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# **Alaska Natural Gas Transportation System**

## **Alaska Segment — 48" Natural Gas Pipeline**

### **(Prudhoe Bay To Canadian Border)**

#### **ENVIRONMENTAL MASTER GUIDE**

##### **Level 1**

**Alignment Sheets 1 Thru 131 (Revision 3)**  
**Topographic Supplement 1A Thru 22B**

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1981

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**ALASKAN NORTHWEST NATURAL  
GAS TRANSPORTATION COMPANY**

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ALASKA SEGMENT OF ANGTS

# ENVIRONMENTAL MASTER GUIDE LEVEL I

PREPARED  
MARCH 1981

**ARLIS**  
Alaska Resources  
Library & Information Services  
Anchorage, Alaska



## PREFACE TO ENVIRONMENTAL MASTER GUIDE

The Environmental Master Guide (EMG) is a compilation of environmental information on the Alaska segment of Alaska Natural Gas Transportation System (ANGTS). It provides rapid access to information on sensitive areas and time periods which result in design limitations and construction restraints.

The EMG is based on existing literature and field studies as well as NWA sponsored research and investigations. These data are evaluated and integrated into the EMG by NWA/Fluor Environmental Affairs. The EMG is a

living document; it will be refined with new environmental data and project information. Agency interaction has been instrumental in the development of the EMG.

The EMG is composed into three "Levels." Level I consists of a set of alignment sheets and a set of topographic sheets. Level II consists of data sheets with detailed information about the entries on Level I. Level III is a bibliography of the information used to develop the EMG.

## **LEVEL I**

### **ALIGNMENT SHEETS**

Level I alignment sheets graphically depict environmentally sensitive areas such as fish streams and nest areas, as well as selected project features such as compressor stations that may impact these areas. Each alignment sheet also has a calendar of sensitive periods for the areas covered. A coding system identifies the entries and each entry is correlated with a Level II data sheet.

### **TOPOGRAPHIC SUPPLEMENT**

The topographic sheets depict an overview of wildlife habitats and movement zones including coverage beyond the alignment sheet photobands. The topographic sheets differ from the alignment sheets in that they do not contain fisheries and stream information, but they do present species and range information which is better displayed at a large scale. Also depicted on the topographic sheets are selected project features such as potential material sites.

(Figures 1 and 2 are samples of the alignment and topographic sheets with instructions for their use.)

## **LEVEL II**

Level II data sheets contain expanded information on Level I entries.

It is intended that a Level II data sheet will synthesize information necessary for daily project decisions affecting a particular environmental resource. Level II Biological information includes: species and habitat data, protection strategies, specific restrictions, source document citations, and other information pertinent to the site.

## **LEVEL III**

Level III is a discrete set of documents used to develop all levels of the Environmental Master Guide and cited in Level II. The documents are comprised of reports, maps and drawings generated from the gasline project, published literature, and unpublished agency files and sources.



## TERMS AND DEFINITIONS

AS - Archaeological Sites: are cultural resources that include prehistoric or historic archaeological remains, standing historic structures, and sites considered culturally important to the regional inhabitants. Each is mapped in Level I with "floating boundaries," indicating the general area of concern but masking specific location. The use of floating boundaries aids in protecting these sensitive sites from unauthorized disturbance. State identification numbers appear with archaeological site codes on alignment sheets only.

B - Bison habitats: depicted are areas of bison use.\*

BB - Black bear habitats: are areas of intensive year round use by black bear.\*

BE - Bald Eagle habitats: are areas observed or cited in literature to be nesting sites for Bald Eagles. Specific raptor nest locations are masked by "floating boundaries" to conceal their exact location. Identification numbers per David Roseneau appear with site codes on alignment sheets only.

BM - Bison movement zones: are areas traversed by bison during traditional seasonal migrations.\*

C - Caribou habitats: are areas of seasonal concentrations of caribou.\*

CC - Caribou calving habitats: are areas utilized by caribou for calving.\*

CM - Caribou movement zones: are areas traversed by caribou during traditional seasonal migrations.\*

DS - Dall sheep habitats: are areas of seasonal concentrations of Dall sheep.

DSL - Dall sheep lambing habitats: are areas observed or cited in the literature as being used by Dall sheep for lambing. These habitats are areas of steep, mountainous terrain.

DSM - Dall sheep movement zones: are areas traditionally traversed by Dall sheep.\*

EH - Endangered species habitats: are areas observed or cited in the literature to have been nest sites for peregrine falcons. Nest sites are further classified into "likely" or "not likely" to be reoccupied. Specific nest locations are masked by "floating boundaries" to conceal their exact location. Identification numbers per David Roseneau appear with site codes on alignment sheets only.

EMS - Exploration material sites: are proposed areas to be investigated and possibly developed as a borrow pit for gravel, riprap, shot rock and other earth materials to be used for workpad, access road, backfill and other civil construction.\*

FH - Fish habitats: are waterbodies used by fish populations; use may include overwintering, spawning, rearing and migration. (Alignment sheets only.)

GB - Grizzly bear habitats: are areas of year round concentrations of grizzly bears.\*

GE - Golden Eagle habitats: are areas observed or cited in literature to be nesting sites for Golden Eagles. Specific raptor nest locations are masked by "floating boundaries" to conceal their exact location. Identification numbers per David Roseneau appear with site codes on alignment sheets only.

GGO - Great Gray Owl habitats: are areas observed or cited in literature to be nesting sites for Great Gray Owls. Specific raptor nest locations are masked by "floating boundaries" to conceal their exact location.\*

GHO - Great Horned Owl habitats: are areas observed or cited in literature to be nesting sites for Great Horned Owls. Specific raptor nest locations are masked by "floating boundaries" to conceal their exact location.\*

GOS - Goshawk habitats: are areas observed or cited in literature to be nesting sites for Goshawks. Specific raptor nest locations are masked by "floating boundaries" to conceal their exact location.\*

GYR - Gyr Falcon habitats: are areas observed or cited in literature to be nesting sites for Gyr Falcon. Specific raptor nest locations are masked by "floating boundaries" to conceal their exact location. Identification numbers per David Roseneau appear with site codes on alignment sheets only.

M - Moose habitats: are areas of seasonal concentrations of moose.\*

MC - Moose calving habitats: are areas utilized by moose for calving.\*

ML - Mineral licks: are areas of natural mineral spring or mineral deposits at the ground surface and used by mammals as a mineral source.

MM - Moose movement zones: are areas traditionally traversed by moose.\*

MP - Mile Posts along the pipeline route are displayed every mile on the alignment sheets and every five miles on the topographic sheets and are sequential from Prudhoe Bay to the Canadian Border.

OS - Osprey habitats: are areas observed or cited in literature to be nesting sites for Osprey. Specific raptor nest locations are masked by "floating boundaries" to conceal their exact location. Identification numbers per David Roseneau appear with site codes on alignment sheets only.

RLH - Rough Legged Hawk habitats: are areas observed or cited in literature to be nesting sites for Rough Legged Hawks. Specific raptor nest locations are masked by "floating boundaries" to conceal their exact location. Identification numbers per David Roseneau appear with site codes on alignment sheets only.

RTH - Red Tailed Hawk habitats: are areas observed or cited in literature to be nesting sites for Red Tailed Hawks. Specific raptor nest locations are masked by "floating boundaries" to conceal their exact location.\*

RX - River and floodplain crossings: designate rivers or floodplains traversed by the NWA alignment. If the crossing is fish habitat the code will be followed by FH. (Alignment sheets only.)

SC - Sandhill crane habitats: are areas of sandhill crane concentration for breeding, nesting, molting, staging and feeding.

SCM - Sandhill crane migration: and resting areas are seasonal migration routes and resting areas used by sandhill cranes. Resting areas have been designated "sensitive." Arrows show migration routes.\*

SWD - Solid waste disposal sites: are proposed areas used to dispose of residue from incinerators, nonrecoverable scrap materials and other inert wastes.\*

SY - Storage yards: are proposed areas used for storage of pipeline materials and equipment.\*

WB - Waterbird habitats: are areas of waterbird concentration for breeding, nesting, molting, staging and feeding.

WBM - Waterbird migration: and resting areas are seasonal migration routes and resting areas used by waterbirds. (Resting areas have been designated "sensitive.") Arrows show migration routes.\*

\* topographic sheets only  
(alignment sheets only)

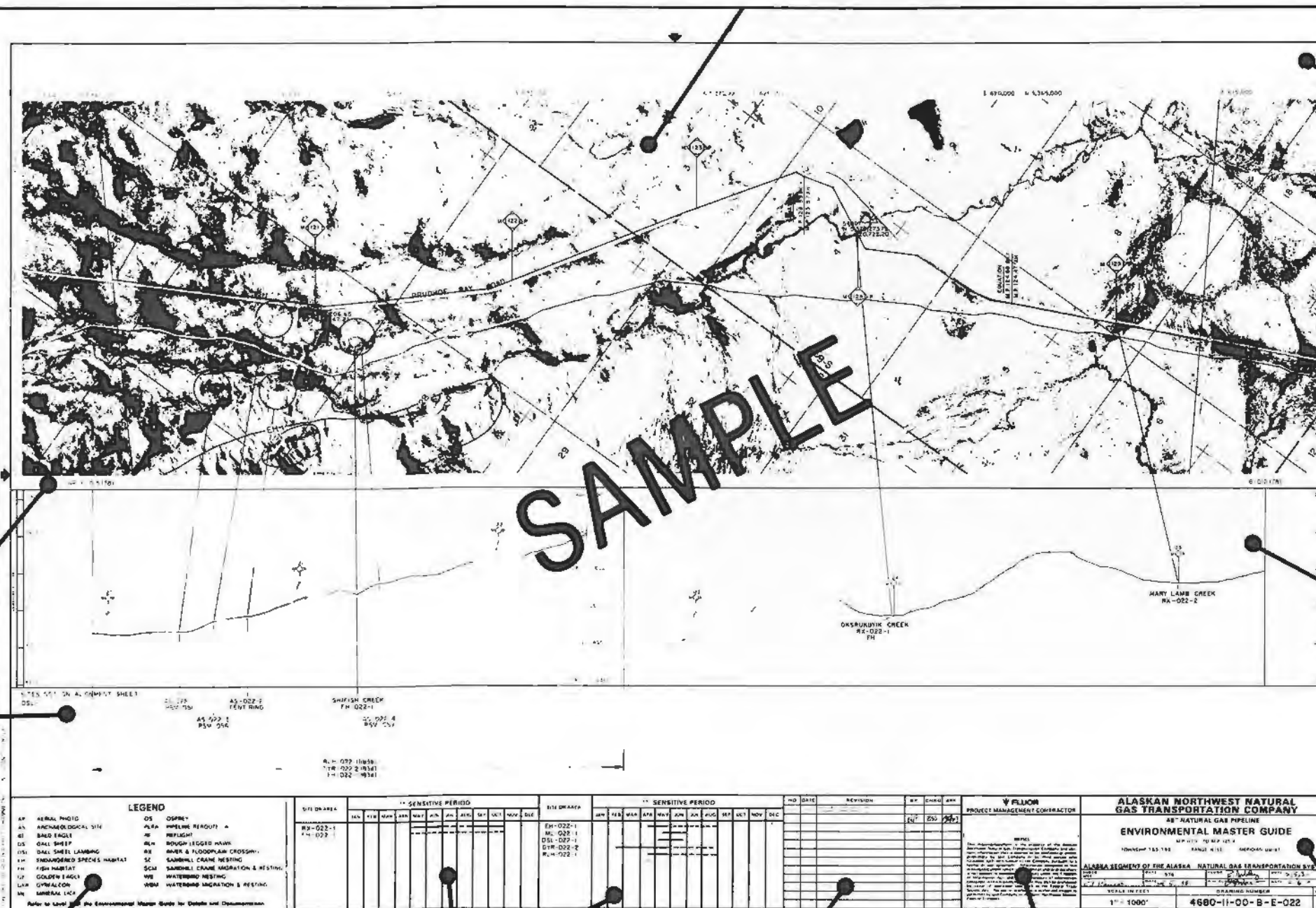


## FACILITIES

- A. Camps depicted represent proposed pipeline construction camps, and are called out on the photoband. Those that are off the photomosaic on the alignment sheets appear under "sites not on the alignment sheet."
- B. Compressor stations are facilities for compressing and chilling incoming gas and appear in the photomosaic. Future Compressor station locations appear in profile data box in the general vicinity of the site.
- C. Metering stations are facilities for measuring quantities of gas and appear on photomosaic.

**Photo Mosaic:** The photo mosaic is a composite of aerial photographs on which various data have been graphically indicated. The photo band encompasses an area 2 miles wide and 6 miles long. Sites or habitats confined to concise locations have entry codes numbered sequentially on each alignment sheet. For example: RX-022-1FH (Oksruyk Creek) defines this as a river crossing with fish habitat on alignment sheet #022. Mammal and waterbird habitats which cannot be confined to specific areas have entry codes numbered sequentially from north to south along the pipeline route. For example: WBM-2 defines the waterbird migration and nesting area as the second such habitat encountered by the pipeline alignment.

**FIGURE 1  
LEVEL I ALIGNMENT SHEET**



**Aerial Photo Number:** This box shows the aerial photos which compose the alignment sheet. For example: AP 6-015(78) means aerial photo of flight number 6; 015 is the photo number for that flight. (78) is the year it was flown. APRF signifies it is a reflight of the aerial photo; PLRA signifies a reflight for pipeline reroute "A".

**Lower Data Box:** Data from Level II on fish habitat, raptor habitat, mammal habitat, waterbird nesting and archaeological sites which are either "below" the pipeline or totally off the photo mosaic appear in this box.

**Upper Data Box:** Data from Level II on fish habitat, raptor habitat, mammal habitat, waterbird nesting and archaeological sites which are either "above" the pipeline or totally off of the photo mosaic appear in this box.

**Scale Adaptation:** Used for accurately computing the scale on reduced maps. The scale on the 11" x 17" Level I alignment sheets is 1" = 2375'.

**Profile Data Box:** This box portrays the topographic profile of the pipeline alignment and associated mileposts. Data intersecting the pipeline are depicted on the photo band and connected by lines to specific pipeline profile locations. Also included in this box are unique/sensitive vegetation areas and areas having high wildlife habitat value.

**Legend:** An explanatory list of the symbols used to note data entries.

**Sensitive Period Box:** A representation by calendar chart of environmentally sensitive (---) and critical (—) times which may limit access and other activities. "X" denotes actual times will be subject to field determination.

**Revision Block:** Shows each revision by number, the date it was made, and the purpose of the revision.

**Confidentiality Box:** Notice of ownership and confidentiality of the information contained on these sheets.

**Title And Drawing Number Block:** This block gives the scale, drawing number, revision number, milepost range covered, township, range, and meridian.



**Photo Mosaic:** The photo mosaic is a composite of USGC 1:63360 maps encompassing an area approximately 36 miles long by 10 miles wide and on the reductions approximately 20 miles long by 10 miles wide. Township, range and section numbers appear on the photo mosaic, and mileposts are given every five miles.

Sites or habitats confined to concise locations have entry codes numbered sequentially per the alignment sheets. For example: AS-022-3 defines the third archaeologically sensitive site on alignment sheet #022.

Mammal and waterbird habitats which cannot be confined to specific areas have entry codes numbered sequentially from north to south along the pipeline route. For example: WBM-2 defines the waterbird migration and nesting area as the second such habitat encountered by the pipeline alignment.

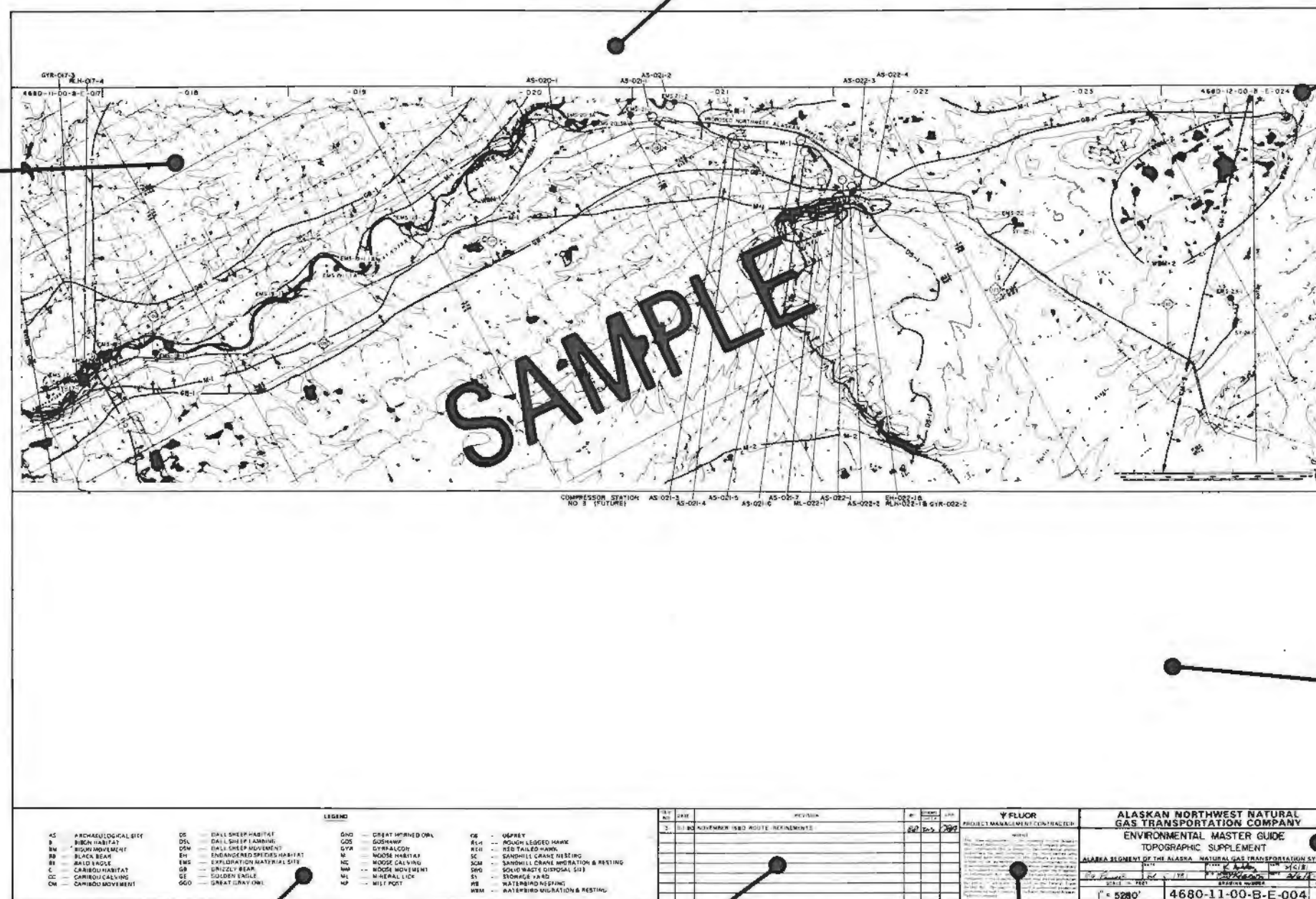
**Upper Data Box:** This block is for the call-out of archaeological sites, mineral licks, solid waste disposal sites, and raptor habitats which are either "above" the pipeline or totally off the photo mosaic.

**FIGURE 2**  
**LEVEL 1 TOPOGRAPHIC SHEET**

**Alignment Sheet Number Box:** In this block the environmental master guide alignment sheet number is shown giving the correlation between the alignment sheet drawings and the topographic supplement drawings.

**Scale:** This set of drawings was generated from USGS 1:63360 maps in which 1" = 1 mile. A scale is shown for accurately computing distances on reduced maps.

**Lower Data Box:** This block is used for the call-out of archaeological sites, mineral licks, raptor habitats, proposed compressor stations, and solid waste disposal sites which are either "below" the pipeline or totally off the photo mosaic.



**Legend:** An explanatory list of the symbols used to note data entries.

**Revision Block:** Shows each revision by number, the date it was made, and the purpose of the revision.

**Confidentiality Box:** Notice of ownership and confidentiality of the information contained on these sheets.

**Title And Drawing Number Block:** This block gives title of the drawing, drawing number, and revision number.











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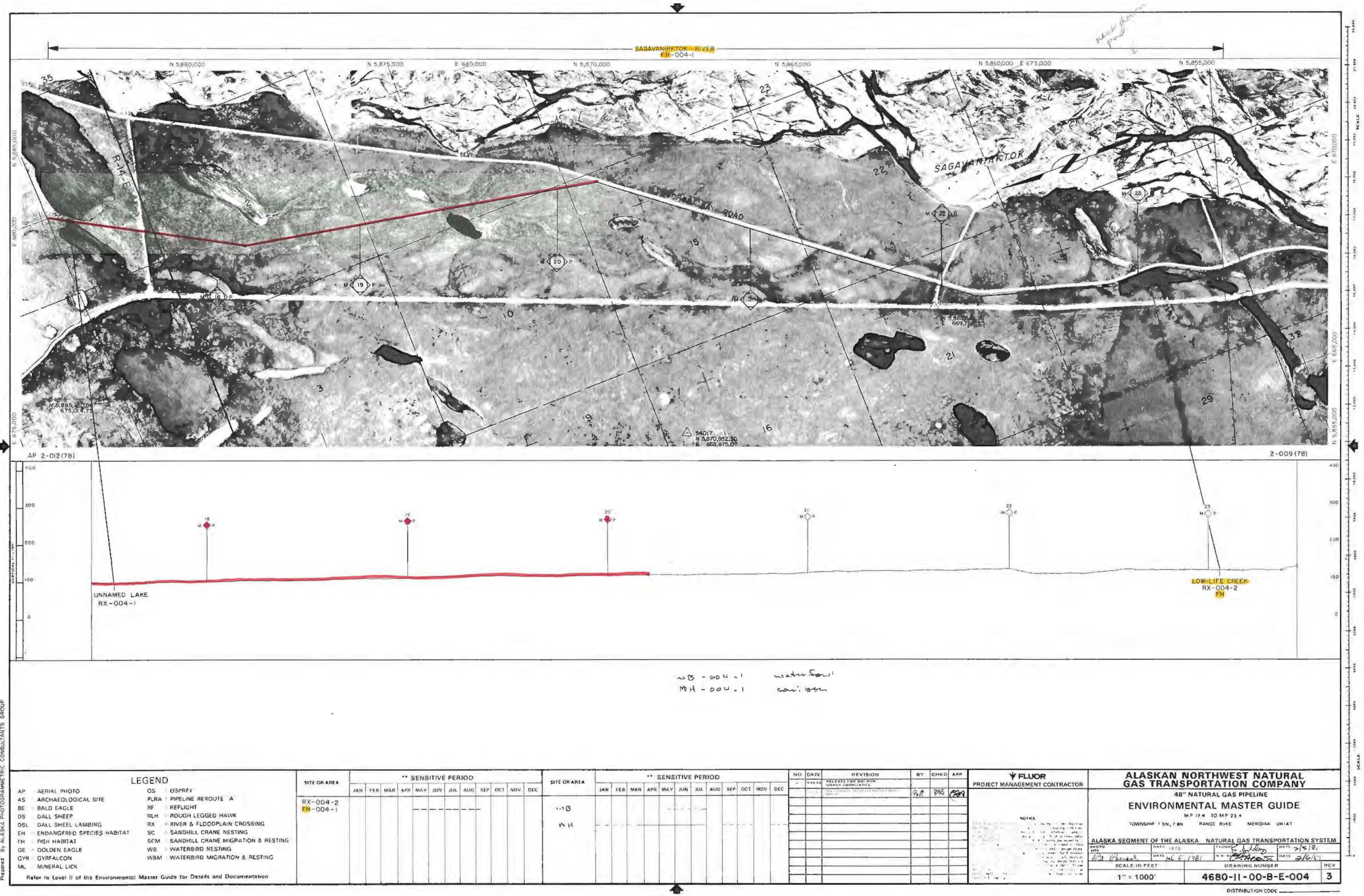


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MR-003-1 Car "

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Records by Alaska Photogrammetric Consultants Group



LEGEND

- |                               |  |
|-------------------------------|--|
| AP AERIAL PHOTO               | OS OSPREY                              |
| AS ARCHAEOLOGICAL SITE        | PLRA PIPELINE REROUTE A                |
| BE BALD EAGLE                 | RF REFLIGHT                            |
| DS DALL SHEEP                 | RLH ROUGH LEGGED HAWK                  |
| DSL DALL SHEEP LAMBING        | RK RIVER & FLOODPLAIN CROSSING         |
| EH ENDANGERED SPECIES HABITAT | SC SANDHILL CRANE NESTING              |
| FH FISH HABITAT               | SCM SANDHILL CRANE MIGRATION & RESTING |
| GE GOLDEN EAGLE               | WB WATERBIRD NESTING                   |
| GYR GYRFALCON                 | WBM WATERBIRD MIGRATION & RESTING      |
| ML MINERAL LICK               |  |

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-004-2												
EH-004-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WB												
EH												

REV	DATE	REVISION	BY	CHKD	APP
1		RELEASE FOR BUDGET GRANT COMPLIANCE			
2		NO FLOODING INFLUENCE ON PIPELINE			

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b>			
48" NATURAL GAS PIPELINE			
<b>ENVIRONMENTAL MASTER GUIDE</b>			
MP 17.4 TO MP 23.4			
TOWNSHIP 10N, T8N RANGE 14E MERIDIAN 121W			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	1978	SCALE	DATE
DATE	1981	SCALE	DATE
SCALE IN FEET		DRAWING NUMBER	
1" = 1000'		4680-11-00-B-E-004	
		3	

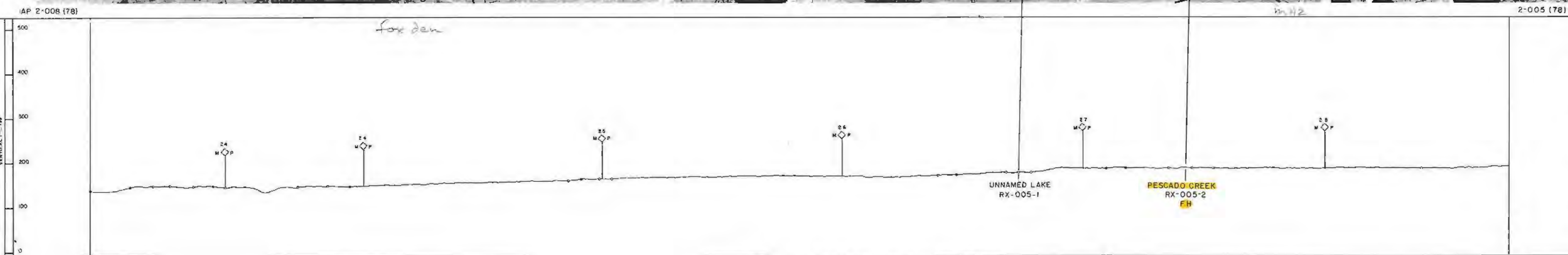
Refer to Level II of the Environmental Master Guide for Details and Documentation

DISTRIBUTION CODE



EH-005-1 (225)  
EH-005-2 (224)

AS-005-  
SAG-DIC



NH-2 gr 22ly over. sps fall  
 NH-3 more - gr

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															** SENSITIVE PERIOD												** SENSITIVE PERIOD																											
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AP = AERIAL PHOTO															OS = OSPREY																																							
AS = ARCHAEOLOGICAL SITE															PLRA = PIPELINE REROUTE "A"																																							
BE = BALD EAGLE															RF = REFLIGHT																																							
DS = DALL SHEEP															RLW = ROUGH-LEGGED HAWK																																							
DSL = DALL SHEEP LAMBING															RX = RIVER & FLOODPLAIN CROSSING																																							
EH = ENDANGERED SPECIES HABITAT															SC = SANDHILL CRANE NESTING																																							
FM = FISH HABITAT															SCM = SANDHILL CRANE MIGRATION & RESTING																																							
GE = GOLDEN EAGLE															WB = WATERBIRD NESTING																																							
GYR = GYRFALCON															WBM = WATERBIRD MIGRATION & RESTING																																							
ML = MINERAL LICK																																																						
Refer to Level II of the Environmental Master Guide for Details and Documentation.																																																						

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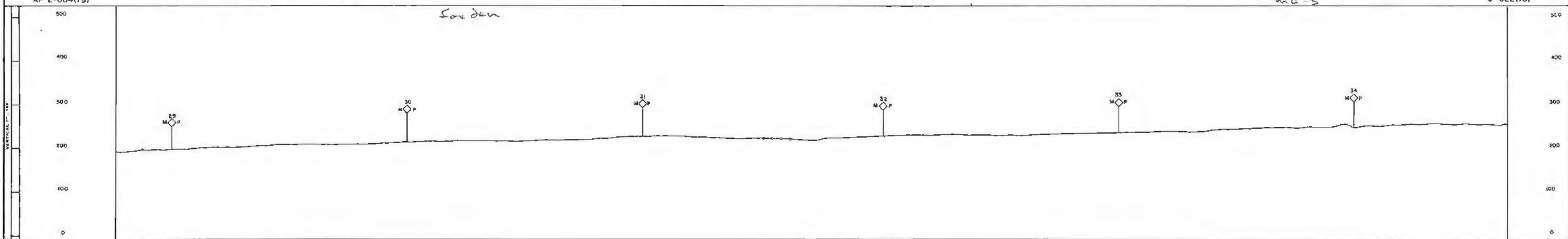
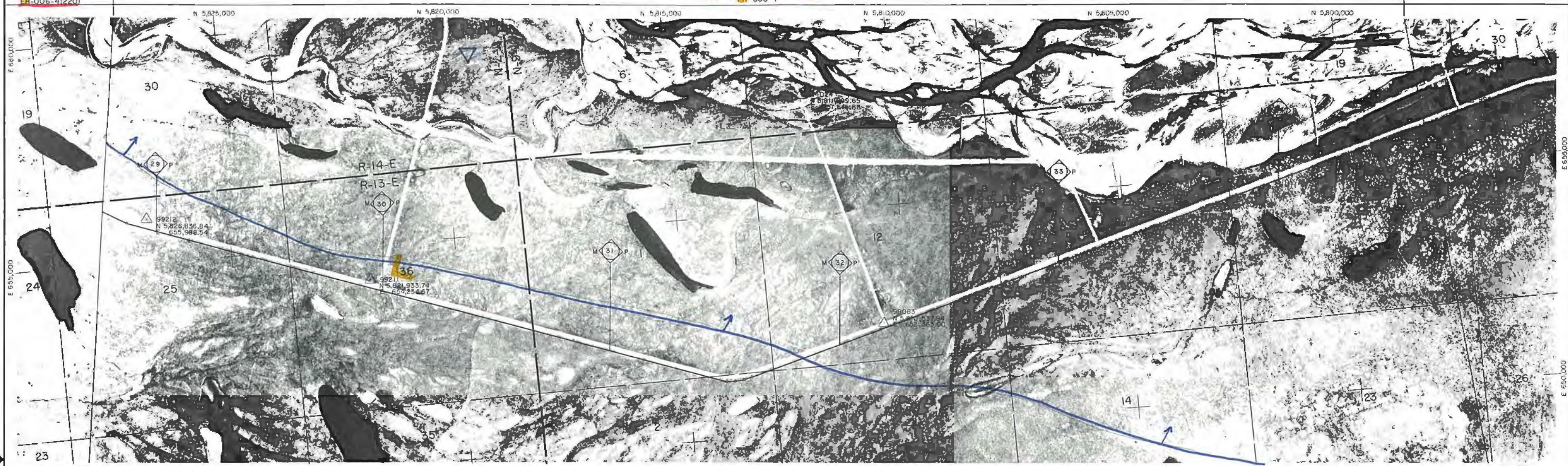
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM											
PHOTO APRIL DATE 1978											
DRAWING NUMBER 4680-11-00-B-E-005											
1" = 1000'											

48" NATURAL GAS PIPELINE											
ENVIRONMENTAL MASTER GUIDE											
MP 23.4 TO MP 28.8											
TOWNSHIP 18N, T7H RANGE 12E MERIDIAN 10W											
DRAWING NUMBER 4680-11-00-B-E-005											
1" = 1000'											



SITES NOT ON ALIGNMENT SHEET  
EH-006-1 (223) RLH-006-1 (219)  
EH-006-2 (222)  
EH-006-3 (221)  
EH-006-4 (220)

SAGANIRKOT RIVER FLOODPLAIN  
EH-006-1



WB-1 - waterfowl  
MH-1 - caribou  
MH-2 - grizzly  
MH-3 - moose

# LEGEND

- AP - AERIAL PHOTO
- AS - ARCHAEOLOGICAL SITE
- BE - BALD EAGLE
- DS - DALL SHEEP
- DSL - DALL SHEEP LAMBING
- EH - ENDANGERED SPECIES HABITAT
- FH - FISH HABITAT
- GE - GOLDEN EAGLE
- GYR - GYRFALCON
- ML - MINERAL LICK
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- RF - REFLIGHT
- RLH - ROUGH LEGGED HAWK
- RX - RIVER & FLOODPLAIN CROSSING
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- SCM - SANDHILL CRANE MIGRATION & RESTING
- WB - WATERBIRD NESTING
- WBM - WATERBIRD MIGRATION & RESTING

SITE OR AREA	SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
EH-006-1												

SITE OR AREA	SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
EH-006-1												
EH-006-2												
EH-006-3												
EH-006-4												
RLH-006-1												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	RELEASED FOR PUBLIC FILING			
2	7-80	REVISION FOR PUBLIC FILING			
3	7-80	REVISION FOR PUBLIC FILING			
4	7-80	REVISION FOR PUBLIC FILING			

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

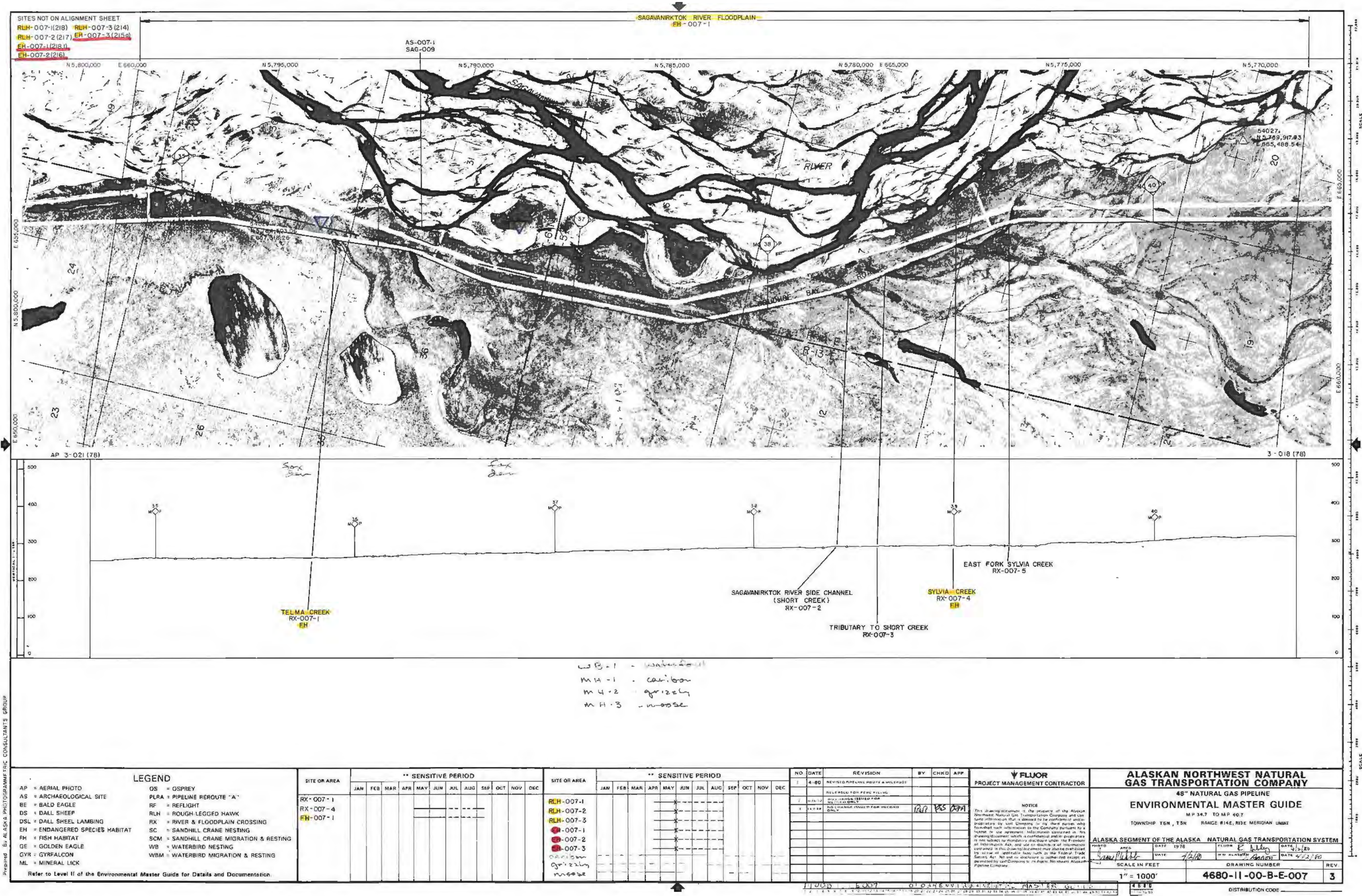
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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
48" NATURAL GAS PIPELINE			
ENVIRONMENTAL MASTER GUIDE			
MP 28.8 TO MP 34.7			
TOWNSHIP 77N, 16W RANGE 14E, 15E MERIDIAN UTM			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
PHOTO	DATE	DATE	DATE
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LEGEND

