

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SSHXY00496	2024	A1	10
			CDS ROUTE:	291400	MILEPOINT:	1.7 TO 1.7	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

AS-BUILTS

CONTRACTOR: Hamilton Construction
Alaska Co.
PROJECT ENGINEER: Emily Delaney
START DATE: 10/22/2024
END DATE: 01/10/2025

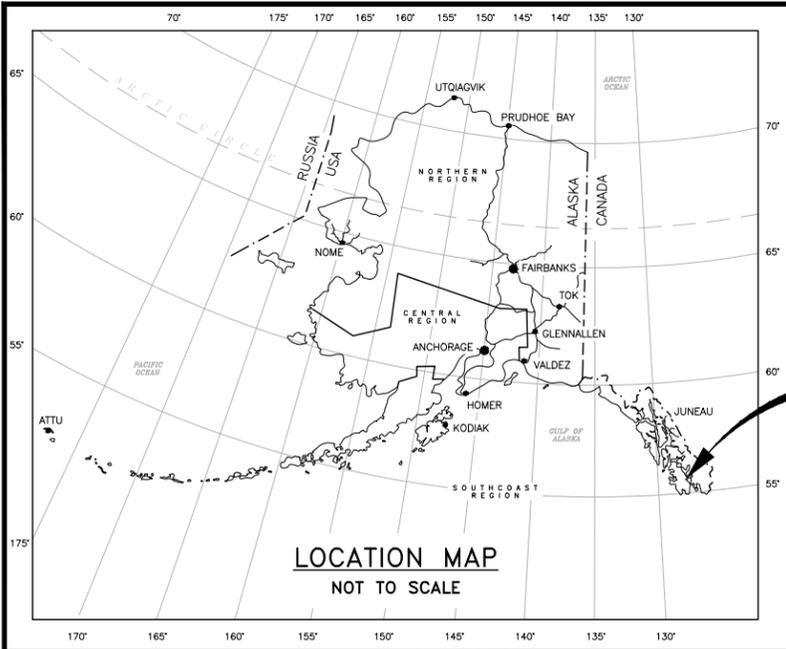
INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	RIGHT OF WAY MAP
A3-A4	SURVEY CONTROL
C1	ESTIMATE OF QUANTITIES & GENERAL NOTES
N1-N4	BRIDGE PLANS
Q1	EROSION SEDIMENT CONTROL PLAN (ESCP)

PROPOSED HIGHWAY PROJECT

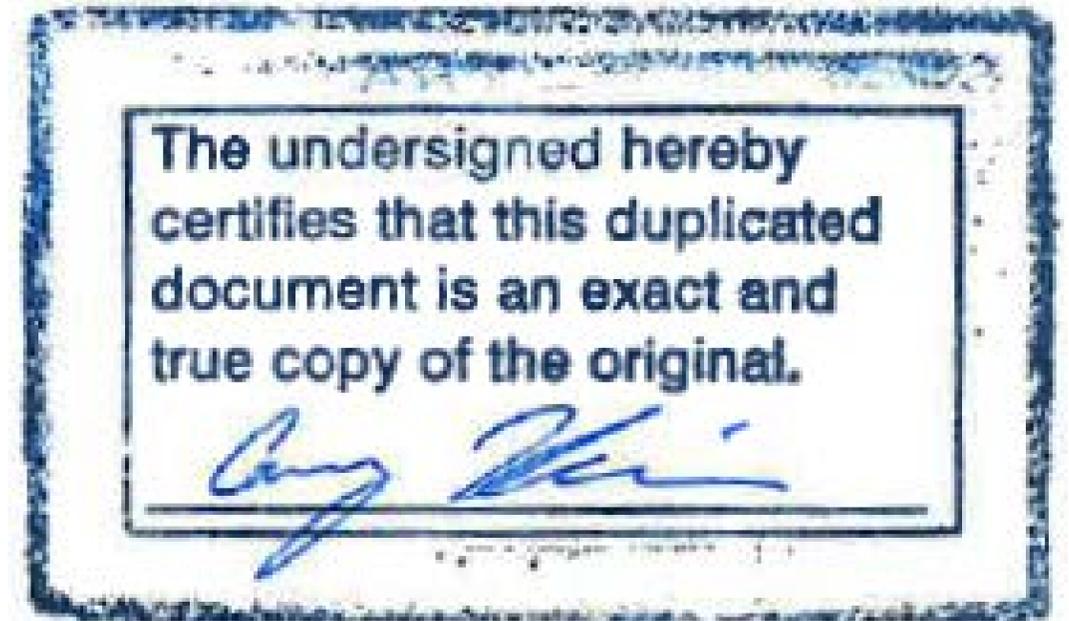
SSHXY00496

KTN WATER ST BRIDGE NBI #797 STRENGTHENING

BRIDGE



PROJECT
LOCATION:
KETCHIKAN



08/14/2024

PROJECT SUMMARY			
BRIDGE STRUCTURE	WIDTH	LENGTH	YEAR BUILT
BRIDGE #797 WATER STREET VIADUCT	50 FT	1,624 FT	1955

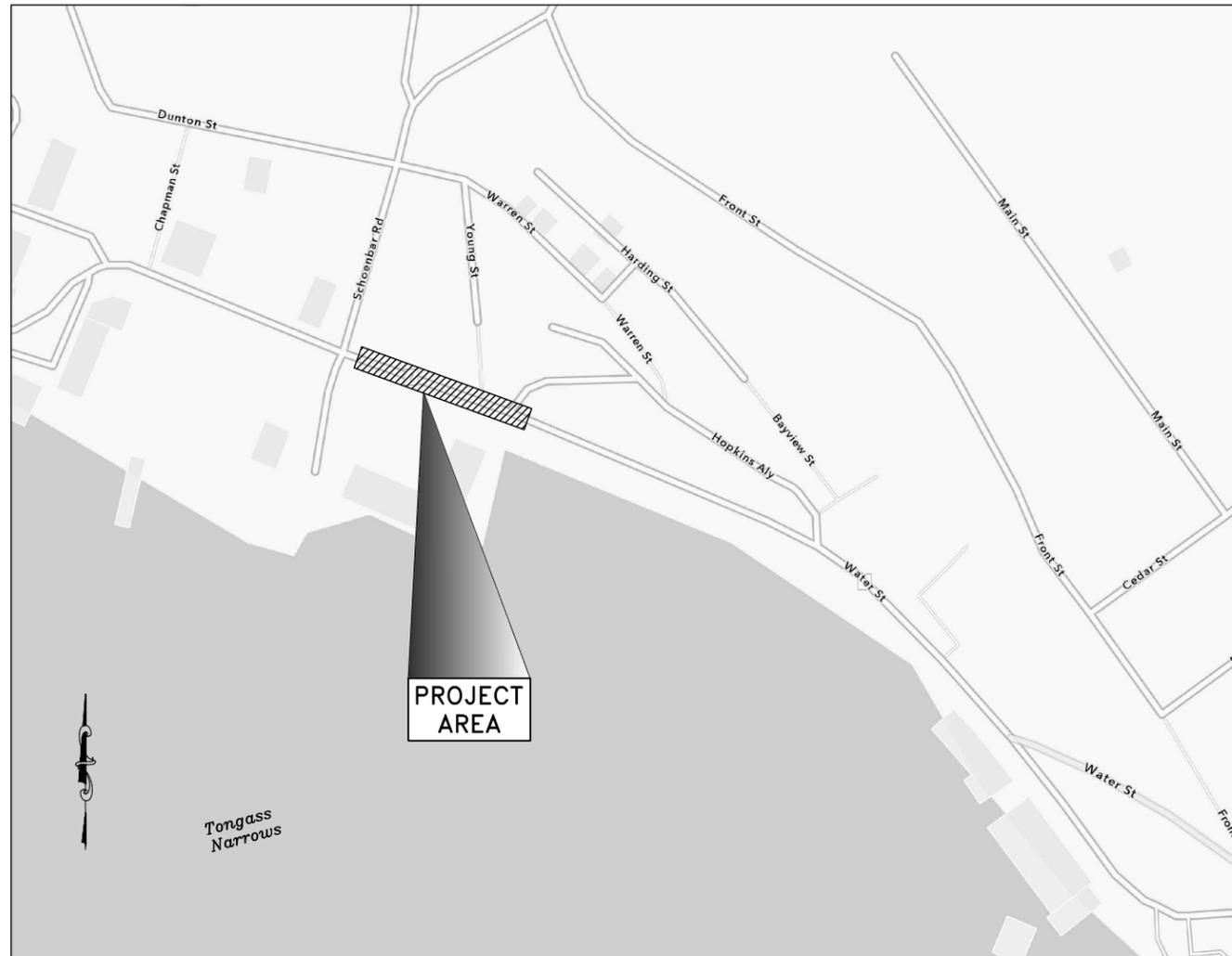
PROJECT AS-BUILT DRAWINGS HAVE BEEN REVIEWED BY THE PROJECT ENGINEER AND REPRESENT TO THE BEST OF MY KNOWLEDGE THE PROJECT AS CONSTRUCTED.

