

ITEM NO.	ITEM	PRY UNIT ESTIMATING UNIT	QUSST.	SUPERST.	TOTAL
202(72)	Removal of Existing Bridge No. 506	LS			
202(73)	Unclassified Excavation	CY			
202(74)	Structural Fill	CY			
202(75)	Class A Concrete	LS			
501(1)	Precast Concrete Member (118'x54' Decked Sub-Frag)	EA			
501(2)	Reinforcing Steel	LS			
501(3)	Epoxy-Coated Reinforcing Steel	LS			
501(4)	Furnish Structural Steel Piles (2' Dia. Pipe)	LF			
501(5)	Furnish Structural Steel Piles (4' Dia. Pipe)	EA			
501(6)	Drive Structural Steel Piles (2' Dia. Pipe)	EA			
501(7)	Drive Structural Steel Piles (4' Dia. Pipe)	EA			
502(1)	Steel Bridge Raising	LF			
502(2)	Waterproofing Membrane	LS			
502(3)	Temporary Crossings	SY			
606(1)	Transition Road	EA			
611(1)	Signs, Class II	CY			
611(2)	Geotextile Erosion Control, Class I	SY			

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

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**PRELIMINARY PLAN**

① Approximate location of Bridge Number Plate

DESIGNED BY: <i>Leah Augspury</i>	CHECKED: _____	LAYOUT BY: <i>Leah Augspury</i>	CHECKED BY: _____
DRAWN BY: <i>Sam Saha</i>	CHECKED: _____	SPECIFICATIONS BY: <i>Leah Augspury</i>	CHECKED BY: _____
QUANTITIES BY: <i>Leah Augspury</i>	CHECKED: _____	APPROVAL RECOMMENDED BY: _____	CHECKED BY: _____

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION  
3-32 Channel Drive  
Juneau, Alaska 99801  
907-486-2875

TOK RIVER BRIDGE  
ALASKA HIGHWAY  
GENERAL LAYOUT

BRIDGE NO. 506  
DWG. NO. 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A2101/7831298000	2017	N2	

**GENERAL NOTES**

DESIGN: AASHTO LRFD Bridge Design Specifications, 2014 Edition, with latest interim specifications.  
 Seismic design per AASHTO Guide Specifications for LRFD Seismic Bridge Design, 2011 with latest interim revisions.

LI-V LOAD: HI-83

DEAD LOAD: Includes 50 psf for all wearing surfaces.

SEISMIC PARAMETERS: PGA = 0.14  
 S<sub>s</sub> = 0.32  
 S<sub>1</sub> = 0.18  
 Site Class = B  
 Liquefaction Potential = Moderate  
 AASHTO 7% probability of exceedance in 75 years.

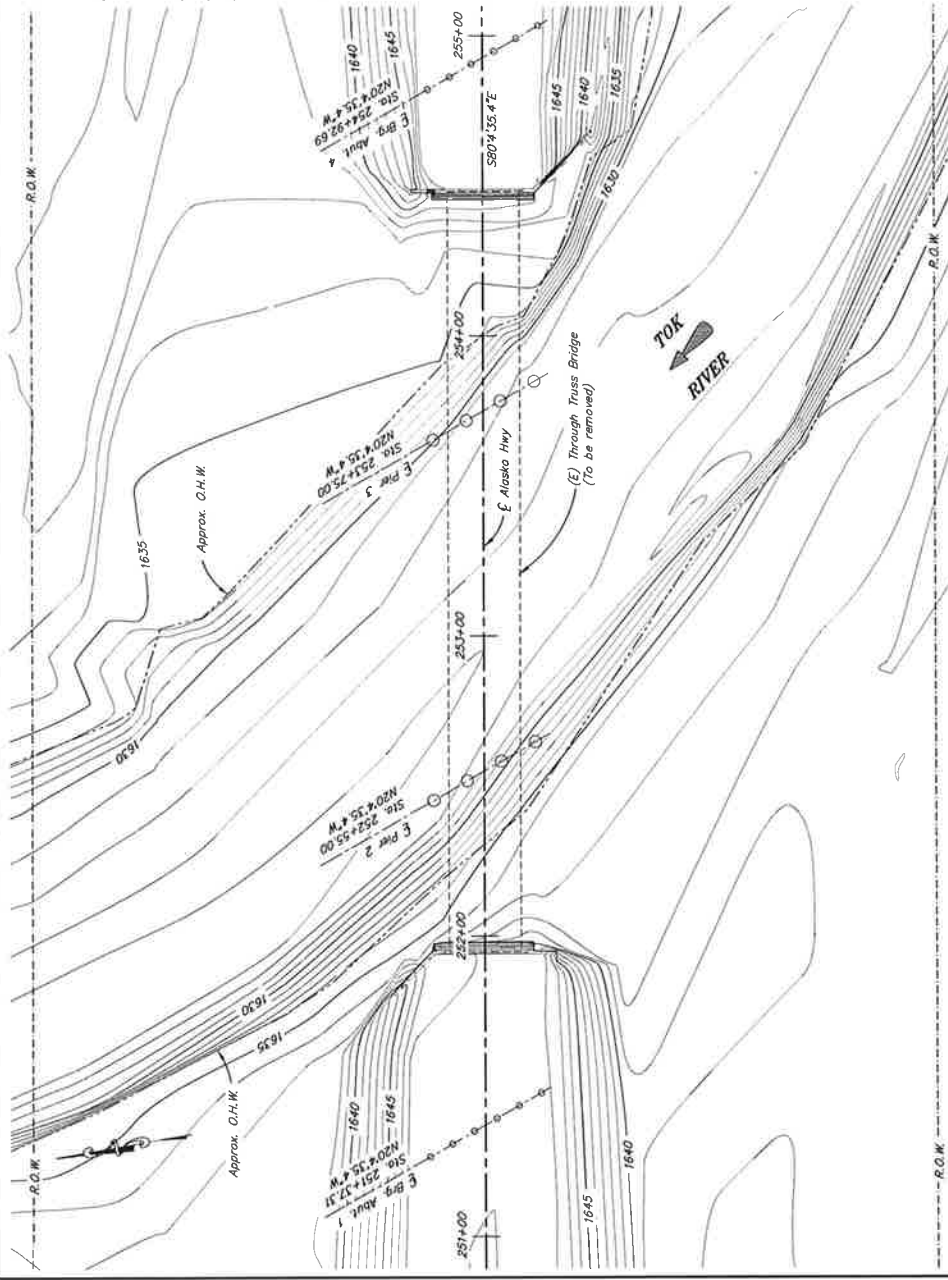
REINFORCEMENT: ASTM A706, Grade 60, F<sub>y</sub> = 60,000 psi  
 ASTM A970, Headed Bars, Class III  
 Space reinforcement early unless otherwise noted.