- AP = AERIAL PHOTO
- AS = ARCHAEOLOGICAL SITE
- BE = BALD EAGLE
- DS = DALL SHEEP
- DSL = DALL SHEEP LAMBING
- EH = ENDANGERED SPECIES HABITAT
- FE = FISH HABITAT
- GE = GOLDEN EAGLE
- GYR = GYRFALCON
- ML = MINERAL LICK
- OS = OSPREY
- PLRA = PIPELINE ROUTE "A"
- RF = REFLIGHT
- RLH = ROUGH-LEGGED HAWK
- RX = RIVER & FLOODPLAIN CROSSING
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- WB = WATERBIRD NESTING
- WBM = WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-007-1												
RX-007-4												
EH-007-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RLH-007-1												
RLH-007-2												
RLH-007-3												
EH-007-1												
EH-007-2												
EH-007-3												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISED RIVER CROSSING & WILDERNESS			
2	4-80	RELEASED FOR PERMITS			
3	4-80	ADDED FISH HABITAT			
4	4-80	ADDED CHANGE IN RIVER CROSSING			

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY

48" NATURAL GAS PIPELINE

ENVIRONMENTAL MASTER GUIDE

MP 34.7 TO MP 40.7

TOWNSHIP 15N, 15E RANGE 14E, 13E MERIDIAN UTM

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

PHOTO: 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 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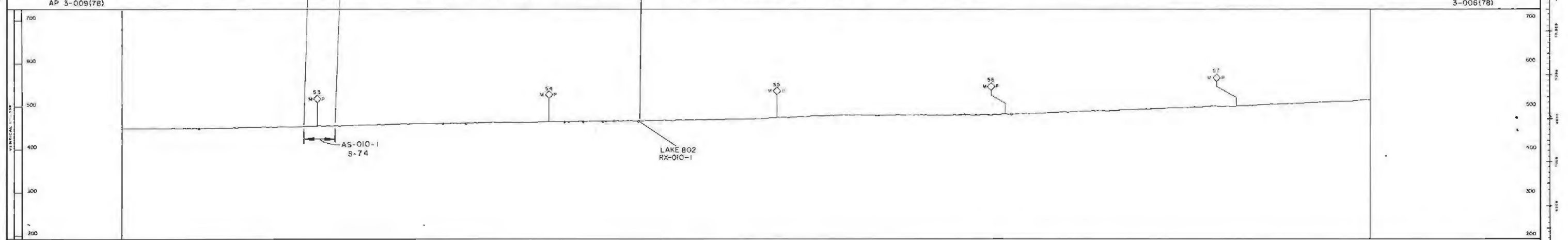
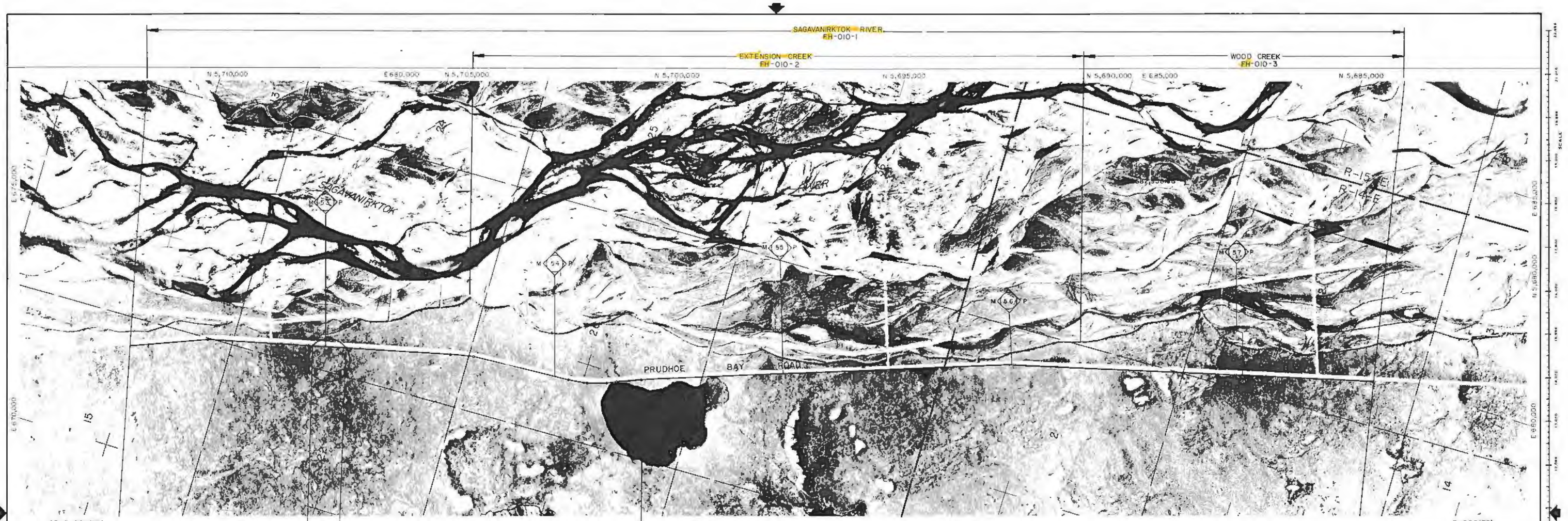












MH-1 Caribou  
MH-2 grizzly  
MH-3 moose  
WB 1 waterfowl

LEGEND											
AP = AERIAL PHOTO	OS = OSPREY										
AS = ARCHAEOLOGICAL SITE	PLRA = PIPELINE ROUTE "A"										
BE = BALD EAGLE	RF = REFLIGHT										
DS = DALL SHEEP	RLM = ROUGH-LEGGED HAWK										
DSL = DALL SHEEP LAMBING	RX = RIVER & FLOODPLAIN CROSSING										
EH = ENDANGERED SPECIES HABITAT	SC = SANDHILL CRANE NESTING										
FH = FISH HABITAT	SCM = SANDHILL CRANE MIGRATION & RESTING										
GE = GOLDEN EAGLE	WB = WATERBIRD NESTING										
GYR = GYRFALCON	WBM = WATERBIRD MIGRATION & RESTING										
ML = MINERAL LICK											

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
EH-010-1												
EH-010-2												
EH-010-3												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Caribou												
grizzly												
moose												
waterfowl												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	PERMANENTLY REMOVED FROM PROJECT			
2	10-80	ADDED TO PROJECT			
3	10-80	ADDED TO PROJECT			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 52.2 TO MP 57.6  
TOWNSHIP 15N, T2N RANGE R14E, R3E MERIDIAN UMAT

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

SCALE IN FEET: 1" = 1000'

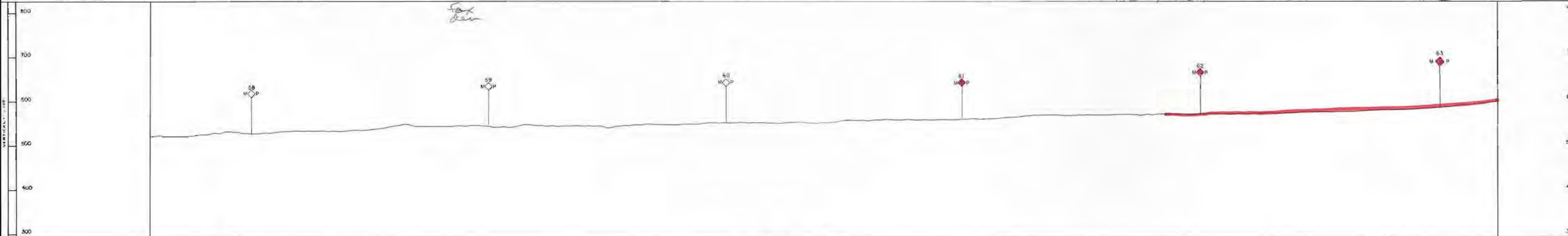
DRAWING NUMBER: 4680-11-00-B-E-010

REV: 3

DISTRIBUTION CODE: 41516

Prepared by ALASKA PHOTOGRAMMETRIC CONSULTANTS GROUP





WB-1	water bowl
MH-1	cavi bon
MH-2	grizzly
MH-3	nose

LEGEND		** SENSITIVE PERIOD												** SENSITIVE PERIOD												NO. DATE REVISION BY CHKD APP				PROJECT MANAGEMENT CONTRACTOR		ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY	
		JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC												JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC																			
AP = AERIAL PHOTO	OS = OSPREY																																
AS = ARCHAEOLOGICAL SITE	PLRA = PIPELINE REROUTE 'A'																																
BE = BALD EAGLE	RF = REFLIGHT																																
DS = DALL SHEEP	RLH = ROUGH-LEGGED HAWK																																
DSL = DALL SHEEP LAMBING	RC = RIVER & FLOODPLAIN CROSSING																																
EH = ENDANGERED SPECIES' HABITAT	RK = SANDHILL CRANE NESTING																																
FN = FISH HABITAT	SCM = SANDHILL CRANE MIGRATION & RESTING																																
GE = GOLDEN EAGLE	WB = WATERBIRD NESTING																																
GYR = GYRFALCON	WBM = WATERBIRD MIGRATION & RESTING																																
ML = MINERAL LICK																																	

Refer to Level II of the Environmental Master Guide for Details and Documentation.

**SITE OR AREA**

**FH-OH-1**

**FH-OH-2**

**SITE OR AREA**

**QAR-001**

**grizzly**

**wolf**

**NOTICE**

This property is located on the property of the Alaska Pipeline Authority. The Pipeline Authority and its subsidiaries are not responsible for the construction, operation, or maintenance of the pipeline or any other facilities on the property. The Pipeline Authority and its subsidiaries are not responsible for the construction, operation, or maintenance of the pipeline or any other facilities on the property. The Pipeline Authority and its subsidiaries are not responsible for the construction, operation, or maintenance of the pipeline or any other facilities on the property.

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

1" = 1000'

4680-II-00-B-E-011

**PROJECT MANAGEMENT CONTRACTOR**

**FLUOR**

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**

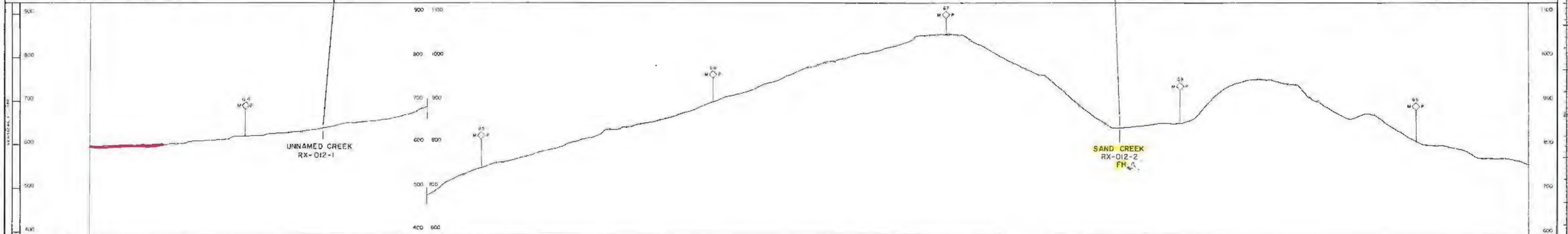
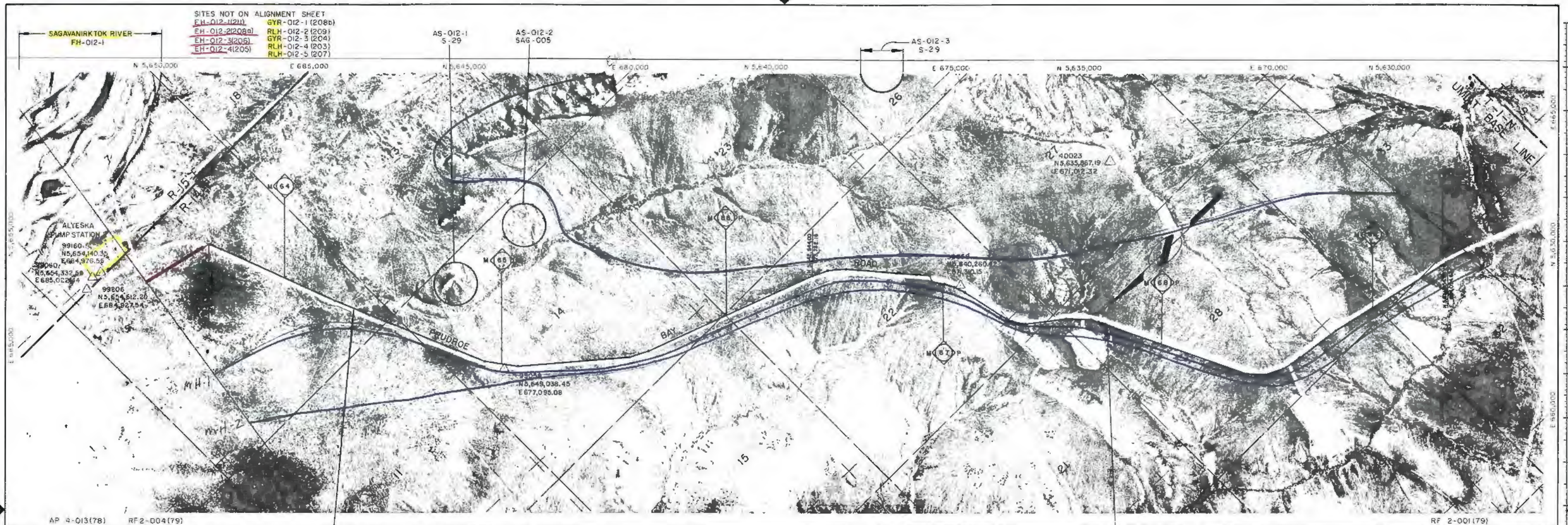
**48" NATURAL GAS PIPELINE**

**ENVIRONMENTAL MASTER GUIDE**

**MP 57.8 TO MP 63.3**

**TOWNSHIP 12N, 74W RANGE 145E, 146E MERIDIAN UTM**





Legend

AP - AERIAL PHOTO	OS - OSPREY
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE REROUTE "A"
BE - BALD EAGLE	RF - REFLIGHT
DS - DALL SHEEP	RLH - ROUGH LEGGED HAWK
DSL - DALL SHEEP LAMBING	RX - RIVER & FLOODPLAIN CROSSING
EH - ENDANGERED SPECIES HABITAT	SC - SANDHILL CRANE NESTING
FM - FISH HABITAT	SCM - SANDHILL CRANE MIGRATION & RESTING
GE - GOLDEN EAGLE	WB - WATERBIRD NESTING
GYR - GYRFALCON	WBM - WATERBIRD MIGRATION & RESTING
ML - MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-012-2												
FH-012-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
012-1												
012-2												
012-3												
012-4												
GYR-012-1												
GYR-012-2												
GYR-012-3												
RLH-012-4												
RLH-012-5												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISED TO SHOW SITE LOCATION			
2	8-80	REVISED TO SHOW SITE LOCATION			
3	8-80	REVISED TO SHOW SITE LOCATION			

FLUOR PROJECT MANAGEMENT CONTRACTOR

ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY

48" NATURAL GAS PIPELINE

ENVIRONMENTAL MASTER GUIDE

MP 653 TO MP 685

TOWNSHIP 11 N RANGE 94 E MERIDIAN 14 W

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

DATE: 1975

SCALE: 1" = 1000'

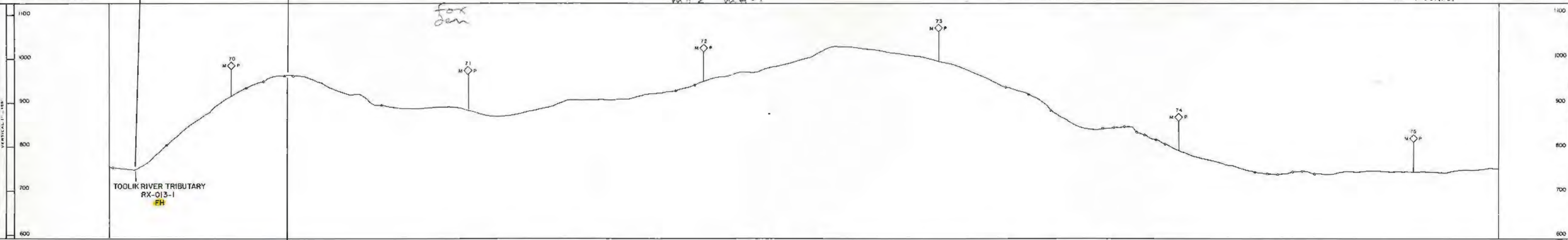
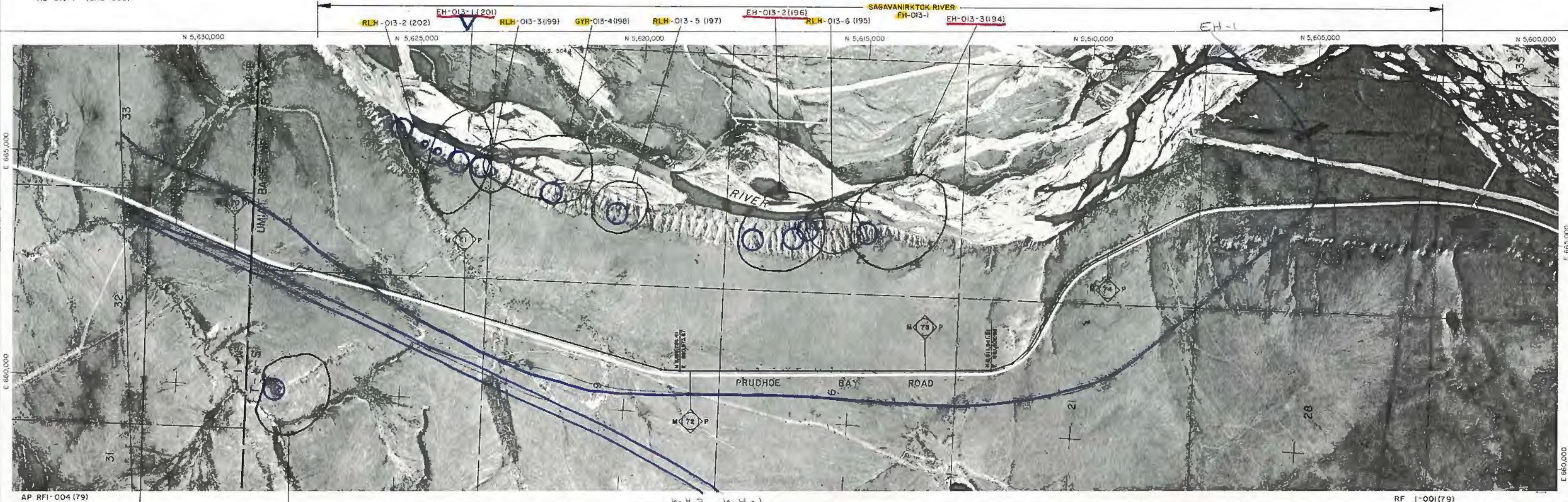
DRAWING NUMBER: 4680-11-00-C-E-012

REV: 3

DISTRIBUTION CODE



SITES NOT ON ALIGNMENT SHEET  
AS-013-1 (SAG-003)



LEGEND

- AP = AERIAL PHOTO
- AS = ARCHAEOLOGICAL SITE
- BE = BALD EAGLE
- DS = DALL SHEEP
- DSL = DALL SHEEP LAMBING
- EH = ENDANGERED SPECIES HABITAT
- FH = FISH HABITAT
- GE = GOLDEN EAGLE
- GYR = GYRFALCON
- ML = MINERAL LICK
- OS = OSPREY
- PLRA = PIPELINE ROUTE "A"
- RF = REFLIGHT
- RLH = ROUGH-LEGGED HAWK
- RX = RIVER & FLOODPLAIN CROSSING
- SC = SANDHILL CRANE NESTING
- SCM = SANDHILL CRANE MIGRATION & RESTING
- WB = WATERBIRD NESTING
- WBM = WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-013-1												
FH-013-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RLH-013-1												
RLH-013-2												
RLH-013-3												
GYR-013-4												
RLH-013-5												
RLH-013-6												
EH-013-2												
EH-013-3												

NO	DATE	REVISION	BY	CHKD	APP
1	8-80	REVISION: PIPELINE ROUTE & MILEPOST			
2	8-80	REVISION: PIPELINE ROUTE & MILEPOST			
3	8-80	REVISION: PIPELINE ROUTE & MILEPOST			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 69.5 TO MP 75.3  
TOWNSHIP T1N, T1S RANGE R14E MERIDIAN UMAT

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

DATE 1978  
DATE 4/12/80  
DATE 4/12/80

SCALE IN FEET  
1" = 1000'

DRAWING NUMBER  
4680-11-00-C-E-013

REV.  
3

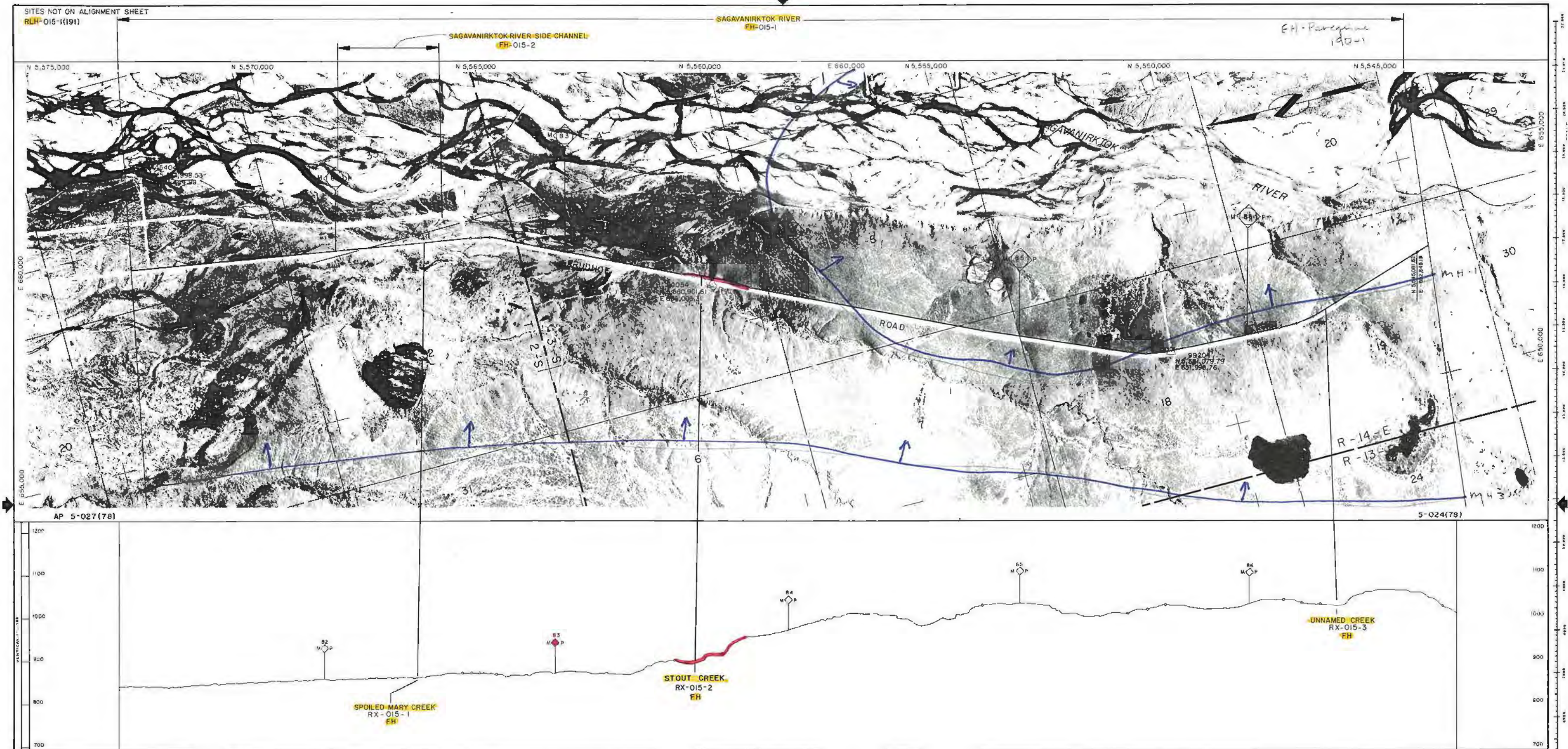
DISTRIBUTION CODE

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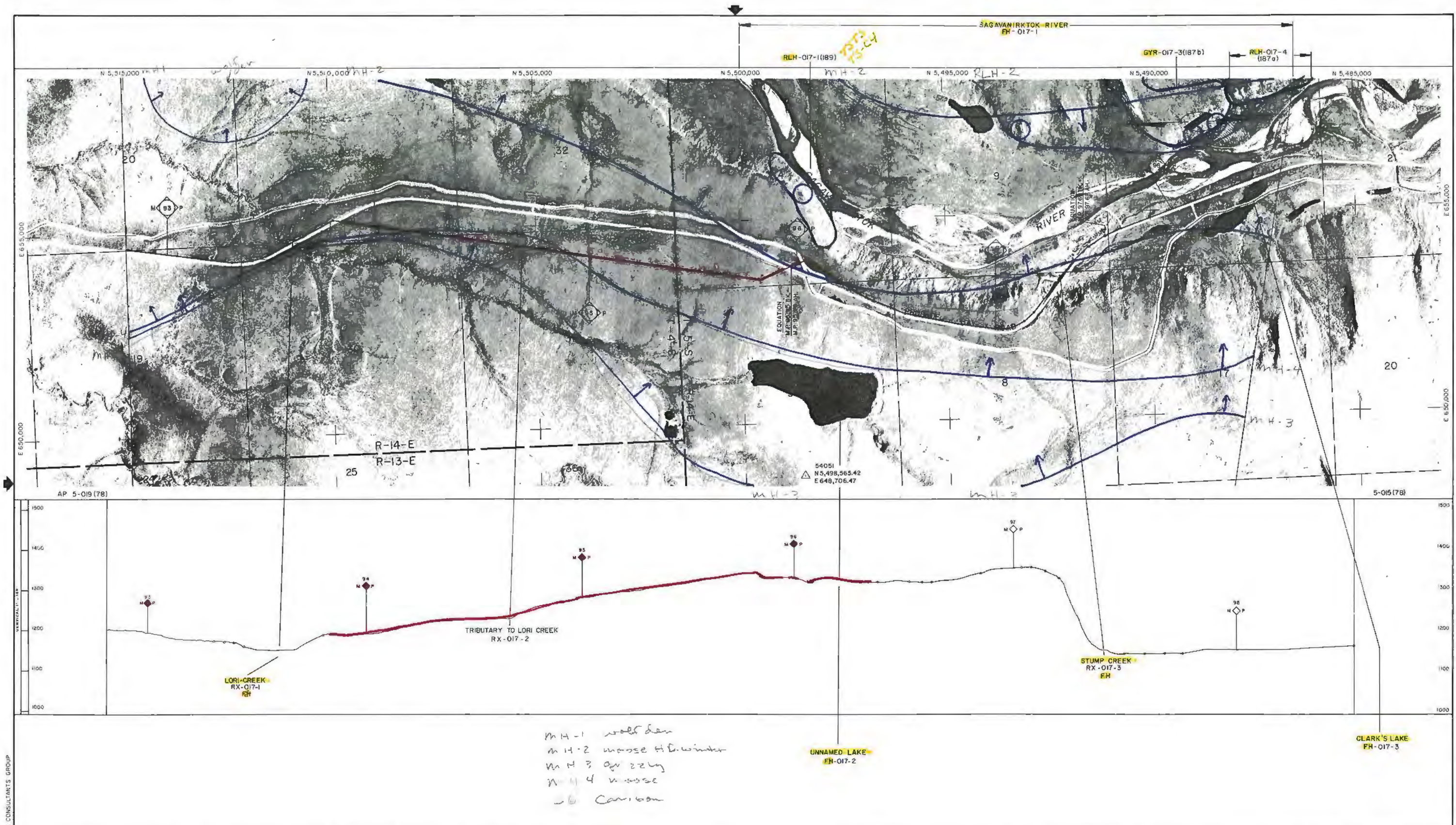
mt 1 HD worse winter  
mt 2 gr z  
mt 3 worse  
B6-1 caribou

LEGEND		SITE OR AREA												SITE OR AREA												NO DATE REVISION BY CHKD APP			FLUOR PROJECT MANAGEMENT CONTRACTOR		ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430	1431	1432	1433	1434	14









### LEGEND

AP = AERIAL PHOTO	OS = OSPREY
AS = ARCHAEOLOGICAL SITE	PLRA = PIPELINE REROUTE "A"
BE = BALD EAGLE	RF = REFLIGHT
DS = DALL SHEEP	RLH = ROUGH-LEGGED HAWK
DSL = DALL SHEEP LAMBING	RX = RIVER & FLOODPLAIN CROSSING
EH = ENDANGERED SPECIES HABITAT	SC = SANDHILL CRANE NESTING
FI = FISH HABITAT	SCM = SANDHILL CRANE MIGRATION & RESTING
GE = GOLDEN EAGLE	WB = WATERBIRD NESTING
GYP = GYRFALCON	WBM = WATERBIRD MIGRATION & RESTING
ML = MINERAL LICK	

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-017-1												
RX-017-3												
RLH-017-1												
RLH-017-2												
RLH-017-3												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RLH-017-1												
GYP-017-3												
RLH-017-4												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISIONS TO THE ENVIRONMENTAL MASTER GUIDE			
2	4-80	RELEASE FOR DISSEMINATION			
3	4-80	REVISIONS TO THE ENVIRONMENTAL MASTER GUIDE			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**

48" NATURAL GAS PIPELINE

**ENVIRONMENTAL MASTER GUIDE**

MP 92.8 TO MP 99.5

TOWNSHIP T45, T55 RANGE R14E MERIDIAN UMAT

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

SCALE IN FEET: 1" = 1000'

DRAWING NUMBER: 4680-11-00-B-E-017

REV: 3

DISTRIBUTION CODE: 4.5/8.0

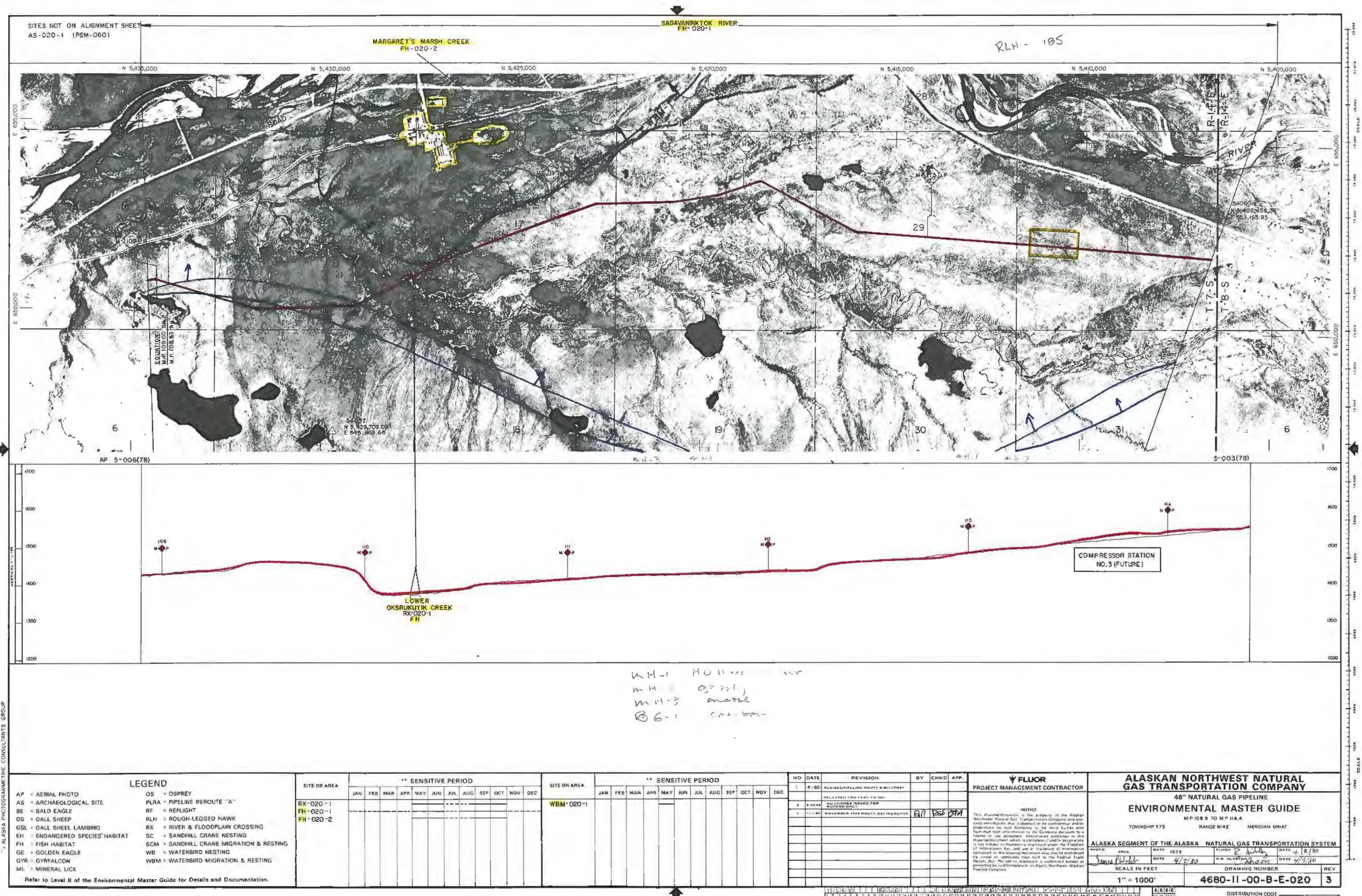












ALASKA PHOTOGRAMMETRIC CONSULTANTS GROUP

- LEGEND**
- AP = AERIAL PHOTO
  - AS = ARCHAEOLOGICAL SITE
  - BE = BALD EAGLE
  - DS = DALL SHEEP
  - OSL = DALL SHEEP LAMBING
  - EH = ENDANGERED SPECIES' HABITAT
  - FH = FISH HABITAT
  - GE = GOLDEN EAGLE
  - GYR = GYRFALCON
  - ML = MINERAL LICK
  - OS = OSPREY
  - PLRA = PIPELINE REROUTE "A"
  - RF = REFUGIT
  - RLH = ROUGH-LEGGED HAWK
  - SC = SANDHILL CRANE NESTING
  - SCM = SANDHILL CRANE MIGRATION & RESTING
  - WB = WATERBIRD NESTING
  - WBM = WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-020-1												
FH-020-1												
FH-020-2												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WBM-020-1												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISED PIPELINE ROUTE & MILEPOST			
2	6-80	RELEASED FOR FERC FILING			
3	11-80	NO CHANGE ISSUED FOR REVISION ONLY			
4	11-80	NOVEMBER 1980 ROUTE REFINEMENTS	AT	DES	STH