PE: *Emily Delaney*

DATE: 02/13/2025

JAMES L. BROWN, P.E., PROJECT MANAGER
JESSE ESCAMILLA III, P.E., DESIGN ENGINEER
TRAVIS DENNISON, P.E., DESIGN ENGINEER

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES	
APPROVED BY: <i>Kirk Miller</i>	5/24/2024
Kirk Miller, P.E. Preconstruction Engineer, Southcoast Region	DATE
ACCEPTED FOR CONSTRUCTION: <i>Christopher Goms</i>	5/24/2024
Christopher Goms, P.E., C.M. Regional Director, Southcoast Region	DATE



VICINITY MAP
NOT TO SCALE

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SSHXY00496	2024	A2	10

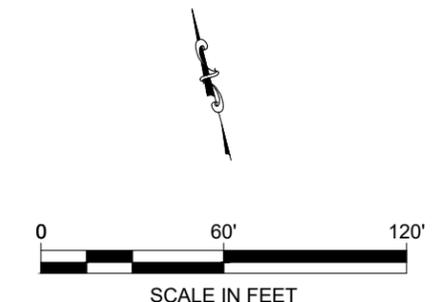
GENERAL NOTES:

1. TEMPORARY ACCESS EASEMENTS (TAE'S) SHOWN ON THIS SHEET HAVE BEEN ACQUIRED FOR THIS PROJECT. TAE'S ALLOW FOR TEMPORARY ACCESS, OVER AND ACROSS, FOR ALL ACTIVITIES FOR CONSTRUCTION OF TRANSPORTATION ASSET AND ALL HIGHWAY AND UTILITY PURPOSES. REFER TO THE SURVEY CONTROL SHEET AS NECESSARY TO STAKE OUT THE LIMITS OF THE TAE'S.
2. THE TAE'S SHOWN WILL BE IN EFFECT FOR A PERIOD BEGINNING ON THE STARTING DATE OF CONSTRUCTION AND ENDING AT THE COMPLETION OF THE PROJECT AT WHICH TIME THE EASEMENT WILL EXPIRE AND BE OF NO FORCE AND EFFECT, EXCEPT AS SPECIFIED IN NOTE 6.
3. RESTRICT ACCESS TO THE WORK AREA TO PREVENT PUBLIC ENTRY. LADDERS OR OTHER TEMPORARY FEATURES ARE ALLOWED TO ACCESS TAE-3 BUT MUST BE ATTENDED BY THE CONTRACTOR'S PERSONNEL AT ALL TIMES DURING THEIR USE. LADDERS OR TEMPORARY FEATURES MUST NOT BE LEFT UNATTENDED WITHIN TAE-3 AND MUST BE REMOVED IMMEDIATELY WHEN THEY ARE NO LONGER ACTIVELY IN USE.
4. DO NOT TRAVEL OR ACCESS AREAS UNDER PRIVATELY OWNED BUILDINGS.
5. DO NOT MODIFY OR ATTACH ANYTHING TO THE EXISTING BOARDROADS, RAILINGS, OR BUILDING STRUCTURES; THE USE OF NAILS OR SCREWS IS PROHIBITED.
6. ADDITIONAL CONDITIONS SPECIFIC TO TAE-2 ARE AS FOLLOWS:
 - a. THE STATE OF ALASKA AND THEIR AFFILIATED CONTRACTOR(S) WILL BE REQUIRED TO TRANSIT THE PROPERTY IN A MANNER THAT PROHIBITS LOITERING, WORK TAKING PLACE FROM THE PROPERTY, AND STAGING OF MATERIALS FOR EQUIPMENT WITHIN THE PROPERTY.
 - b. INGRESS/EGRESS: ONTO, ACROSS, AND OFF OF THE PROPERTY SHALL BE FROM THE WATER VIA WATERCRAFT.
 - c. WATERCRAFT NO LONGER THAN 24 FEET MAY TRANSPORT NECESSARY PERSONNEL, MATERIAL, AND TOOLS ACROSS THE PROPERTY FOR THE DURATION OF THE PROJECT. LARGER WATERCRAFT MAY BE ALLOWED ONLY WITH THE EXPRESS PERMISSION OF THE PROPERTY OWNER.
 - d. USE OF THE PROPERTY IN ACCORDANCE WITH THE CONDITIONS DETAILED ABOVE SHALL NOT BE RESTRICTED TO SPECIFIC HOURS OF THE DAY DURING THE TEMPORARY ACCESS EASEMENT TERM, UNLESS OTHERWISE RESTRICTED BY LOCAL ORDINANCE.
 - e. THE DURATION (TERM) FOR THIS ACCESS EASEMENT SHALL BE NO LONGER THAN THREE MONTHS.
 - f. THE PROPERTY OWNER SHALL RECEIVE WRITTEN NOTICE 14 CALENDAR DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
 - g. THE TEMPORARY ACCESS EASEMENT SHALL BE OF NO FORCE AND EFFECT UPON COMPLETION OF THE CONSTRUCTION PROJECT AND/OR SHALL TERMINATE NO LATER THAN DECEMBER 31ST, 2024.



LEGEND

- BLOCK NO.
- EXISTING PEDESTRIAN ACCESS EASEMENT
- RIGHT OF WAY
- TEMPORARY ACCESS EASEMENT (TAE)
- ABOVE DECK WORK AREA



PROJECT AS-BUILT DRAWINGS HAVE BEEN REVIEWED BY THE PROJECT ENGINEER AND REPRESENT TO THE BEST OF MY KNOWLEDGE THE PROJECT AS CONSTRUCTED.

PE: *Emily Delaney*

DATE: 02/13/2025

RIGHT OF WAY MAP



DESIGNED: J.PAPOI
 CHECKED: E.PEDERSEN
 DRAFTED: J.PAPOI
 XREFS
 SCALE
 LAYOUT: A3
 DATE: 5/22/2024 15:35
 DRAWING LOCATION: Q:\Kt\YSHWY00496\SV\SOURCE\DWGS\BASEMAP\FHWHY00496_SCS_013024.dwg

HORIZONTAL CONTROL

Horizontal Control for this project is based on the DOT/PF South Tongass Grid 2000. The intent of this local ground distance based coordinate system is to relate it to Alaska State Plane while preserving ground distances.

The DOT/PF Ketchikan South Tongass Grid -2000 System is a local ground coordinate system based at DOT/PF GPS control station 95-K-4 (#36). It relates to AKSPC zone 1 NAD83 (92) through the following parameters:

Zone = NAD83 AKSPC ZONE 1
 Grid Scale = 0.999900264
 Convergence = +144'48"
 Translation about DOT/PF control point 95-K-4 as follows:
 AKSPC Northing = 1277612.22594 FT US
 AKSPC Easting = 3117379.86890 FT US
 Local Northing = 328083.33333 FT US
 Local Easting = 656166.66667 FT US

Project Specific Basis of Horizontal Control

95-K-4 : 2" Brass Cap located in the breakwater of Saxman harbor.

NAD83(1992) Lat 5518'51.8820" N Lon 13135'43.1545"W
 KTN_S-Tongass-Grid N 328083.3333' E 656166.6667'
 AKSPC N=1277612.22594' E=3117379.86890'

95-K-6 : 2" Brass Cap in bedrock on beach located adjacent to 2976 S. Tongass

NAD83(1992) Lat 5518'49.0933"N Lon 13135'23.7309"W
 KTN_S-Tongass-Grid N 327799.9386' E 657290.4836'
 AKSPC N 1277363.2420' E 3118511.6888'

VERTICAL CONTROL

The Vertical Datum for Ketchikan South Tongass Grid 2000 is Mean Lower Low Water based on levels from the National Ocean Service Benchmark NO. 37. The record elevation for NO. 37 is 35.09' above MLLW based on the 1960-1978 tidal epoch for tide station 9450460. The project specific basis of vertical control is point #36 "95-K-4" with an observed elevation of 22.21' above MLLW.