PRESSTRESSED CONCRETE: See "COTILDERS" Dwg.

CONCRETE: Class A Concrete unless otherwise noted, f<sub>c</sub> = 4000 psi  
 ASTM A708, Grade 36TS, F<sub>y</sub> = 36,000 psi  
 Galvanize structural steel in accordance with AASHTO M11 unless shown otherwise.

STRUCTURAL STEEL: Class A Concrete unless otherwise noted, f<sub>c</sub> = 4000 psi  
 ASTM A708, Grade 36TS, F<sub>y</sub> = 36,000 psi  
 Galvanize structural steel in accordance with AASHTO M11 unless shown otherwise.

STRUCTURAL STEEL PILING: Pipe Piles - API 5L X52 PSL2, F<sub>y</sub> = 52,000 psi.  
 Pipe tip reinforcing is required.



**SITE PLAN**



**PRELIMINARY PLAN**

LOCATION	PILE TYPE	MINIMUM PILE PENETRATION		DRIVING CRITERIA		DESIGN DATA	
		(ft)	(in)	ESTIMATED PILE RESISTANCE (k)	ESTIMATED TIP RESISTANCE (k)	SEISMIC FACTORED RESISTANCE (k)	RESISTANCE FACTOR, φ
Abutment 1	2'-0" x 1/2" Pipe						
Pier 2	4'-0" x 1/2" Pipe						
Pier 3	4'-0" x 1/2" Pipe						
Abutment 4	2'-0" x 1/2" Pipe						

**ABBREVIATIONS:**

- hwy. = highway
- ut. = utility
- lef = left
- LP = lamp
- LS = lamp sum
- left = left
- LI = lamp
- max. = maximum
- min. = minimum
- num. = number
- o.c. = on center
- O.H.W. = ordinary high water
- par. = parallel
- psf = pounds per square foot
- PVC = point of vertical curve
- PVI = point of vertical intersection
- PT = point of tangency
- RI = right of way
- right of way = right of way
- s.p. = space
- Sta. = station
- sq. ft. = square feet
- Sp. = space
- Typ. = typical
- w/ = with
- centerline = centerline
- emb. = embankment
- end = end
- of = of
- abutment = abutment
- approx. = approximate
- b.f. = back/dirt face
- bot. = bottom
- between = between
- Brg. = bearing
- cast in place = cast in place
- C.I.P. = cast in place
- clear. = clearance
- Cy = cubic yard
- diam. = diameter
- Dwg. = drawing
- exp. = expansion
- existing = existing
- Elev. = elevation
- e.l. = each face
- e.w. = each way
- face = face
- f.f. = front/air face

STATE OF ALASKA  
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 3132 Channel Drive  
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 CHECKED BY: *Sam Sells* ENGINEER  
 DRAWN BY: *Sam Sells* ENGINEER  
 CHECKED BY: *Lena Daugherty* ENGINEER  
 FOUNDATIONS REVIEWED BY: *Lena Daugherty* ENGINEER  
 QUANTITIES BY: *Jane Daugherty* ENGINEER

**TOK RIVER BRIDGE**  
 ALASKA HIGHWAY  
 SITE PLAN