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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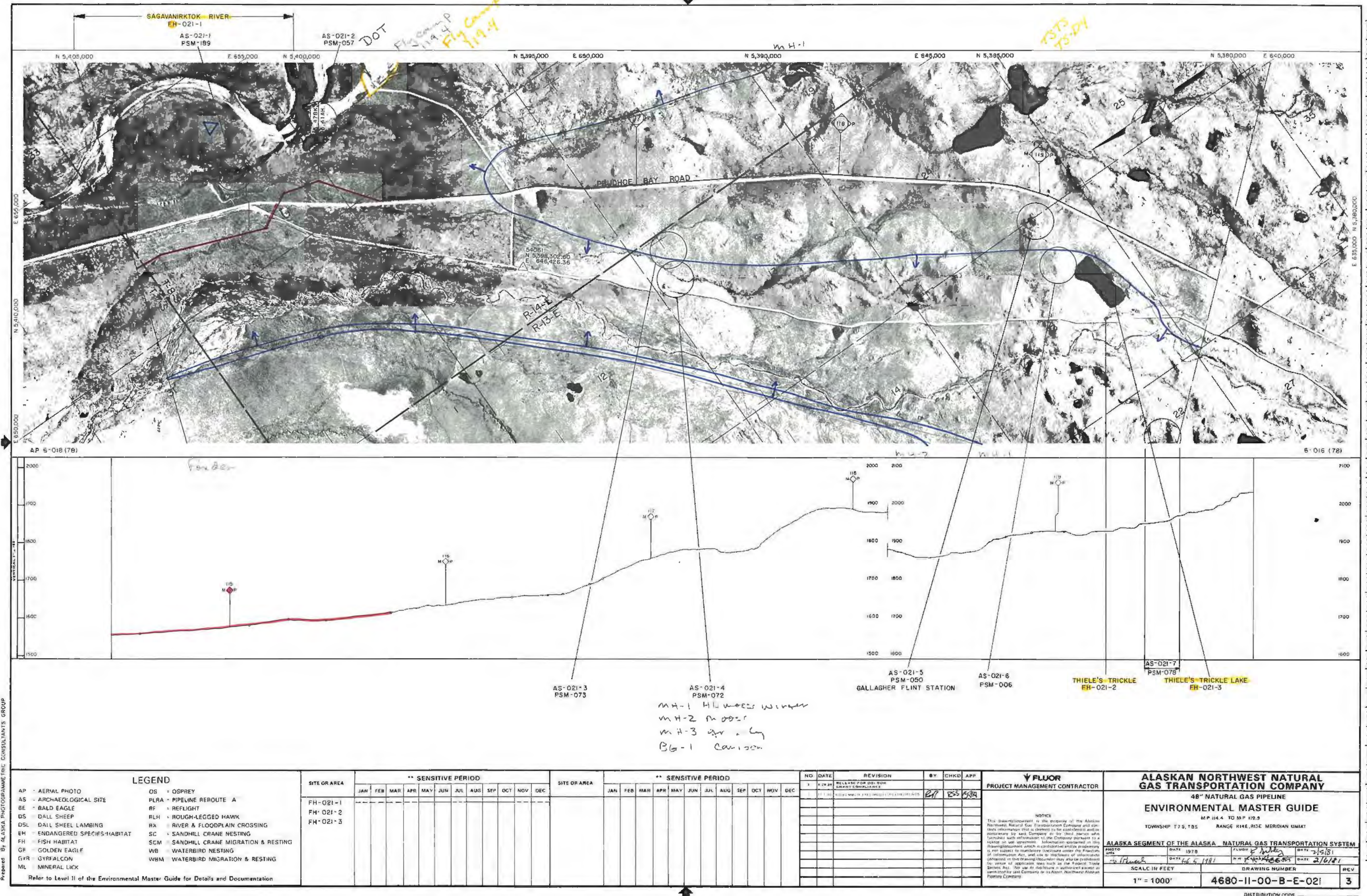
**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
**ENVIRONMENTAL MASTER GUIDE**  
MP 108.9 TO MP 114.4  
TOWNSHIP 17S RANGE 14E MERIDIAN 14W

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

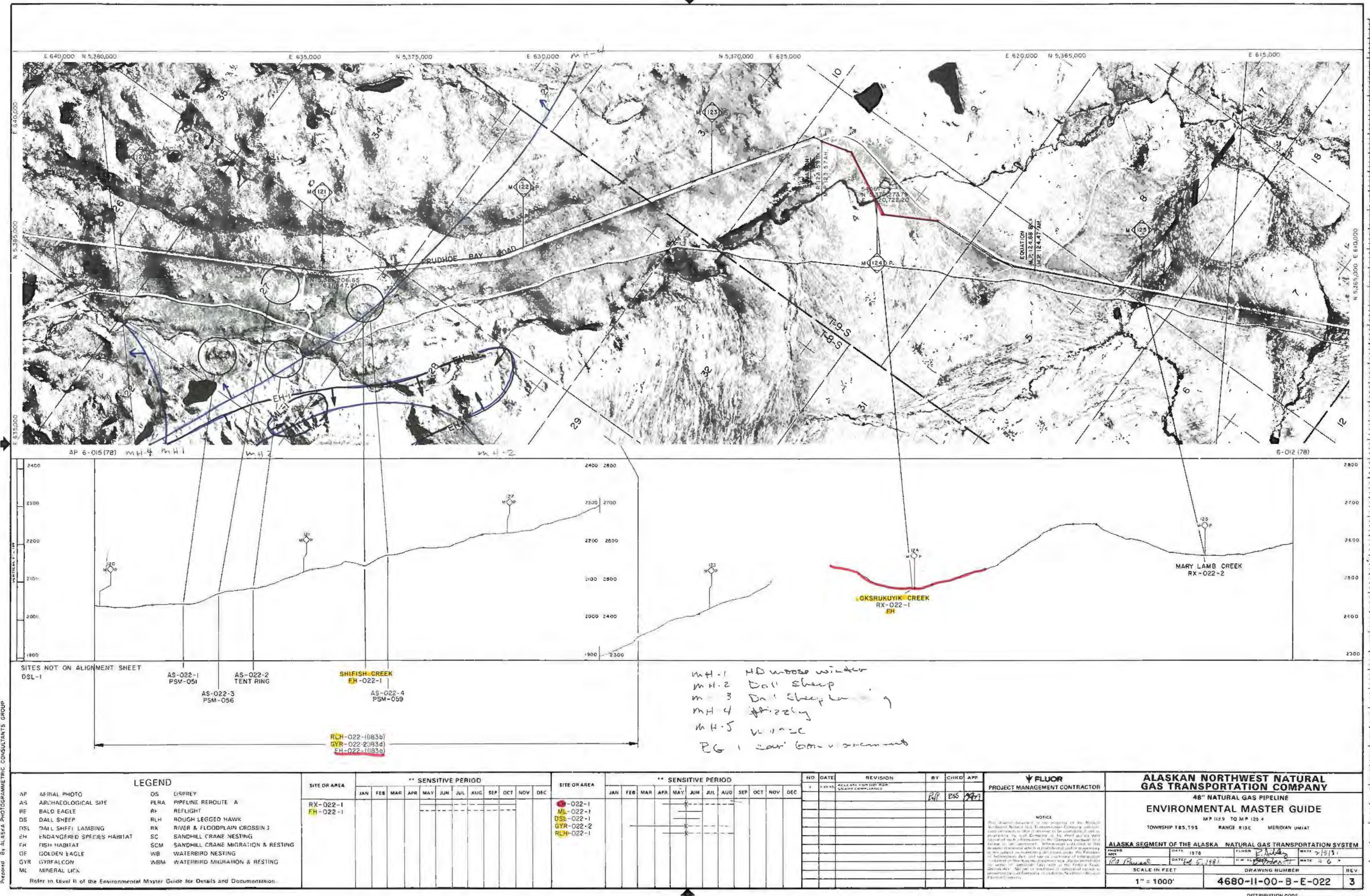
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SCALE IN FEET	DATE	4/7/80	H.W. ALASKA	DATE	4/5/80	DRAWING NUMBER	4680-11-00-B-E-020
1" = 1000'						REV.	3

DISTRIBUTION CODE

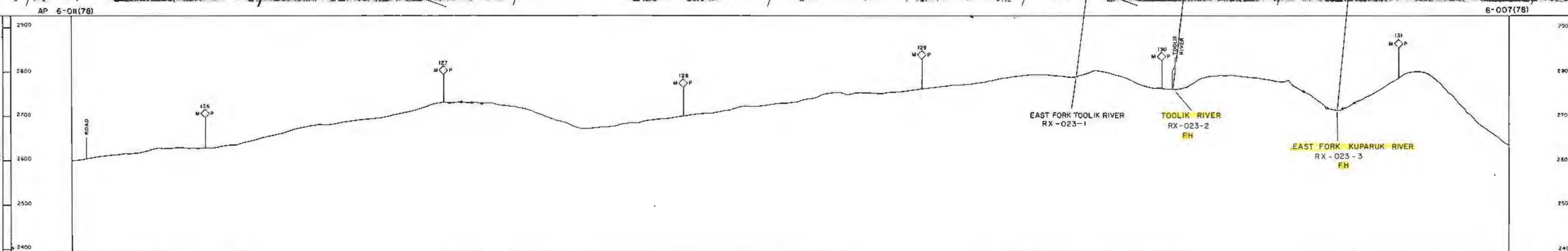
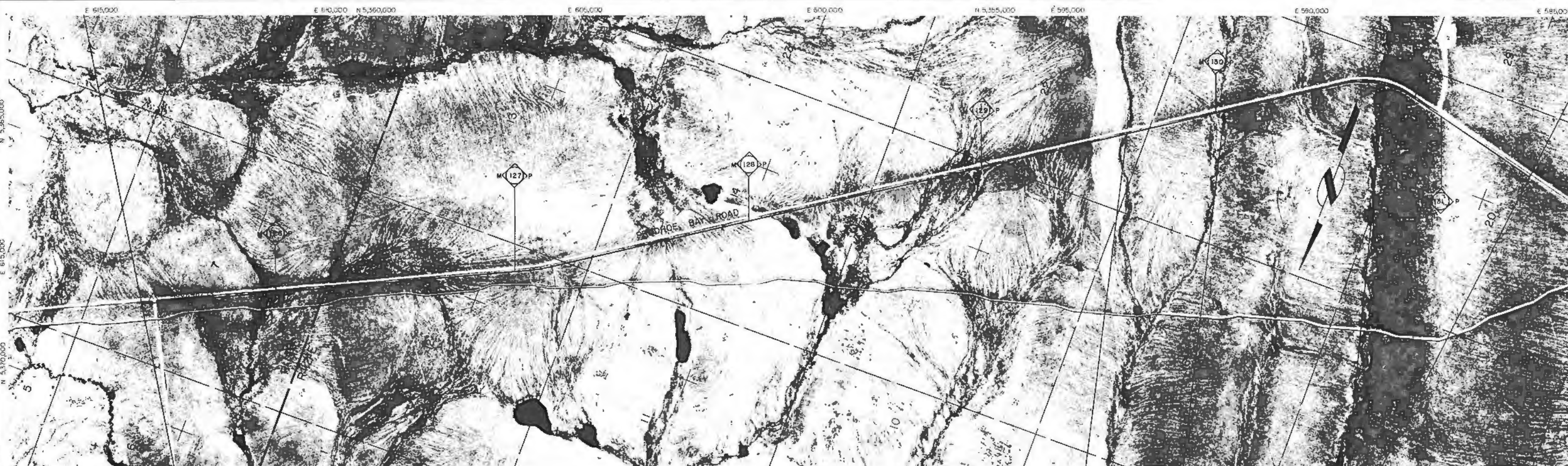












M-1 1000 ft  
E-1 1000 ft

- LEGEND**
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  - BE = BALD EAGLE
  - DS = DALL SHEEP
  - DSL = DALL SHEEP LAMBING
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  - SCM = SANDHILL CRANE MIGRATION & RESTING
  - WB = WATERBIRD MIGRATION & RESTING
  - WBM = WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-023-2												
RX-023-3												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WBM-023-2												

NO.	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISED FOR FINAL REVIEW			
2	8-80	NO CHANGES PERMITTED FOR RECORD ONLY			
3	11-80	NO CHANGES PERMITTED FOR RECORD ONLY			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**

**48" NATURAL GAS PIPELINE**

**ENVIRONMENTAL MASTER GUIDE**

MP 126.4 TO MP 131.4  
TOWNSHIP T9S RANGE R1E, R1E MERIDIAN 141W

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

DATE: 1978  
BY: [Signature]  
SCALE IN FEET: 1" = 1000'

**DRAWING NUMBER: 4680-11-00-B-E-023**

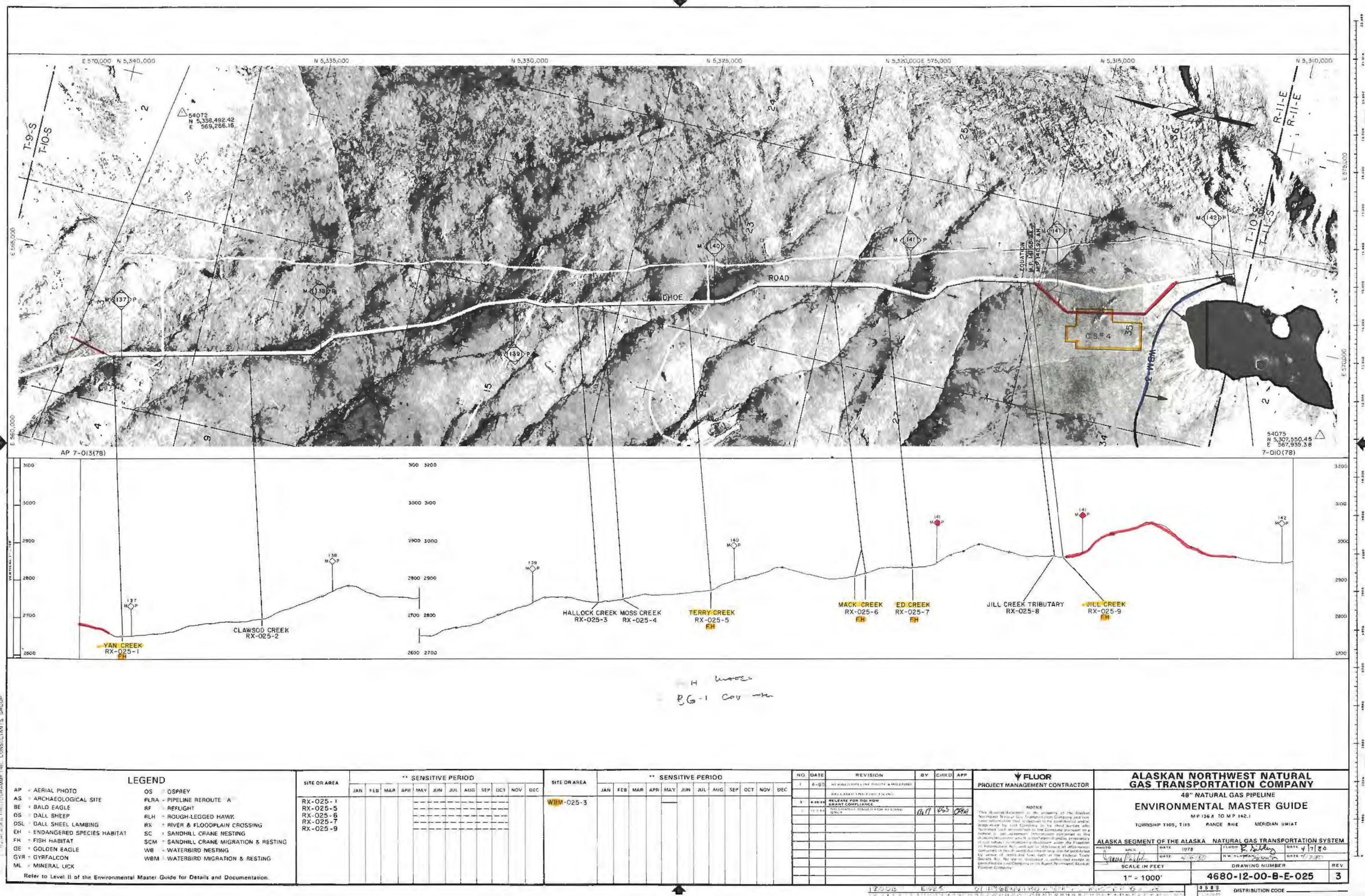
**REV: 3**

**DISTRIBUTION CODE: 4680**





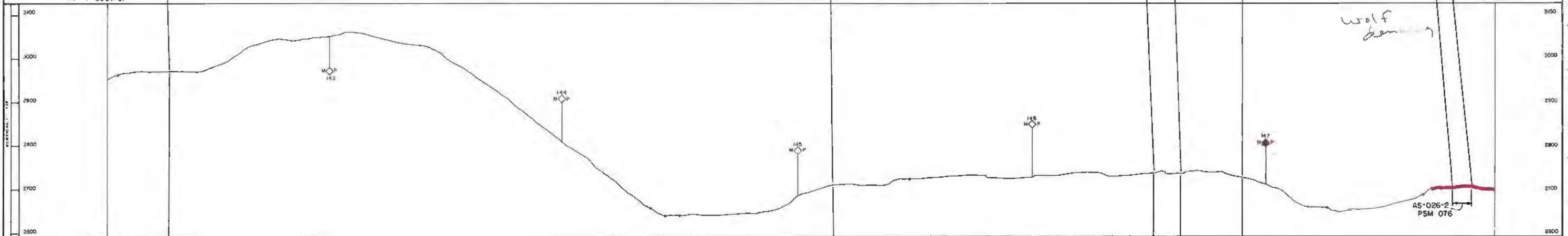






NL-2

Raptor Habitat



wolf  
den

ISLAND LAKE  
EH-026-1

GALBRAITH LAKE INLET  
BN-026-2

AS-026-1  
S-23

GALBRAITH LAKE  
FH-026-3

"GALBRAITH CAMP CREEK  
FR-026-4

B6-1 Car. son  
M H 1 Da Clump  
M H 2 moss  
M H 3 moss & ferns

LEGEND	
AP	AERIAL PHOTO
AS	ARCHAEOLOGICAL SITE
BE	BALD EAGLE
DS	DALL SHEEP
DSL	DALL SHEEP LAMBING
EH	ENDANGERED SPECIES HABITAT
FE	FISH HABITAT
GE	GOLDEN EAGLE
Gyr	GYRFALCON
ML	MINERAL LICK
OS	OSPREY
PLRA	PIPELINE ROUTE
RF	RELIGHT
RLH	ROUGH LEGGED HAWK
RX	RIVER & FLOODPLAIN CROSSING
SC	SANDHILL CRANE NESTING
SCM	SANDHILL CRANE MIGRATION & RESTING
WB	WATERBIRD NESTING
WBM	WATERBIRD MIGRATION & RESTING

[illegible][illegible][illegible]

1  $P_2 = 2.0$

## 48" NATURAL GAS PIPELINE

ENVIRONMENTAL MASTER GUIDE

TOWNSHIP	RANGE	SECTION	ACRES	MERIDIAN	UNIT
10S	12E	36	360	4	1
10S	12E	35	360	4	1
10S	12E	34	360	4	1
10S	12E	33	360	4	1
10S	12E	32	360	4	1
10S	12E	31	360	4	1
10S	12E	30	360	4	1
10S	12E	29	360	4	1
10S	12E	28	360	4	1
10S	12E	27	360	4	1
10S	12E	26	360	4	1
10S	12E	25	360	4	1
10S	12E	24	360	4	1
10S	12E	23	360	4	1
10S	12E	22	360	4	1
10S	12E	21	360	4	1
10S	12E	20	360	4	1
10S	12E	19	360	4	1
10S	12E	18	360	4	1
10S	12E	17	360	4	1
10S	12E	16	360	4	1
10S	12E	15	360	4	1
10S	12E	14	360	4	1
10S	12E	13	360	4	1
10S	12E	12	360	4	1
10S	12E	11	360	4	1
10S	12E	10	360	4	1
10S	12E	9	360	4	1
10S	12E	8	360	4	1
10S	12E	7	360	4	1
10S	12E	6	360	4	1
10S	12E	5	360	4	1
10S	12E	4	360	4	1
10S	12E	3	360	4	1
10S	12E	2	360	4	1
10S	12E	1	360	4	1

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

PHOTO	ALL	DATE 1978	FLAVOR F. Sibley	DATE 4/2/80
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Yarrow's P. 12. 10. 1960	DATE 28/10	NEW ALASKAN	DATE 4/9/60
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SCALE IN FEET	DRAWING NUMBER	REV
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1" = 1000'	4680-12-00-B-E-026	3
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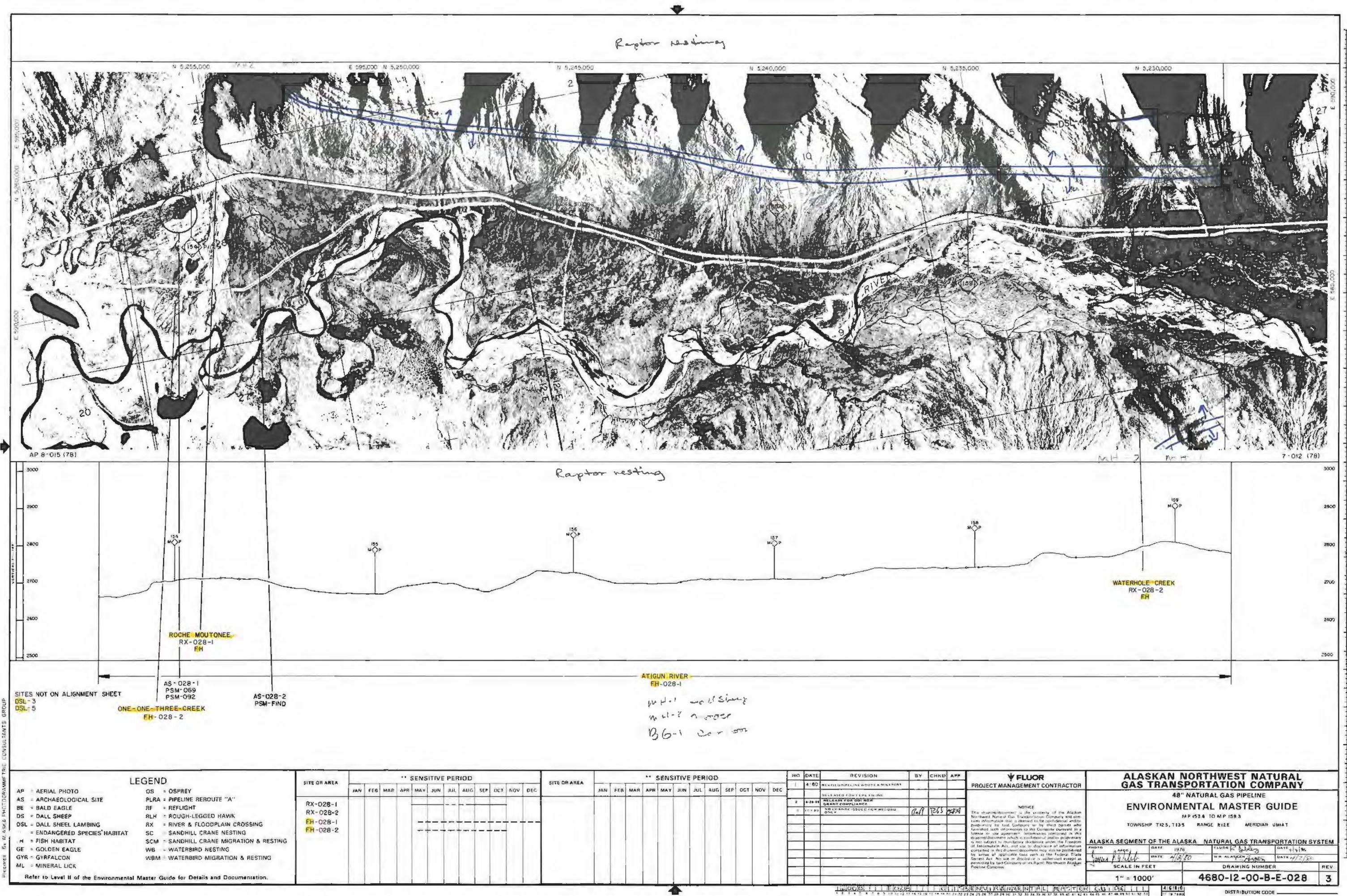
Refer to Level II of the Environmental Master Guide for Details and Documentation

4010 DISTRIBUTION CODE









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LEGEND

- AP = AERIAL PHOTO
- AS = ARCHAEOLOGICAL SITE
- BE = BALD EAGLE
- DS = DALL SHEEP
- DSL = DALL SHEEP LAMBING
- H = FISH HABITAT
- GE = GOLDEN EAGLE
- GYR = GYRFALCON
- ML = MINERAL LICK
- OS = OSPREY
- PLRA = PIPELINE ROUTE "A"
- RF = REFLIGHT
- RLH = ROUGH-LEGGED HAWK
- RX = RIVER & FLOODPLAIN CROSSING
- SC = SANDHILL CRANE NESTING
- SCM = SANDHILL CRANE MIGRATION & RESTING
- WB = WATERBIRD NESTING
- WBM = WATERBIRD MIGRATION & RESTING

Refer to Level II of the Environmental Master Guide for Details and Documentation.

SITE OR AREA	** SENSITIVE PERIOD												SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-028-1																									
RX-028-2																									
FH-028-1																									
FH-028-2																									

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	RELEASED PIPELINE ROUTE & MILE POST			
2	8-28-85	RELEASED FOR POSTING			
3	11-1-85	NO CHANGE ISSUED FOR RECORD ONLY	Call	TS	gnd

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 153.6 TO MP 159.3  
TOWNSHIP T12S, T13S RANGE R12E MERIDIAN UTM1T

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

DATE: 10/75  
SCALE: 1" = 1000'  
DRAWING NUMBER: 4680-12-00-B-E-028  
REV: 3





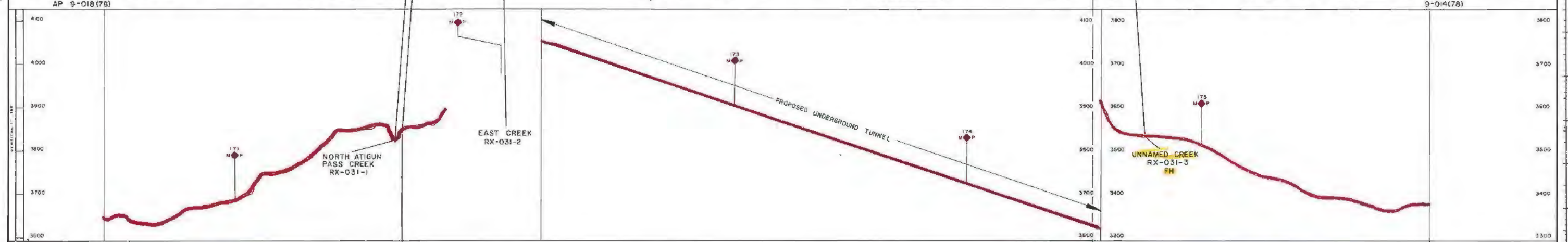
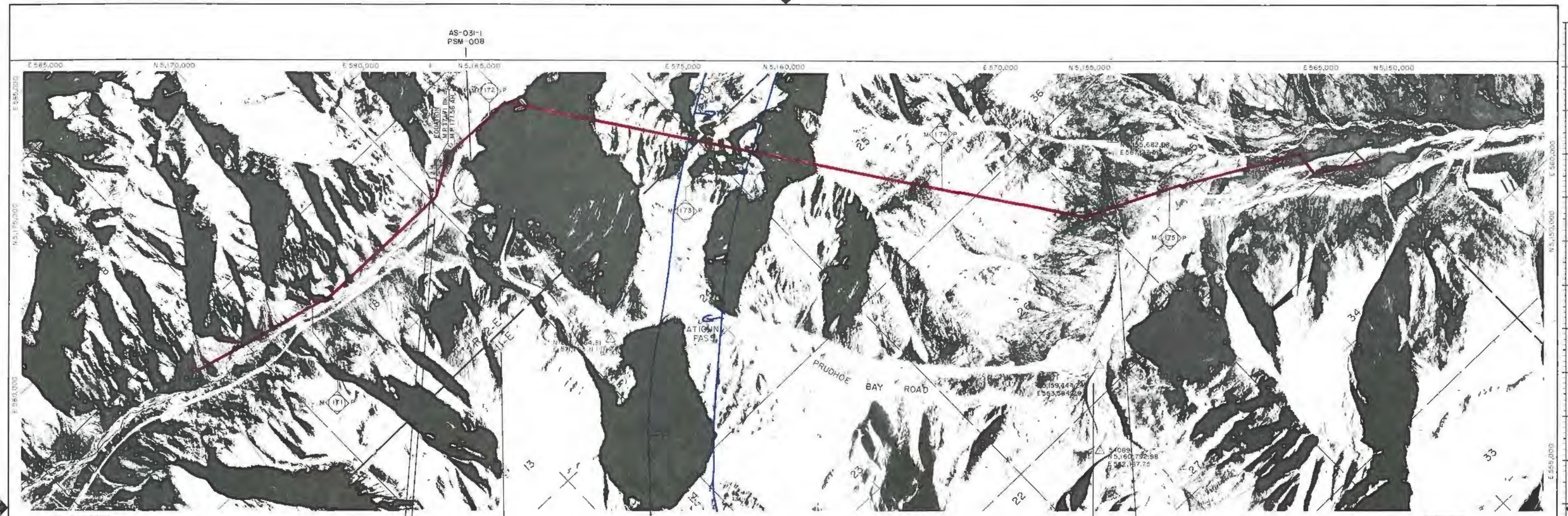












SITES NOT ON ALIGNMENT SHEET  
ML-4

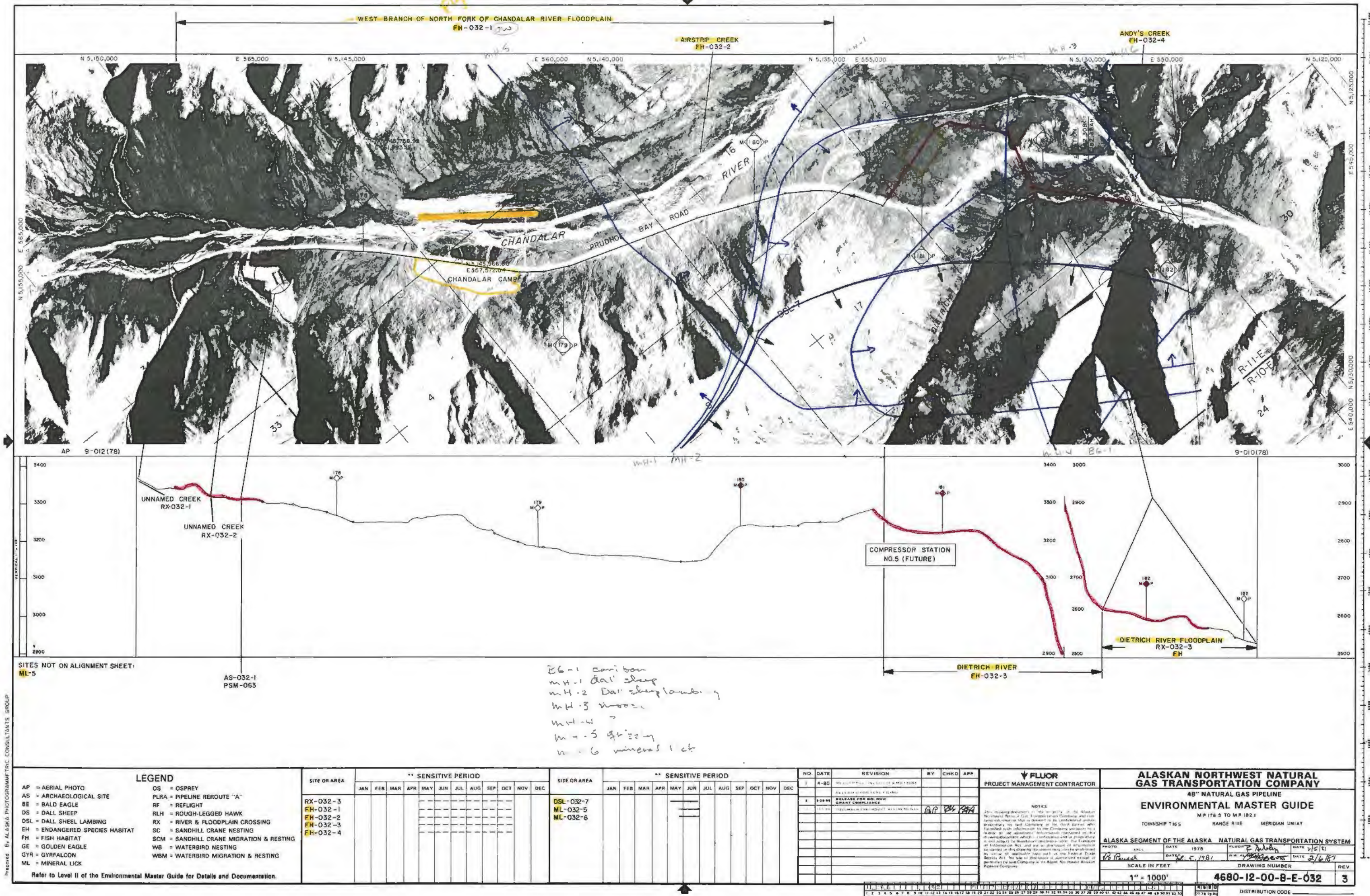
EG-1 dall sheep  
EG-2 caribou  
ML-4 dall sheep.

LEGEND		SITE OR AREA												SITE OR AREA												REVISION				FLUOR				ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
		** SENSITIVE PERIOD												** SENSITIVE PERIOD												DATE				PROJECT MANAGEMENT CONTRACTOR				48" NATURAL GAS PIPELINE			
		JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC												JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC												BY				ENVIRONMENTAL MASTER GUIDE							
AP - AERIAL PHOTO	OS - OSPREY																									4-80				PROJECT MANAGEMENT CONTRACTOR				ENVIRONMENTAL MASTER GUIDE			
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE ROUTE "A"																									4-80				PROJECT MANAGEMENT CONTRACTOR				ENVIRONMENTAL MASTER GUIDE			
BE - BALD EAGLE	RF - REFLIGHT																									4-80				PROJECT MANAGEMENT CONTRACTOR				ENVIRONMENTAL MASTER GUIDE			
DS - DALL SHEEP	RLH - ROUGH-LEGGED HAWK																									4-80				PROJECT MANAGEMENT CONTRACTOR				ENVIRONMENTAL MASTER GUIDE			
DSL - DALL SHEEP LAMBING	RX - RIVER & FLOODPLAIN CROSSING																									4-80				PROJECT MANAGEMENT CONTRACTOR				ENVIRONMENTAL MASTER GUIDE			
EH - ENDANGERED SPECIES HABITAT	SC - SANDHILL CRANE NESTING																									4-80				PROJECT MANAGEMENT CONTRACTOR				ENVIRONMENTAL MASTER GUIDE			
FH - FISH HABITAT	SCM - SANDHILL CRANE MIGRATION & RESTING																									4-80				PROJECT MANAGEMENT CONTRACTOR				ENVIRONMENTAL MASTER GUIDE			
GE - GOLDEN EAGLE	WB - WATERBIRD NESTING																									4-80				PROJECT MANAGEMENT CONTRACTOR				ENVIRONMENTAL MASTER GUIDE			
GYR - GYRFALCON	WBM - WATERBIRD MIGRATION & RESTING																									4-80				PROJECT MANAGEMENT CONTRACTOR				ENVIRONMENTAL MASTER GUIDE			
ML - MINERAL LICK																										4-80				PROJECT MANAGEMENT CONTRACTOR				ENVIRONMENTAL MASTER GUIDE			

Refer to Level II of the Environmental Master Guide for Details and Documentation.

