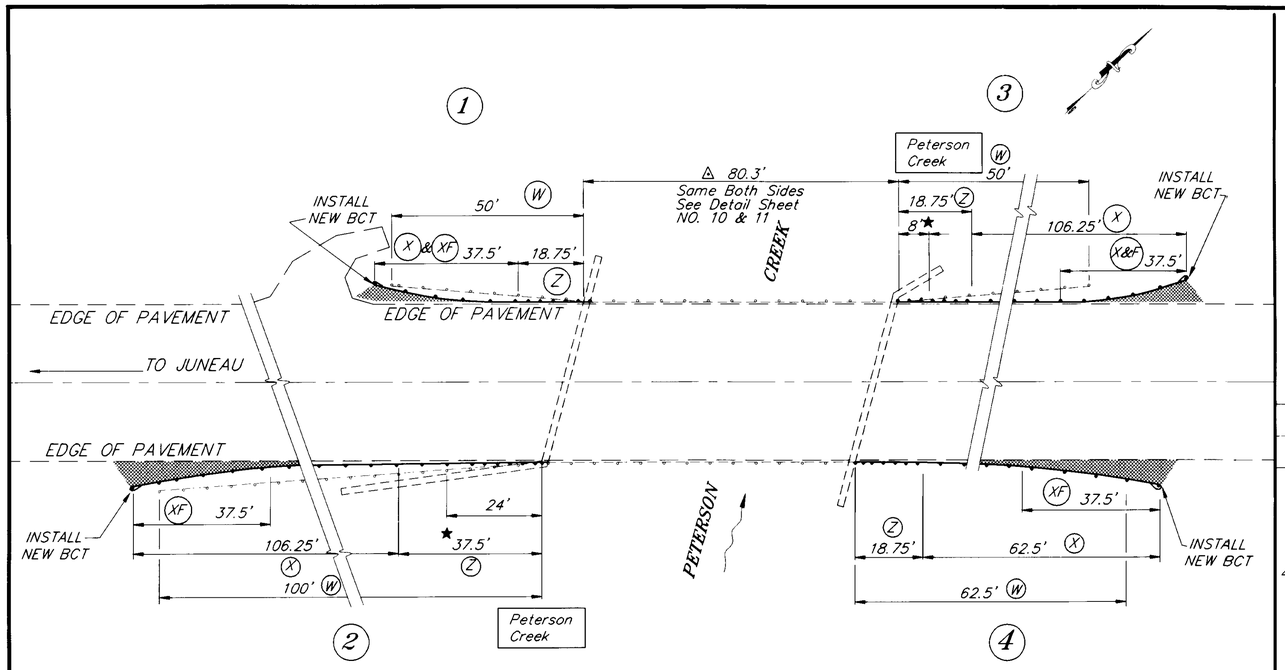
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — JNU-ROADSIDE BARRIER IMPROVEMENTS — ALASKA
PROJECT NO 71366
HROG-000S (138)

SALMON CREEK & EAGLE RIVER BRIDGE RAILING & APPROACHES

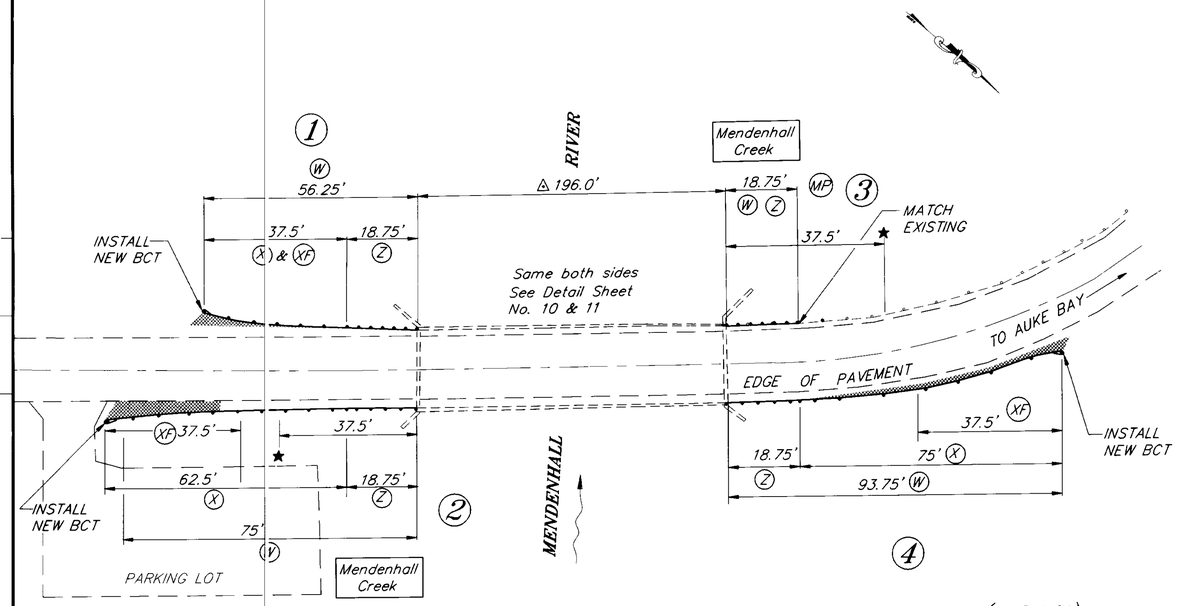
DESIGNED BY: P. JONES	PROJECT NO. 71366
DRAWN BY: B.W.B.	DATE: SEPT. 1993
CHECKED BY: A.J. STEININGER	SHEET 5 OF 19

ENGINEER'S SEAL
STATE OF ALASKA
Alan John Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER



Peterson Creek Bridge Railing & Approaches (#734)

NOTE: 7' GUARDRAIL POST REQUIRED



Mendenhall River Bridge Railing & Approaches (#217)

NOTE: 7' GUARDRAIL POST REQUIRED

#734 Estimate of Quantities

Item No.	Item	Unit	1	2	3	4	Total
201 (3B)	Clearing & Grubbing	LS	(APPROX. 3,000 SF)				All Req'd
301 (1)	Crushed Aggregate Base Course	Ton	4	4	4	4	16
304 (1)	Subbase, Grading "E"	Ton		25	50		75
606 (1)	W-beam Guardrail		37.5	~~106.25~~ 100	106.25	62.5	~~312.5~~ 306.25
606 (2)	Thrie Beam Guardrail	LF	18.75	~~37.5~~ 18.75	18.75	18.75	~~93.75~~ 100
606 (5)	Removal & Disposal of Guardrail	LF	50	100	~~50~~ 62.5	~~62.5~~ 50	262.5
606 (6)	End Anchorages	EA	1	1	1	1	4
606 (12)	Guardrail/Bridge Rail Bracket	EA	1	1	1	1	4
615 (1)	Standard Sign	SF		18	18		36
618 (1)	Seeding	LS	(APPROX. 3,000 SF)				All Req'd

