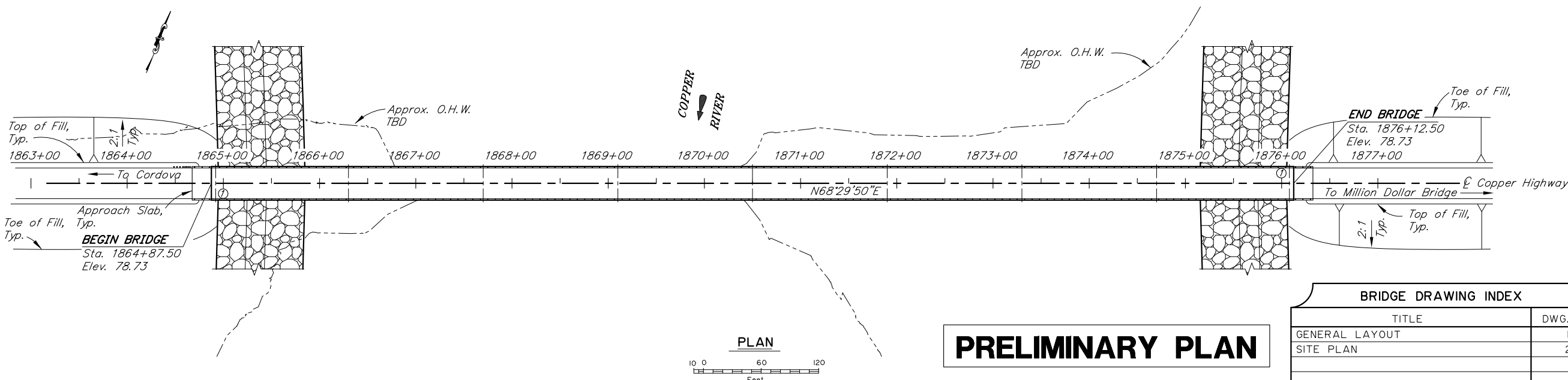
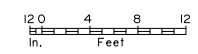
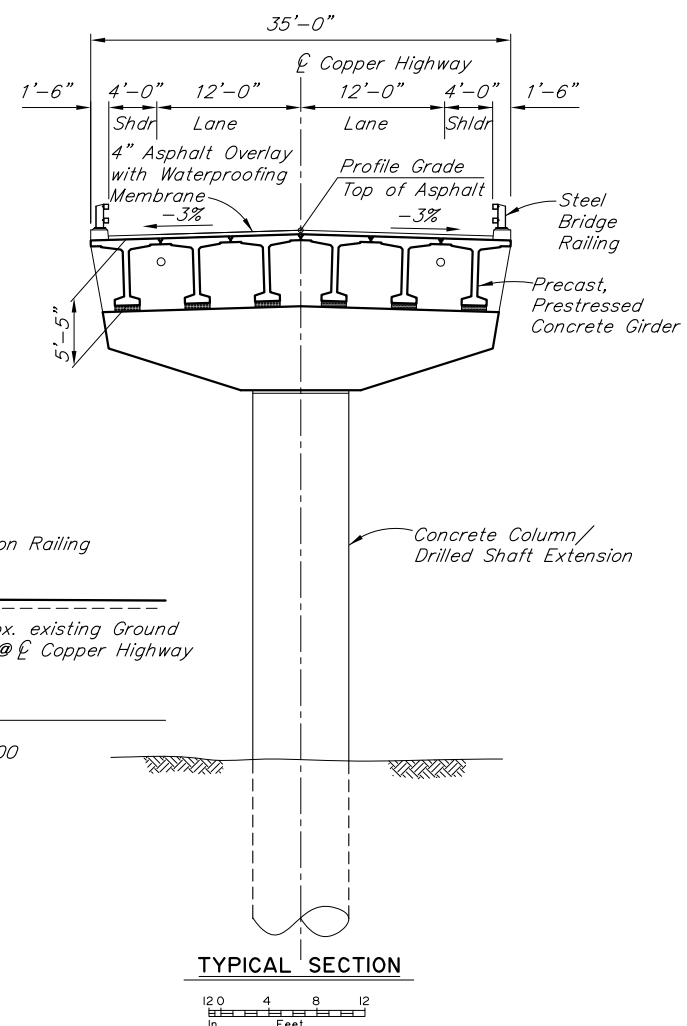