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	DATE: 10/28	REVISION: 2/5/81	SCALE IN FEET: 1" = 1000'	DRAWING NUMBER: 4680-12-00-B-E-031	REV: 3A
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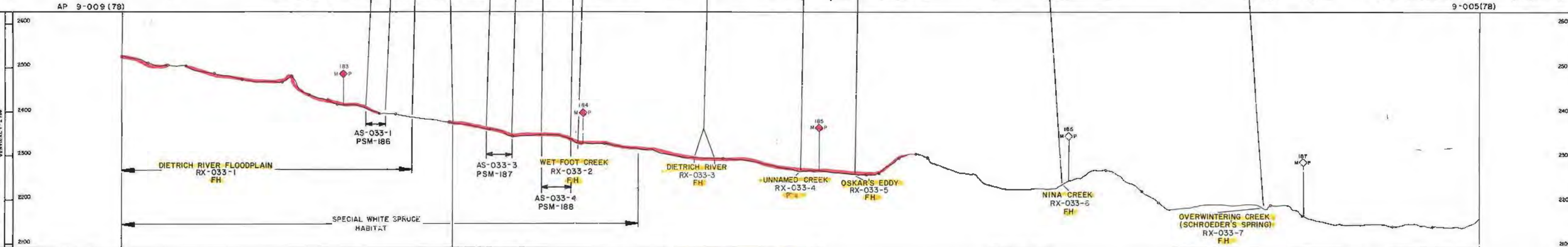
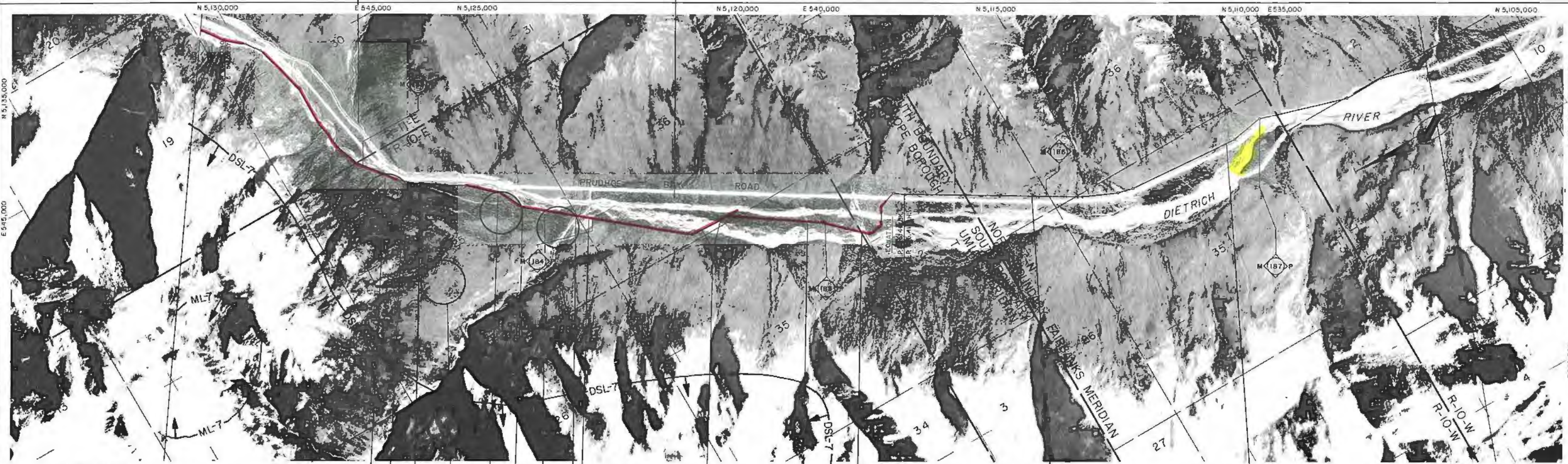




SITES NOT ON ALIGNMENT SHEET  
ML-8

BEAVER BROOK  
FH-033-2

BEAR TRACK CREEK  
FH-033-3



LEGEND

- AP = AERIAL PHOTO  
AS = ARCHAEOLOGICAL SITE  
BE = BALD EAGLE  
DS = DALL SHEEP  
DSL = DALL SHEEP LAMBING  
EH = ENDANGERED SPECIES HABITAT  
FH = FISH HABITAT  
GE = GOLDEN EAGLE  
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Refer to Level II of the Environmental Master Guide for Details and Documentation.

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-033-1												
RX-033-2												
RX-033-3												
RX-033-5												
RX-033-6												
RX-033-7												
FH-033-1												
FH-033-2												
FH-033-3												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DSL-033-7												
ML-033-7												
ML-033-8												

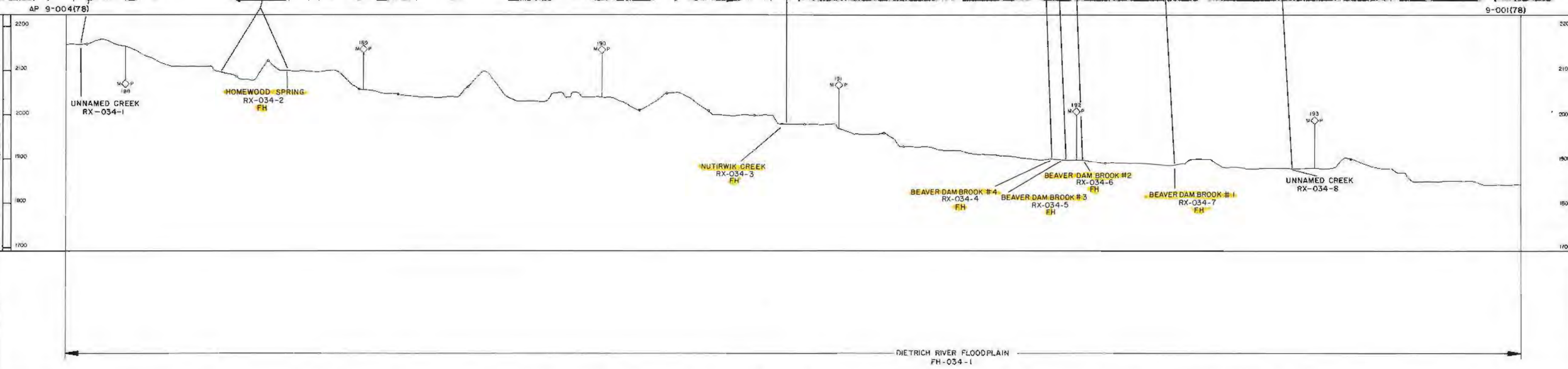
NO.	DATE	REVISION	BY	CHKD	APP
1	6-80	REVISIONS TO THE MASTER GUIDE			
2	6-80	RELEASED FOR FIELD USE			
3	11-84	RELEASED FOR DOG WASH			
4	11-84	NOVEMBER 1984 DOG WASH COMPLIANCE			

FLUOR				
PROJECT MANAGEMENT CONTRACTOR				
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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
48" NATURAL GAS PIPELINE			
ENVIRONMENTAL MASTER GUIDE			
MP 182.1 TO MP 187.7			
TOWNSHIP 116S, 117S, 118S, 119S RANGE 10E, 11E, 12E, 13E, 14E, 15E, 16E, 17E, 18E, 19E, 20E, 21E, 22E, 23E, 24E, 25E, 26E, 27E, 28E, 29E, 30E, 31E, 32E, 33E, 34E, 35E, 36E, 37E, 38E, 39E, 40E, 41E, 42E, 43E, 44E, 45E, 46E, 47E, 48E, 49E, 50E, 51E, 52E			
A SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM		DRAWING NUMBER	
DATE 1979 4/13/80	FLUID NORTH ALASKA 4/13/80	DATE 4/13/80	DATE 4/13/80
SCALE IN FEET		DRAWING NUMBER	
1" = 1000'		4680-12-00-B-E-033	
		REV	
		3	

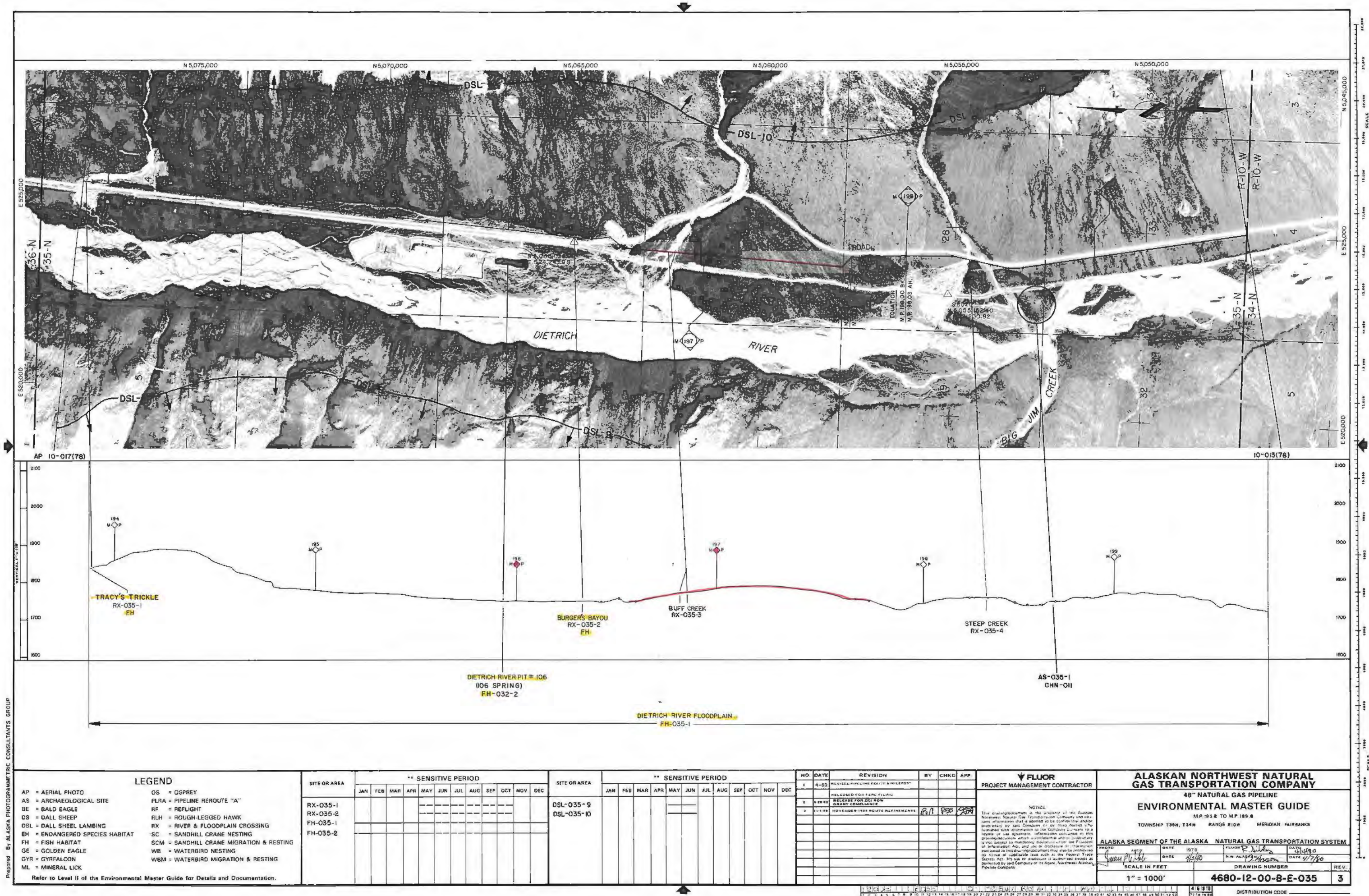


SITES NOT ON ALIGNMENT SHEET  
GE-034-1(168)  
ML-9



LEGEND		SITE OR AREA												SITE OR AREA												NO. DATE				REVISION				BY				CHKD				APP.				PROJECT MANAGEMENT CONTRACTOR				ALASKA NORTHWEST NATURAL GAS TRANSPORTATION COMPANY				48" NATURAL GAS PIPELINE				ENVIRONMENTAL MASTER GUIDE				M.P. 187.7 TO M.P. 193.8				TOWNSHIP T36N, T35N RANGE R10W MERIDIAN FAIRBANKS				ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM				SCALE IN FEET				DRAWING NUMBER				REV																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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Prepared By ALASKA PHOTOGRAMMETRIC CONSULTANTS GROUP

LEGEND

AP = AERIAL PHOTO	OS = OSPREY
AS = ARCHAEOLOGICAL SITE	PLRA = PIPELINE ROUTE "A"
BE = BALD EAGLE	RF = REFLIGHT
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DSL = DALL SHEEP LAMBING	RX = RIVER & FLOODPLAIN CROSSING
EH = ENDANGERED SPECIES HABITAT	SC = SANDHILL CRANE NESTING
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ML = MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation.

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-035-1												
RX-035-2												
FH-035-1												
FH-035-2												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DSL-035-9												
DSL-035-10												

NO.	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISED PIPELINE ROUTE & MILEPOST			
2	4-80	RELEASE FOR FERC FILING			
3	11-85	RELEASE FOR DELROW DRAIN COMPLIANCE			
4	11-85	NOVEMBER 1985 ROUTE REFINEMENTS	RA	PS	CA

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

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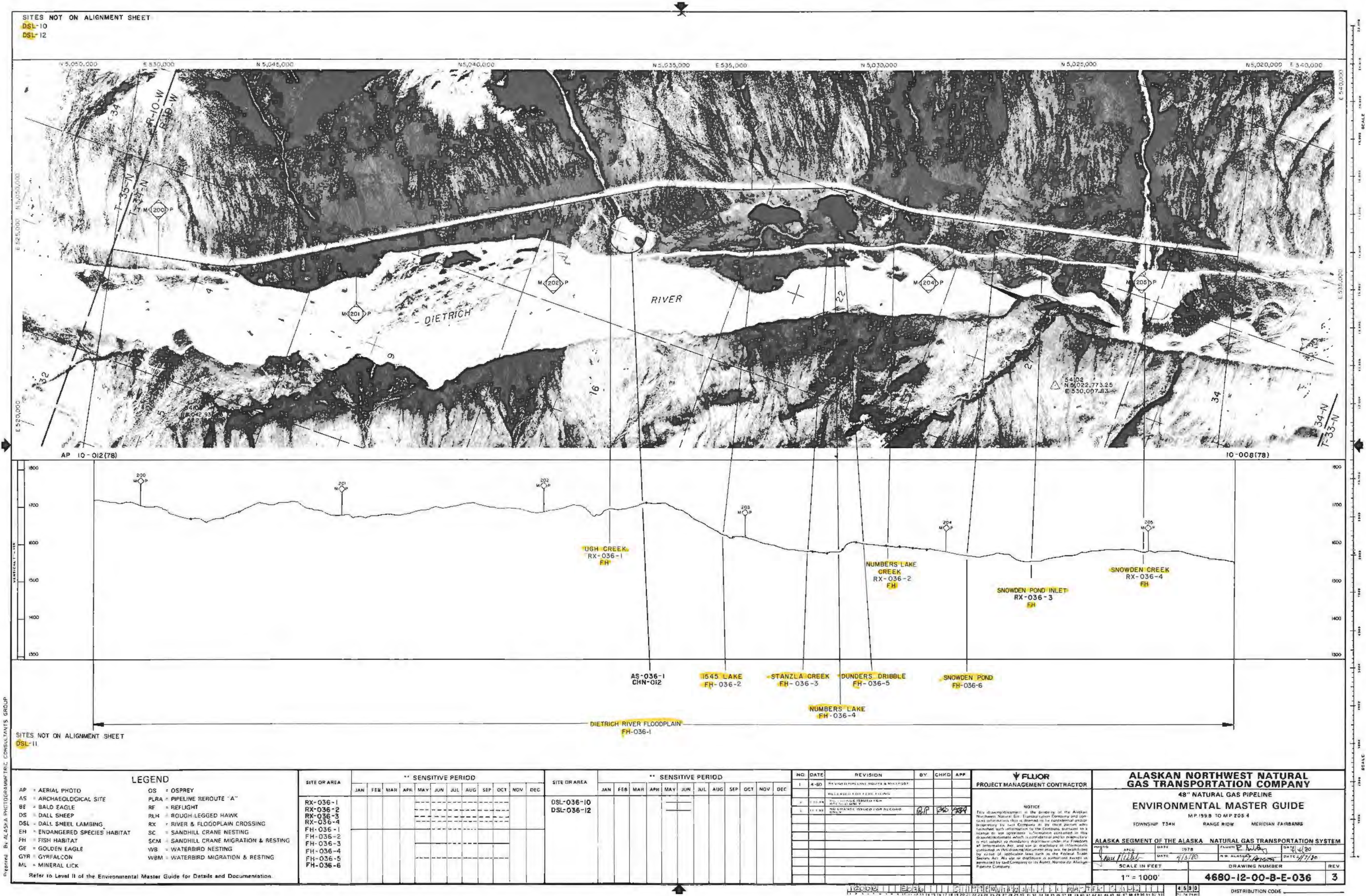
ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 193.8 TO MP 199.8  
TOWNSHIP T35N, T34N RANGE R10W MERIDIAN FAIRBANKS

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

PHOTO APP DATE 1978 PLANT DATE 1980  
SCALE IN FEET DRAWING NUMBER  
1" = 1000' 4680-12-00-B-E-035 3

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- FH = FISH HABITAT
- GE = GOLDEN EAGLE
- GYR = GYRFALCON
- ML = MINERAL LICK
- OS = OSPREY
- PLRA = PIPELINE REROUTE "A"
- RF = REFLIGHT
- RLH = ROUGH LEGGED HAWK
- RX = RIVER & FLOODPLAIN CROSSING
- SC = SANDHILL CRANE NESTING
- SCM = SANDHILL CRANE MIGRATION & RESTING
- WB = WATERBIRD NESTING
- WBM = WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-036-1												
RX-036-2												
RX-036-3												
RX-036-4												
FH-036-1												
FH-036-2												
FH-036-3												
FH-036-4												
FH-036-5												
FH-036-6												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DSL-036-10												
DSL-036-12												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISED PIPELINE ROUTE & MILEPOSTS			
2	11-80	ADDED SITE INFORMATION			
3	11-80	NO CHANGES ISSUED FOR RECORD ONLY			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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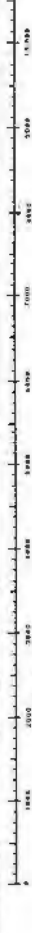
<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b>			
<b>48" NATURAL GAS PIPELINE</b>			
<b>ENVIRONMENTAL MASTER GUIDE</b>			
MP 159.9 TO MP 205.4			
TOWNSHIP T34N RANGE R10W MERIDIAN 14W			
<b>ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM</b>			
APPROVED	DATE	DATE	DATE
<i>[Signature]</i>	4/15/80	4/15/80	4/15/80
SCALE IN FEET		DRAWING NUMBER	
1" = 1000'		4680-12-00-B-E-036	
		REV 3	

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GE-037-2 (153)

**GEND**

OS = OSPREY  
PLRA = PIPELINE REROUTE 'A'  
RF = REFLIGHT  
RLH = ROUGH-LEGGED HAWK  
RX = RIVER & FLOODPLAIN CROSSING  
SC = SANDHILL CRANE NESTING  
SCM = SANDHILL CRANE MIGRATION & RESTING  
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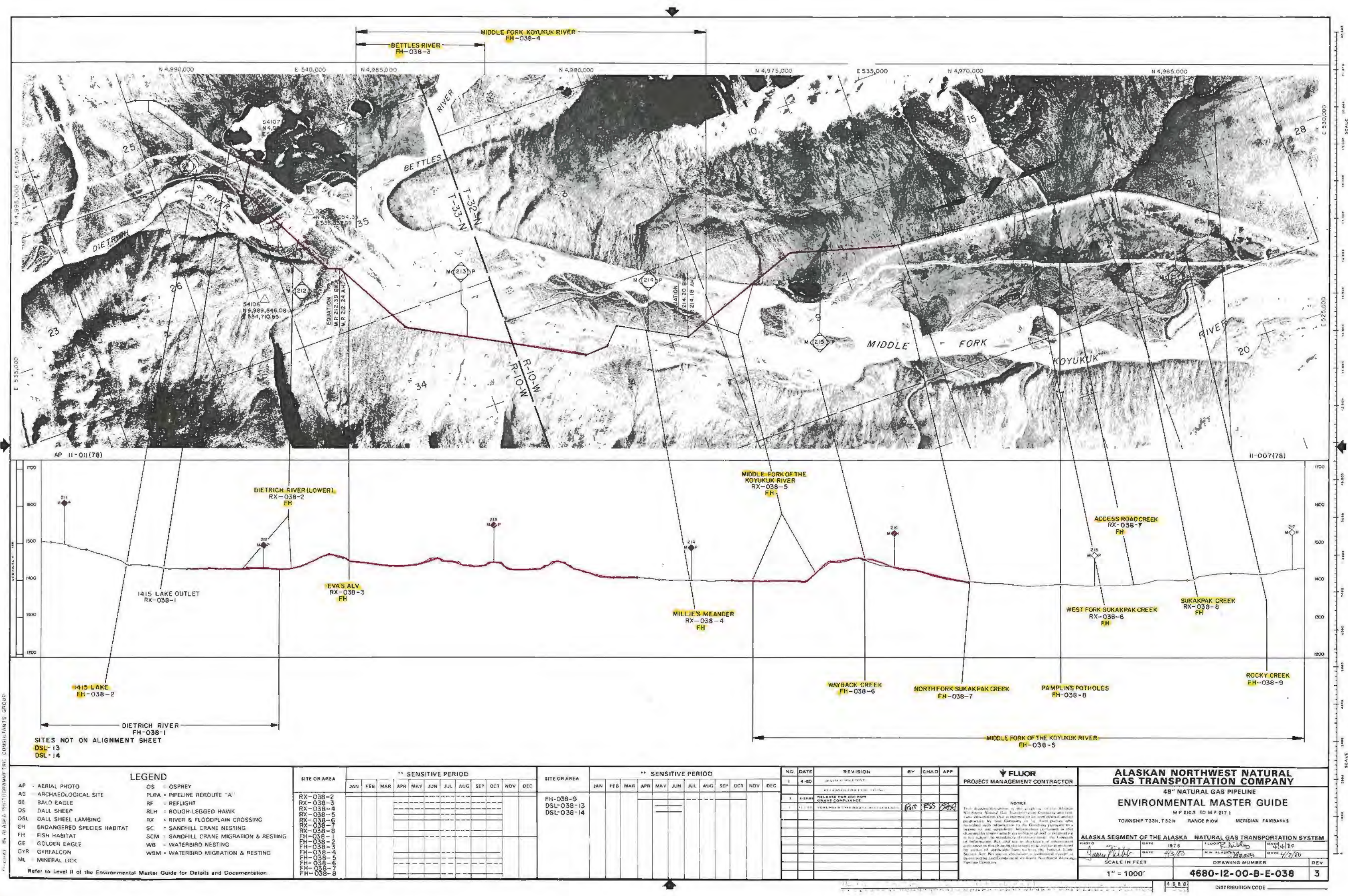
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<h2 style="text-align: center;">48" NATURAL GAS PIPELINE</h2>					
<h3 style="text-align: center;">ENVIRONMENTAL MASTER GUIDE</h3>					
<p style="text-align: center;">MP 205.4 TO MP 210.9</p>					
TOWNSHIP 134N, 133W		RANGE 410W		MERIDIAN FAIRBANKS	
<h4 style="text-align: center;">ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM</h4>					
PHOTO	APPLIC	DATE	TAVERN	DATE	
<i>John Smith</i>		<i>4/3/80</i>	<i>N.W. Alaska</i>	<i>4/1/80</i>	

Refer to Level II of the Environmental Master Guide for Details and Documentation.

4680-12-00-B-E-037	3
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  - DSL - DALL SHEEP LAMBING
  - EH - ENDANGERED SPECIES HABITAT
  - FH - FISH HABITAT
  - GE - GOLDEN EAGLE
  - Gyr - GYRFALCON
  - ML - MINERAL LICK
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  - WB - WATERBIRD NESTING
  - WBM - WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-038-2												
RX-038-3												
RX-038-4												
RX-038-5												
RX-038-6												
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RX-038-8												
RX-038-9												
DSL-038-13												
DSL-038-14												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
FH-038-9												
DSL-038-13												
DSL-038-14												

NO.	DATE	REVISION	BY	CHKD	APP
1	4-80	ISSUED FOR REVIEW			
2	4-80	REVISED FOR COMMENTS			
3	4-80	RELEASE FOR DOI AND STATE COMPLIANCE			
4	4-80	FOR REVIEW OF THE BUREAU OF LAND MANAGEMENT			

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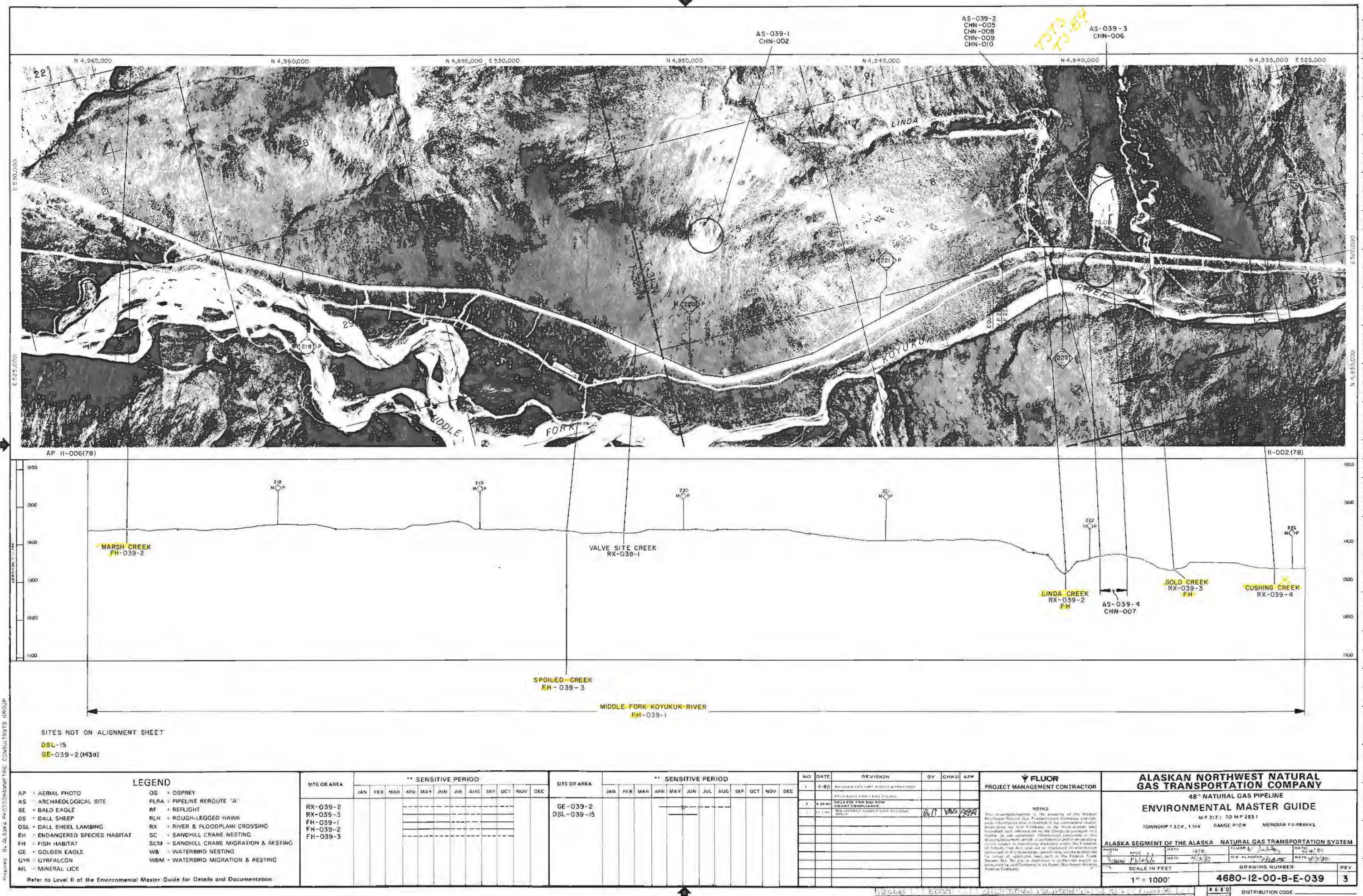
**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 210.3 TO MP 217.1  
TOWNSHIP T33N, T32N RANGE R10W MERIDIAN FAIRBANKS

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

DATE: 4/3/80  
SCALE IN FEET: 1" = 1000'  
DRAWING NUMBER: 4680-12-00-B-E-038  
REV: 3



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SITES NOT ON ALIGNMENT SHEET  
DSL-15  
GE-039-2 (143a)

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- DSL = DALL SHEEP LAMBING
- EH = ENDANGERED SPECIES HABITAT
- FH = FISH HABITAT
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- SCM = SANDHILL CRANE MIGRATION & RESTING
- WB = WATERBIRD NESTING
- WBM = WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-039-2												
RX-039-3												
FH-039-1												
FH-039-2												
FH-039-3												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
GE-039-2												
DSL-039-15												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISION FOR COMMENTS			
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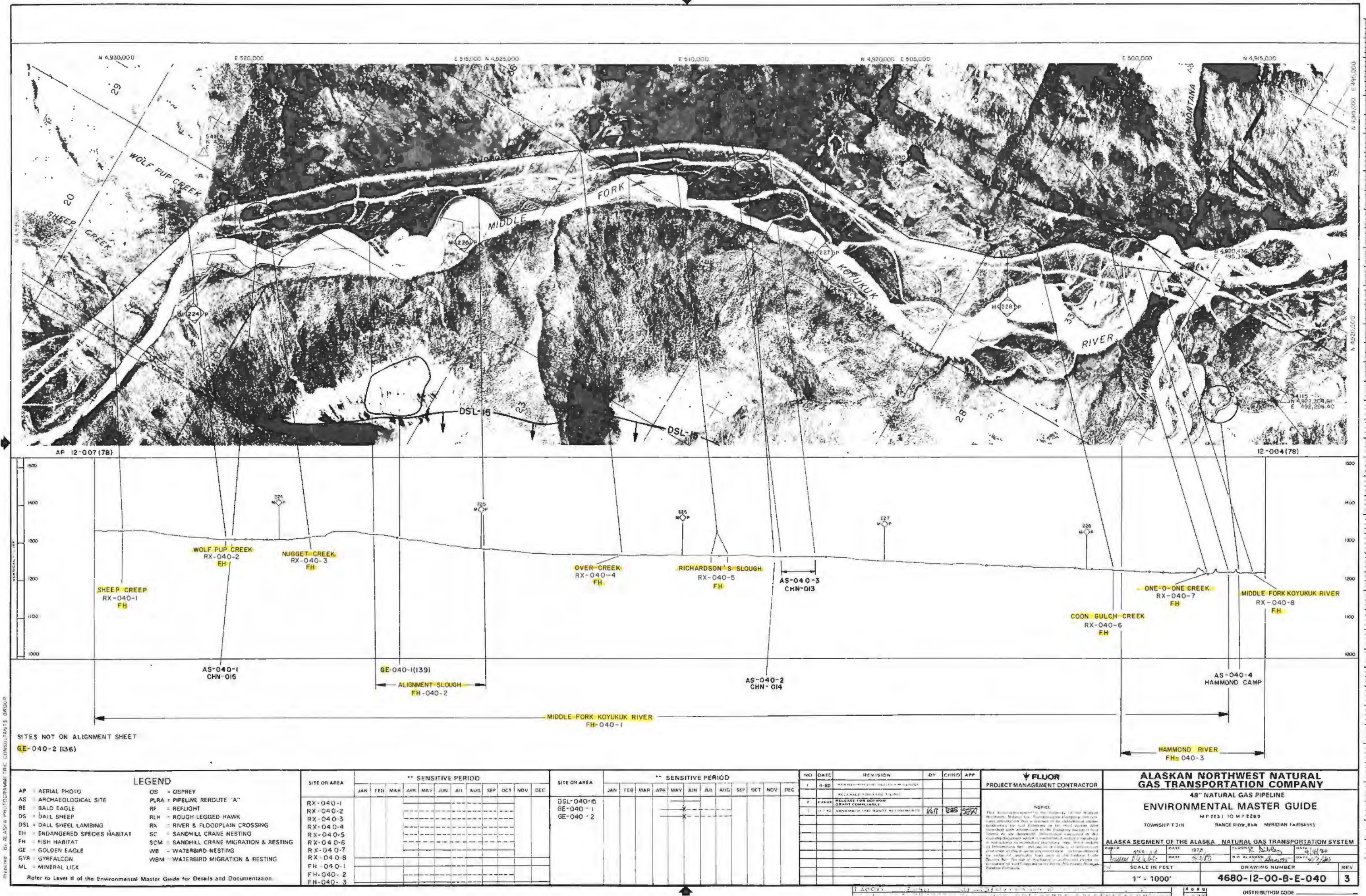
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PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 217.1 TO MP 223.1  
TOWNSHIP 132N, 15W RANGE 10W MERIDIAN FAIRBANKS

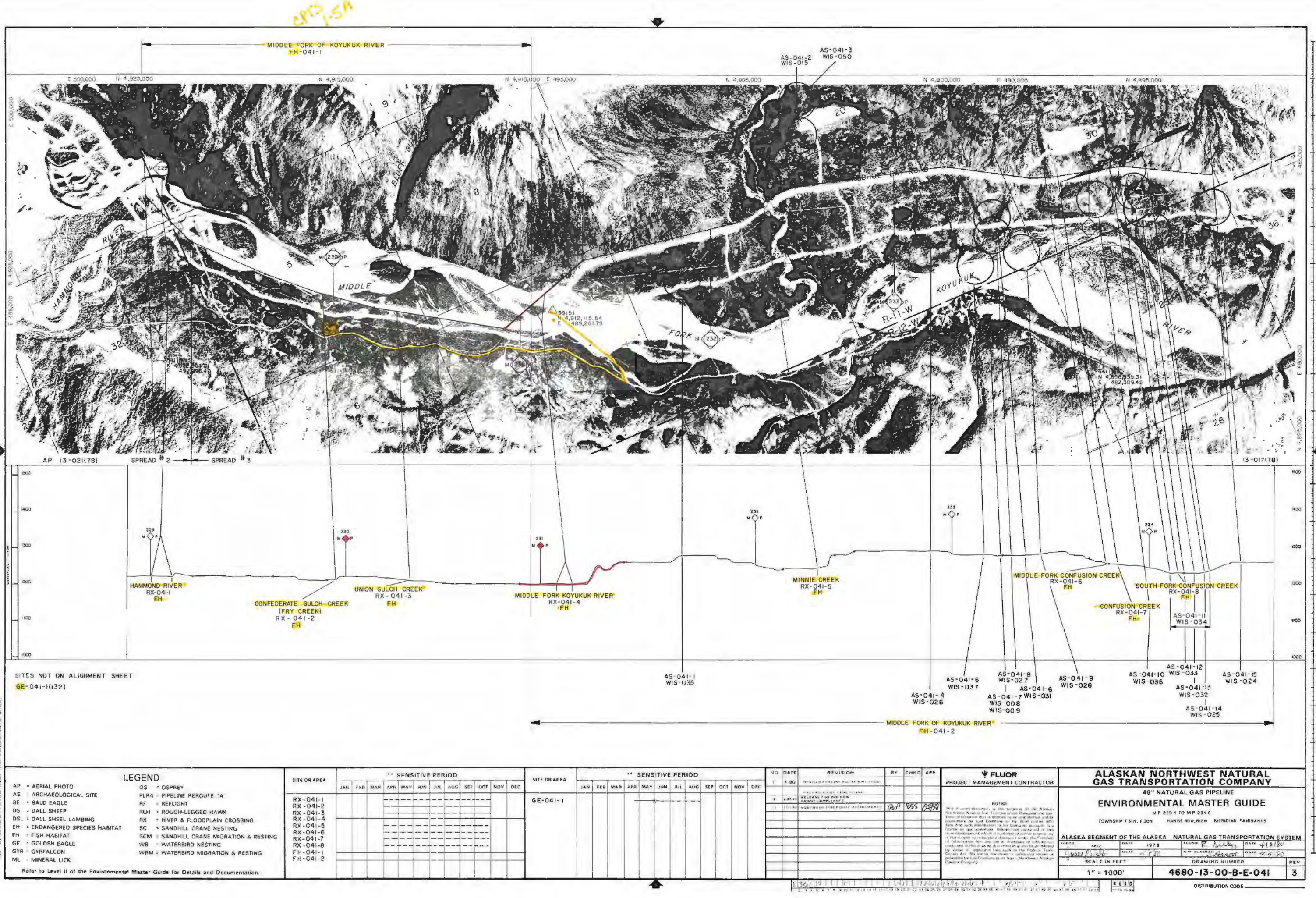
**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