Legend:

W	Removal & disposal of guardrail
X	New W-beam guardrail
XF	37.5' parabola flare
Z	New thrie beam guardrail
WP	Existing wood post
MP	Existing metal post
EOP	Edge of pavement
★	Existing sign to be removed/ Install new, same locations
Δ	Bridge rail length
	Crushed aggregate base course
BCT	Breakaway Cable Terminal
1 3 / BRIDGE / 2 4	General work zones

#217 Estimate of Quantities

Item No.	Item	Unit	1	2	3	4	Total
201 (3B)	Clearing & Grubbing		(APPROX. 3,250 SF)				All Req'd
301 (1)	Crushed Aggregate Base Course	Ton	4	8		8	20
304 (1)	Subbase, Grading "E"	Ton		20		20	40
606 (1)	W-beam Guardrail	LF	37.5	62.5		75	175
606 (2)	Thrie Beam Guardrail	LF	18.75	18.75	18.75	18.75	75
606 (5)	Removal & Disposal of Guardrail	LF	56.25	75	18.75	93.75	243.75
606 (6)	End Anchorages	EA	1	1		1	3
606 (12)	Guardrail/Bridge Rail Bracket	EA	1	1	1	1	4
615 (1)	Standard Sign	SF		22.5	22.5		45
618 (1)	Seeding	LS	(APPROX. 3,250 SF)				All Req'd

~~AS-BUILT~~
BY: B.A. DATE: ~~4-8-96~~

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
Alan John Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER

1/2000

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BY	DATE	DESCRIPTION OF CHANGE

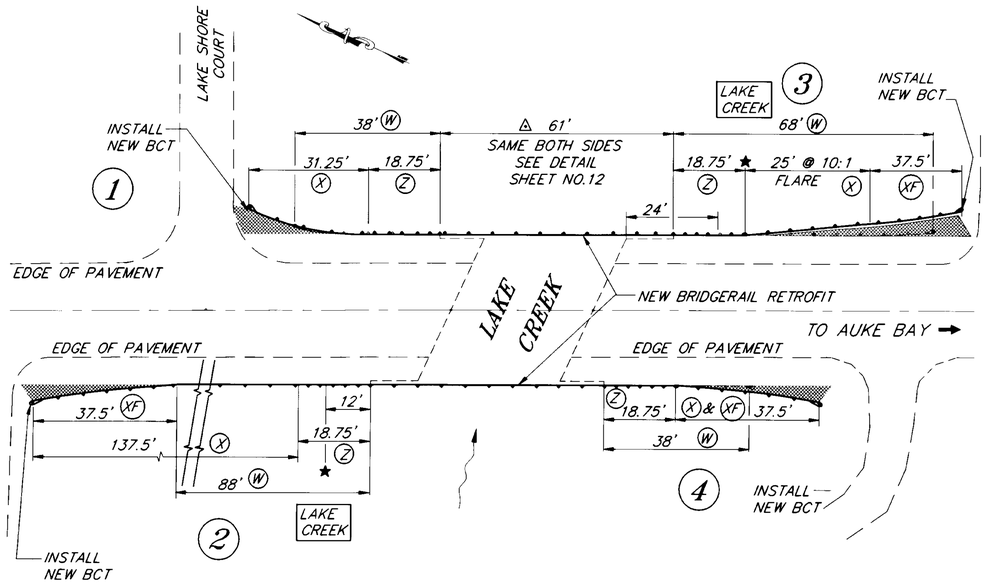
RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — JNU - ROADSIDE BARRIER IMPROVEMENTS — ALASKA
PROJECT NO. 71366
HROG-0005(138)

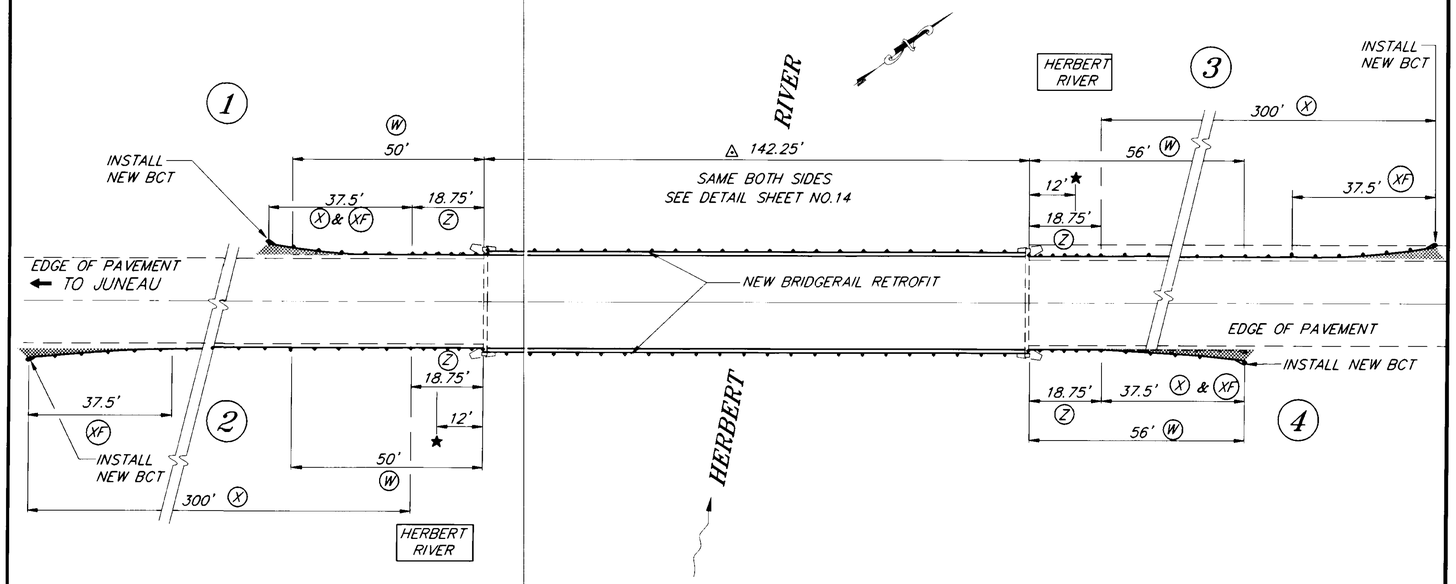
PETERSON CREEK & MENDENHALL RIVER BRIDGE RAILING & APPROACHES