Survey Control Table						
Point #	Northing	Easting	Elevation	Description	Station	Offset
114	339233.55	643150.02	22.53	GPS_AC2" _FND	116+75.66	25.60R
116	339120.58	643909.91	21.93	GPS_MAG/WASH_FND	125+02.46	24.74R
117	338921.91	644396.16	22.94	GPS_MAGMINI_SET	130+30.23	23.22R
525	339017.02	644159.70	22.20	2"ALCAP_TA_3491-S	127+72.86	26.98R

ALL SURVEY CONTROL MONUMENTS IN THIS TABLE ARE PROVIDED STRICTLY FOR SURVEY CONTROL. SHOULD ANY OF THEM BE DESTROYED DURING CONSTRUCTION THEY SHALL NOT BE REPLACED.

MONUMENT NOTES:

1. IF ANY PAIR OF CONTROL POINTS DISAGREES FROM PUBLISHED VALUE BY MORE THAN 1:10,000 HORIZONTALLY OR VERTICALLY THEN A THIRD NETWORK POINT MUST BE TIED TO ASCERTAIN WHICH POINT IS IN ERROR OR HAS BEEN DISTURBED.

2. WHETHER LISTED OR NOT, ALL PROPERTY MONUMENTS, PROPERTY MARKERS, CORNERS OR ACCESSORIES WHICH WILL BE DISTURBED OR BURIED SHALL BE REFERENCED PRIOR TO BEING DISTURBED, AND RE-ESTABLISHED IN THEIR ORIGINAL HORIZONTAL POSITION AND A RECORD OF MONUMENT FORM IN ACCORDANCE WITH (A.S.34.65.040) AND (A.S.19.10.260) SHALL BE SUBMITTED TO THE CONSTRUCTION ENGINEER FOR REVIEW PRIOR TO RECORDING. COORDINATE VALUES LISTED ARE FOR INFORMATIONAL PURPOSES AND SHOULD BE USED TO RESET MONUMENTS ONLY AS A LAST RESORT.

3. WHEN POSSIBLE ALL ORIGINAL PRIMARY MONUMENTS SHALL BE SAVED AND RESET IN THEIR ORIGINAL HORIZONTAL POSITION AND A RECORD OF MONUMENT FORM IN ACCORDANCE WITH (A.S.34.65.040) AND (A.S.19.10.260) SHALL BE SUBMITTED TO THE CONSTRUCTION ENGINEER FOR REVIEW PRIOR TO RECORDING.

4. RIGHT OF WAY LOCATION IS SHOWN FOR GRAPHICAL ORIENTATION PURPOSES ONLY. REFER TO ALASKA DOT&PF RIGHT OF WAY MAPS FOR RIGHT OF WAY INFORMATION.

5. HORIZONTAL AND VERTICAL CONTROL MUST BE FIELD VERIFIED BY THE CONTRACTOR. DISCREPANCIES WILL BE REPORTED TO DOT&PF CONSTRUCTION PROJECT ENGINEER.

Existing Centerline Monuments					
Point #	Northing	Easting	Description	Station	Offset
1333	338629.26	644742.50	BC_IN-CASE-BOLT-PUNCH-MARK	N/A	N/A
1351	339216.09	643745.11	ALCAP_3" _IN-CASE	123+13.86	1.92L

ALL CENTERLINE MONUMENTS IN THIS TABLE SHALL BE REFERENCED PRIOR TO DISTURBANCE FROM CONSTRUCTION AND RE-ESTABLISHED IN THEIR ORIGINAL HORIZONTAL POSITION AND A RECORD OF MONUMENT FORM IN ACCORDANCE WITH A.S.34.65.040 SHALL BE SUBMITTED TO DOT FOR REVIEW PRIOR TO RECORDING.

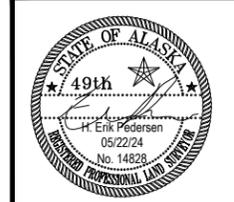
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWHY00496	2024	A3	10

Existing Property					
Point #	Northing	Easting	Description	Station	Offset
1320	338887.68	644446.89	ALCAP_CITY-KTN_0010_LS-3491	130+93.94	26.53R
1326	338943.82	644475.53	ALCAP_2" _ROW_L-35A	130+86.85	36.09L
1327	338944.04	644474.90	ALCAP_HEX-PLATE_GRAVITY-STATION_D	130+86.24	35.93L
1328	338968.33	644435.54	ALCAP_2"R&M-KTN	130+42.53	36.38L
1329	339022.81	644146.45	BC_2-1/2" _ROW_WC-2.0	127+58.40	26.58R
1331	338946.35	644456.42	IP_1-1/2" _IN-CASE	130+70.23	27.98L
1332	339368.42	643416.14	ALCAP_2" _IN CASE_TDLDS_RESET	119+65.30	33.10L
1334	339069.35	644031.45	BC_2-1/2" _ROW_WC-1.9_TDLDS-437	126+34.35	26.61R
1335	339159.90	643803.84	ALCAP_2" _ROW_L3	123+89.39	28.11R
1336	339208.42	643684.34	ALCAP_2" _ROW_L1	122+60.42	27.99R
1337	339141.56	643753.74	ALCAP_2" _ROW_L3	123+49.83	63.91R
1338	339137.24	643764.33	ALCAP_2" _ROW_L3	123+61.27	63.94R
1339	339152.63	643800.88	ALCAP_2" _ROW_L3	123+89.38	35.96R
1340	339160.43	643707.46	ALCAP_2" _ROW_L1	122+99.86	63.79R
1341	339201.15	643681.35	ALCAP_2" _ROW_L1	122+60.37	35.86R
1342	339164.71	643696.78	ALCAP_2" _ROW_L1	122+88.35	63.83R
1343	339290.16	643482.96	ALCAP_2" _ROW_L1	120+43.08	27.82R
1344	339299.93	643400.15	ALCAP_2" _ROW_L4_B6	119+31.66	29.51R
1350	338956.96	644464.01	ALCAP_R&M-ENG_DAMAGED	130+71.06	40.99L

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PROJECT AS-BUILT DRAWINGS HAVE BEEN REVIEWED BY THE PROJECT ENGINEER AND REPRESENT TO THE BEST OF MY KNOWLEDGE THE PROJECT AS CONSTRUCTED.

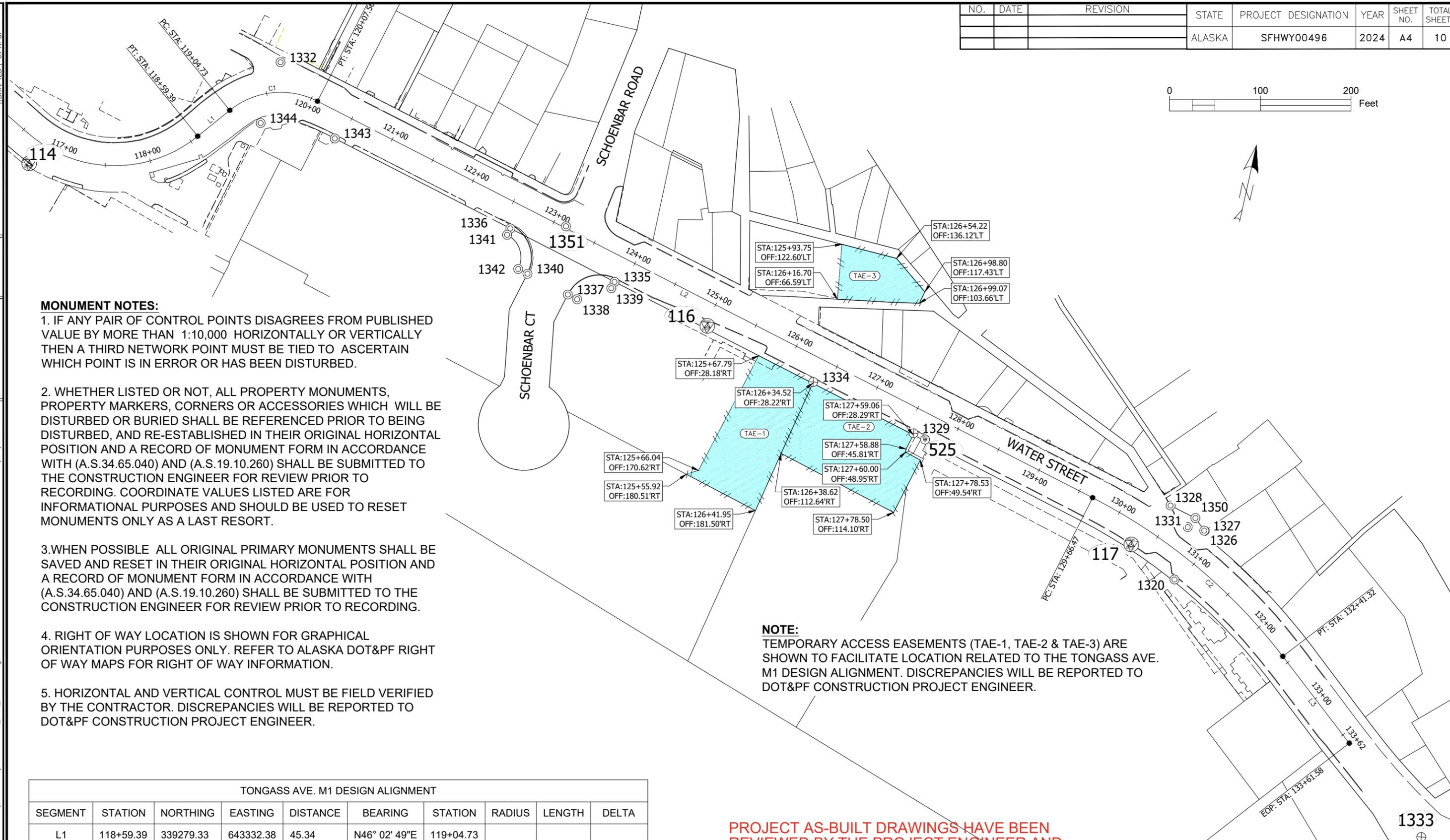
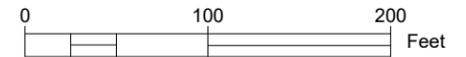
PE: *Emily Delaney*
 DATE: 02/13/2025