PROJECT NO.	4680-12-00-B-E-039	DATE	4/80
SCALE	1" = 1000'	DRAWING NUMBER	4680-12-00-B-E-039
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DSL = DALL SHEEP LAMBING	RX = RIVER & FLOODPLAIN CROSSING
EH = ENDANGERED SPECIES HABITAT	SCM = SANDHILL CRANE MIGRATION & RESTING
GE = GOLDEN EAGLE	WB = WATERBIRD NESTING
GYR = GYRFALCON	WRM = WATERBIRD MIGRATION & RESTING
ML = MINERAL LICK	

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-041-1												
RX-041-2												
RX-041-3												
RX-041-4												
RX-041-5												
RX-041-6												
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RX-041-12												
RX-041-13												
RX-041-14												
RX-041-15												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
GE-041-1												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISIONS TO BE MADE			
2	4-80	REVISIONS TO BE MADE			
3	4-80	REVISIONS TO BE MADE			

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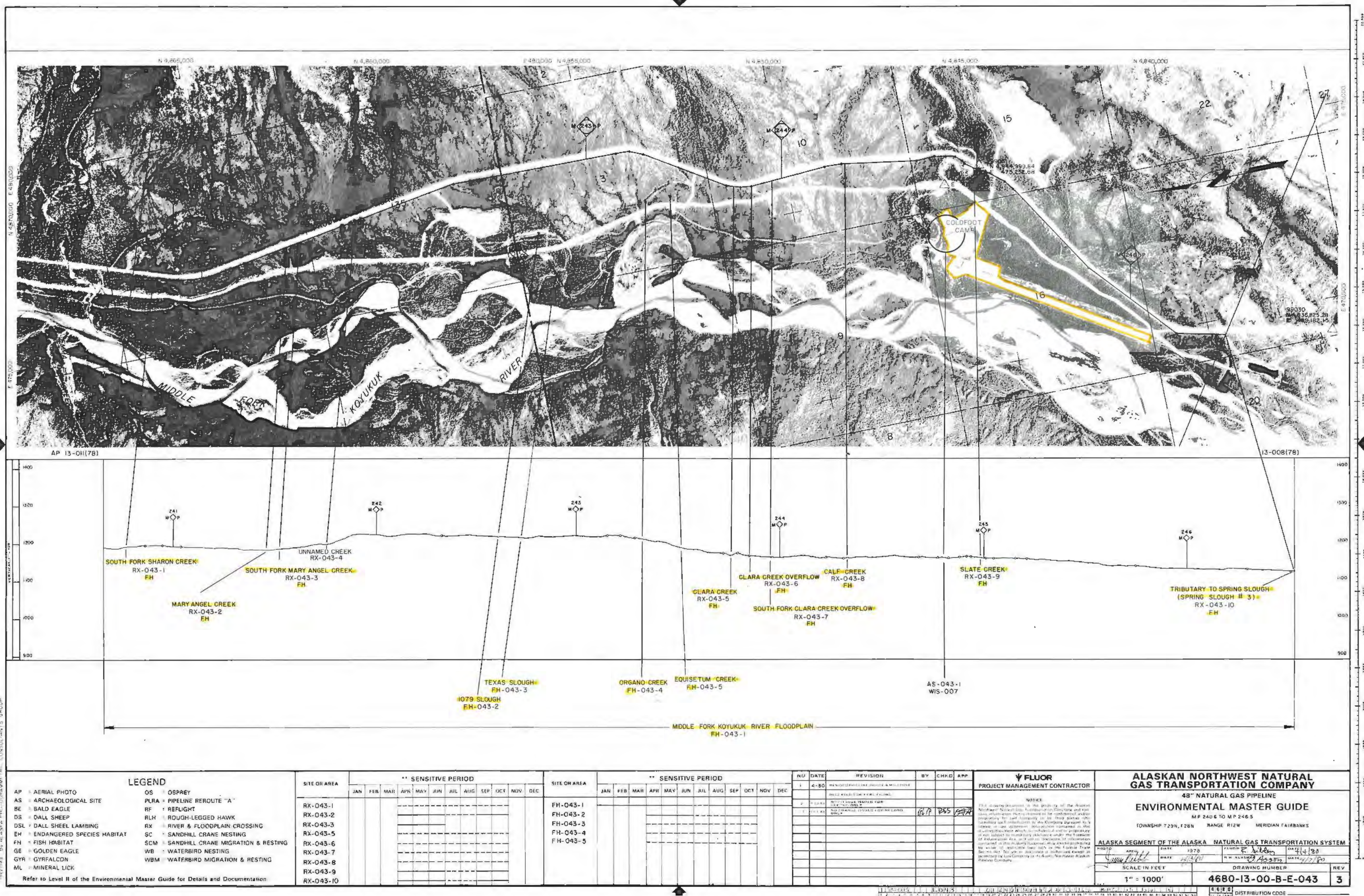
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<b>48" NATURAL GAS PIPELINE</b>	
<b>ENVIRONMENTAL MASTER GUIDE</b>	
MP 229.4 TO MP 234.6	
TOWNSHIP 21N, R. 10W, S. 24E, MERIDIAN FAIRBANKS	
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	
SCALE IN FEET	DRAWING NUMBER
1" = 1000'	4680-13-00-B-E-041
REV	3

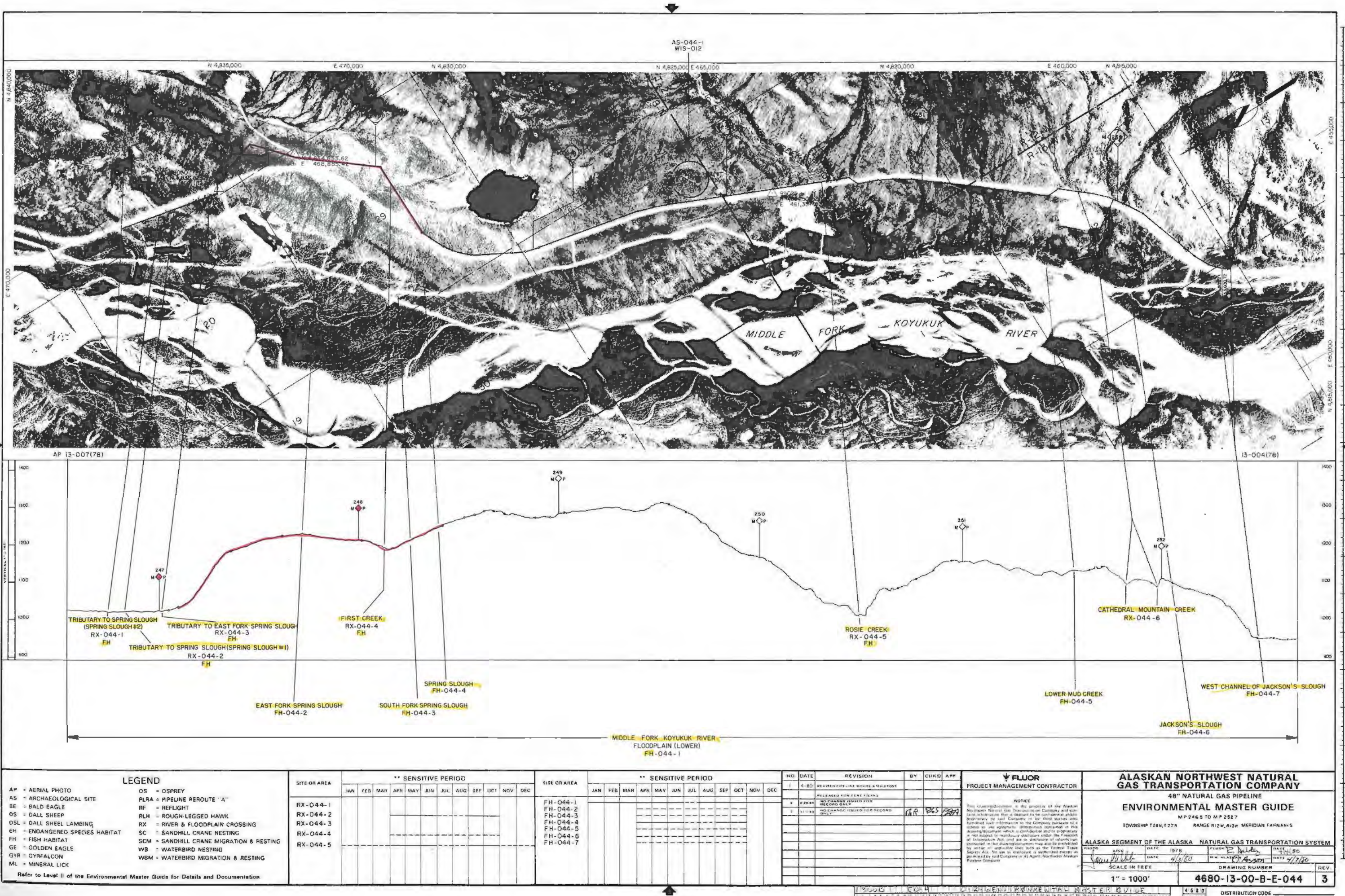






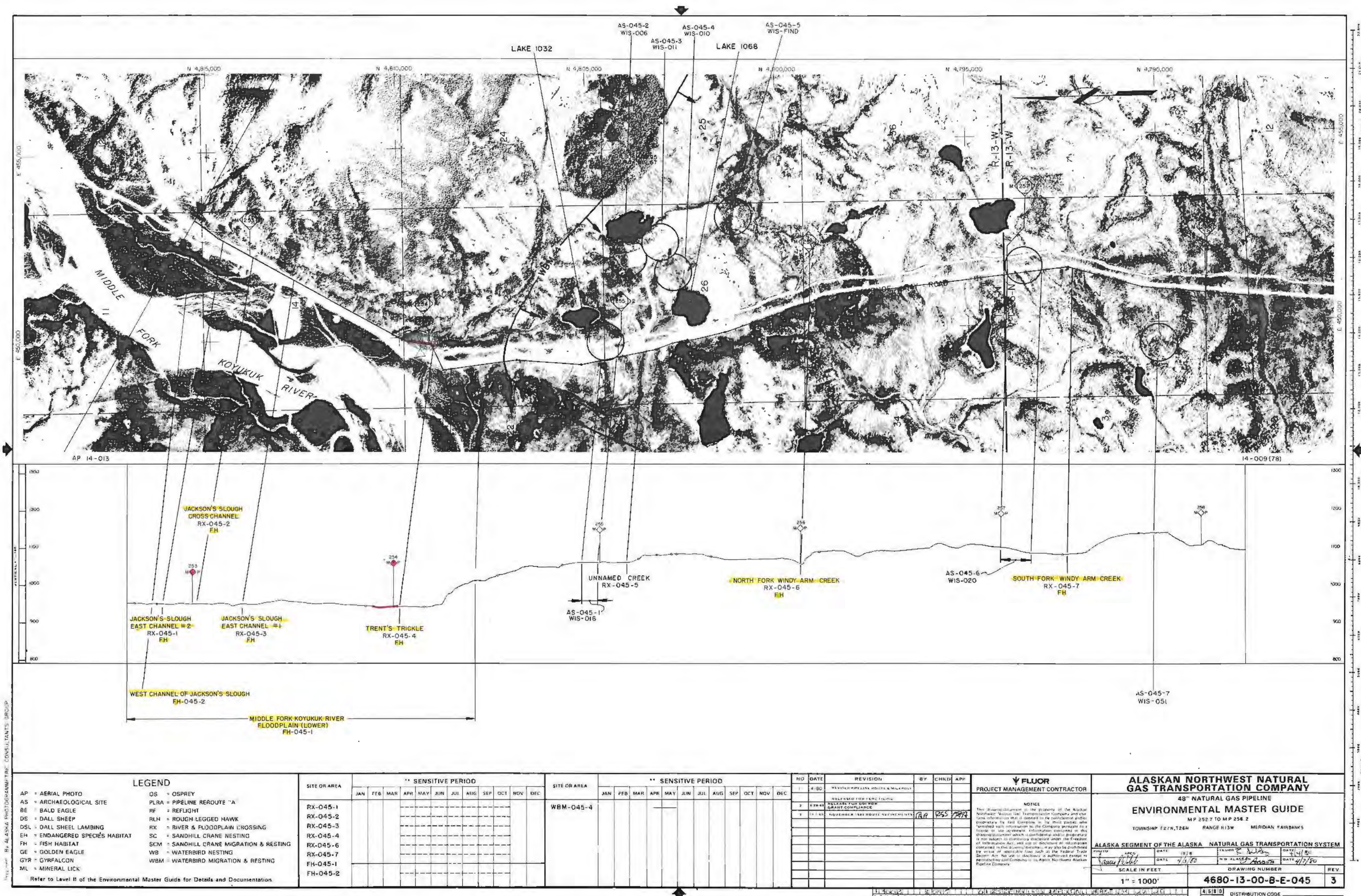








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SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-045-1												
RX-045-2												
RX-045-3												
RX-045-4												
RX-045-6												
RX-045-7												
FH-045-1												
FH-045-2												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WBM-045-4												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISION FOR PIPELINE ROUTE & MILEPOSTS			
2	4-80	REVISION FOR FERC FILING			
3	11-80	REVISION FOR GSA COMPLIANCE			
4	11-80	NOVEMBER 1980 ROUTE REVISIONS	RA	RES	7/8/80

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PROJECT MANAGEMENT CONTRACTOR

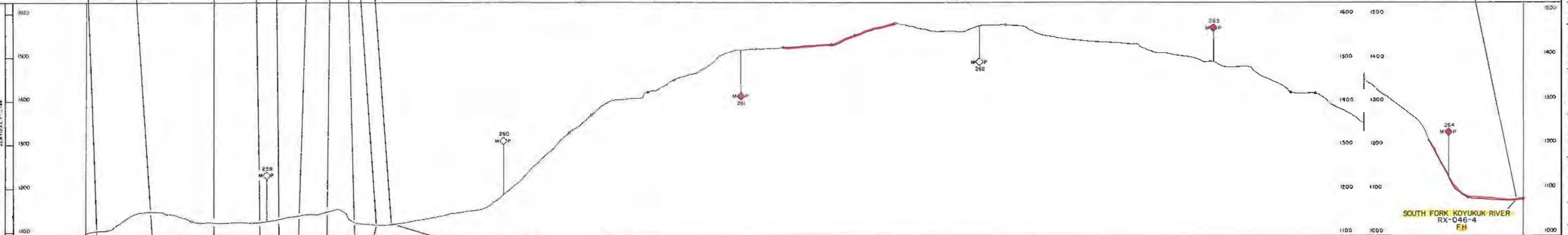
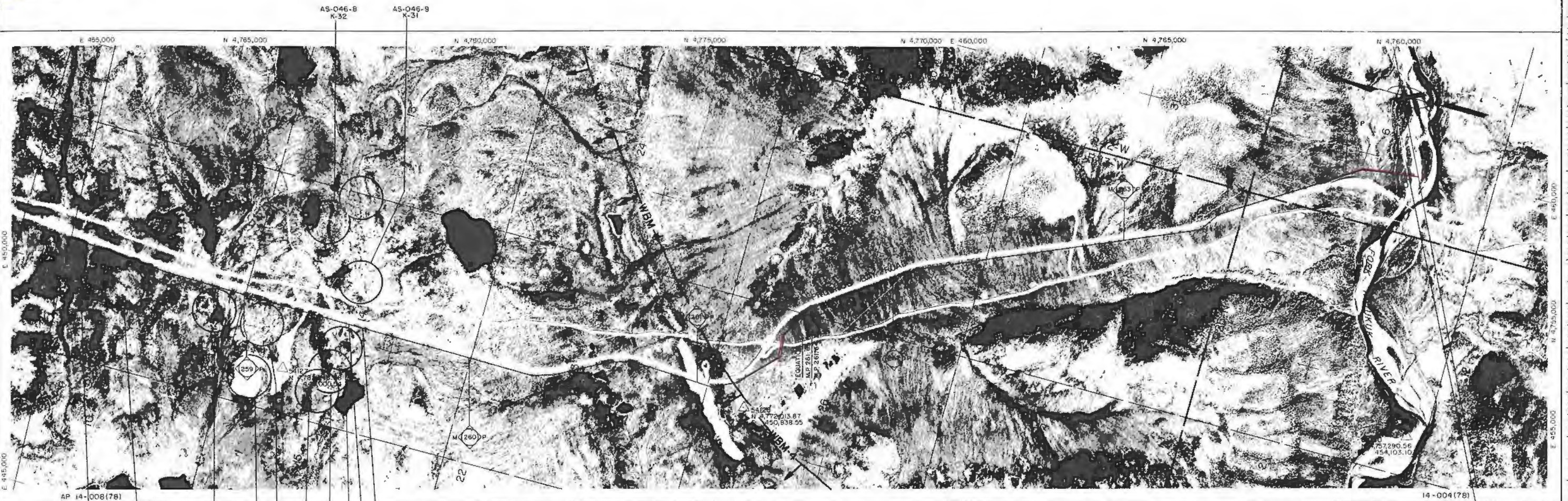
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<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b>			
<b>48" NATURAL GAS PIPELINE</b>			
<b>ENVIRONMENTAL MASTER GUIDE</b>			
MP 252.7 TO MP 258.2			
TOWNSHIP 12N, 26W RANGE R13W MERIDIAN FAIRBANKS			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	10/8	DATE	4/1/80
BY	FLUOR	DATE	4/1/80
SCALE IN FEET	1" = 1000'		
DRAWING NUMBER	4680-13-00-B-E-045		
REV	3		

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CHAPMAN CREEK  
RX-046-1  
FH

AS-046-1  
WIS-002

AS-046-2  
WIS-019

AS-046-3  
WIS-023

AS-046-4  
WIS-004

AS-046-5  
WIS-001

AS-046-6  
WIS-FIND

AS-046-7  
WIS-003

CROSSROADS CREEK #2  
RX-046-2

CROSSROADS CREEK #1  
RX-046-3

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#### SITE OR AREA

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-046-1												
RX-046-4												

#### SITE OR AREA

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
GE-046-1												
WBM-046-4												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISED PIPELINE ROUTE & MILEPOST			
2	8-28-80	RELEASED FOR FIELD FIELD			
3	11-80	RELEASED FOR DD-RW			
4	11-80	NOVEMBER 1980 ROUTE REVISIONS	RR	BSS	987

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PROJECT MANAGEMENT CONTRACTOR

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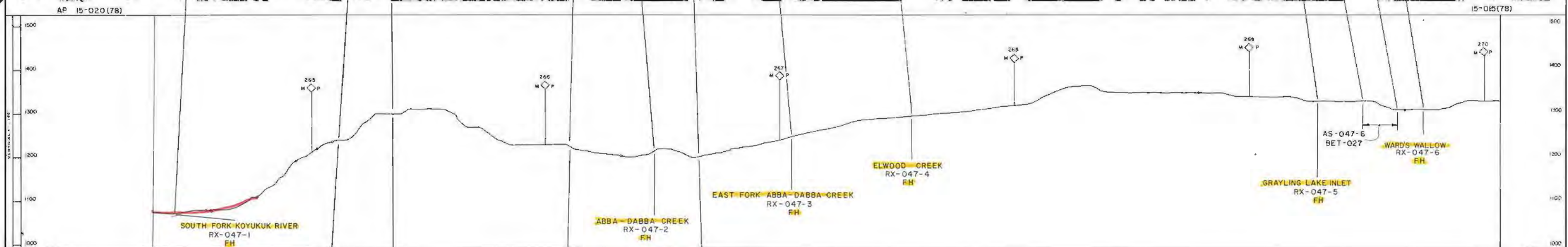
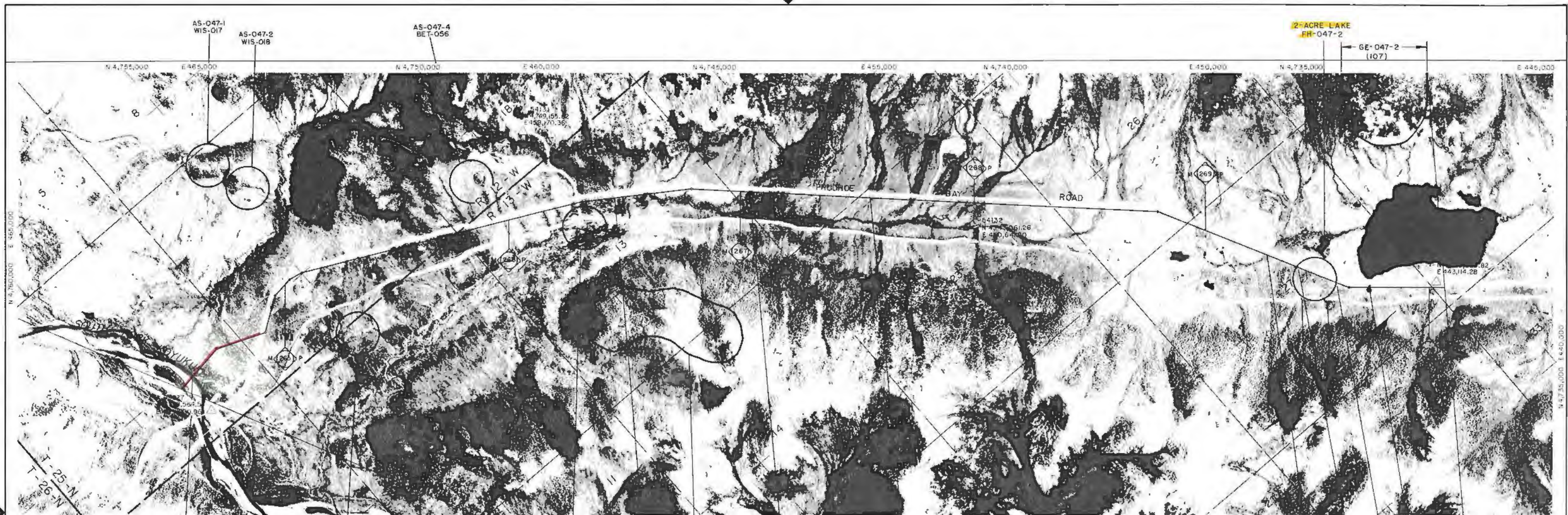
**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 258.2 TO MP 264.3  
TOWNSHIP T26N, T25N RANGE R15W, R12W MERIDIAN FAIRBANKS

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

DATE: 4/13/80  
SCALE: 1" = 1000'  
DRAWING NUMBER: 4680-13-00-B-E-046  
REV: 3

Prepared by ALASKA PHOTOGRAMMETRIC CONSULTANTS GROUP





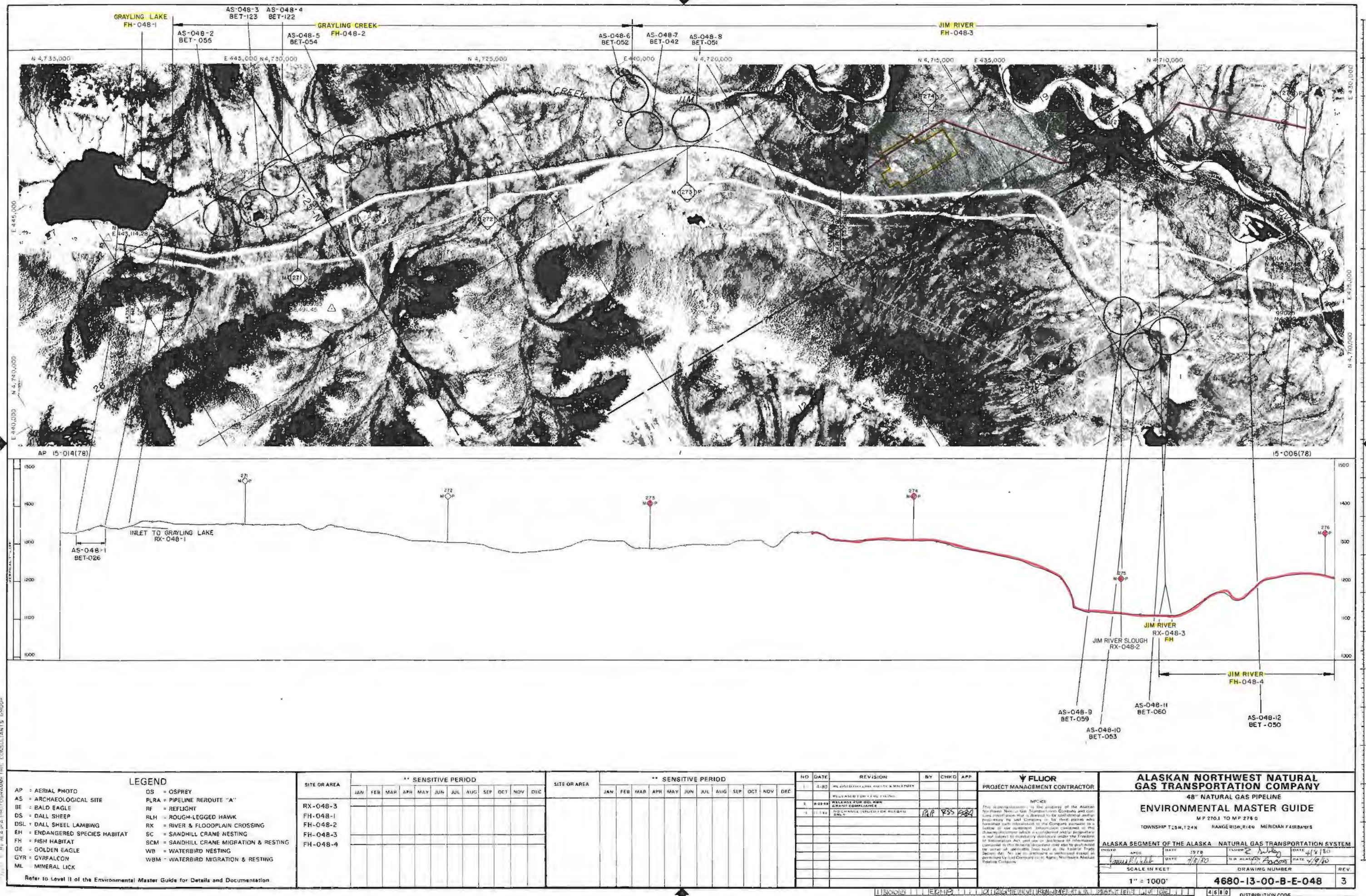
LEGEND		** SENSITIVE PERIOD												** SENSITIVE PERIOD												NO. DATE REVISION BY CHKD APP			FLUOR PROJECT MANAGEMENT CONTRACTOR		ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY																						
AP	AERIAL PHOTO	OS	OSPREY	PUR	PIPELINE ROUTE 'A'	RF	REFLIGHT	RLM	ROUGH LEGGED HAWK	RK	RIVER & FLOODPLAIN CROSSING	SC	SANDHILL CRANE NESTING	SCM	SANDHILL CRANE MIGRATION & RESTING	VB	WATERBIRD NESTING	WBM	WATERBIRD MIGRATION & RESTING	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK										
AP	AERIAL PHOTO	OS	OSPREY	PUR	PIPELINE ROUTE 'A'	RF	REFLIGHT	RLM	ROUGH LEGGED HAWK	RK	RIVER & FLOODPLAIN CROSSING	SC	SANDHILL CRANE NESTING	SCM	SANDHILL CRANE MIGRATION & RESTING	VB	WATERBIRD NESTING	WBM	WATERBIRD MIGRATION & RESTING	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK										
AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK
BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK		
DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK				
DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK						
EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK								
FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK										
GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK												
GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK														
ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK																
AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK																		
BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK																				
DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK																						
DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK																								
EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK																										
FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK																												
GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK																														
GYR	GYRFALCON	ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK																																
ML	MINERAL LICK	AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK																																		
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GYR	GYRFALCON	ML	MINERAL LICK																																																		
ML	MINERAL LICK																																																				

NO.	DATE	REVISION	BY	CHKD	APP
1	4-80	ISSUE FOR CONSTRUCTION			
2	4-80	RELEASE FOR REVIEW			
3	4-80	FOR CHANGE REQUEST (C.R.)	RLP	VSS	2322

FLUOR PROJECT MANAGEMENT CONTRACTOR	
NOTICE	This document is the property of the Alaska Natural Gas Pipeline System. It is to be used for the purpose of the project and is not to be distributed outside the project. It is to be kept confidential and its use is restricted to the project. It is to be kept confidential and its use is restricted to the project. It is to be kept confidential and its use is restricted to the project.

ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY	
48" NATURAL GAS PIPELINE	ENVIRONMENTAL MASTER GUIDE
MP 264.3 TO MP 270.1	TOWNSHIP 125N RANGE 12W, 13W MERIDIAN FAIRBANKS
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	SCALE IN FEET 1" = 1000'
DRAWING NUMBER 4680-13-00-B-E-047	REV 3

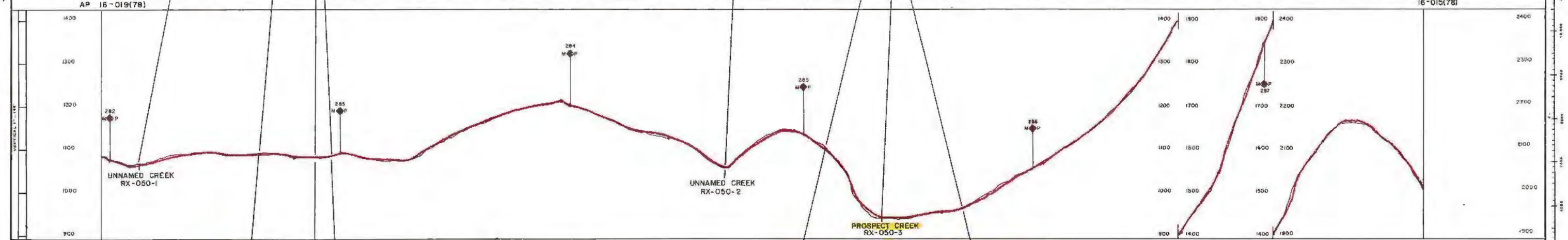
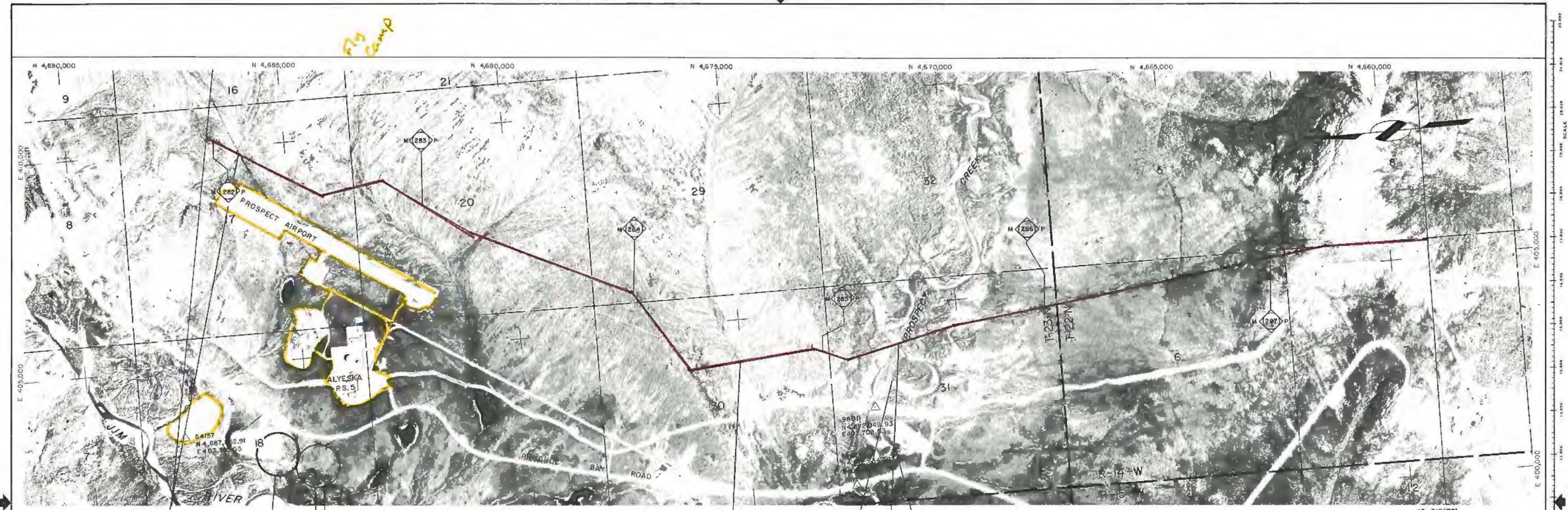












SITES NOT ON ALIGNMENT SHEET:  
PROSPECT CAMP

JIM RIVER FH-050-1

AS-050-1 BET-041

AS-050-2 BET-040

CATCH-22 SPRINGS FH-050-2

PROSPECT PIT CREEK POND FH-050-3

**LEGEND**

AP = AERIAL PHOTO  
AS = ARCHAEOLOGICAL SITE  
BE = BALD EAGLE  
DS = DALL SHEEP  
DSL = DALL SHEEP LAMBING  
EH = ENDANGERED SPECIES HABITAT  
FH = FISH HABITAT  
GE = GOLDEN EAGLE  
GYR = GYRFALCON  
ML = MINERAL LICK

OS = OSPREY  
PLRA = PIPELINE REROUTE "A"  
RF = REFLIGHT  
RLH = ROUGH-LEGGED HAWK  
RX = RIVER & FLOODPLAIN CROSSING  
SC = SANDHILL CRANE NESTING  
SCM = SANDHILL CRANE MIGRATION & RESTING  
WB = WATERBIRD NESTING  
WBM = WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-050-3												
FH-050-1												
FH-050-2												
FH-050-3												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISION FOR LAYOUT & MILEPOSTS			
2	8-80	REVISION FOR LAYOUT & MILEPOSTS			
3	11-80	NO CHANGES FOR RECORD			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