DESIGNED BY: P. JONES	PROJECT NO. 71366
DRAWN BY: B.W.B.	DATE: SEPT. 1993
CHECKED BY: A.J. STEININGER	SHEET 6 OF 19



Lake Creek Bridge Railing Approaches (#873)

NOTE: 7' GUARDRAIL POST REQUIRED



Herbert River Bridge Railing Approaches (#736)

NOTE: 7' GUARDRAIL POST REQUIRED

#873 Estimate of Quantities

Item No.	Item	Unit	1	2	3	4	Total
201 (3B)	Clearing & Grubbing	LS	(APPROX. 3,000 SF)				All Req'd
301 (1)	Crushed Aggregate Base Course	TON			8	8	16
304 (1)	Subbase, Grading "E"	TON		10	25		35
606 (1)	W-beam Guardrail	LF	~~31.25~~	137.5	62.5	~~37.5~~ 31.25	268.75
606 (2)	Thrie Beam Guardrail	LF	18.75	18.75	18.75	18.75	75
606 (5)	Removal & Disposal of Guardrail	LF	~~62.5~~ 38	~~75~~ 88	~~75~~ 68	~~50~~ 38	~~262.5~~ 232
606 (6)	End Anchorages	EA	1	1	1	1	4
606 (13)	Bridge Rail Retrofit	LF					122
615 (1)	Standard Sign	SF		7	7		14
618 (1)	Seeding	LS	(APPROX. 3,000 SF)				All Req'd

Legend:

(W)	Removal & disposal of guardrail
(X)	New W-beam guardrail
(XF)	37.5' parabola flare
(Z)	New thrie beam guardrail
(WP)	Existing wood post
(MP)	Existing metal post
EOP	Edge of pavement
★	Existing sign to be removed/ Install new, same locations
△	Bridge rail length
	Crushed aggregate base course
BCT	Breakaway Cable Terminal
1 3 / BRIDGE / 2 4	General work zones

#736 Estimate of Quantities

Item No.	Item	Unit	1	2	3	4	Total
201 (3B)	Clearing & Grubbing	LS	(APPROX. 3,500 SF)				All Req'd
301 (1)	Crushed Aggregate Base Course	TON	8	8	8	8	32
304 (1)	Subbase, Grading "E"	TON		50	10	50	110
606 (1)	W-beam Guardrail	LF	37.5	300	300	37.5	675
606 (2)	Thrie Beam Guardrail	LF	18.75	18.75	18.75	18.75	75
606 (5)	Removal & Disposal of Guardrail	LF	50	50	~~50~~ 56	~~50~~ 56	~~212~~ 212
606 (6)	End Anchorages	EA	1	1	1	1	4
606 (13)	Bridge Rail Retrofit	LF					300
615 (1)	Standard Sign	SF		8	8		16
618 (1)	Seeding	LS	(APPROX. 3,500 SF)				All Req'd

AS-BUILT
BY: B.A. DATE: 4-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
Allan John Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER

71366

PATH: P:\JNU\GDRAIL2\DR\EST5 < 1=20 >

BY	DATE	DESCRIPTION OF CHANGE

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — JNU-ROADSIDE BARRIER IMPROVEMENTS — ALASKA
PROJECT NO. 71366
HROG-0005 (138)

LAKE CREEK & HERBERT RIVER BRIDGE RAILING & APPROACHES

DESIGNED BY: P. JONES	PROJECT NO. 71366
DRAWN BY: B.W.B.	DATE: SEPT. 1993
CHECKED BY: A.J. STEININGER	SHEET 7 OF 19

#264 Estimate of Quantities

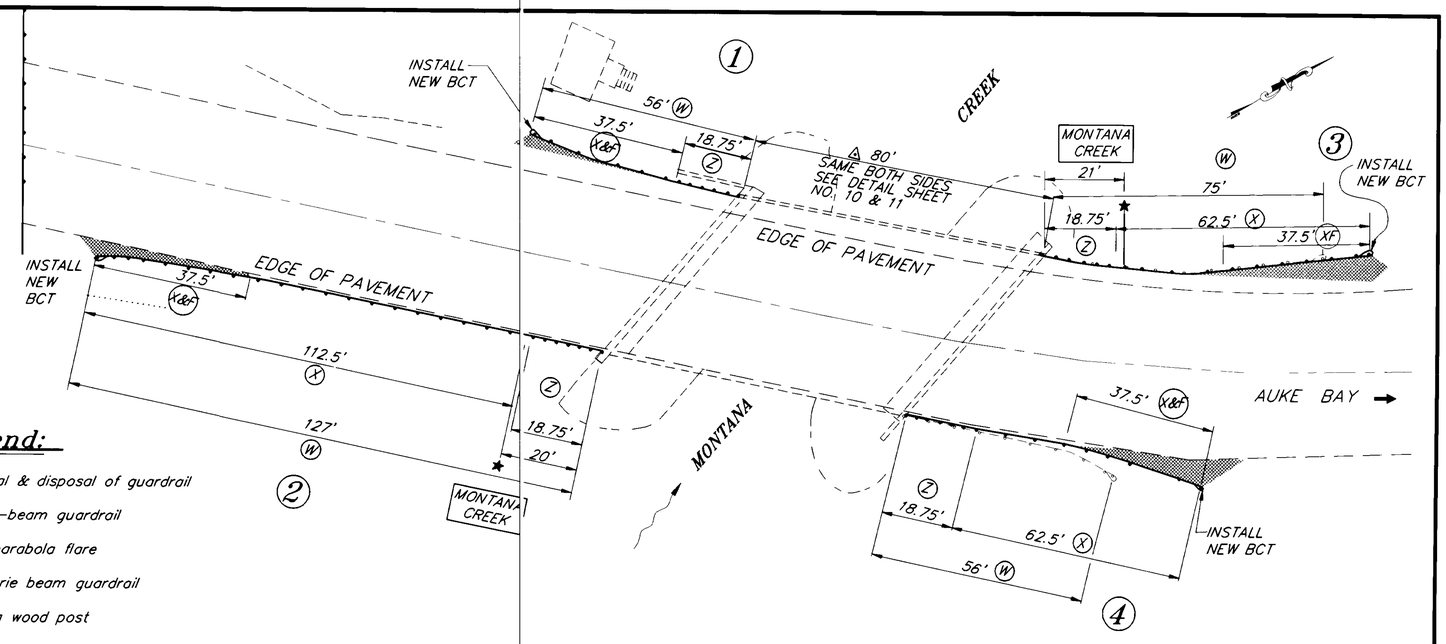
Item No.	Item	Unit	1	2	3	4	Total
201 (3B)	Clearing & Grubbing	LS	(APPROX. 3,000 SF)				All Req'd
301 (1)	Crushed Aggregate Base Course	TON		4	8		14
304 (1)	Subbase, Grading "E"	TON	10	10	10	5	35
606 (1)	W-beam Guardrail	LF	37.5	112.5	62.5	62.5	275
606 (2)	Thrie Beam Guardrail	LF	18.75	18.75	18.75	18.75	75
606 (5)	Removal & Disposal of Guardrail	LF	56	127	75	56	314
606 (6)	End Anchorages	EA	1	1	1	1	4
606 (12)	Guardrail/Bridge Rail Bracket	EA	1	1	1	1	4
615 (1)	Standard Sign	SF		9	9		18
618 (1)	Seeding	LS	Approx. 3,000 SF				All Req'd