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 6860 Glacier Highway Juneau Ak. 99801
 (907) 465-1763

**KTN WATER STREET BRIDGE
 NBI #797 STRENGTHENING
 SURVEY CONTROL**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWHY00496	2024	A4	10



MONUMENT NOTES:

1. IF ANY PAIR OF CONTROL POINTS DISAGREES FROM PUBLISHED VALUE BY MORE THAN 1:10,000 HORIZONTALLY OR VERTICALLY THEN A THIRD NETWORK POINT MUST BE TIED TO ASCERTAIN WHICH POINT IS IN ERROR OR HAS BEEN DISTURBED.
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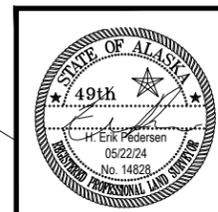
NOTE:
 TEMPORARY ACCESS EASEMENTS (TAE-1, TAE-2 & TAE-3) ARE SHOWN TO FACILITATE LOCATION RELATED TO THE TONGASS AVE. M1 DESIGN ALIGNMENT. DISCREPANCIES WILL BE REPORTED TO DOT&PF CONSTRUCTION PROJECT ENGINEER.

TONGASS AVE. M1 DESIGN ALIGNMENT									
SEGMENT	STATION	NORTHING	EASTING	DISTANCE	BEARING	STATION	RADIUS	LENGTH	DELTA
L1	118+59.39	339279.33	643332.38	45.34	N46° 02' 49"E	119+04.73			
C1	119+04.73	339310.80	643365.01			120+07.56	89.27	102.83	65°59'55"
L2	120+07.56	339329.27	643460.48	958.91	S67° 57' 15"E	129+66.47			
C2	129+66.47	338969.35	644349.28			132+41.32	618.11	274.84	25°28'35"
L3	132+41.32	338813.84	644573.16	120.26	S42° 28' 40"E	133+61.58			

COORDINATES LISTED ABOVE HOLD OVER DISTANCE AND BEARING

PROJECT AS-BUILT DRAWINGS HAVE BEEN REVIEWED BY THE PROJECT ENGINEER AND REPRESENT TO THE BEST OF MY KNOWLEDGE THE PROJECT AS CONSTRUCTED.

PE: *Emily Delaney*
 DATE: 02/13/2025



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 6860 Glacier Highway Juneau Ak. 99801
 (907) 465-1763

**KTN WATER STREET BRIDGE
 NBI #797 STRENGTHENING
 SURVEY CONTROL**

DRAWING LOCATION: G:\kin\SHWHY00496\SV\SOURCE DWGS\BASEMAP\SFHWHY00496_SCS_013024.dwg
 DATE: 5/22/2024 15:35
 LAYOUT: A4
 SCALE: XREFS
 DESIGNED: JFAPOI
 CHECKED: E PEDERSEN
 DRAFTER: JFAPOI

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SSHXY00496	2024	C1	10

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL QUANTITY
501.2001.0000	SPALL REPAIR	SF	115
503.2003.0000	INTERNAL SHEAR ANCHOR, LOW CARBON	EA	50
503.2004.0000	NEAR SURFACE MOUNTED, LOW CARBON	LS	ALL REQ'D
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQ'D
640.0004.0000	WORKER MEALS AND LODGING, OR PER DIEM	LS	ALL REQ'D
643.0002.0000	TRAFFIC MAINTENANCE	LS	ALL REQ'D
643.0023.0000	TRAFFIC PRICE ADJUSTMENT	CS	ALL REQ'D
644.0006.0000	VEHICLE - SKIFF	LS	ALL REQ'D
658.0001.0000	EROSION, SEDIMENT, AND POLLUTION CONTROL WITHOUT CGP COVERAGE	LS	ALL REQ'D
658.0002.0000	ESCP CHANGES BY DIRECTIVE	CS	ALL REQ'D

136.6 SF

THE FOLLOWING STANDARD PLANS APPLY TO THIS PROJECT:

C-03.30 TEMPORARY PEDESTRIAN ACCESSIBLE ROUTES (TPAR)

PROJECT AS-BUILT DRAWINGS HAVE BEEN REVIEWED BY THE PROJECT ENGINEER AND REPRESENT TO THE BEST OF MY KNOWLEDGE THE PROJECT AS CONSTRUCTED.