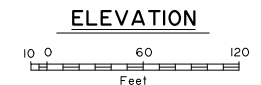
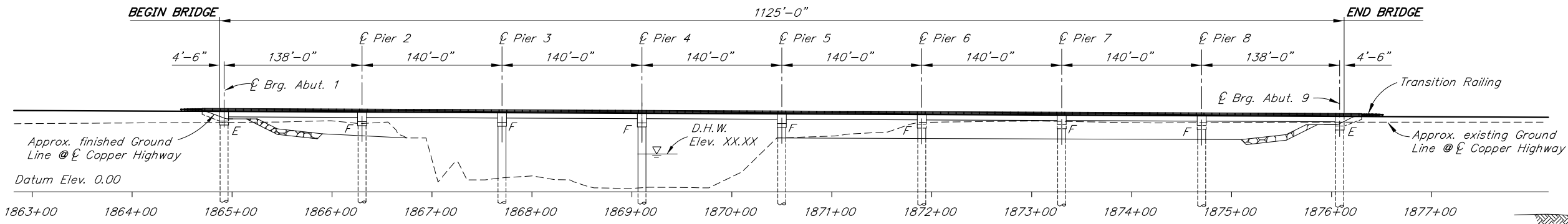
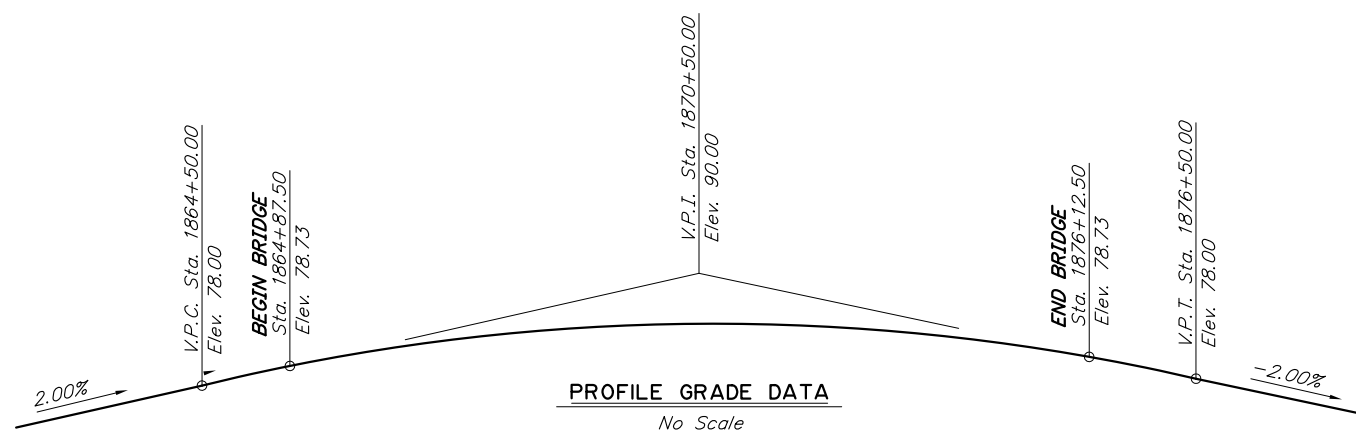