#1197 &#1863 Estimate of Quantities

Item No.	Item	Unit	1	2	3	4	5	6	Total
201 (3B)	Clearing & Grubbing	LS	(Approx. 2,000 SF)						All Req'd
507 (1)	Metal Bridge Railing	LF							725
606 (1)	W-Beam Guardrail	LF					425	425	850
606 (2)	Thrie Beam Guardrail	LF	18.75	18.75	18.75	18.75	37.5	37.5	150
606 (5)	Removal & Disposal of Guardrail	LF	18.75	18.75	18.75	18.75	320	320	715
606 (6)	End Anchorages	EA					2	2	4
606 (12)	Guardrail/Bridge Rail Bracket	EA	1	1	1	1			4
615 (1)	Standard Sign	SF		13.5	13.5				27

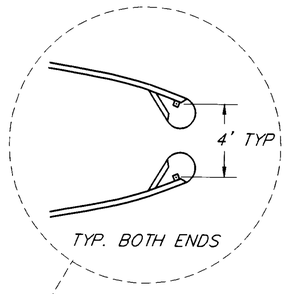
Legend:

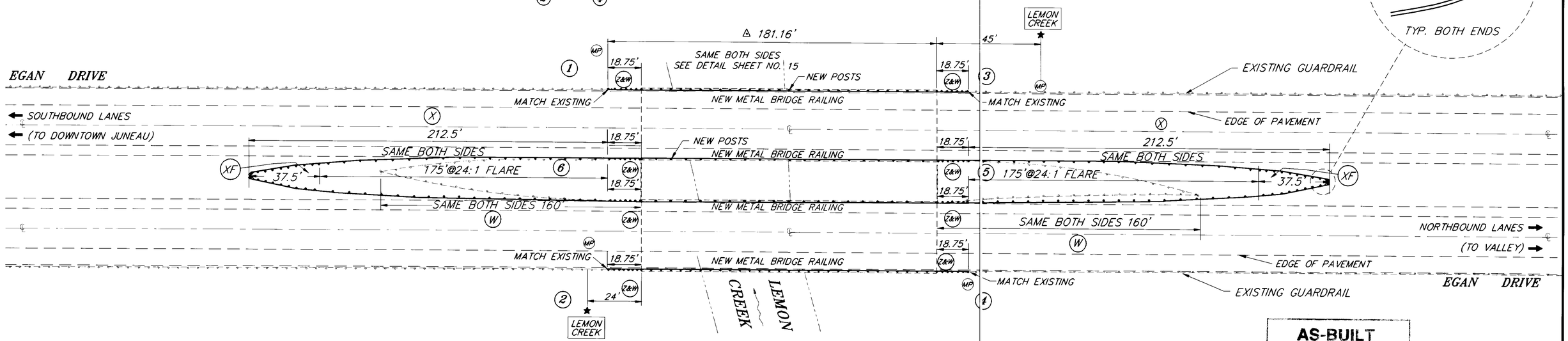
- (W) Removal & disposal of guardrail
- (X) New W-beam guardrail
- (XF) 37.5' parabola flare
- (Z) New thrie beam guardrail
- (WP) Existing wood post
- (MP) Existing metal post
- EOP Edge of pavement
- ★ Existing sign to be removed/ Same Locations Install New
- △ Bridge rail length
- Crushed aggregate base course
- BCT Breakaway Cable Terminal
- (1)(3)(6 BRIDGE 5)(2)(4) General work zones



Montana Creek Bridge Railing & Approaches (#264)

NOTE: 7' GUARDRAIL POSTS REQUIRED.





Lemon Creek Bridge Railing & Approaches (#1197 & #1863)

NOTE: 7' GUARDRAIL POSTS REQUIRED.

AS-BUILT
BY: B.A. DATE: 4-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
Alan John Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER

71366

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BY	DATE	DESCRIPTION OF CHANGE

RECORD OF REVISIONS

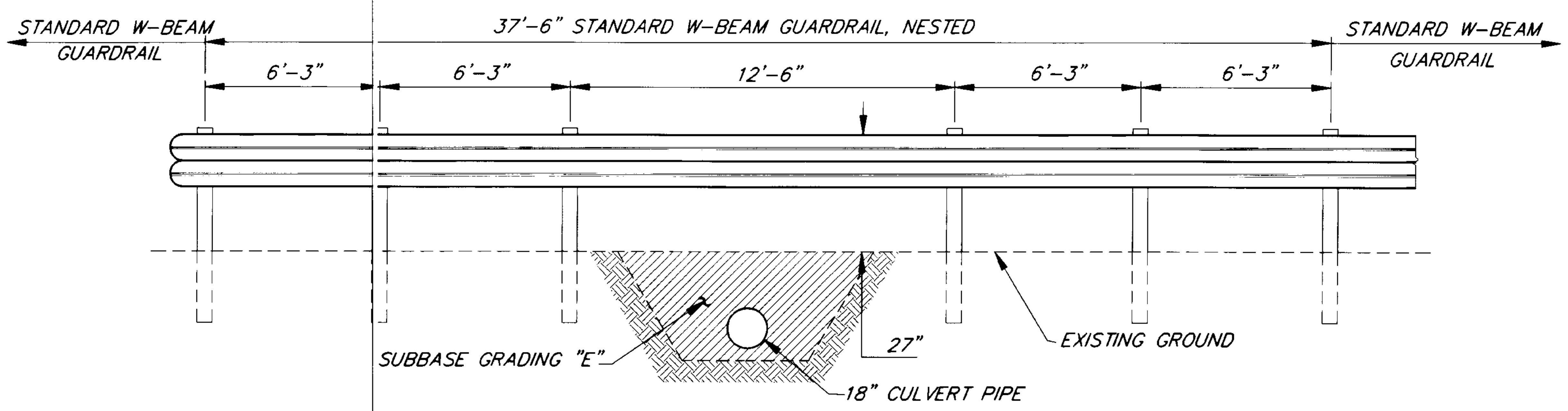
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — JNU-ROADSIDE BARRIER IMPROVEMENTS — ALASKA
PROJECT NO. 71366
HROG-0005 (138)