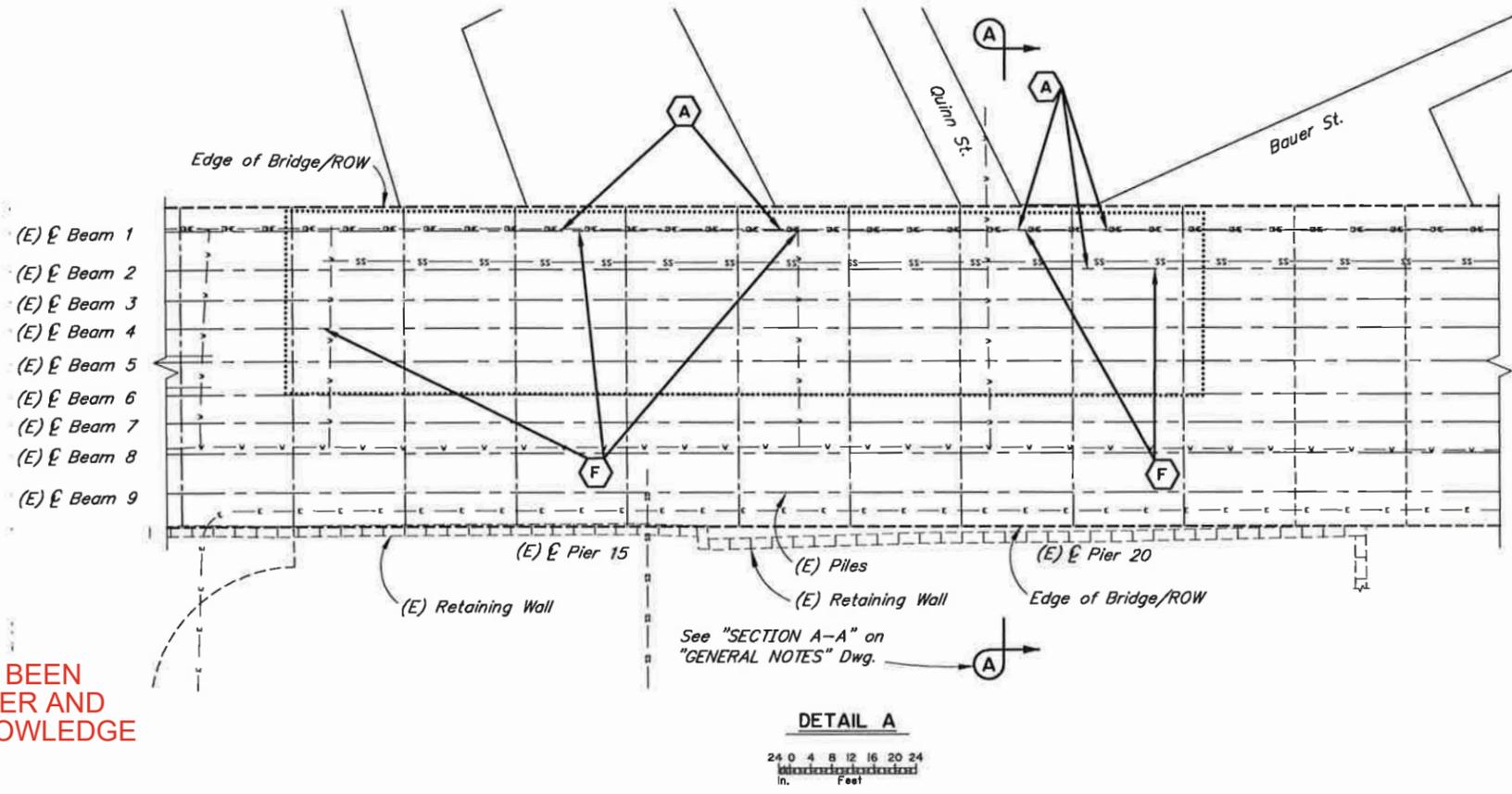
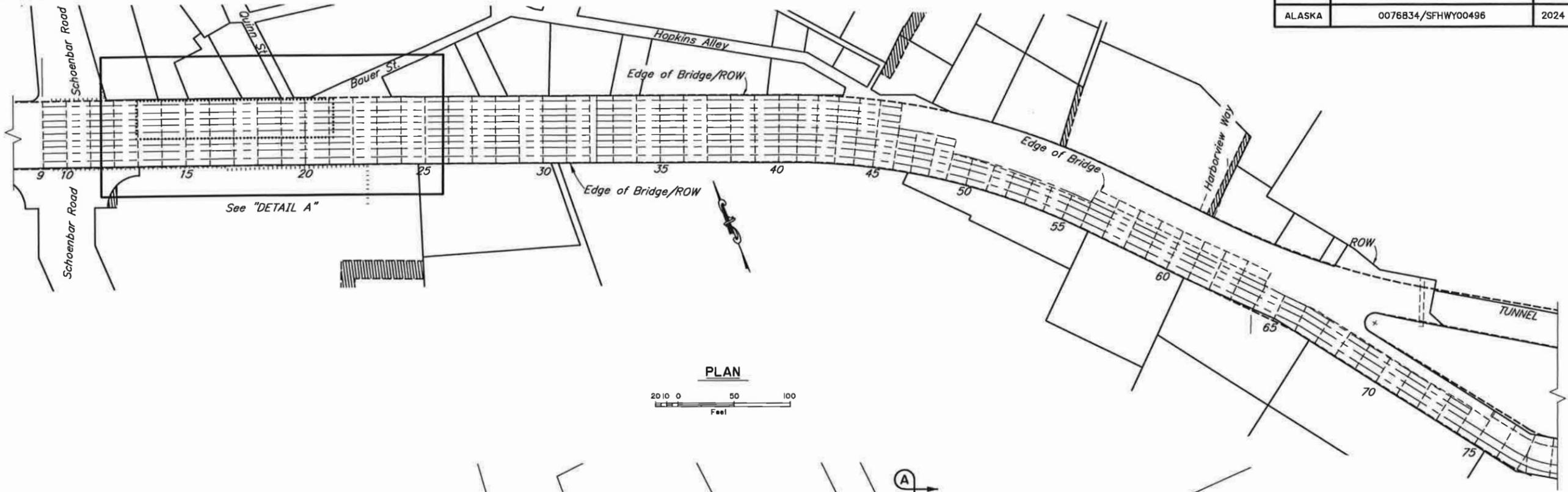
PE: *Emily Delaney*

DATE: 02/13/2025

ESTIMATE OF QUANTITIES &
GENERAL NOTES



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0076834/SFHWO0496	2024	N1	N4



BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	1
GENERAL NOTES	2
CONCRETE SPALL REPAIR	3
STRENGTHENING DETAILS	4

LEGEND	
	Install Internal Shear Anchors
	Flexural Strengthening
	Preliminary Construction Limits

REHABILITATION

PROJECT AS-BUILT DRAWINGS HAVE BEEN REVIEWED BY THE PROJECT ENGINEER AND REPRESENT TO THE BEST OF MY KNOWLEDGE THE PROJECT AS CONSTRUCTED.

PE: *Emily Delaney*

DATE: 02/13/2025

DESIGNED BY: <i>Jesse Escamilla III</i>	CHECKED: Benjamin D. Fatterhoff <i>Ben Fatterhoff</i>	LAYOUT BY: Jesse Escamilla III <i>Jesse Escamilla III</i>	CHECKED BY: Benjamin D. Fatterhoff <i>Ben Fatterhoff</i>
DRAWN BY: Uziel J. Perez	CHECKED: Jesse Escamilla III <i>Jesse Escamilla III</i>	SPECIFICATIONS BY: Jesse Escamilla III <i>Jesse Escamilla III</i>	P S & E COMPARED: Benjamin D. Fatterhoff <i>Ben Fatterhoff</i>
QUANTITIES BY: Jesse Escamilla III <i>Jesse Escamilla III</i>	CHECKED: Benjamin D. Fatterhoff <i>Ben Fatterhoff</i>	APPROVAL RECOMMENDED BY: Leslie K Dougherty <i>Leslie K Dougherty</i>	

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



WATER STREET VIADUCT
SOUTH TONGASS HIGHWAY
GENERAL LAYOUT

BRIDGE NO. 797
DWG. NO. 1

R:\oad\797\797 Rehab 2023-GEN LAYOUT Thu, Feb/29/24, 04:16pm

GENERAL NOTES

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

LIVE LOAD:..... HS-20

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

CORROSION-RESISTANT REINFORCING STEEL:..... ASTM A1035 CM, Grade 100, Fy = 100,000 psi.

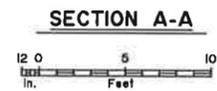
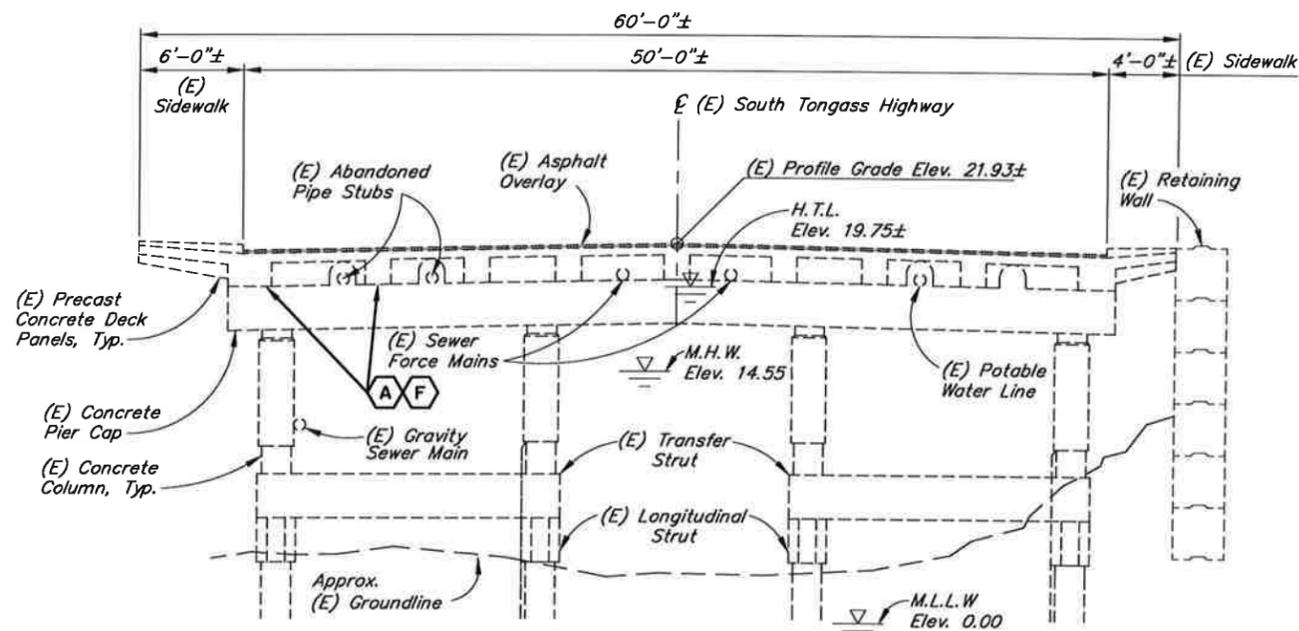
CONCRETE:..... Class A Concrete unless otherwise noted, f'c = 4,000 psi

Existing stations, elevations and dimensions are based on as-built plans and those plans may not show existing dimensions and conditions. Where dimensions of the proposed work depend on the existing bridge dimensions, field-verify the controlling dimension and adjust proposed dimensions of the work to fit existing conditions.