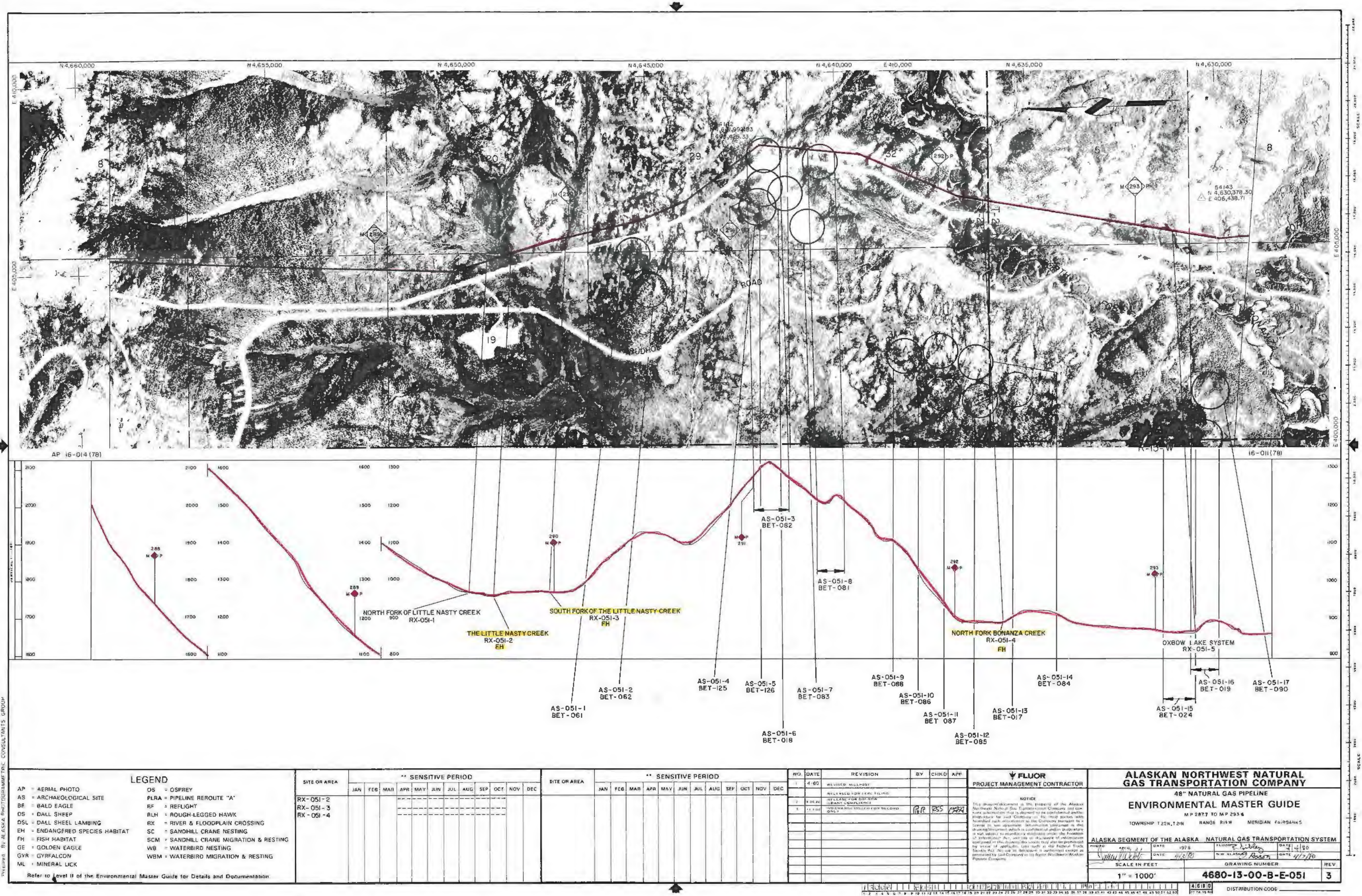
**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 281.9 TO MP 287.7  
TOWNSHIP 123N, T22N RANGE 14W MERIDIAN FAIRBANKS

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

DATE: 4/3/80  
DRAWING NUMBER: 4680-13-00-B-E-050  
REV: 3

DESIGNED BY ALASKA PHOTOGRAMMETRIC CONSULTANTS GROUP





Prepared by ALASKA PHOTOGRAMMETRIC CONSULTANTS GROUP

LEGEND

- AP = AERIAL PHOTO
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- BE = BALD EAGLE
- DS = DALL SHEEP
- DSL = DALL SHEEP LAMBING
- EH = ENDANGERED SPECIES HABITAT
- GE = GOLDEN EAGLE
- GYR = GYRFALCON
- ML = MINERAL LICK
- OS = OSPREY
- PLRA = PIPELINE ROUTE "A"
- RF = REFLIGHT
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- SCM = SANDHILL CRANE MIGRATION & RESTING
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- WBM = WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-051-2												
RX-051-3												
RX-051-4												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
AS-051-1												
AS-051-2												
AS-051-3												
AS-051-4												
AS-051-5												
AS-051-6												
AS-051-7												
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AS-051-14												
AS-051-15												
AS-051-16												
AS-051-17												
AS-051-18												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISED HILLTOP			
2	4-80	RELEASED FOR FIELD			
3	11-80	NO CHANGE COLLECTED FOR RECORD			

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

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<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b>	
48" NATURAL GAS PIPELINE	
<b>ENVIRONMENTAL MASTER GUIDE</b>	
MP 287.7 TO MP 293.6	
TOWNSHIP 12N, 12W	RANGE 15W
MERIDIAN 14R, 64N, 65E	
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	
DATE: 4/1/80	DATE: 4/1/80
SCALE IN FEET	DRAWING NUMBER
1" = 1000'	4680-13-00-B-E-051
REV. 3	DISTRIBUTION CODE

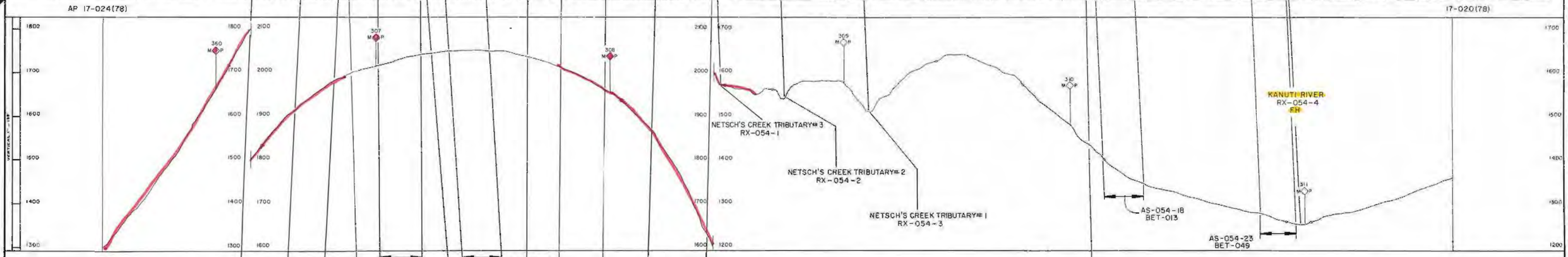
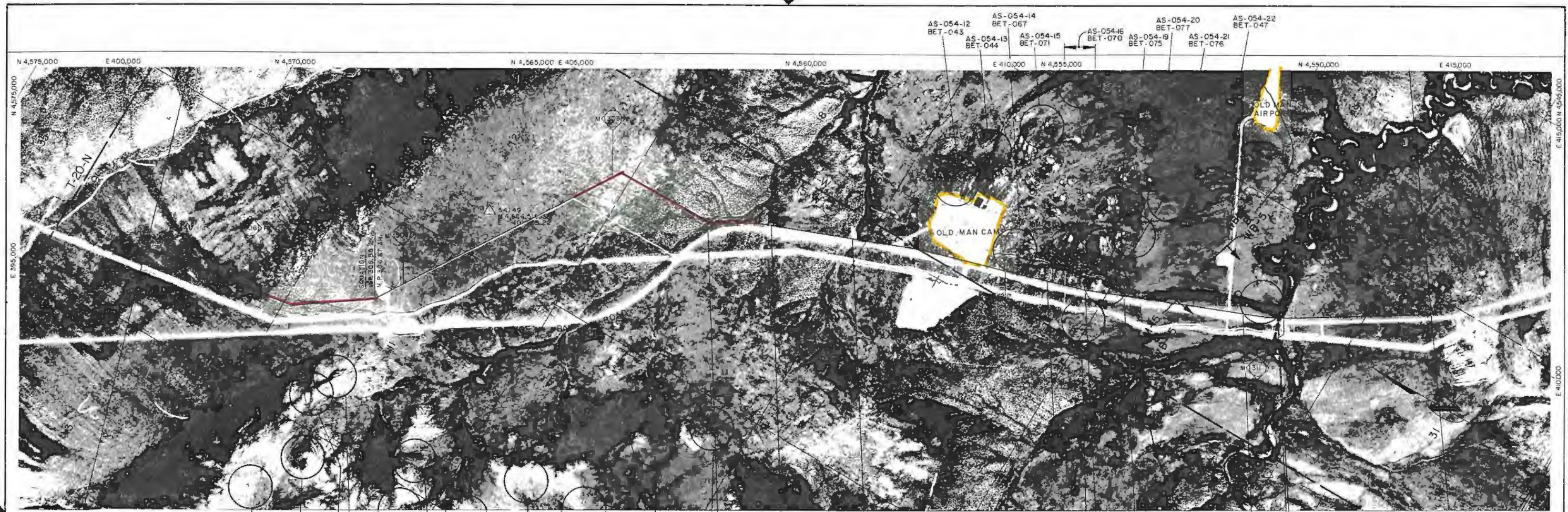












SITE OR AREA												SITE OR AREA											
** SENSITIVE PERIOD												** SENSITIVE PERIOD											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-054-4												WB-054-5 WBM-054-5											

**LEGEND**

AP = AERIAL PHOTO  
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WBM = WATERBIRD MIGRATION & RESTING

Refer to Level II of the Environmental Master Guide for Details and Documentation.

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISED: MAPPING			
2	4-80	RELEASED FOR PERMITTING			
3	4-80	RELEASED FOR DESIGN			
4	4-80	RELEASED FOR CONSTRUCTION			
5	4-80	RELEASED FOR OPERATION			
6	4-80	RELEASED FOR MAINTENANCE			
7	4-80	RELEASED FOR DECOMMISSIONING			
8	4-80	RELEASED FOR ABANDONMENT			
9	4-80	RELEASED FOR REUSE			
10	4-80	RELEASED FOR REDEMPTION			
11	4-80	RELEASED FOR RECONSTRUCTION			
12	4-80	RELEASED FOR REPAIR			
13	4-80	RELEASED FOR REPLACEMENT			
14	4-80	RELEASED FOR REUSE			
15	4-80	RELEASED FOR REDEMPTION			
16	4-80	RELEASED FOR RECONSTRUCTION			
17	4-80	RELEASED FOR REPAIR			
18	4-80	RELEASED FOR REPLACEMENT			
19	4-80	RELEASED FOR REUSE			
20	4-80	RELEASED FOR REDEMPTION			
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34	4-80	RELEASED FOR REUSE			
35	4-80	RELEASED FOR REDEMPTION			
36	4-80	RELEASED FOR RECONSTRUCTION			
37	4-80	RELEASED FOR REPAIR			
38	4-80	RELEASED FOR REPLACEMENT			
39	4-80	RELEASED FOR REUSE			
40	4-80	RELEASED FOR REDEMPTION			
41	4-80	RELEASED FOR RECONSTRUCTION			
42	4-80	RELEASED FOR REPAIR			
43	4-80	RELEASED FOR REPLACEMENT			
44	4-80	RELEASED FOR REUSE			
45	4-80	RELEASED FOR REDEMPTION			
46	4-80	RELEASED FOR RECONSTRUCTION			
47	4-80	RELEASED FOR REPAIR			
48	4-80	RELEASED FOR REPLACEMENT			
49	4-80	RELEASED FOR REUSE			
50	4-80	RELEASED FOR REDEMPTION			
51	4-80	RELEASED FOR RECONSTRUCTION			
52	4-80	RELEASED FOR REPAIR			
53	4-80	RELEASED FOR REPLACEMENT			
54	4-80	RELEASED FOR REUSE			
55	4-80	RELEASED FOR REDEMPTION			
56	4-80	RELEASED FOR RECONSTRUCTION			
57	4-80	RELEASED FOR REPAIR			
58	4-80	RELEASED FOR REPLACEMENT			
59	4-80	RELEASED FOR REUSE			
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62	4-80	RELEASED FOR REPAIR			
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64	4-80	RELEASED FOR REUSE			
65	4-80	RELEASED FOR REDEMPTION			
66	4-80	RELEASED FOR RECONSTRUCTION			
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100	4-80	RELEASED FOR REDEMPTION			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 305.5 TO MP 316  
TOWNSHIP T19N RANGE R14W, R15W MERIDIAN FAIRBANKS

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

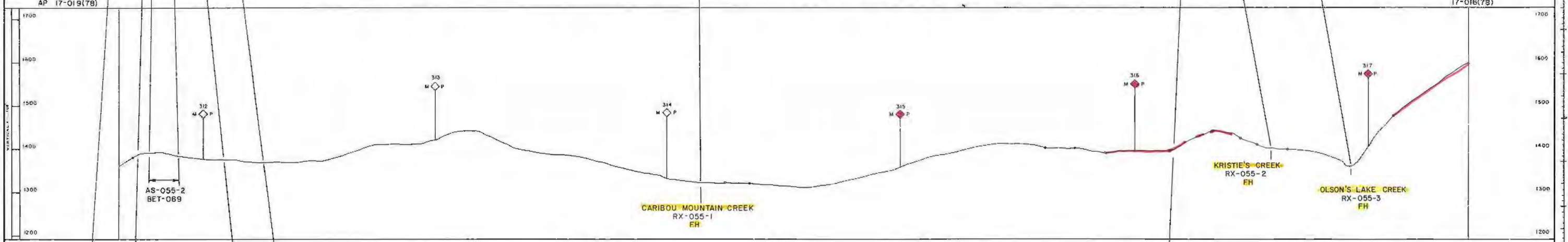
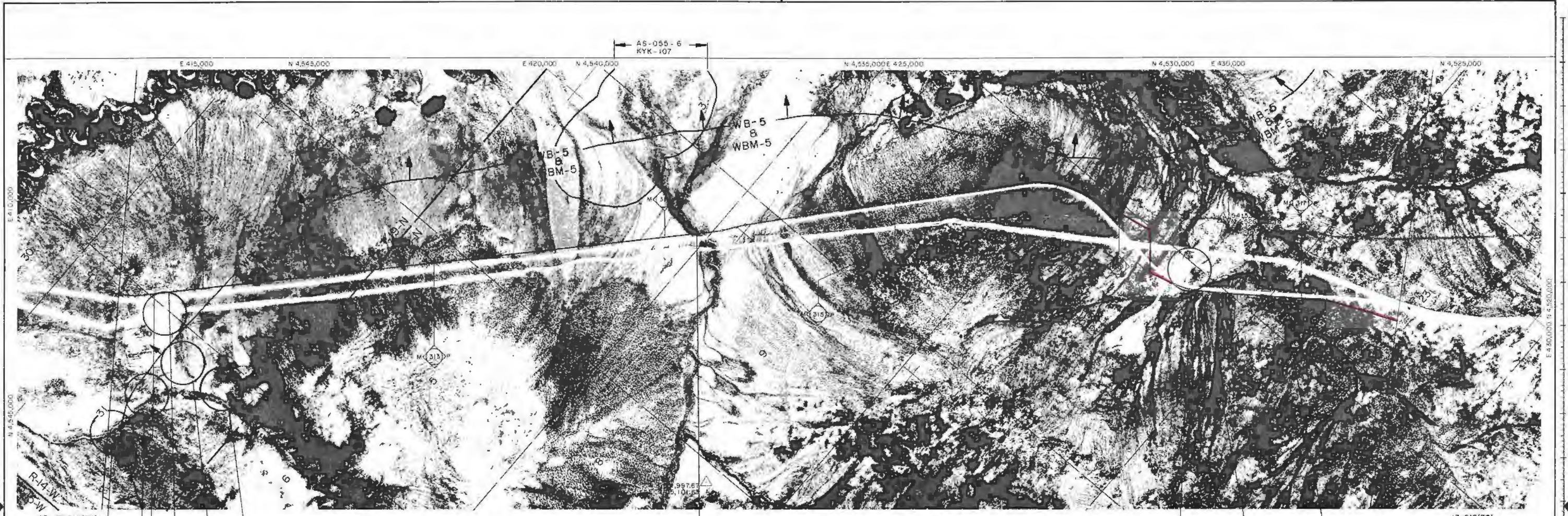
SCALE IN FEET  
1" = 1000'

DRAWING NUMBER  
4680-13-00-B-E-054

REV.  
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DISTRIBUTION CODE





SITE OR AREA	** SENSITIVE PERIOD												SITE OR AREA	** SENSITIVE PERIOD												NO	DATE	REVISION	BY	CHKD	APP
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC						
RX-055-1 RX-055-2 RX-055-3													WBM-055-5 WB-055-5					X								1	2-80	REVISED: MARCH 80			
																										2	4-84	RELEASE FOR DISMOW GRANT COMPLIANCE			
																										3	11-88	REPLACEMENT OF RIVER CROSSING AT 1000000	RAP	DS	980

**LEGEND**

AP = AERIAL PHOTO  
AS = ARCHAEOLOGICAL SITE  
BE = BALD EAGLE  
DS = DALL SHEEP  
DSL = DALL SHEEP LAMBING  
EH = ENDANGERED SPECIES HABITAT  
FH = FISH HABITAT  
GE = GOLDEN EAGLE  
GYR = GYRFALCON  
ML = MINERAL LICK

OS = OSPREY  
PLRA = PIPELINE ROUTE "A"  
RF = REFLIGHT  
RLH = ROUGH-LEGGED HAWK  
RX = RIVER & FLOODPLAIN CROSSING  
SC = SANDHILL CRANE NESTING  
SCM = SANDHILL CRANE MIGRATION & RESTING  
WB = WATERBIRD NESTING  
WBM = WATERBIRD MIGRATION & RESTING

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 314 TO MP 317  
TOWNSHIP T19N, T18N RANGE R14W MERIDIAN F4MBANKS

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

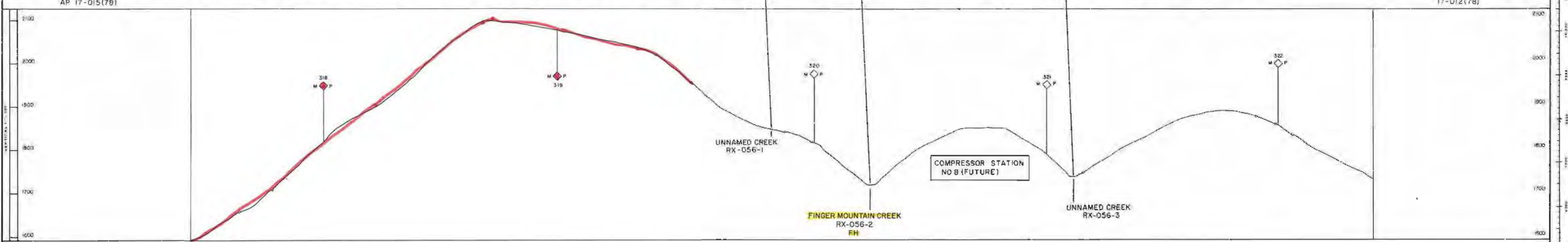
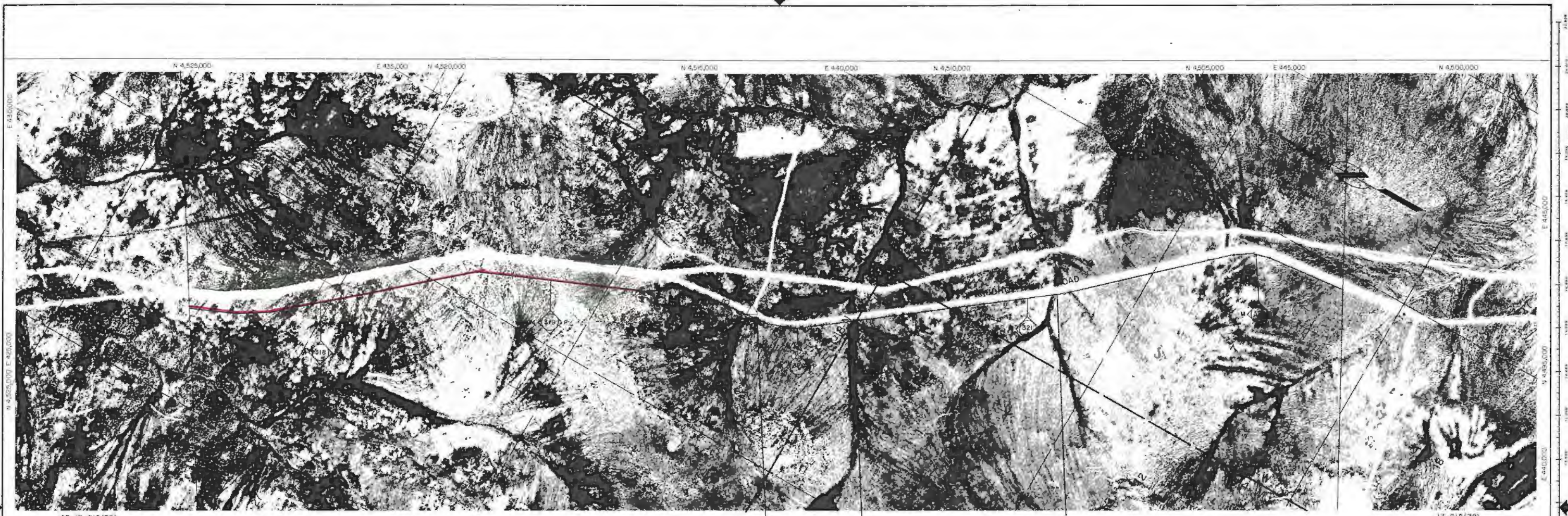
PROJECT	DATE	FLUOR	DATE
48" NGP	1978	48" NGP	1980
SCALE IN FEET	DATE	SCALE IN FEET	DATE
1" = 1000'	4/8/81	1" = 1000'	4/8/80

DRAWING NUMBER: 4680-13-00-B-E-055  
REV: 3

**NOTICE**

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LEGEND		** SENSITIVE PERIOD												** SENSITIVE PERIOD												FLUOR PROJECT MANAGEMENT CONTRACTOR			ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY					
AP	AERIAL PHOTO	OS	OSPREY	PLRA	PIPELINE REROUTE 'A'	RF	REFLIGHT	RLW	ROUGH-LEGGED HAWK	RX	RIVER & FLOODPLAIN CROSSING	SC	SANDHILL CRANE NESTING	SCM	SANDHILL CRANE MIGRATION & RESTING	WB	WATERBIRD NESTING	WRM	WATERBIRD MIGRATION & RESTING													ENVIRONMENTAL MASTER GUIDE		
AS	ARCHAEOLOGICAL SITE	BE	BALD EAGLE	DS	DALL SHEEP	DSL	DALL SHEEP LAMBING	EH	ENDANGERED SPECIES HABITAT	FH	FISH HABITAT	GE	GOLDEN EAGLE	GYR	GYRFALCON	ML	MINERAL LICK													MP 314 TO MP 322.4				
																				TOWNSHIP 11N, 17W			RANGE 14W, 3W			MERIDIAN 1A, 1BANKS			ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM					
																				SCALE IN FEET			1" = 1000'			DRAWING NUMBER			4680-13-00-8-E-056					
																				3			DISTRIBUTION CODE											

Refer to Level II of the Environmental Master Guide for Details and Documentation

FLUOR PROJECT MANAGEMENT CONTRACTOR

ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY

ENVIRONMENTAL MASTER GUIDE

MP 314 TO MP 322.4

TOWNSHIP 11N, 17W RANGE 14W, 3W MERIDIAN 1A, 1BANKS

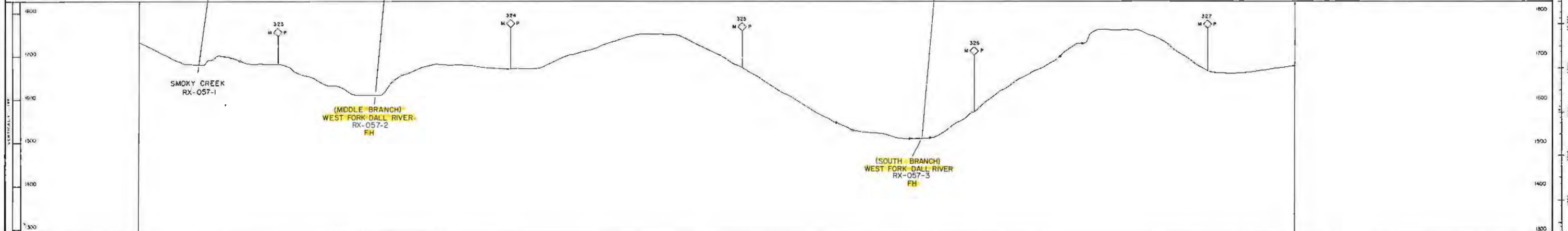
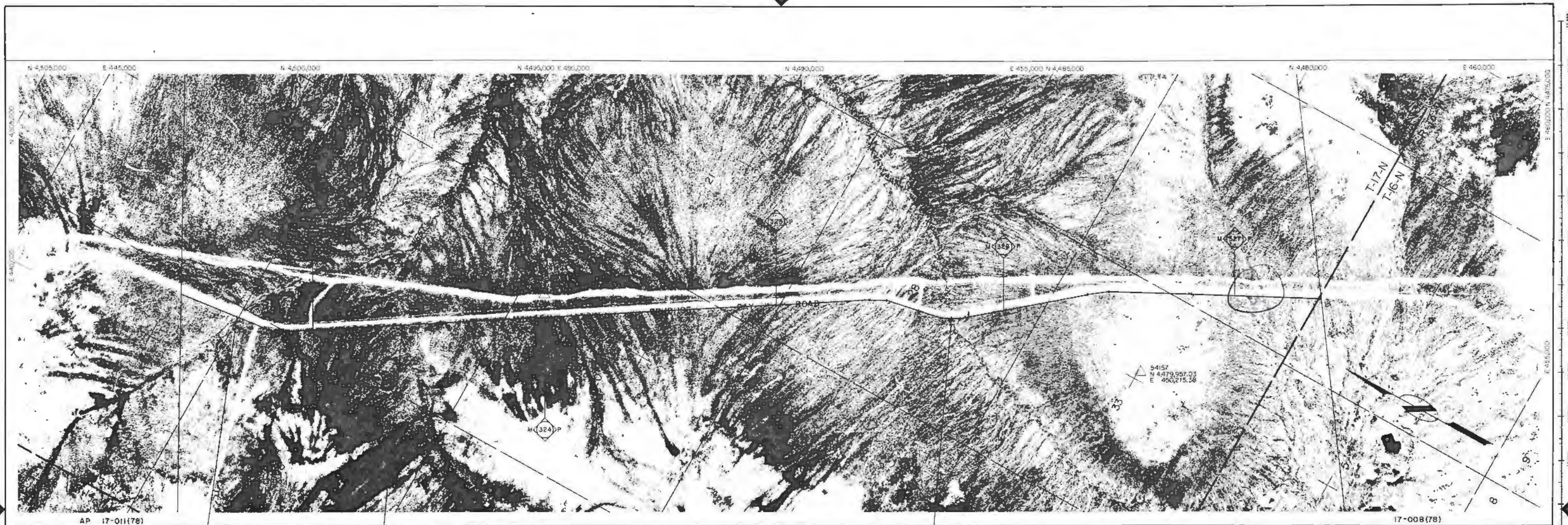
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

SCALE IN FEET 1" = 1000'

DRAWING NUMBER 4680-13-00-8-E-056

3 DISTRIBUTION CODE

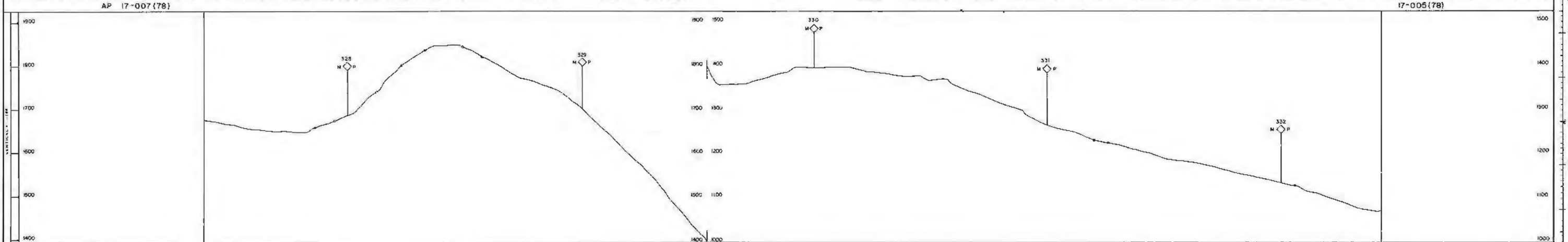
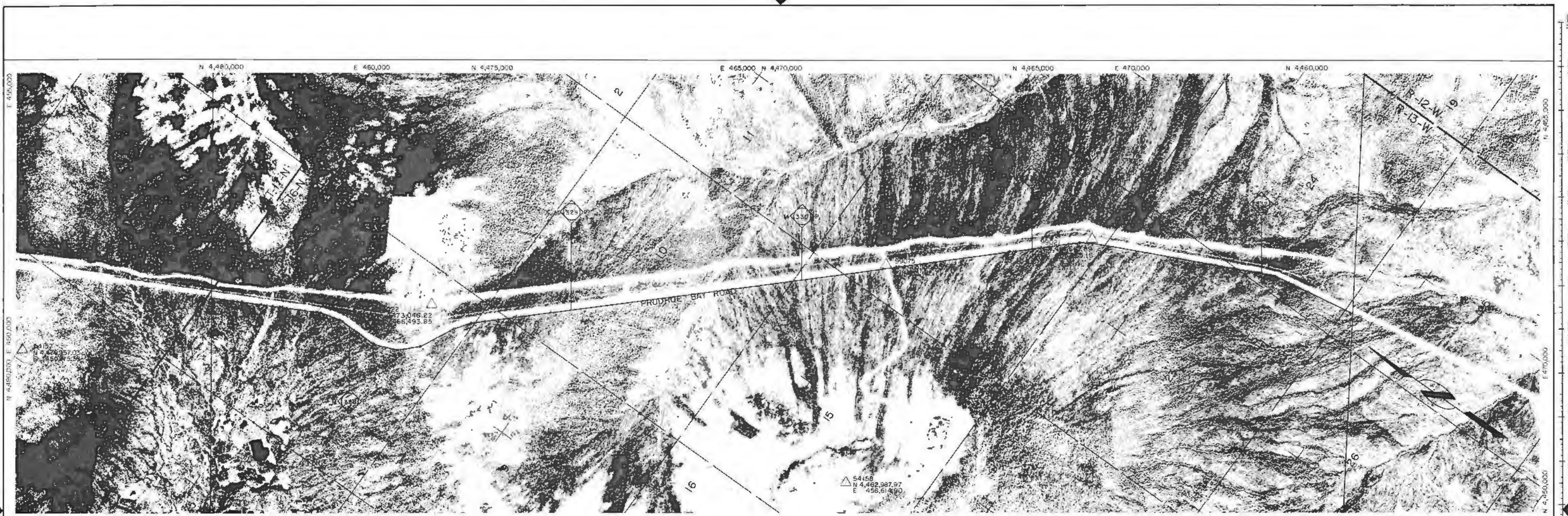




LEGEND		SITE OR AREA												SITE OR AREA												FLUOR PROJECT MANAGEMENT CONTRACTOR				ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
		** SENSITIVE PERIOD												** SENSITIVE PERIOD												NOTICE				48" NATURAL GAS PIPELINE			
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ENVIRONMENTAL MASTER GUIDE							
AP - AERIAL PHOTO	OS - OSPREY																									These documents are the property of the Alaska Northwest Natural Gas Pipeline Company and are not to be distributed outside the Company. Any unauthorized use or reproduction of these documents is strictly prohibited. The Company reserves the right to modify or update these documents without notice.				MP 322.6 TO MP 327.4			
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE REROUTE A																													TOWNSHIP 17N RANGE R13W MERIDIAN FAIRBANKS			
BE - BALD EAGLE	RF - REFLIGHT																													ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DS - DALL SHEEP	RLH - ROUGH LEGGED HAWK																													PROJECT NO. 4680-13-00-B-E-057			
DSL - DALL SHEEP LAMBING	RX - RIVER & FLOODPLAIN CROSSING																													DRAWING NUMBER			
EH - ENDANGERED SPECIES HABITAT	SC - SANDHILL CRANE NESTING																													REV			
FH - FISH HABITAT	SCM - SANDHILL CRANE MIGRATION & RESTING																													1" = 1000'			
GE - GOLDEN EAGLE	WB - WATERBIRD NESTING																													4680-13-00-B-E-057			
GYR - GYRFALCON	WBM - WATERBIRD MIGRATION & RESTING																													3			
ML - MINERAL LICK																														DISTRIBUTION CODE			

Refer to Level II of the Environmental Master Guide for Details and Documentation.





LEGEND												
AP - AERIAL PHOTO	OS - OSPREY											
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE ROUTE 'A'											
BE - BALD EAGLE	RF - REFLIGHT											
DS - DALL SHEEP	RLH - ROUGH LEGGED HAWK											
DSL - DALL SHEEP LAMBING	RX - RIVER & FLOODPLAIN CROSSING											
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ML - MINERAL LICK												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

NO	DATE	REVISION	BY	CHKD	APP
1	8-80	RELEASED FOR KERC FILING			
2	8-80	RELEASED FOR DOWNSIDE GRANT COMPLIANCE	RA	PS	RA

FLUOR PROJECT MANAGEMENT CONTRACTOR			
NOTICE			
This is a preliminary drawing of the proposed 48" natural gas pipeline and is not to be used for construction purposes. It is subject to change without notice. The user assumes all responsibility for the accuracy and completeness of the information contained herein. The user agrees to indemnify and hold the contractor harmless from all claims, damages, and expenses, including reasonable attorneys' fees, arising out of or from the use of this drawing.			

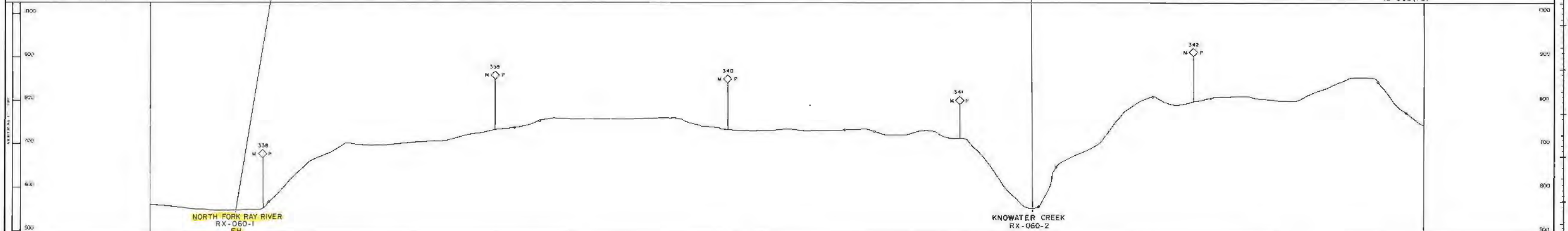
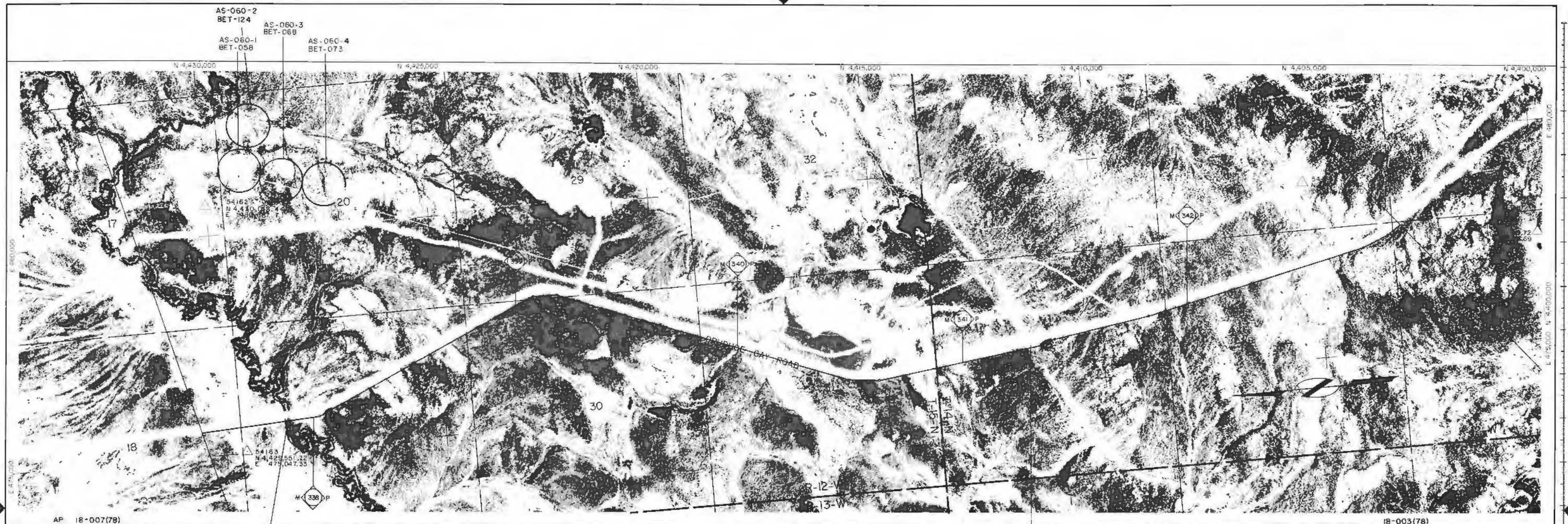
ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
48" NATURAL GAS PIPELINE			
ENVIRONMENTAL MASTER GUIDE			
MP 327.4 TO MP 332.4			
TOWNSHIP 117W, 116N RANGE 13W MERIDIAN FAIRBANKS			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM		DRAWING NUMBER	
1" = 1000'		4680-13-00-B-E-058	
SCALE IN FEET		REV	
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Refer to Level II of the Environmental Master Guide for Details and Documentation.