LEMON CREEK & MONTANA CREEK BRIDGE RAILING & APPROACHES

DESIGNED BY: P. JONES	PROJECT NO. 71366
DRAWN BY: B.W.B.	DATE: SEPT. 1993
CHECKED BY: A.J. STEININGER	SHEET 8 OF 19

#788 Lawson Creek Bridge Railing & Approaches

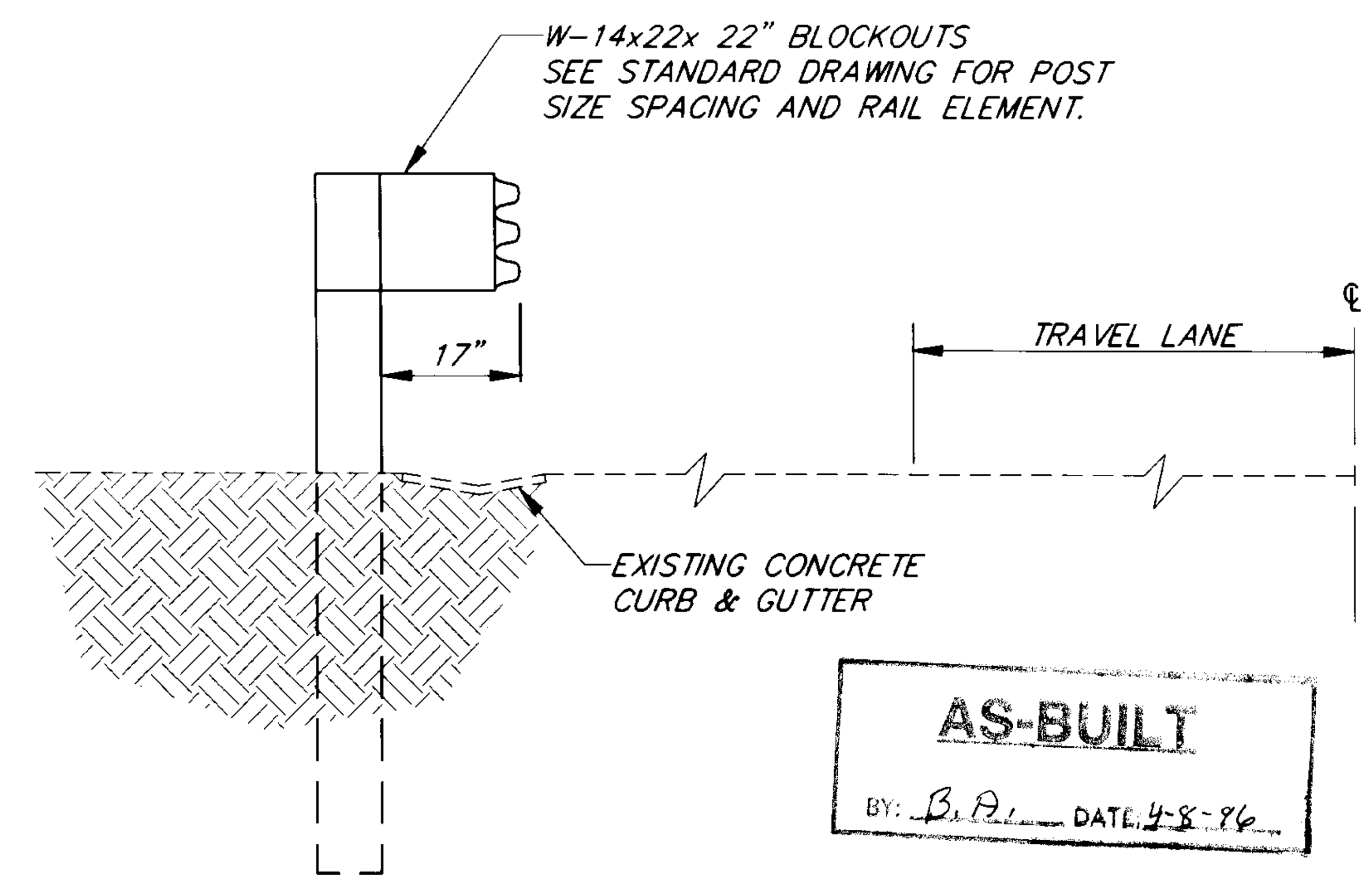


Skipped Post Modification Detail

#788 Estimate of Quantities							
Item No.	**Item**	**Unit**	**1**	**2**	**3**	**4**	**Total**
201 (3B)	Clearing & Grubbing	LS	(APPROX. 4,500 SF)				All Req'd
301 (1)	Crushed Aggregate Base Course	TON	5	5	5	5	20
304 (1)	Subbase, Grading "E"	TON	10	10	30		50
507 (1)	Metal Bridge Railing	LF					304
507 (4)	Concrete Bridge Railing	LF					302
603 (17-18)	18-Inch Pipe	LF			50		50
606 (1)	W-beam Guardrail	LF	37.5	75	181.25	87.5	381.25
606(2)	Thrie Beam Guardrail	LF	18.75	18.75	18.75	18.75	75
606 (5)	Removal & Disposal of Guardrail	LF	54	81.25 ~~83~~	200	112.5 ~~114~~	447.75 ~~451~~
606 (6)	End Anchorages	EA	1	1		1	3
606 (8)	Buried Anchor Terminal	EA			1		1
606 (12)	Guardrail/Bridge Rail Bracket	EA	1		1		2
606 (14)	Thrie Beam Connectors	EA		1		1	2
615 (1)	Standard Sign	SF		15	15		30
618 (1)	Seeding	LS	(APPROX. 4,500 SF)				All Req'd

Legend:

- (W) Removal & disposal of guardrail
- (X) New W-beam guardrail
- (XF) 37.5' parabola flare
- (Z) New thrie beam guardrail
- (WP) Existing wood post
- (MP) Existing metal post
- EOP Edge of pavement
- ★ Existing sign to be removed/ Install New
- △ Bridge rail length
- Crushed aggregate base course
- BCT Breakaway Cable Terminal
- (1) (2) (3) (4) BRIDGE General work zones



AS-BUILT
BY: B.A. DATE: 4-8-96

Thrie Beam Blockout Detail

LAWSON CREEK (#788)
LOCATIONS SHOWN ABOVE

ENGINEER'S SEAL
STATE OF ALASKA
49th
Alan John Steininger
CE-6440
REGISTERED PROFESSIONAL ENGINEER

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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BY	DATE	DESCRIPTION OF CHANGE