BRIDGE BASIS OF ESTIMATE						
ITEM NO.	ITEM	PAY UNIT	ESTIMATING UNIT	SUBST.	SUPERST.	TOTAL QUANTITY
501.2001.0000	Spall Repair	SF	SF	----	115	115
503.2002.0000	Near Surface Mounted, Low Carbon	LS	LF	----	252	252
503.2003.0000	Internal Shear Anchor, Low Carbon	EA	EA	----	50	50

136.6 SF

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



ABBREVIATIONS:

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

PROJECT AS-BUILT DRAWINGS HAVE BEEN REVIEWED BY THE PROJECT ENGINEER AND REPRESENT TO THE BEST OF MY KNOWLEDGE THE PROJECT AS CONSTRUCTED.

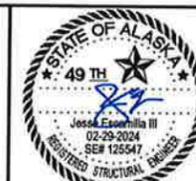
PE: *Emily Delaney*

DATE: 02/13/2025

DESIGNED BY: <i>Jesse Escamilla III</i>	CHECKED: Benjamin D. Fetterhoff <i>Ben Fetterhoff</i>
DRAWN BY: <i>Uziel J. Perez</i>	CHECKED: Jesse Escamilla III <i>Jesse Escamilla III</i>
QUANTITIES BY: <i>Jesse Escamilla III</i>	CHECKED: Benjamin D. Fetterhoff <i>Ben Fetterhoff</i>

REHABILITATION

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

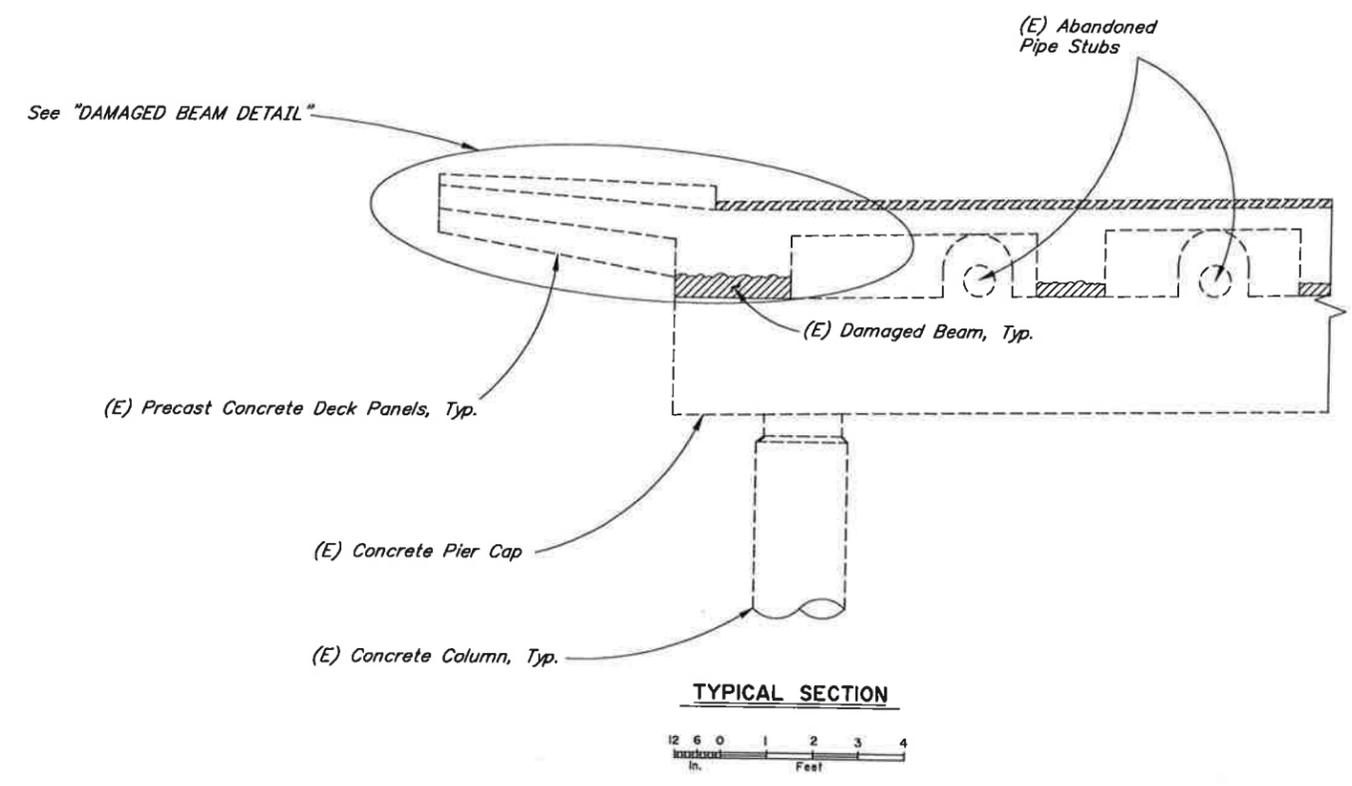


WATER STREET VIADUCT
SOUTH TONGASS HIGHWAY
GENERAL NOTES

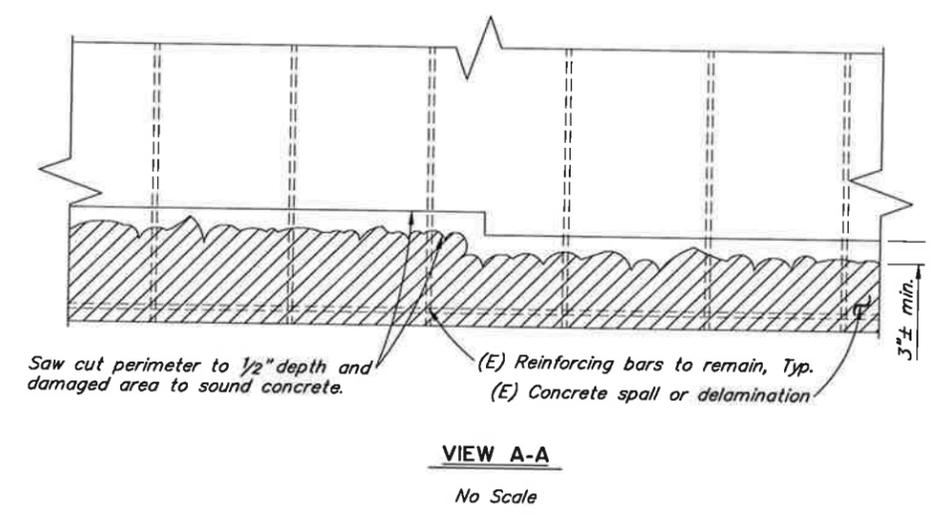
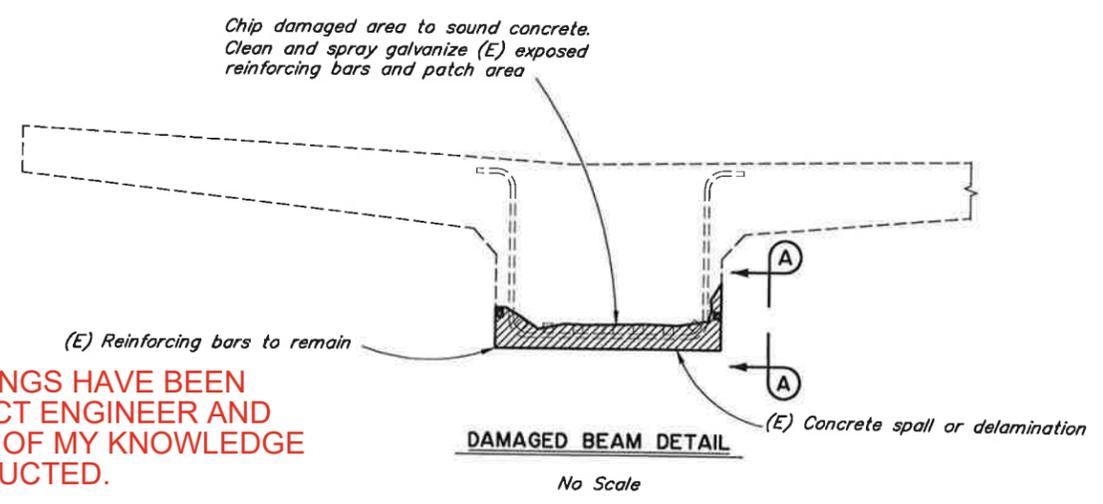