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA		2013		



PRELIMINARY PLAN

BRIDGE DRAWING INDEX	
TITLE	DWG. NO.
GENERAL LAYOUT	1
SITE PLAN	2

① Approximate location of Bridge Number Plate

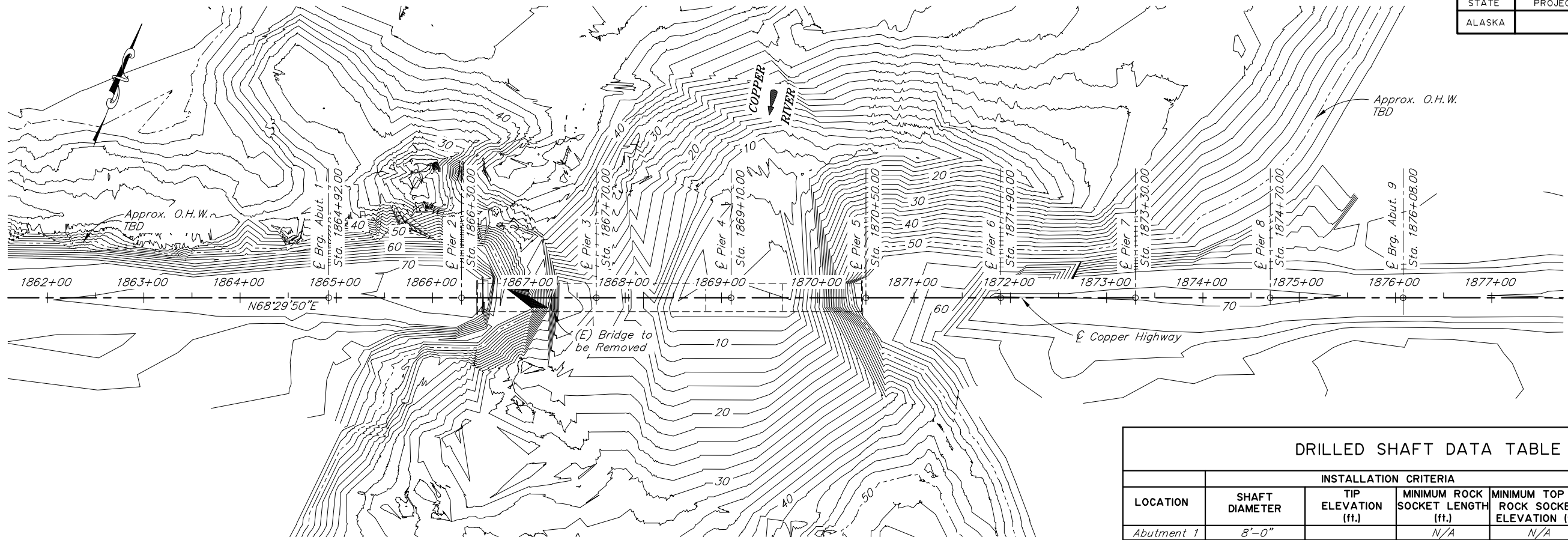
DESIGNED BY: Elmer Marx	CHECKED BY: Engineer	LAYOUT BY: Elmer Marx	CHECKED BY: Engineer
DRAWN BY: Sam Sollie	CHECKED BY: Elmer Marx	SPECIFICATIONS BY: Elmer Marx	P S & E COMPARED: Engineer
QUANTITIES BY: Elmer Marx	CHECKED BY: Engineer	APPROVAL RECOMMENDED BY: Rich Pratt	

STATE OF ALASKA
**DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES**
 BRIDGE SECTION

COPPER RIVER DELTA
 COPPER HIGHWAY
GENERAL LAYOUT



BRIDGE NO. 339
 DWG. NO. 1



SITE PLAN
10 0 60 120
Feet

LOCATION	INSTALLATION CRITERIA			DESIGN DATA		
	SHAFT DIAMETER	TIP ELEVATION (ft.)	MINIMUM ROCK SOCKET LENGTH (ft.)	MINIMUM TOP OF ROCK SOCKET ELEVATION (ft.)	STRENGTH FACTORED LOAD (K)	NOMINAL RESISTANCE (K)
Abutment 1	8'-0"		N/A	N/A		
Pier 2	8'-0"		N/A	N/A		
Pier 3	8'-0"		N/A	N/A		
Pier 4	8'-0"		N/A	N/A		
Pier 5	8'-0"		N/A	N/A		
Pier 6	8'-0"		N/A	N/A		
Pier 7	8'-0"		N/A	N/A		
Pier 8	8'-0"		N/A	N/A		
Abutment 9	8'-0"		N/A	N/A		