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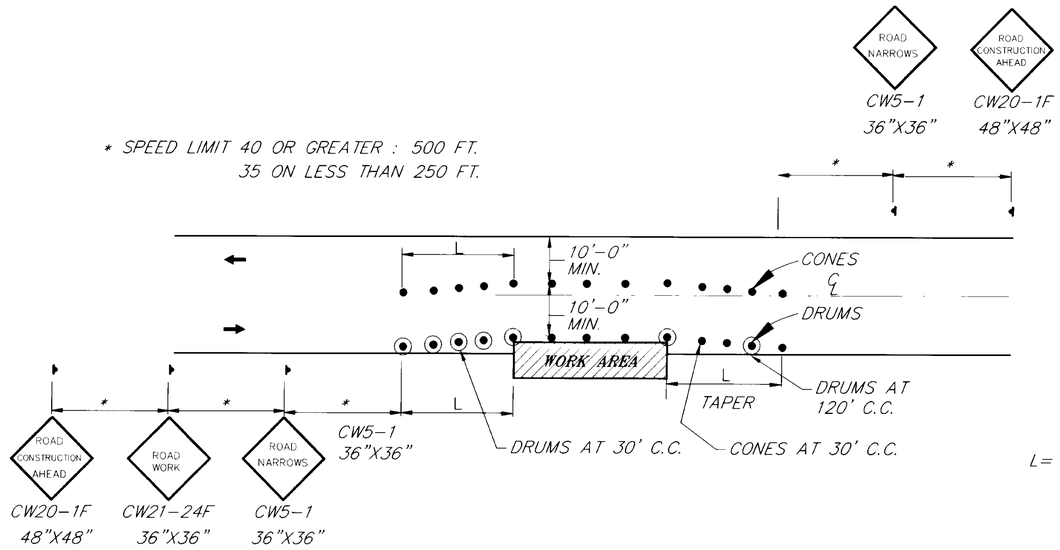
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU — JNU-ROADSIDE BARRIER IMPROVEMENTS PROJECT NO. 71366 — ALASKA
HROG-000S (138)

LAWSON CREEK BRIDGE RAILING & APPROACHES

DESIGNED BY: P. JONES
DRAWN BY: B.W.B.
CHECKED BY: A.J. STEININGER

PROJECT NO. 71366
DATE: SEPT. 1993
SHEET 9 OF 19



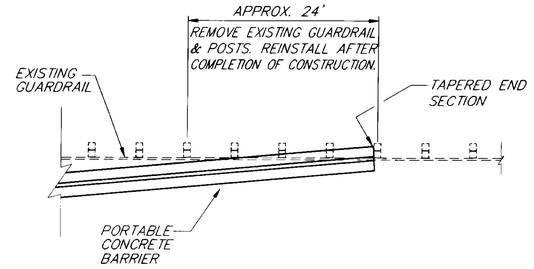
ROADWAY ENCROACHMENT

NOTE: IF ONLY ONE LANE IS EFFECTED BY ROAD WORK (THAT IS, THE DRUMS ALONG THE WORK AREA ARE NO CLOSER THAN 10' TO CENTERLINE) THE CENTERLINE CONES FOR THE OPPOSING LANE MAY BE DELETED.

TRAFFIC CONTROL NOTES

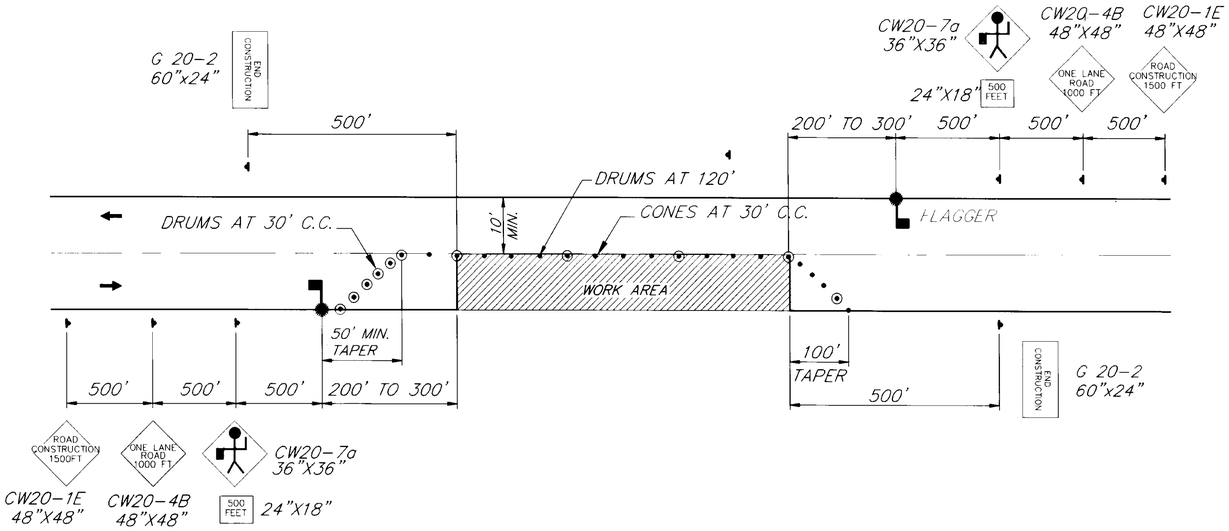
1. A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES AT WORK AREAS.
2. 2 THROUGH LANES SHALL BE MAINTAINED NORTHBOUND ON SALMON CREEK AND LEMON CREEK BRIDGES FROM 4:00-6:00 PM, AND SOUTHBOUND FROM 7:00-9:00 AM. TWO WAY TRAFFIC SHALL BE MAINTAINED ON LAWSON CREEK BRIDGE FROM 7:00-9:00 AM AND FROM 4:00-6:00 PM.
3. MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES SHALL BE EQUAL TO THE SPEED LIMIT IN FEET.
4. FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS.
5. A SINGLE FLAGGER MAY BE APPROVED BY THE ENGINEER IF THE ENTIRE WORK AREA IS LESS THAN 50' LONG AND IS VISIBLE FROM BOTH DIRECTIONS.
6. RECESSED MARKERS SHALL BE REPLACED IN EXISTING SAWCUT AFTER BRIDGE CONSTRUCTION WORK HAS BEEN COMPLETED.