BRIDGE NO. 797
DWG. NO. 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0076834/SFHwy00496	2024	N3	N4



SPAN	BEAM	SF ESTIMATE	
13	5	20	
15	1	20	34.08 SF
17	1	10	38.74 SF
19	1	10	26.19 SF
19	4	15	
20	1	15	7.93 SF
20	2	5	15.92 SF
21	4	20	13.75 SF



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PE: *Emily Delaney*
DATE: 02/13/2025

NOTES:
(E) = Existing
--- = Existing
--- = Proposed

R:\cad\797\797 Rehab 2023-CONCRETE SPALL REPAIR Thu, Feb/29/24 04:19pm

DESIGNED BY: <i>Jesse Escamilla III</i>	CHECKED: Benjamin D. Fetterhoff <i>Ben Fetterhoff</i>
DRAWN BY: Uziel J. Perez	CHECKED: Jesse Escamilla III <i>Jesse Escamilla III</i>
QUANTITIES BY: <i>Jesse Escamilla III</i>	CHECKED: Benjamin D. Fetterhoff <i>Ben Fetterhoff</i>

REHABILITATION

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

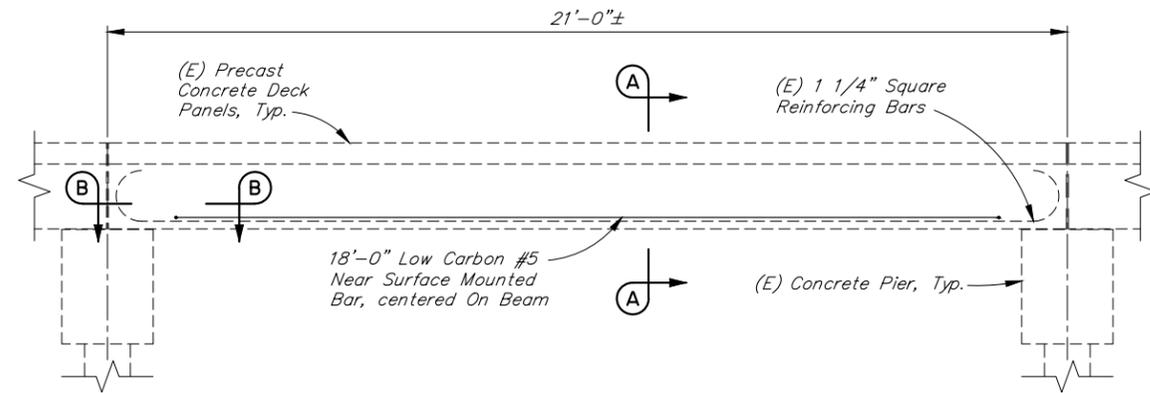


WATER STREET VIADUCT
SOUTH TONGASS HIGHWAY
CONCRETE SPALL REPAIR

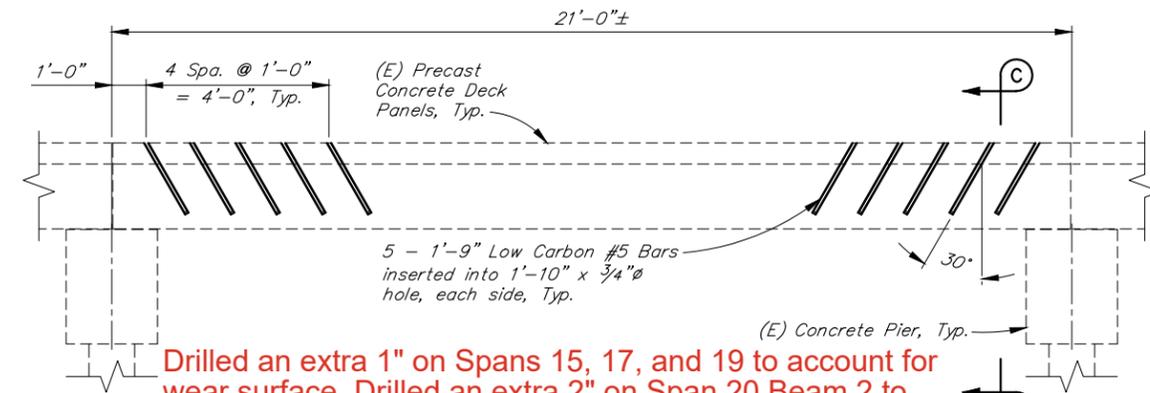

BRIDGE NO. 797
DWG. NO. 3

REVISIONS			
No.	Date	By	Description
1	6/25/24	RG	Updated Notes 2 and 3

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0076834/SFHWHY00496	2024	N4	N4



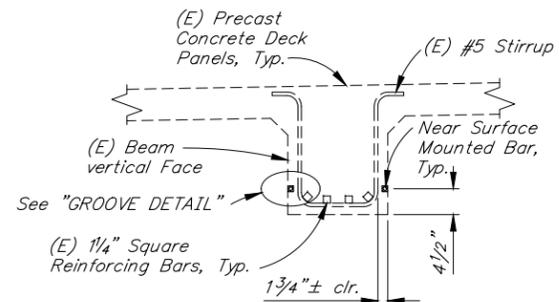
FLEXURAL STRENGTHENING ELEVATION



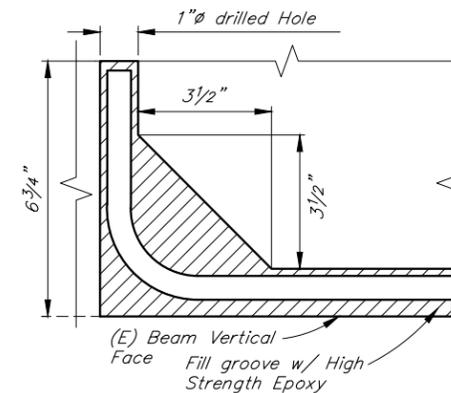
SHEAR STRENGTHENING ELEVATION



Drilled an extra 1" on Spans 15, 17, and 19 to account for wear surface. Drilled an extra 2" on Span 20 Beam 2 to account for additional wear surface.

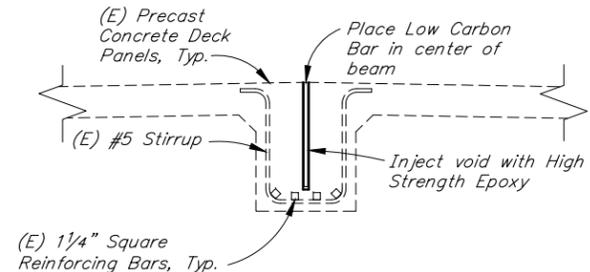


SECTION A-A



SECTION B-B

No Scale



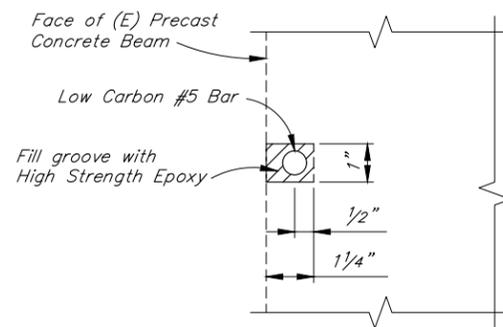
SECTION C-C



PROJECT AS-BUILT DRAWINGS HAVE BEEN REVIEWED BY THE PROJECT ENGINEER AND REPRESENT TO THE BEST OF MY KNOWLEDGE THE PROJECT AS CONSTRUCTED.