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DSL	DALL SHEEP LAMBING	RX	RIVER & FLOODPLAIN CROSSING								
FH	ENDANGERED SPECIES HABITAT	SC	SANDHILL CRANE NESTING								
FH	FISH HABITAT	SCM	SANDHILL CRANE MIGRATION & RESTING								
GE	GOLDEN EAGLE	WB	WATERBIRD NESTING								
GYR	GYRFALCON	WBM	WATERBIRD MIGRATION & RESTING								
ML	MINERAL LICK										

SITE OR AREA	** SENSITIVE PERIOD											
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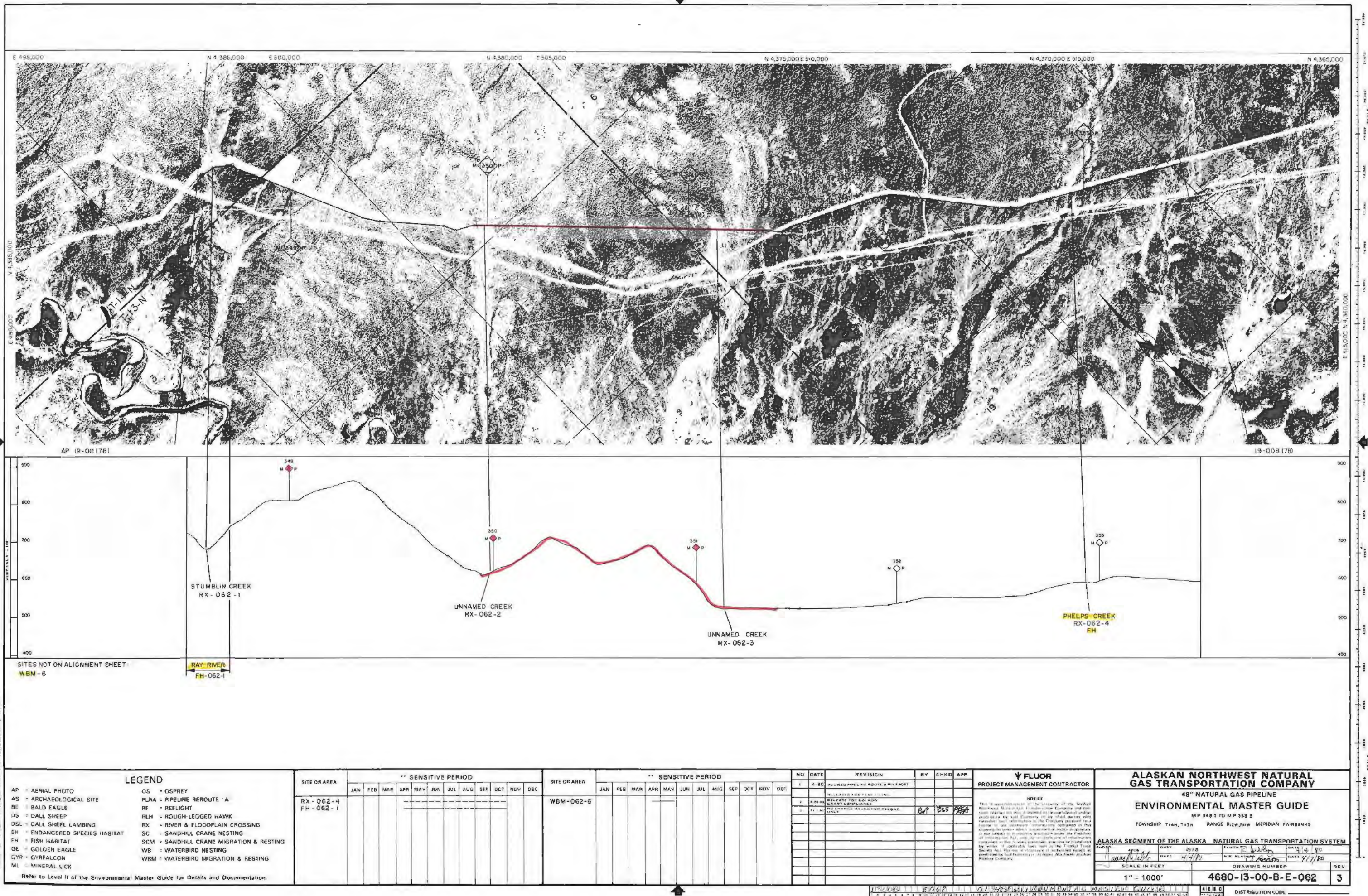
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275	2-03	REVISED DESIGN			



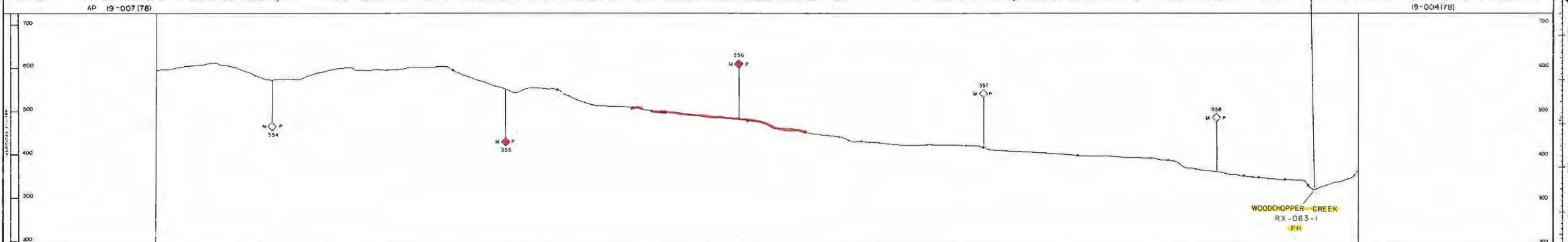
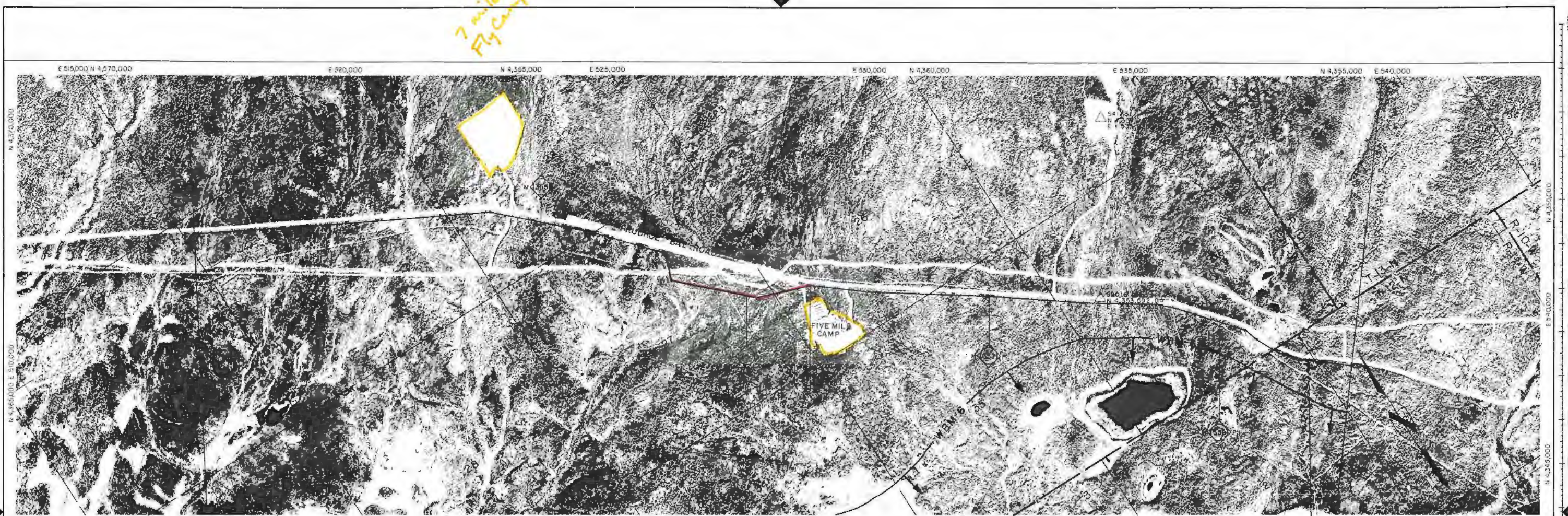








7 mile  
Fly Camp

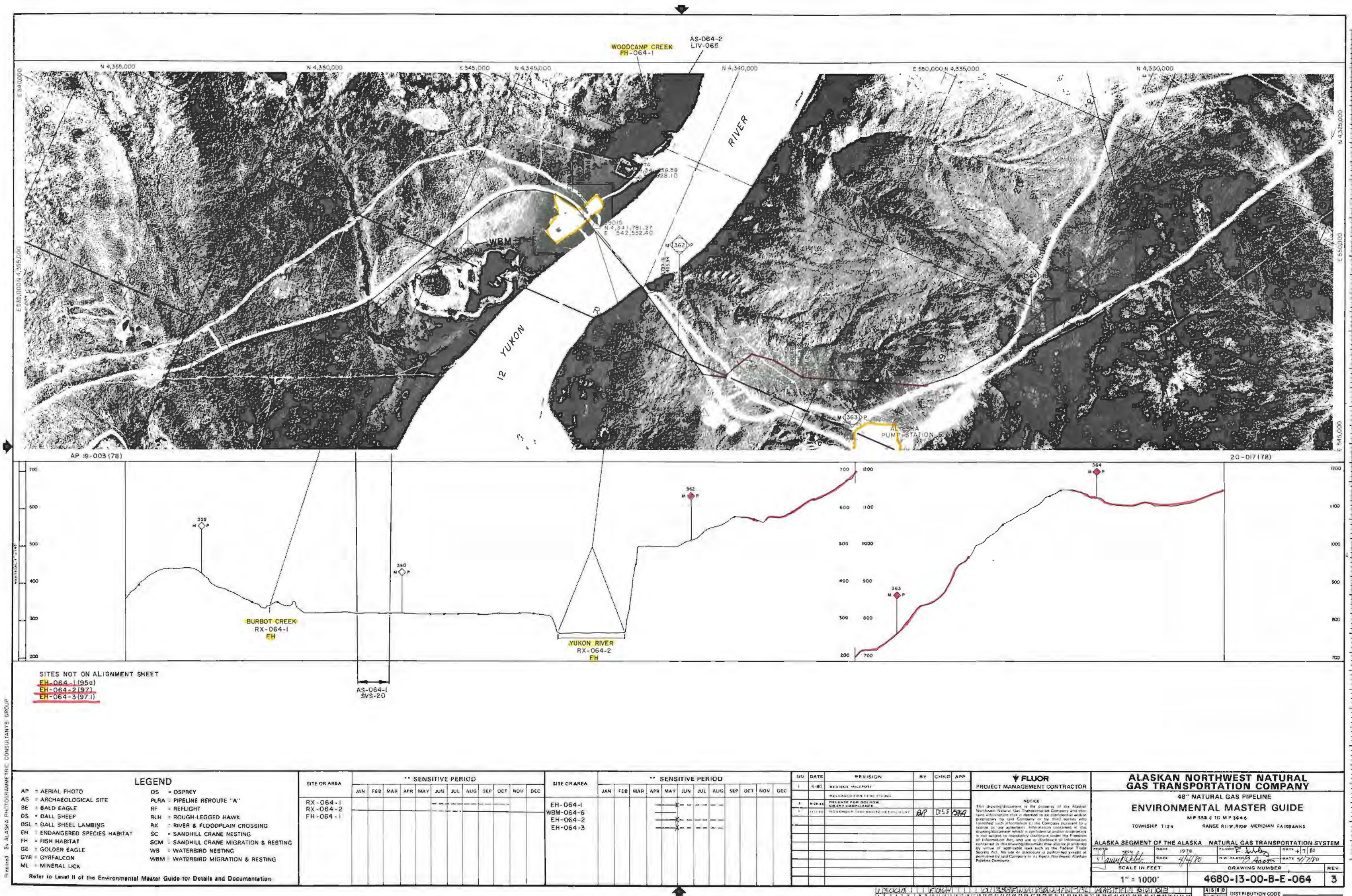


LEGEND		** SENSITIVE PERIOD												** SENSITIVE PERIOD												NO. DATE REVISION BY CHECK APP			FLUOR PROJECT MANAGEMENT CONTRACTOR		ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY	
		JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC												JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC												1 2 3			NOTICE		ENVIRONMENTAL MASTER GUIDE	
AP - AERIAL PHOTO	OS - OSPREY																									1 2 3			This document is the property of the Alaskan Northwest Natural Gas Transportation Company and shall remain the property of the Company. It is to be used only for the purpose for which it was prepared and is not to be distributed outside the Company without the written consent of the Company. It is to be kept confidential and its use is restricted to the Company and its authorized personnel.		4680-13-00-B-E-063	
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE ROUTE 'A'																									1 2 3			NOTICE		4680-13-00-B-E-063	
BE - BALD EAGLE	RF - REFLIGHT																									1 2 3			NOTICE		4680-13-00-B-E-063	
DS - DALL SHEEP	RLH - ROUGH-LEGGED HAWK																									1 2 3			NOTICE		4680-13-00-B-E-063	
DSL - DALL SHEEP LAMBING	RX - RIVER & FLOODPLAIN CROSSING																									1 2 3			NOTICE		4680-13-00-B-E-063	
EH - ENDANGERED SPECIES HABITAT	SCM - SANDHILL CRANE MIGRATION & RESTING																									1 2 3			NOTICE		4680-13-00-B-E-063	
FH - FISH HABITAT	WB - WATERBIRD MIGRATION & RESTING																									1 2 3			NOTICE		4680-13-00-B-E-063	
GE - GOLDEN EAGLE	WBM - WATERBIRD MIGRATION & RESTING																									1 2 3			NOTICE		4680-13-00-B-E-063	
GYR - GYRFALCON																										1 2 3			NOTICE		4680-13-00-B-E-063	
ML - MINERAL LICK																										1 2 3			NOTICE		4680-13-00-B-E-063	

Refer to Level II of the Environmental Master Guide for Details and Documentation



Revised by ALASKA PHOTOGRAMMETRIC CONSULTANTS GROUP



SITES NOT ON ALIGNMENT SHEET  
EH-064-1 (95a)  
EH-064-2 (97)  
EH-064-3 (97.1)

AS-064-1  
SVS-20

#### LEGEND

AP = AERIAL PHOTO  
AS = ARCHAEOLOGICAL SITE  
BE = BALD EAGLE  
DS = DALL SHEEP  
DSL = DALL SHEEP LAMBING  
EH = ENDANGERED SPECIES HABITAT  
FH = FISH HABITAT  
GE = GOLDEN EAGLE  
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OS = OSPREY  
PLRA = PIPELINE ROUTE "A"  
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WB = WATERBIRD NESTING  
WBM = WATERBIRD MIGRATION & RESTING

SITE OR AREA  
RX-064-1  
RX-064-2  
FH-064-1

#### \*\* SENSITIVE PERIOD

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-064-1												
RX-064-2												
FH-064-1												

SITE OR AREA  
EH-064-1  
WBM-064-6  
EH-064-2  
EH-064-3

#### \*\* SENSITIVE PERIOD

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
EH-064-1												
WBM-064-6												
EH-064-2												
EH-064-3												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISED MILEPOST			
2	8-80	RELEASED FOR FEDERAL FILING			
3	11-80	RELEASED FOR GORROW GRANT COMPLIANCE			
4	11-80	NOVEMBER 1980 (REVISIONS)	BP	DS	BP

#### FLUOR PROJECT MANAGEMENT CONTRACTOR

NOTICE  
This drawing is the property of the Alaska Northwest Natural Gas Transportation Company and contains information that is deemed to be confidential and proprietary by said Company. It is to be used only for the purpose of use in connection with the project and is not to be used for any other purpose without the written consent of the Alaska Northwest Natural Gas Transportation Company. No use or disclosure is authorized except as permitted by said Company or its Agent, Northwest Alaska Pipeline Company.

#### ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY

#### 48" NATURAL GAS PIPELINE ENVIRONMENTAL MASTER GUIDE

MP 355.6 TO MP 364.6  
TOWNSHIP 12N RANGE 11W, 10W MERIDIAN FAIRBANKS

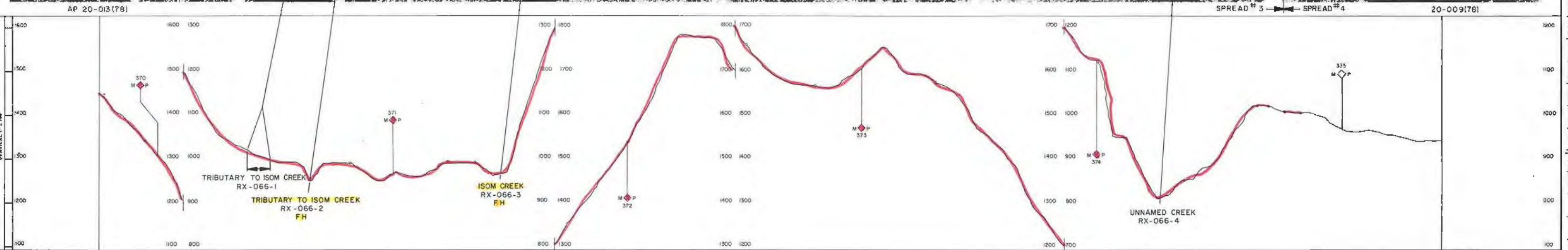
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	
PHOTO	REVISION
DATE	DATE
SCALE IN FEET	DRAWING NUMBER
1" = 1000'	4680-13-00-B-E-064
REV.	3

DISTRIBUTION CODE

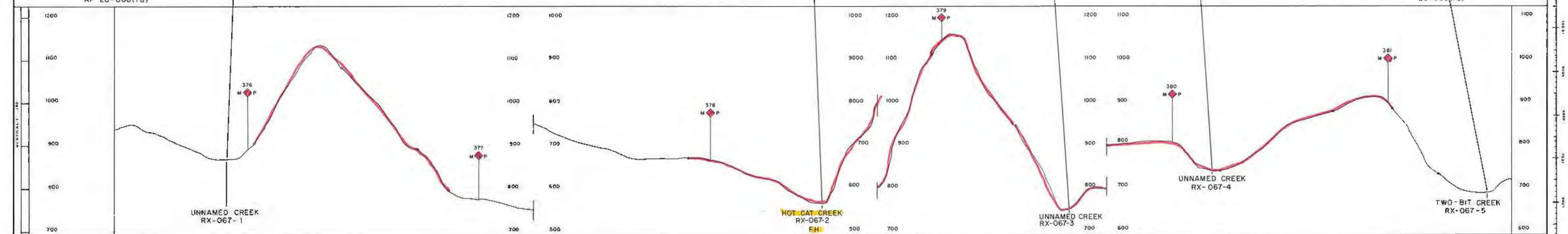
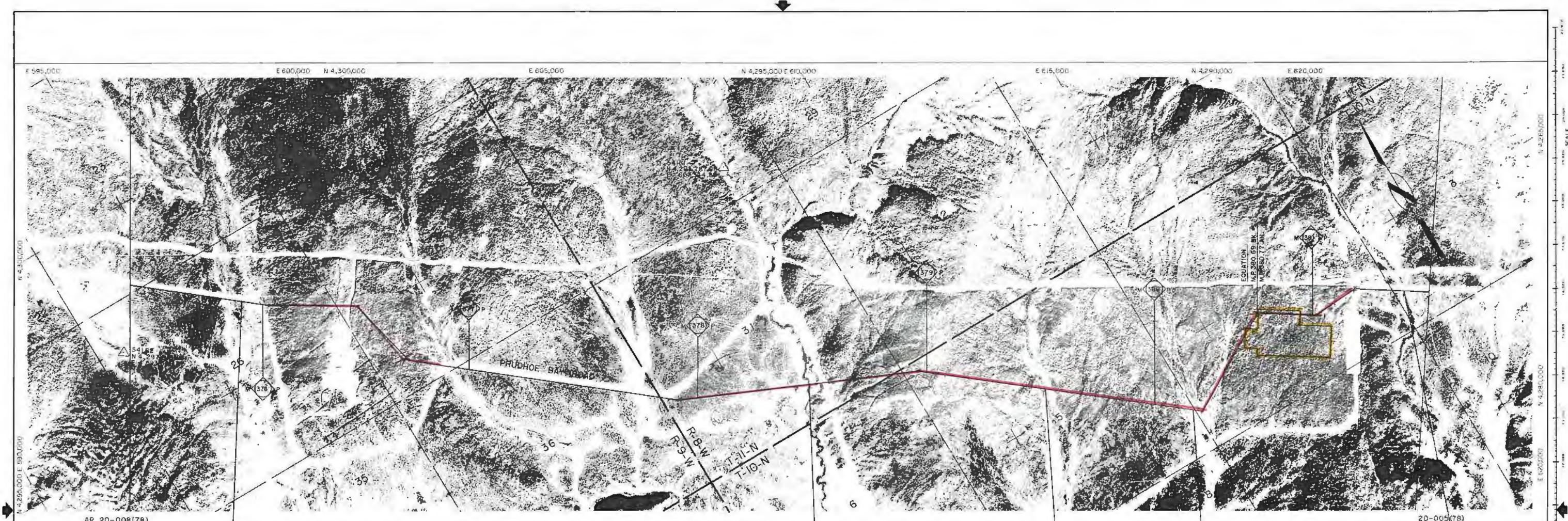






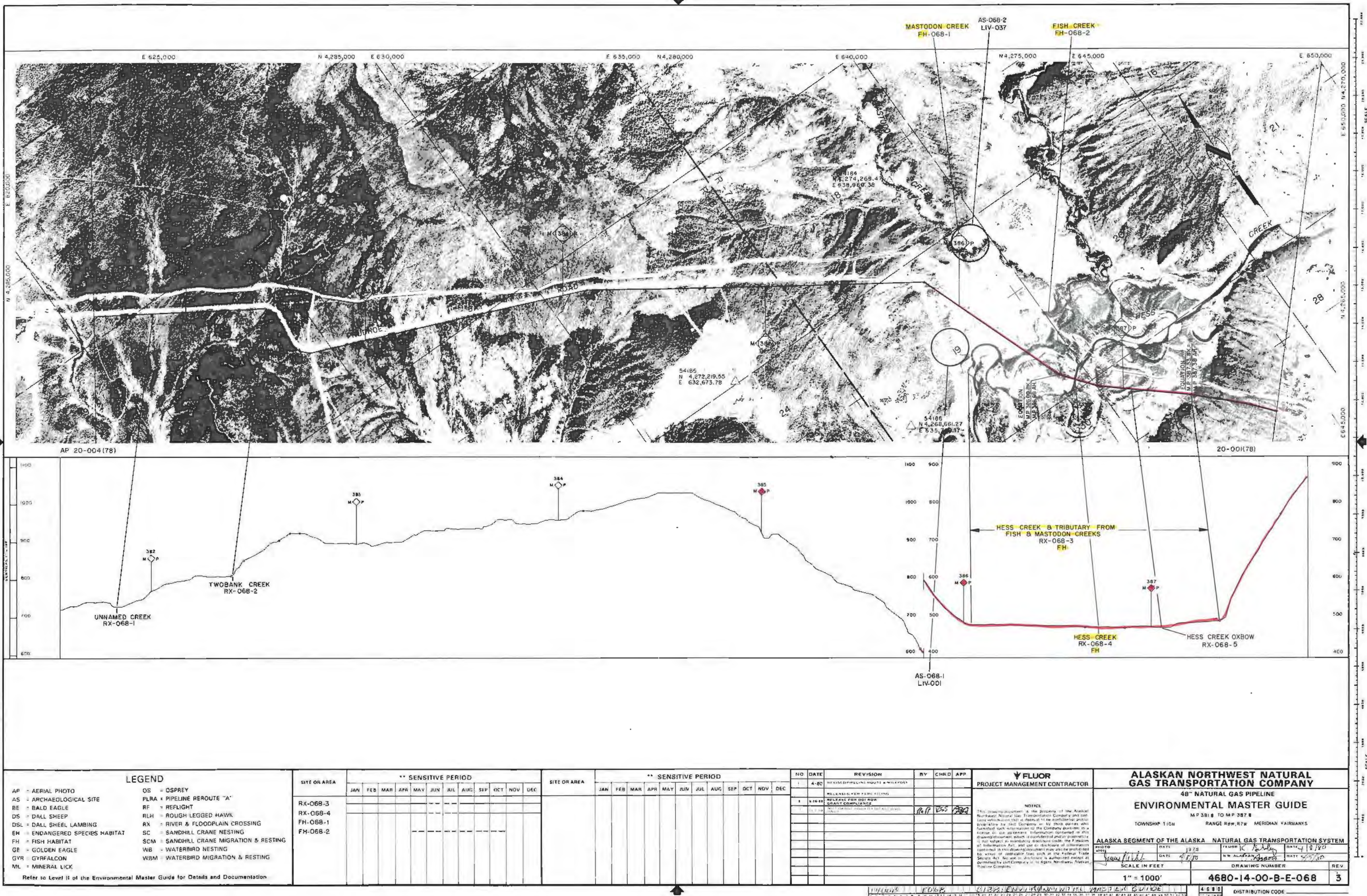
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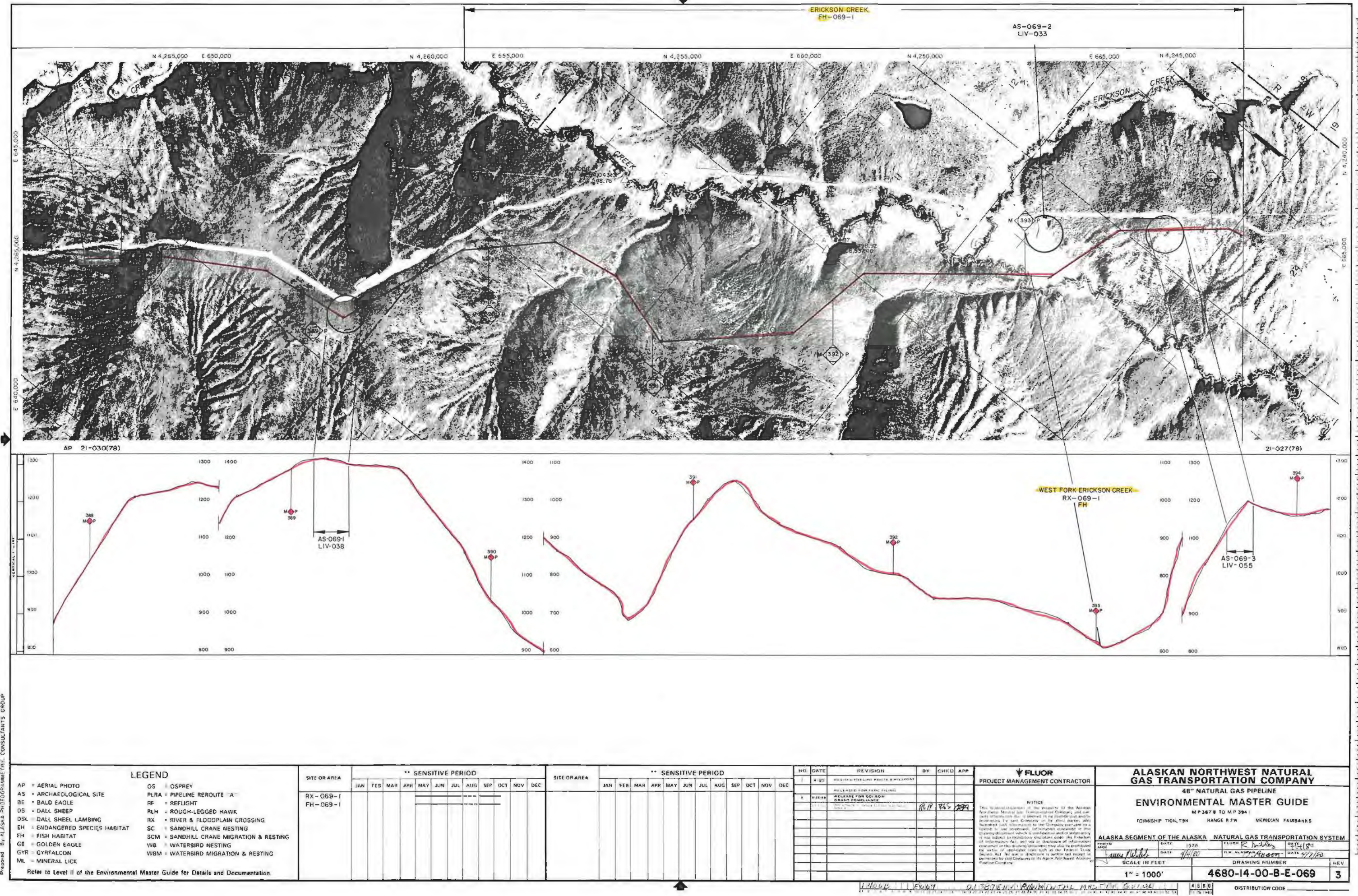


LEGEND		** SENSITIVE PERIOD												** SENSITIVE PERIOD												NO. DATE REVISION BY CHD APP			FLUOR PROJECT MANAGEMENT CONTRACTOR		ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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LEGEND

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Refer to Level II of the Environmental Master Guide for Details and Documentation.