L= SXW L= MIN. LENGTH OF TAPER IN FEET
S= POSTED SPEED LIMIT
W= WIDTH OF OFFSET

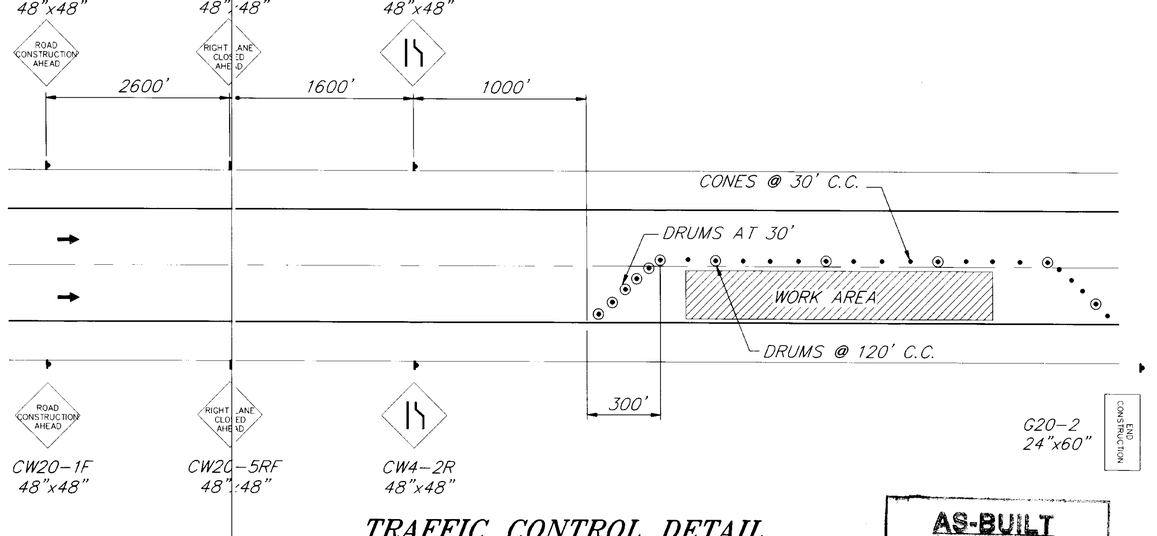


PORTABLE CONCRETE BARRIER DETAIL FOR BARRIER END

SALMON CREEK BRIDGE RAIL REPLACEMENT



TWO LANE ROADWAY-SINGLE LANE CLOSURE



TRAFFIC CONTROL DETAIL 4 LANE DIVIDED SINGLE LANE CLOSURE

AS-BUILT
BY: B.A. DATE: 4-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

JUNEAU

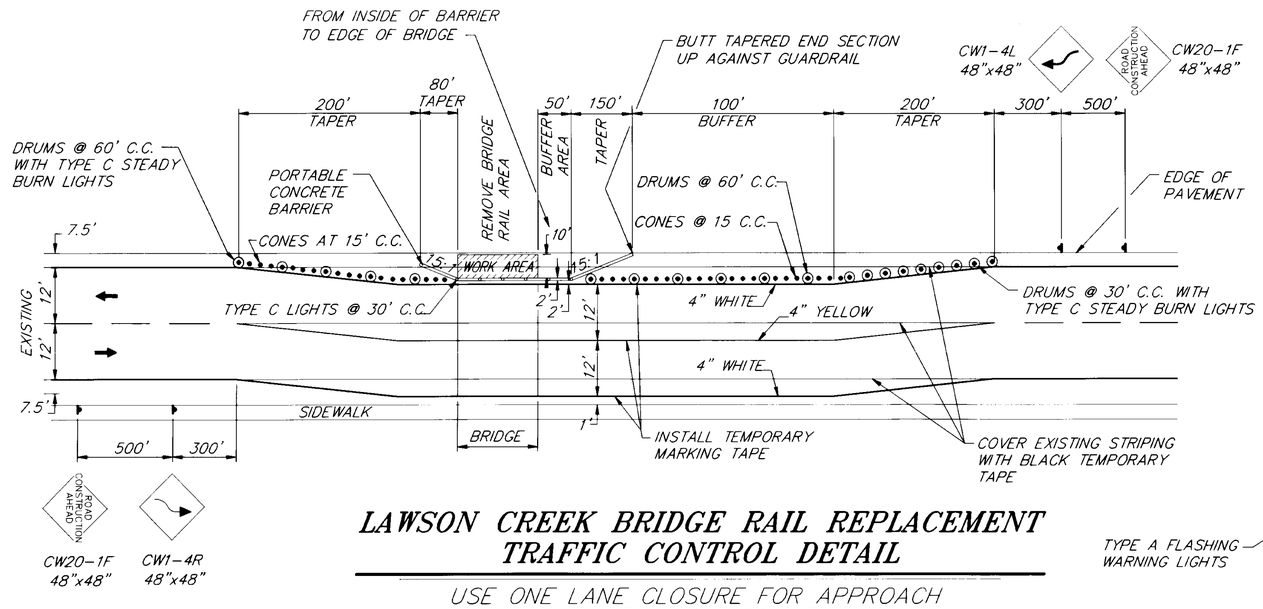
JNU-ROADSIDE BARRIER IMPROVEMENTS
PROJECT NO. 71366
HROG-0005(138)

TRAFFIC CONTROL PLAN

ALASKA

DESIGNED BY: R. PURVES	PROJECT NO. 71366
DRAWN BY: B. ADAMS	DATE: SEPT. 1993
CHECKED BY: K. SMITH	SHEET 18 OF 19

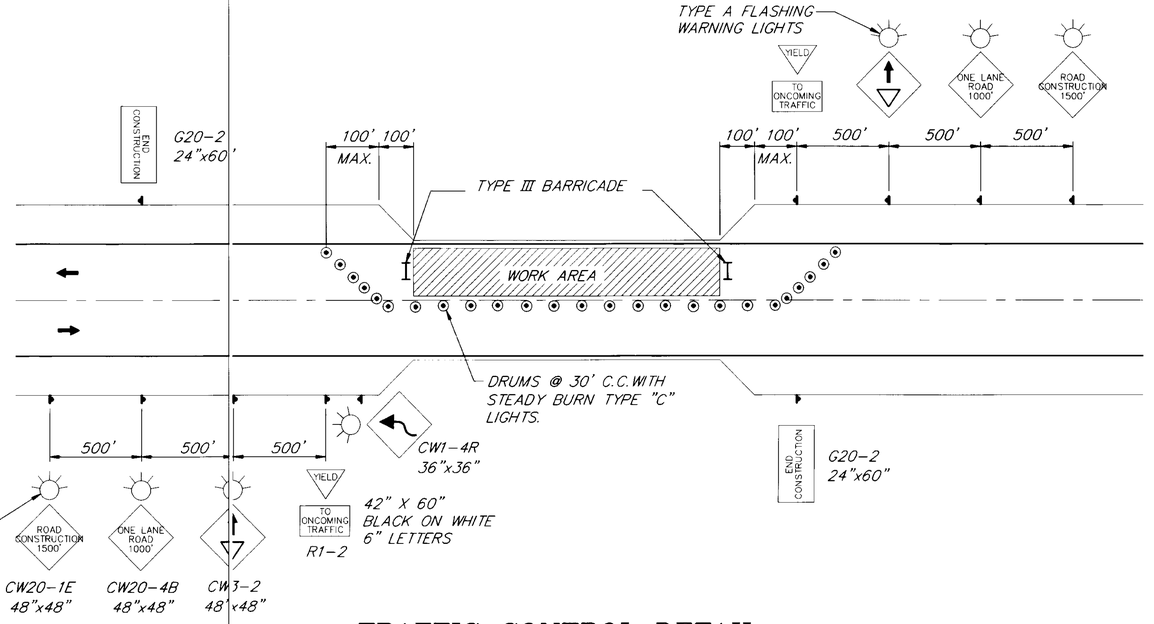
STATE OF ALASKA 11-3-93 49th Kurtis Smith KURTIS SMITH CE-7347 REGISTERED PROFESSIONAL ENGINEER