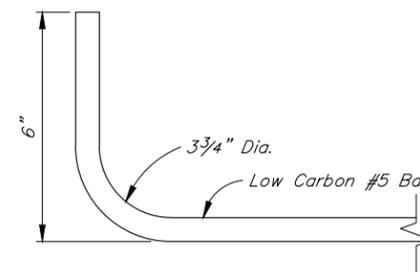
PE: *Emily Delaney*

DATE: 02/13/2025



GROOVE DETAIL

No Scale



BAR BEND DETAIL

No Scale

FLEXURAL STRENGTHENING INSTALLATION NOTES

- Furnish all Low Carbon bars with shop-bent hooks at one end only. Furnish all bars with the required in-place length plus 6 inches to account for potential conflicts.
- Drill holes for bar bend placement to verify if any conflicts exist prior to cutting Corrosion-Resistant Reinforcing Steel and saw cutting grooves.
- Shop bend one 90 degree hook and field cut each Corrosion-Resistant Reinforcing Steel to field verified dimension. Heat Corrosion-Resistant Reinforcing Steel and field bend remaining 90 degree hook to fit as specified.

BEAM REPAIR LOCATION SUMMARY

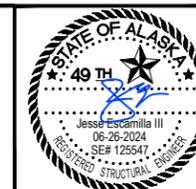
SPAN	BEAM	FLEXURE STRENGTHENING	SHEAR STRENGTHENING
13	5	Req'd	-
15	1	Req'd	Req'd
17	1	Req'd	Req'd
19	1	Req'd	Req'd
19	4	Req'd	-
20	1	Req'd	Req'd
20	2	-	Req'd
21	4	Req'd	-

R:\cad\797\797-Rehab_2023-Repair_Details_Wed, Jun/26/24 11:47am

DESIGNED BY: <i>Jesse Escamilla III</i>	CHECKED: Benjamin D. Fetterhoff <i>Ben Fetterhoff</i>
DRAWN BY: Uziel J. Perez	CHECKED: Jesse Escamilla III <i>Jesse Escamilla III</i>
QUANTITIES BY: <i>Jesse Escamilla III</i>	CHECKED: Benjamin D. Fetterhoff <i>Ben Fetterhoff</i>

REHABILITATION

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



WATER STREET VIADUCT
SOUTH TONGASS HIGHWAY
STRENGTHENING DETAILS



BRIDGE NO. 797
DWG. NO. 4

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SSHWHY00496	2024	Q1	10



ESCP NOTES:

1. CAPTURE ALL SEDIMENT, PAINT, AND DEBRIS GENERATED DURING BRIDGE REPAIRS BY IMPLEMENTING THE BEST MANAGEMENT PRACTICE (BMP) MEASURES SHOWN ON THIS EROSION SEDIMENT CONTROL PLAN (ESCP). ALL BMP MEASURES SHALL BE PROPERLY INSTALLED AND APPROVED BY THE ENGINEER BEFORE WORK BEGINS.
2. CONDUCT INSPECTIONS EVERY 7 DAYS TO ENSURE THE INTEGRITY AND EFFECTIVENESS OF THE BMP'S IN CAPTURING ALL CONSTRUCTION-RELATED MATERIALS. FOLLOW APPROVED MAINTENANCE PROCEDURES AT THE FREQUENCY REQUIRED IN SECTION 658 OF THE PROJECT SPECIFICATIONS.
3. THE BMP'S SHOWN ON THIS ESCP ASSUME THAT MECHANICAL DEMOLITION METHODS WILL BE USED BY THE CONTRACTOR. IF WATER JET/HYDRO, OR OTHER MEANS AND METHODS WILL BE USED, SUBMIT ALTERNATIVE BMP'S AS NECESSARY TO THE ENGINEER FOR APPROVAL. ANY CHANGES TO THIS ESCP SHALL BE REQUESTED IN ADVANCE AND APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION. ALLOW 14 DAYS FOR THE DEPARTMENT TO REVIEW PROPOSED CHANGES TO THE ESCP.

4. IMPLEMENT ONE OR MORE OF THE FOLLOWING STANDARD BMP'S FROM THE ALASKA SWPPP GUIDE TO PREVENT SEDIMENT FROM ENTERING CURB, SCUPPER, OR STORM INLETS. THE ALASKA STANDARD BMP'S ARE AVAILABLE ONLINE AT:

[HTTPS://DOT.ALASKA.GOV/STWDDDES/DESENVIRON/RESOURCES/STORMWATER.SHTML](https://dot.alaska.gov/stwddes/desenviron/resources/stormwater.shtml)

- A. BMP-25.00
- B. BMP-26.00
- C. BMP-27.00
- D. BMP-28.00
- E. BMP-29.00

5. FURNISH AND INSTALL A TEMPORARY CONTAINMENT LINER DIRECTLY BENEATH THE WORK AREA TO CAPTURE ALL SEDIMENT, DEBRIS, AND PAINT RESIDUES. ENSURE THE FOLLOWING REQUIREMENTS ARE MET:

- A. USE AN IMPERVIOUS MEMBRANE LINER THAT MEETS THE MINIMUM SPECIFICATIONS FOR SHORT-TERM STORAGE AS PER 18 AAC 75.370, TABLE D.
- B. THE LINER SHALL BE FREE OF HOLES.
- C. THE LINER MUST ENCOMPASS THE ENTIRE WORK AREA AND EXTEND BEYOND AS NECESSARY TO CAPTURE SPILLAGE OF ALL MATERIALS.
- D. REMOVE THE LINER FROM THE WORK AREA WHEN CONSTRUCTION ACTIVITIES ARE NOT IN PROGRESS.
- E. IF THE LINER IS PLACED DIRECTLY ON THE TIDELANDS, REMOVE IT IN ACCORDANCE TO THE TIDAL SCHEDULE TO ENSURE IT IS NOT SUBMERGED.
- F. IF THE LINER IS PLACED ON A FLOATING PLATFORM, ENSURE THAT STORM WATER DOES NOT ACCUMULATE WITHIN THE LINER WHEN THE FLOATING PLATFORM IS EXPOSED TO PRECIPITATION BY COVERING THE LINER WITH REINFORCED POLYETHYLENE SHEETING (6 MIL THICKNESS, MIN). ALL SEAMS ON THE COVER SHALL BE WELDED. USE A SANDBAG ANCHORING SYSTEM TO SECURE THE COVER.
- G. CONSTRUCT A BERM OR SIDEWALL AROUND THE FULL PERIMETER OF THE LINER BY WRAPPING THE PERIMETER OVER AN OBJECT SUCH AS A STRAW WADDLE OR OTHER APPROVED FEATURE. THE BERM OR SIDEWALL SHALL BE SECURED OR ANCHORED AND DESIGNED TO PREVENT SPILLAGE OF WASTE MATERIAL.

6. FURNISH AND INSTALL A DUST CONTAINMENT CURTAIN BELOW THE BRIDGE DECK TO CAPTURE DUST GENERATED DURING THE DEMOLITION. THE CURTAINS SHALL FULLY ENCAPSULATE THE IMMEDIATE WORK AREA AND SHALL MEET THE FOLLOWING REQUIREMENTS:

- A. HIGH DENSITY FABRIC SUCH AS POLYETHYLENE, VINYL, OR EQUIVALENT MATERIAL THAT IS DURABLE AND TEAR AND UV RESISTANT
- B. BOTTOM OF CURTAIN SHALL BE WEIGHTED OR TIED AS NEEDED TO COUNTERACT DISPLACEMENT DUE TO WIND.
- C. REMOVE THE CURTAIN WHEN CONSTRUCTION ACTIVITIES ARE NOT IN PROGRESS.

REFER TO APPENDIX B FOR ENVIRONMENTAL COMMITMENTS AND PERMIT INFORMATION.

LEGEND

- ROW — RIGHT OF WAY
- BELOW DECK WORK AREA (SEE NOTES 5 & 6 FOR REQUIRED BMP MEASURES)
- INLET PROTECTION AREA (SEE NOTE 4 FOR REQUIRED BMP MEASURES)

PROJECT AS-BUILT DRAWINGS HAVE BEEN REVIEWED BY THE PROJECT ENGINEER AND REPRESENT TO THE BEST OF MY KNOWLEDGE THE PROJECT AS CONSTRUCTED.

PE: *Emily Delaney*

DATE: 02/13/2025

ESCP