ABBREVIATIONS

- | | |
|----------------------------------|------------------------------|
| ℄ = Centerline | kip = thousand pounds |
| ℄ = Plate | ksf = kips per square foot |
| & = and | LBS = pounds |
| @ = at | LF = linear foot |
| ∅ = diameter | LS = lump sum |
| A/C = asphalt concrete | Lt. = left |
| Approx. = approximate | max. = maximum |
| Abut. = Abutment | min. = minimum |
| bot. = bottom | n.a. = not applicable |
| Br. = bridge | N/A = not applicable |
| btwn. = between | n.f. = near face |
| Brq. = Bearings | NIC = not in contract |
| cfs = cubic feet per second | No. = number |
| C.I.P. = cast in place | n.c. = not calculated |
| CJP = complete joint penetration | o.d. = outside diameter |
| Clr. = clear, clearance | O.H.W. = Ordinary High Water |
| CSL = Crosshole Sonic Logging | psf = pounds per square foot |
| CY = cubic yards | psi = pounds per square inch |
| D.H.W. = Design High Water | Req'd = required |
| dia. = diameter | R.O.W. = right of way |
| Dwg. = Drawing | Rt. = right |
| Elev. = Elevation | RT = Radiographic Testing |
| e.f. = each face | SF = square feet |
| E = Expansion Bearing | S.I.P. = stay in place |
| EA = each | spc. = space, spaces |
| F = Fixed Bearing | Sta. = station |
| f.f. = far face | Symm. = symmetric |
| ft. = feet | Typ. = typical |
| Hwy. = Highway | UT = ultrasonic testing |
| H.S. = high strength | Yr. = year |
| i.d. = inside diameter | w/ = with |
| Jt. = joint | |

BRIDGE BASIS OF ESTIMATE

ITEM NO.	ITEM	PAY UNIT	ESTIMATING UNIT	SUBST.	SUPERST.	TOTAL
202(13)	Removal of Existing Bridge No. 339	LS	LS			
205(1)	Excavation for Structures	CY	CY			
205(3)	Structural Fill	CY	CY			
501(1)	Class A Concrete	LS	CY			
501(6)	Class DS Concrete (8'-0"∅)	LF	LF			
501(7)	Precast Concrete Member (138' Bulb-Tee)	EA	EA			
503(1)	Reinforcing Steel	LS	LBS			
503(2)	Epoxy-Coated Reinforcing Steel	LS	LBS			
507(1)	Steel Bridge Railing	LF	LF			
508(1)	Waterproofing Membrane	LS	SY			
514(1)	Elastomeric Bearing Pad	EA	EA			
514(2)	PTFE Bearing Assembly	EA	EA			
514(3)	Modular Bridge Joint System	LF	LF			
515(1)	Drilled Shaft	LS	LS			
515(2)	Unclassified Shaft Excavation (8'-0"∅)	LF	LF			
515(3)	Shaft Casing (8'-0"∅)	LF	LF			
515(4)	Shaft Instrumentation and Data Collection	LS	LS			
606(12)	Guardrail / Bridge Rail Connection	EA	EA			

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

GENERAL NOTES

DESIGN:AASHTO LRFD Bridge Design Specifications, Sixth Edition, 2012, with latest interim specifications. Seismic design per AASHTO Guide Specifications for LRFD Seismic Bridge Design, 2011.

LIVE LOAD:.....HL-93

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

SEISMIC PARAMETERS:.....PGA = 0.60
S_s = 1.42
S₁ = 0.61
Site Class = E
Liquefaction Potential = High
AASHTO 7% probability of exceedance in 75 years.

REINFORCEMENT:.....ASTM A706, Grade 60, F_y = 60,000 psi
Headed bars - ASTM A970, Class HA.
Space reinforcement evenly unless otherwise noted.

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

CONCRETE:.....Class A Concrete, f'c = 4000 psi, unless otherwise noted.
Class DS Concrete for drilled shaft foundations, f'c = 4000 psi.

STRUCTURAL STEEL:.....ASTM A709 Grade 36T3, F_y = 36,000 psi, unless otherwise noted.
Galvanize all structural steel in accordance with AASHTO M111 unless shown otherwise.

DESIGNED BY: Elmer Marx	CHECKED: Engineer	HYDRAULICS BY: Engineer	CHECKED BY: Engineer
DRAWN BY: Sam Sollie	CHECKED: Elmer Marx	FOUNDATIONS REVIEWED BY: Engineer	
QUANTITIES BY: Elmer Marx	CHECKED: Engineer		

STATE OF ALASKA
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COPPER RIVER DELTA
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SITE PLAN