LAWSON CREEK BRIDGE RAIL REPLACEMENT TRAFFIC CONTROL DETAIL

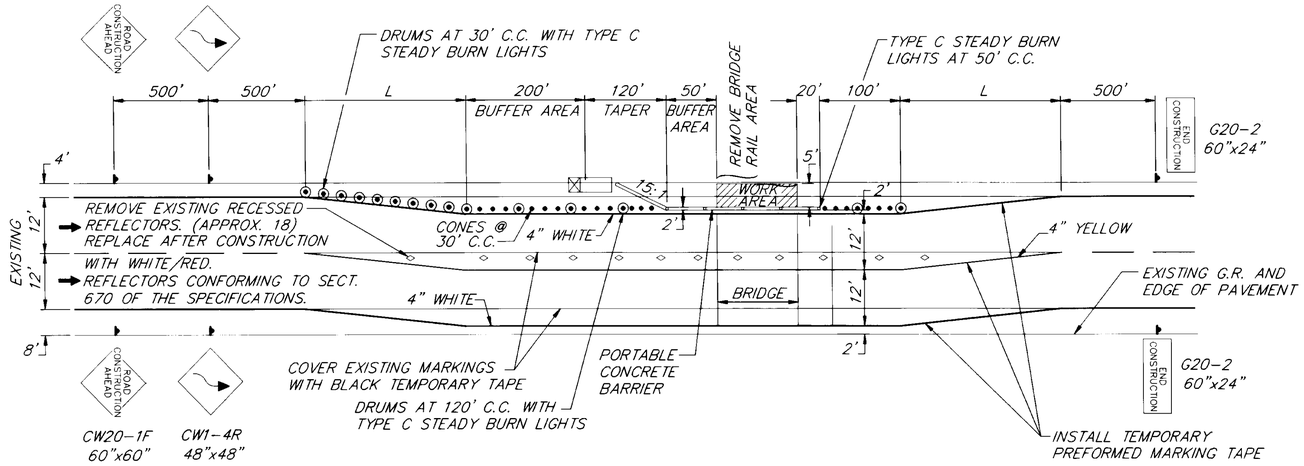
USE ONE LANE CLOSURE FOR APPROACH GUARDRAIL REPLACEMENT (UPHILL SIDE ONLY)

WORK FOR WHICH TRAFFIC CONTROL PLANS (TCPs) ARE NOT SHOWN ON THIS SHEET SHALL BE DONE USING THE GENERIC TCPs ON THE PRECEEDING SHEET.
TMA = TRUCK MOUNTED ATTENUATOR.
L = SxW
S= SPEED LIMIT IN MPH
W = WIDTH OF DIVERSION, FT.
☒ = TRUCK WITH TRUCK MOUNTED ATTENUATOR



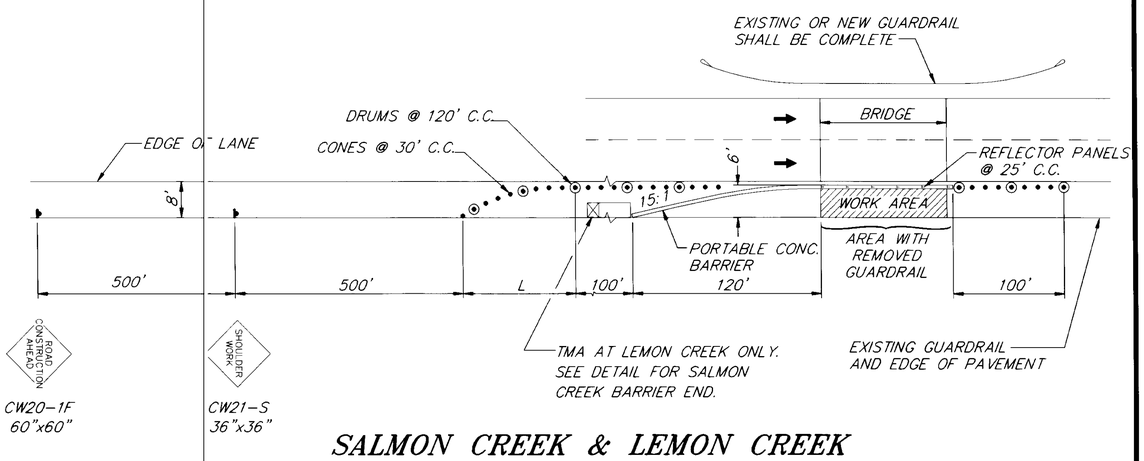
TRAFFIC CONTROL DETAIL
KOWEE CREEK BRIDGE AND APPROACH RAIL REPLACEMENT

(TYPICAL BOTH SIDES)



LEMON CREEK INSIDE BRIDGE RAIL REPLACEMENT TRAFFIC CONTROL DETAIL

USE ONE LANE CLOSURE FOR APPROACH GUARDRAIL REPLACEMENT (TYP. BOTH SIDES).



SALMON CREEK & LEMON CREEK OUTSIDE BRIDGE RAIL REPLACEMENT TRAFFIC CONTROL DETAIL

USE ONE LANE CLOSURE FOR APPROACH GUARDRAIL REPLACEMENT (TYP. BOTH SIDES).

AS-BUILT
BY: B.A. DATE 4-8-96

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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JUNEAU

JNU-ROADSIDE BARRIER IMPROVEMENTS
PROJECT NO. 71366
HROG-000S(138)

ALASKA

TRAFFIC CONTROL PLAN

DESIGNED BY: R. PURVES	PROJECT NO. 71366
DRAWN BY: B. ADAMS	DATE: SEPT. 1993
CHECKED BY: K. SMITH	SHEET 19 OF 19

STATE OF ALASKA
11-3-93
49th
KURTIS SMITH
CE-7347
REGISTERED PROFESSIONAL ENGINEER