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-069-1 FH-069-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

NO.	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISIONS TO LINE WEIGHTS & HIGHLIGHTS			
2	4-80	RELEASED FOR PUBLIC COMMENT			
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100	4-80	RELEASED FOR PUBLIC COMMENT			

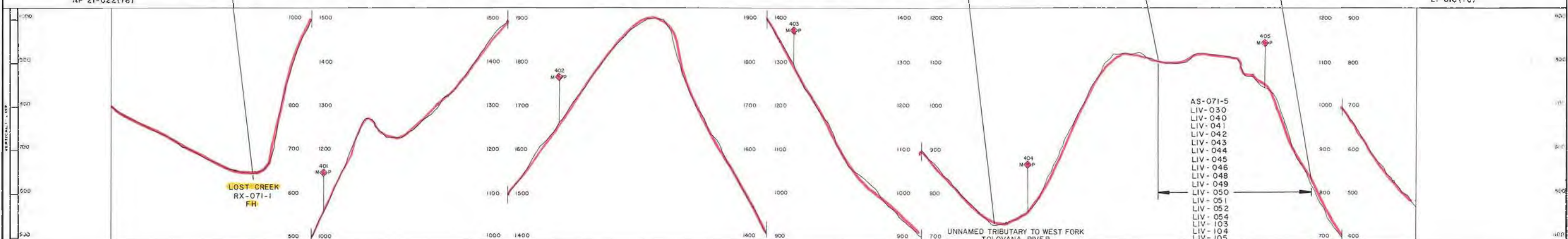
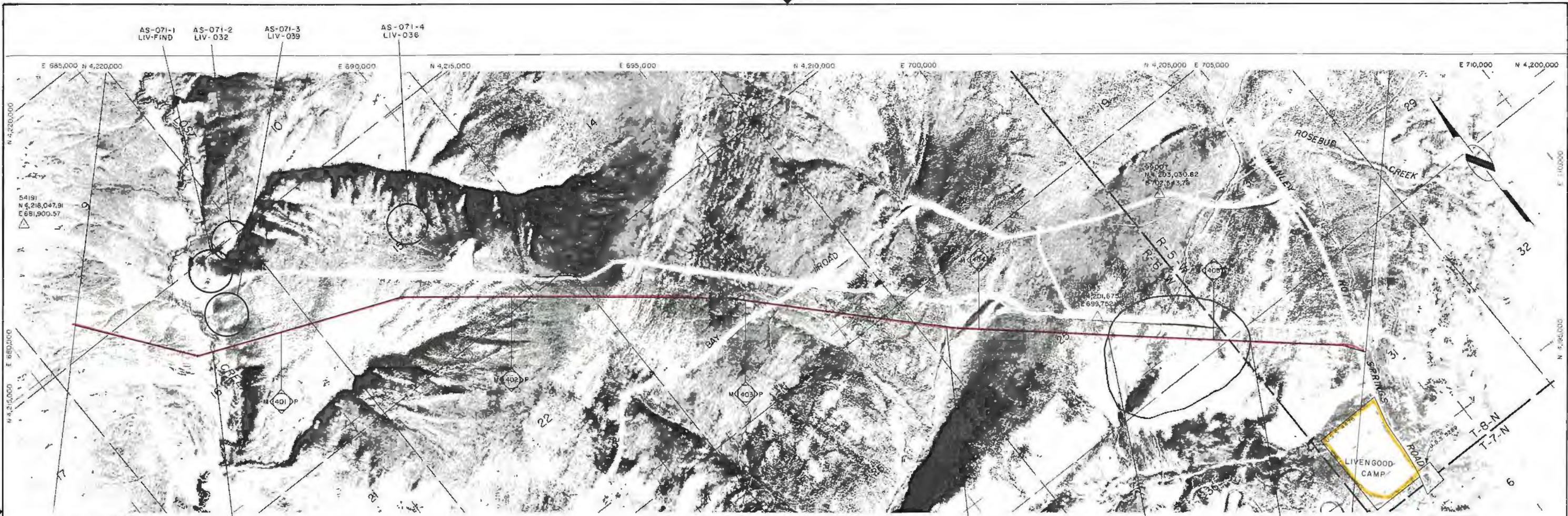
FLUOR					
PROJECT MANAGEMENT CONTRACTOR					
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DATE	1978	FLUOR	R. J. J. J.	DATE	4/1/80
SCALE IN FEET	1" = 1000'	DRAWING NUMBER	4680-14-00-B-E-069	REV	3

ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY					
48" NATURAL GAS PIPELINE					
ENVIRONMENTAL MASTER GUIDE					
M.P. 367.8 TO M.P. 394					
TOWNSHIP 10N, 19N RANGE 2W MERIDIAN FAIRBANKS					
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM					
DATE	1978	FLUOR	R. J. J. J.	DATE	4/1/80
SCALE IN FEET	1" = 1000'	DRAWING NUMBER	4680-14-00-B-E-069	REV	3









**LEGEND**

AP - AERIAL PHOTO	OS - OSPREY
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE ROUTE 'A'
BE - BALD EAGLE	RF - REFLIGHT
DS - DALL SHEEP	RLH - ROUGH LEGGED HAWK
DSL - DALL SHEEP LAMBING	RK - RIVER & FLOODPLAIN CROSSING
EH - ENDANGERED SPECIES HABITAT	SC - SANDHILL CRANE NESTING
FH - FISH HABITAT	SCM - SANDHILL CRANE MIGRATION & RESTING
GE - GOLDEN EAGLE	WB - WATERBIRD NESTING
GVR - GYRFALCON	WBM - WATERBIRD MIGRATION & RESTING
ML - MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation

SITE OR AREA	** SENSITIVE PERIOD												SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-071-1																									

NO	DATE	REVISION	BY	CHKD	APP
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**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
**ENVIRONMENTAL MASTER GUIDE**  
MP 430 TO MP 405  
TOWNSHIP 12N RANGE 60W MERIDIAN F3198BANK

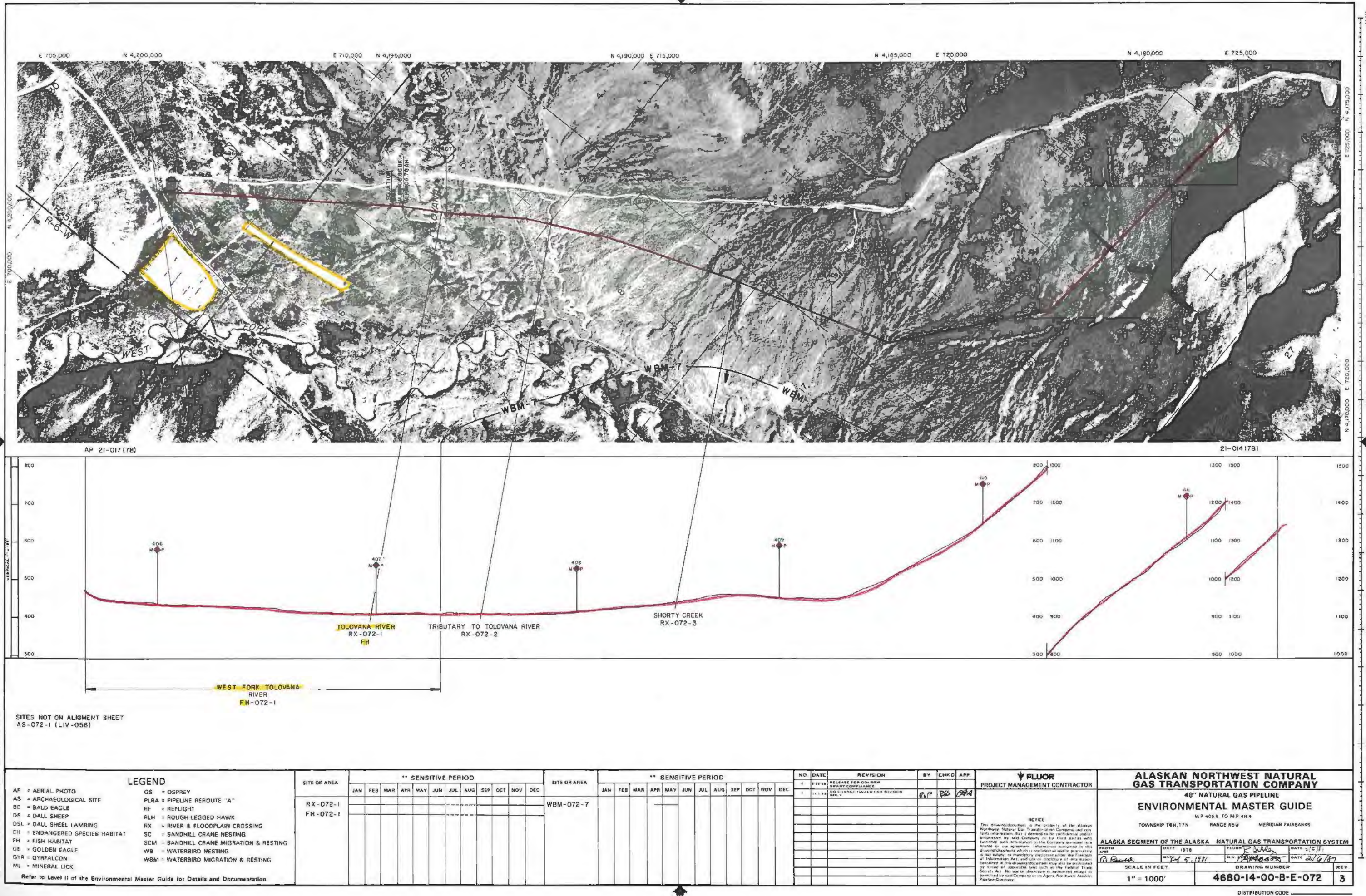
**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

SCALE IN FEET	DRAWING NUMBER	REV
1" = 1000'	4680-14-00-B-E-071	3

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AS-072-1 (LIV-056)

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- AP = AERIAL PHOTO
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  - BE = BALD EAGLE
  - DS = DALL SHEEP
  - DSL = DALL SHEEP LAMBING
  - EH = ENDANGERED SPECIES HABITAT
  - FH = FISH HABITAT
  - GE = GOLDEN EAGLE
  - GYR = GYRFALCON
  - ML = MINERAL LICK
  - OS = OSPREY
  - PLRA = PIPELINE ROUTE "A"
  - RF = REFLIGHT
  - RLH = ROUGH LEGGED HAWK
  - RX = RIVER & FLOODPLAIN CROSSING
  - SC = SANDHILL CRANE NESTING
  - SCM = SANDHILL CRANE MIGRATION & RESTING
  - WB = WATERBIRD NESTING
  - WBM = WATERBIRD MIGRATION & RESTING

Refer to Level II of the Environmental Master Guide for Details and Documentation

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-072-1												
FH-072-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WBM-072-7												

NO.	DATE	REVISION	BY	CHKD	APP
1	11/1/88	RELEASE FOR DORR ON GREAT COMPLAINT	RLP	DES	ASA
2	11/1/88	NO CHANGES ISSUED FOR RECORD ONLY			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

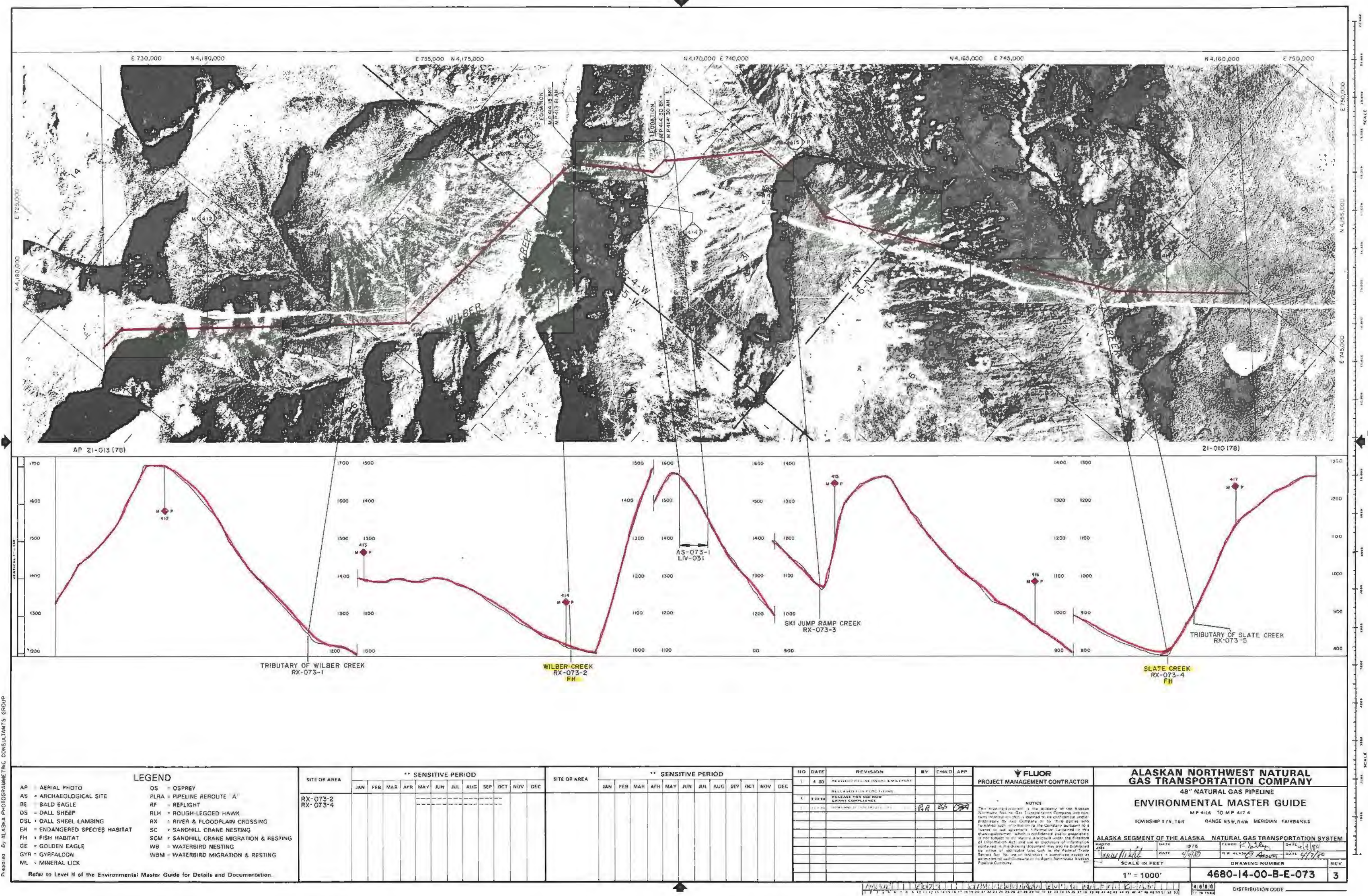
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<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b>			
<b>48" NATURAL GAS PIPELINE</b>			
<b>ENVIRONMENTAL MASTER GUIDE</b>			
MP 405.6 TO MP 411.4			
TOWNSHIP 16N, 17N RANGE R5W MERIDIAN FAIRBANKS			
<b>ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM</b>			
DATE: 1978	FLUOR: [Signature]	DATE: 1/5/89	
SCALE IN FEET: 1" = 1000'	DRAWING NUMBER: 4680-14-00-B-E-072		REV: 3

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- DSL = DALL SHEEP LAMBING
- EH = ENDANGERED SPECIES HABITAT
- FH = FISH HABITAT
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- GYR = GYRFALCON
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- PLRA = PIPELINE REROUTE 'A'
- RF = REFLIGHT
- RLH = ROUGH-LEGGED HAWK
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- SC = SANDHILL CRANE NESTING
- SCM = SANDHILL CRANE MIGRATION & RESTING
- WB = WATERBIRD NESTING
- WBM = WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-073-2												
RX-073-4												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

NO	DATE	REVISION	BY	CHKD	APP
1	4-30	REVISED FOR LINE POINTS & WILBERT			
2	8-25-88	RELEASED FOR PUBLIC RECORDS			
3	1-1-89	REVISION FOR GRANT COMPLIANCE			
4	1-1-89	REVISION FOR GRANT COMPLIANCE			
5	1-1-89	REVISION FOR GRANT COMPLIANCE			
6	1-1-89	REVISION FOR GRANT COMPLIANCE			
7	1-1-89	REVISION FOR GRANT COMPLIANCE			
8	1-1-89	REVISION FOR GRANT COMPLIANCE			
9	1-1-89	REVISION FOR GRANT COMPLIANCE			
10	1-1-89	REVISION FOR GRANT COMPLIANCE			
11	1-1-89	REVISION FOR GRANT COMPLIANCE			
12	1-1-89	REVISION FOR GRANT COMPLIANCE			

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

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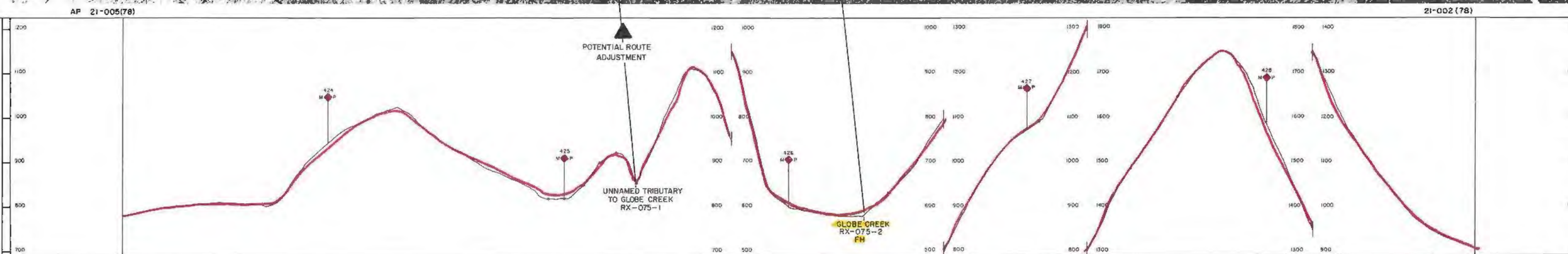
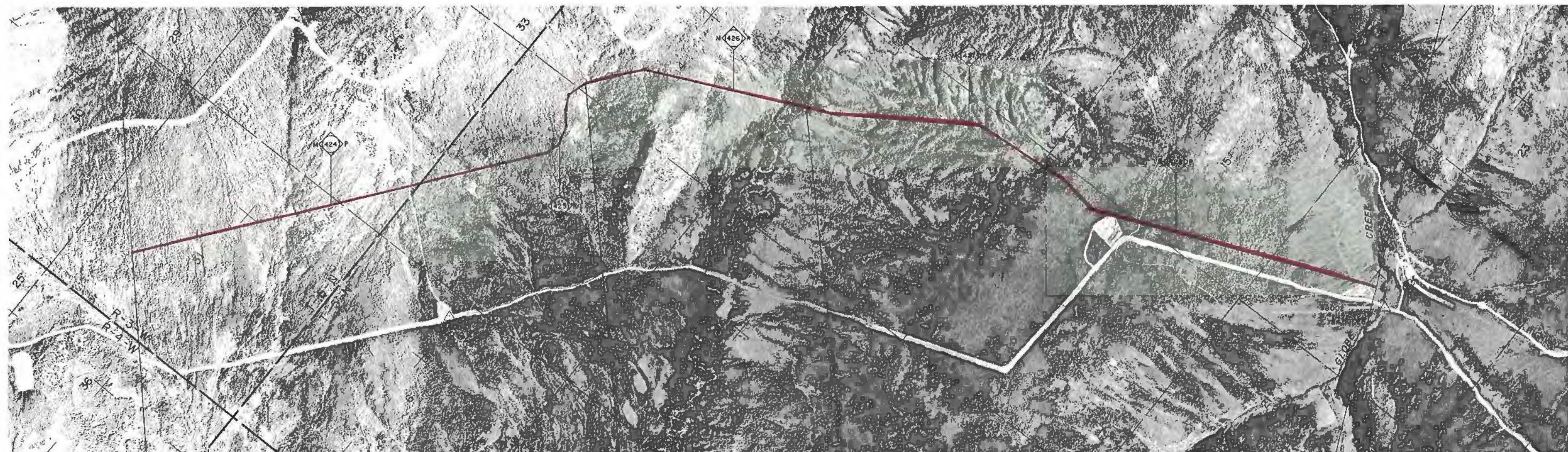
<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b>	
48" NATURAL GAS PIPELINE	
<b>ENVIRONMENTAL MASTER GUIDE</b>	
MP 414 TO MP 417	
TOWNSHIP T1N, T6N	RANGE R5W, R4W MERIDIAN FAIRBANKS
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	
DATE 1976	DATE 4/7/80
SCALE IN FEET	DRAWING NUMBER
1" = 1000'	4680-14-00-B-E-073
	REV 3
DISTRIBUTION CODE	







SITES NOT ON ALIGNMENT SHEET  
BH-075-1 (86)  
BH-075-2 (88 I)



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- DS = DALL SHEEP
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Refer to Level II of the Environmental Master Guide for Details and Documentation.

SITE OR AREA	** SENSITIVE PERIOD												SITE OR AREA	** SENSITIVE PERIOD												NO	DATE	REVISION	BY	CHKD	APP	FLUOR PROJECT MANAGEMENT CONTRACTOR																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
**ENVIRONMENTAL MASTER GUIDE**  
MP 425.2 TO MP 428.5  
TOWNSHIP T6N, T5N RANGE R4W, R3W MERIDIAN FAIRBANKS

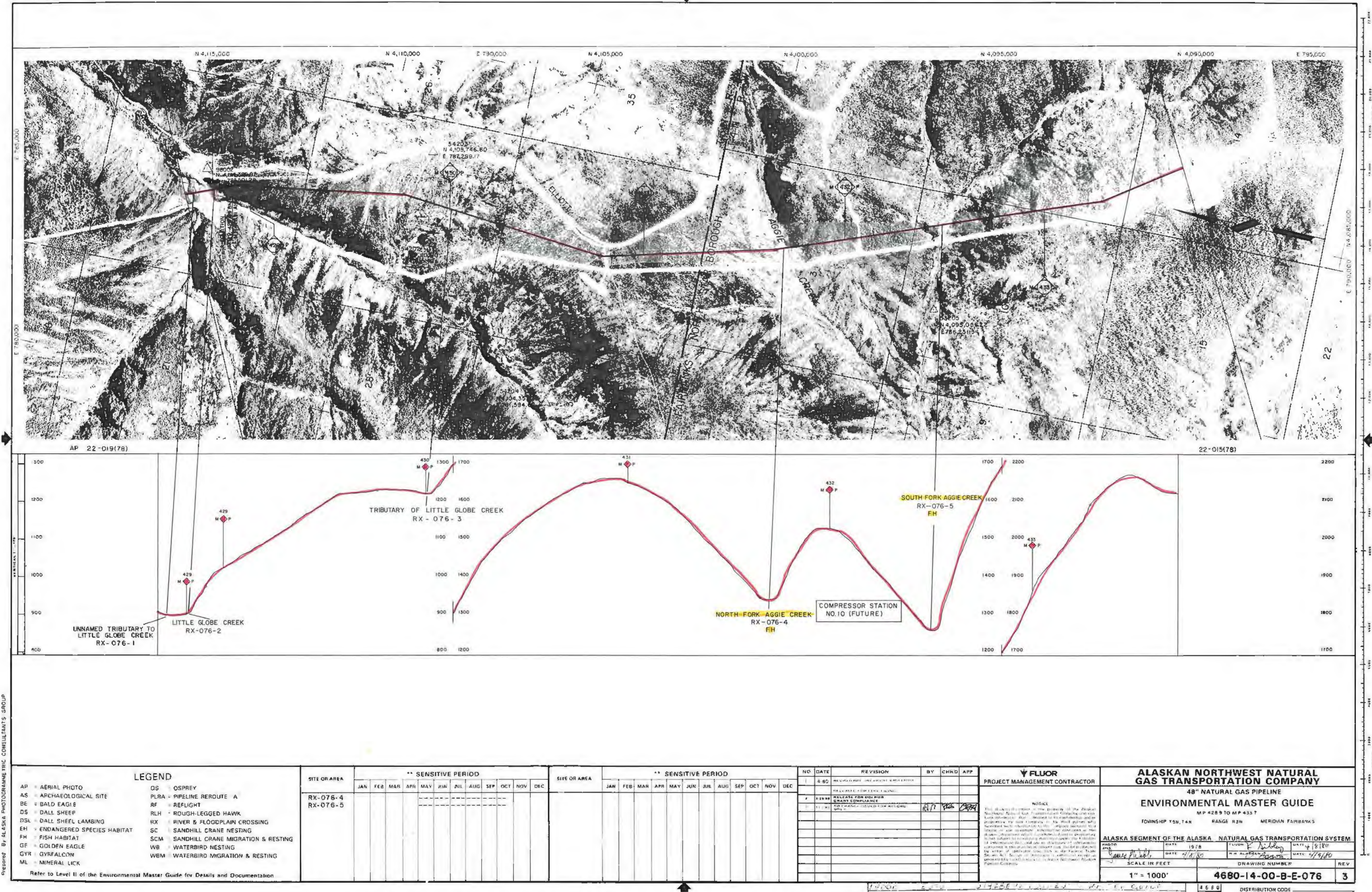
**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

PHOTO: *[Signature]* DATE: 5/5/87  
SCALE IN FEET: 1" = 1000'  
DRAWING NUMBER: 4680-14-00-B-E-075  
REV: 3

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AS = ARCHAEOLOGICAL SITE	PLRA = PIPELINE ROUTE A
BE = BALD EAGLE	RF = REFLIGHT
DS = DALL SHEEP	RLH = ROUGH-LEGGED HAWK
DSL = DALL SHEEP LAMBING	RX = RIVER & FLOODPLAIN CROSSING
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ML = MINERAL LICK	

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-076-4												
RX-076-5												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISIONS MADE AND APPROVED BY THE ENGINEER			
2	1-80	RELEASE FOR DOK FOR GRANT COMPLIANCE			
3	11-80	NOT FINALLY ISSUED FOR WILSON			

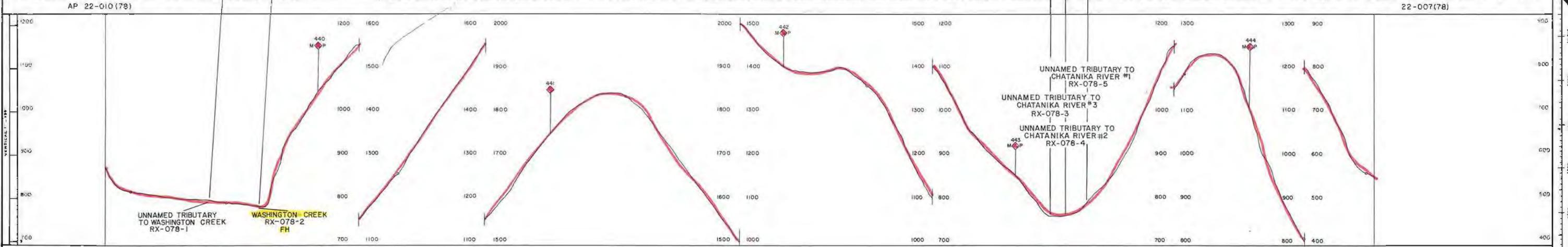
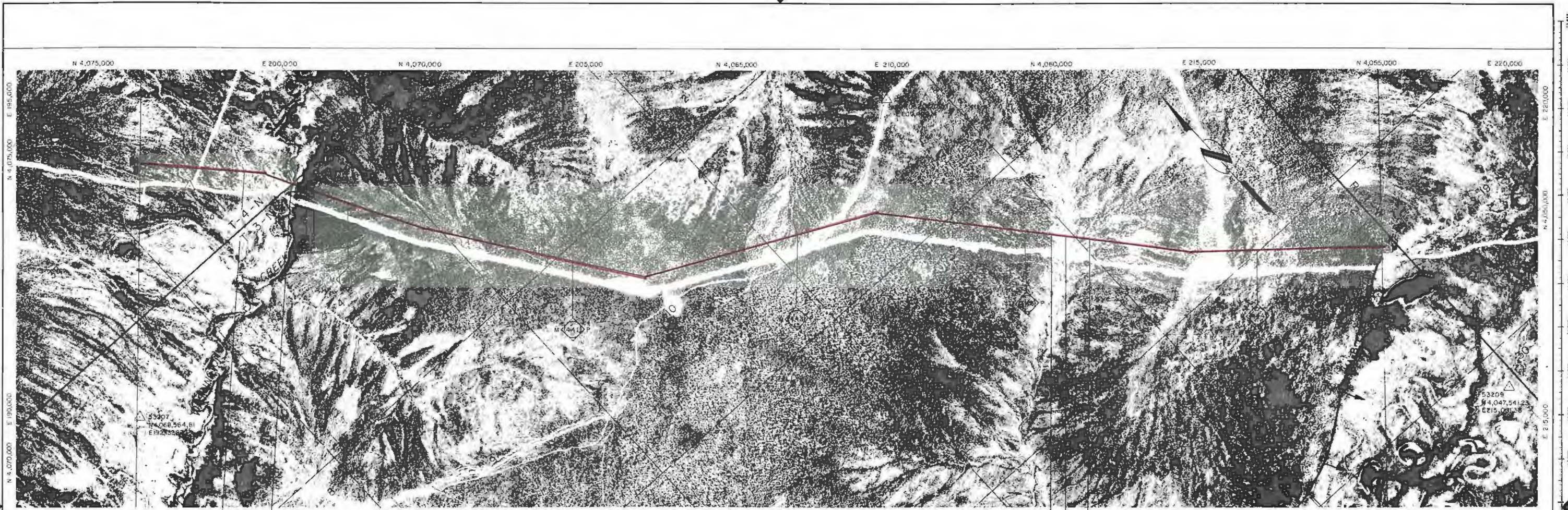
FLUOR	
PROJECT MANAGEMENT CONTRACTOR	
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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
48" NATURAL GAS PIPELINE			
ENVIRONMENTAL MASTER GUIDE			
TOWNSHIP T5N, T4N RANGE R3W MERIDIAN FAIRBANKS			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
PHOTO	DATE	FILED	DATE
1/1/80	1/1/80	1/1/80	1/1/80
SCALE IN FEET	DRAWING NUMBER		
1" = 1000'	4680-14-00-B-E-076		
	REV		
	3		









LEGEND												
AP = AERIAL PHOTO	OS = OSPREY											
AS = ARCHAEOLOGICAL SITE	PLRA = PIPELINE REROUTE "A"											
BE = BALD EAGLE	RF = REFLIGHT											
DS = DALL SHEEP	RLH = ROUGH LEGGED HAWK											
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GYR = GYRFALCON												
ML = MINERAL LICK												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-078-2												
WBM-078-B												

NO	DATE	REVISION	BY	CHKD	APP
1	2-80	REVISION: PIPELINE ROUTE & MILE POST			
2	3-80	REVISION: ADDITIONAL ROUTE			
3	4-80	REVISION: ADDITIONAL ROUTE			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

**ALASKA NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
TOWNSHIP T4N, T34N RANGE P2W MERIDIAN T4R, B1E5

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

SCALE IN FEET: 1" = 1000'

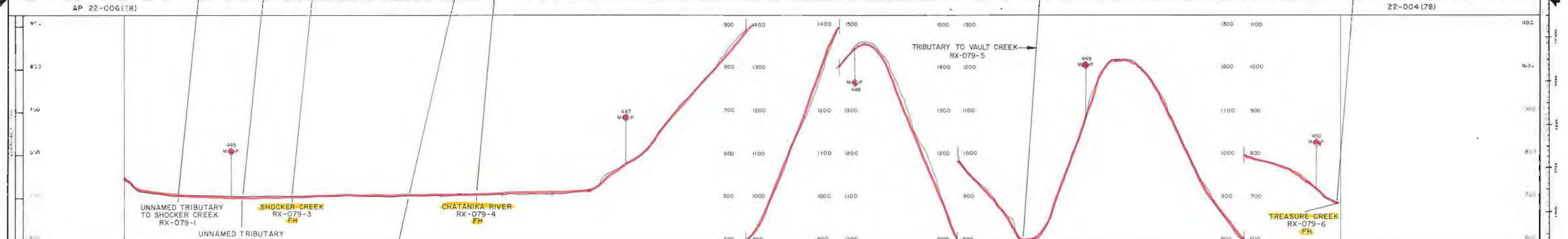
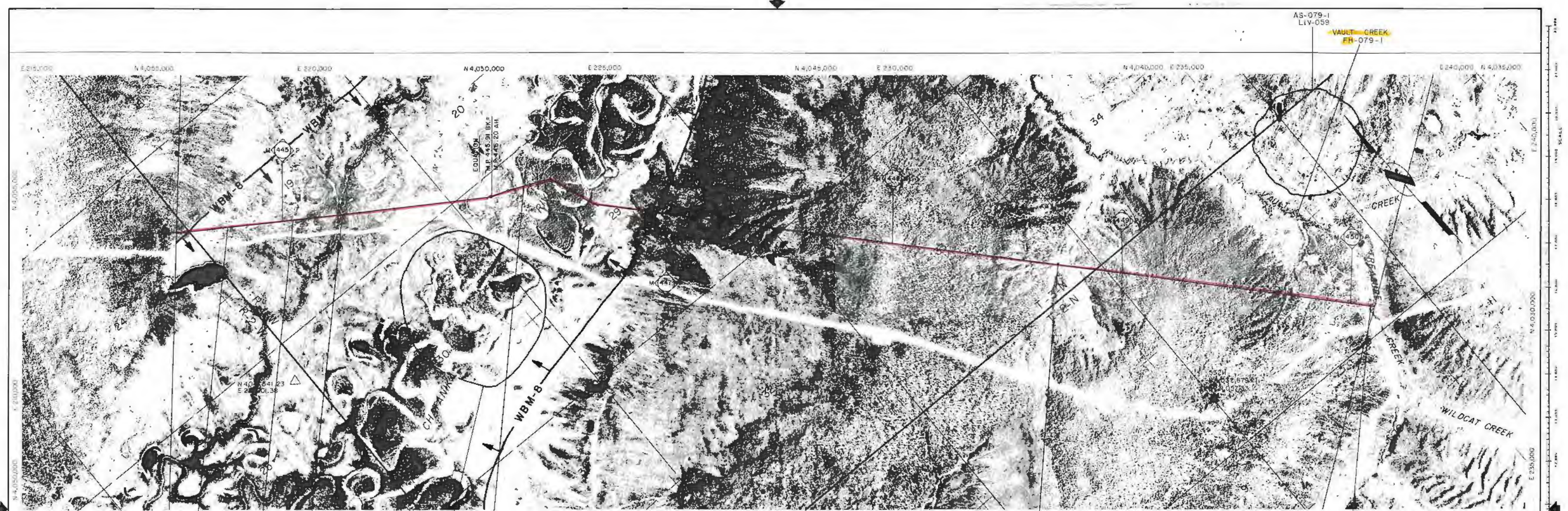
DRAWING NUMBER: 4680-14-00-B-E-078

REV: 3

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**LEGEND**

AP AERIAL PHOTO

AS ARCHAEOLOGICAL SITE

BE BALD EAGLE

DS DALL SHEEP

DSL DALL SHEEP LAMBING

EH ENDANGERED SPECIES HABITAT

FH FISH HABITAT

GE GOLDEN EAGLE

GYR GYRFALCON

ML MINERAL LICK

OS OSPREY

PLRA PIPELINE ROUTE A

RF REFLIGHT

RLH ROUGH LEGGED HAWK

RX RIVER & FLOODPLAIN CROSSING

SC SANDHILL CRANE NESTING

SCM SANDHILL CRANE MIGRATION & RESTING

WB WATERBIRD NESTING

WBM WATERBIRD MIGRATION & RESTING

**SITE OR AREA**

RX-079-3

RX-079-4

RX-079-6

FH-079-1

**\*\* SENSITIVE PERIOD**

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

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**SITE OR AREA**

WBM-079-8

BE-079-1

**\*\* SENSITIVE PERIOD**

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

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**NO DATE REVISION BY CHPO APP**

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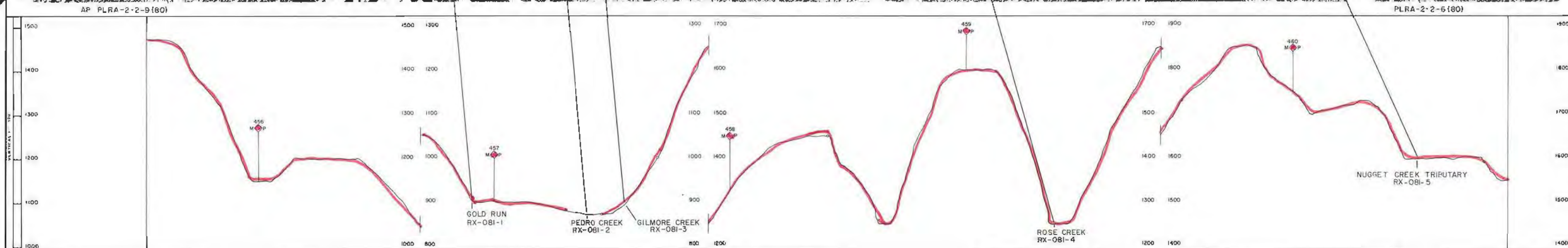
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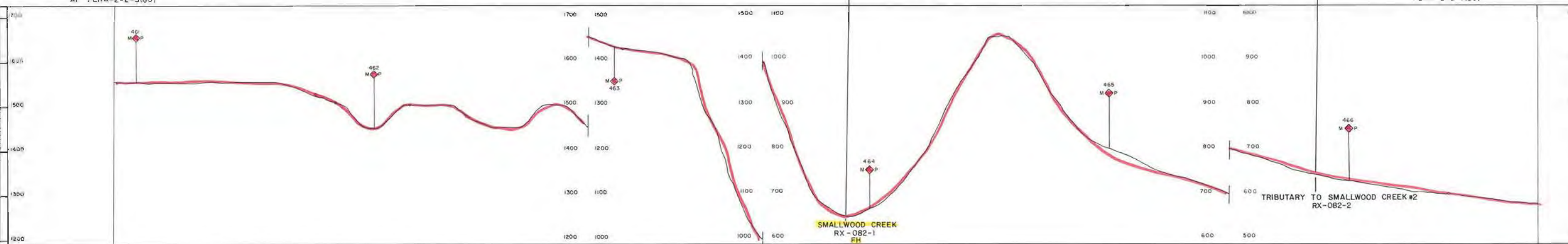
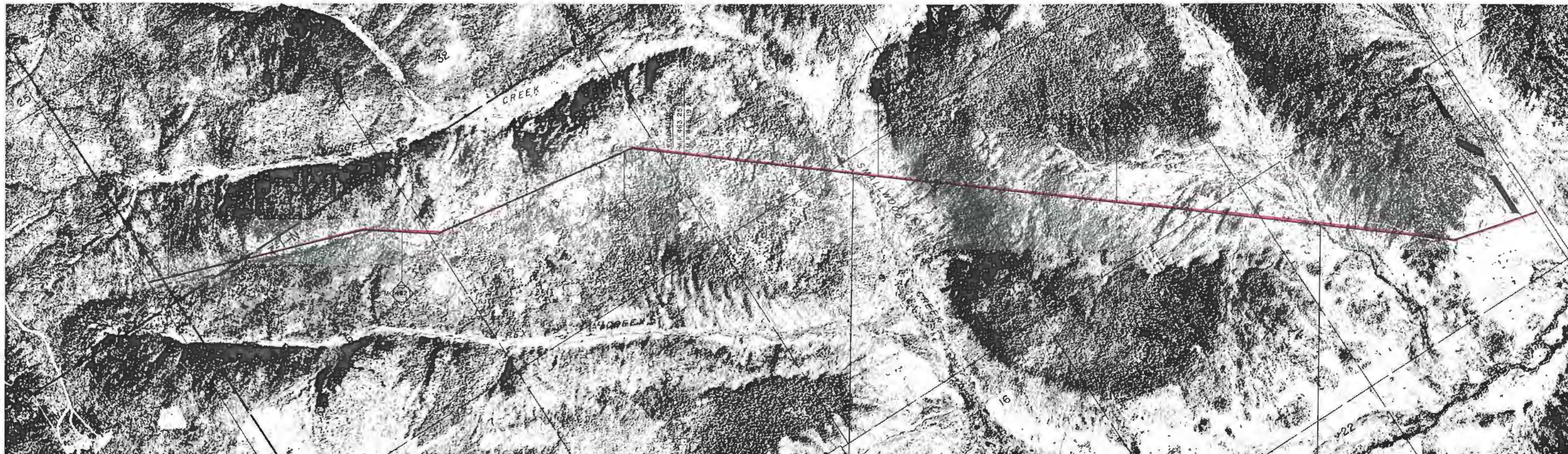






[illegible]





**LEGEND**

AP AERIAL PHOTO	DS OSPREY
AS ARCHAEOLOGICAL SITE	PLRA PIPELINE ROUTE "A"
BE BALD EAGLE	RF = REFLIGHT
DS DALL SHEEP	RLM ROUGH LEGGED HAWK
DSL DALL SHEEP LAMBING	RX RIVER & FLOODPLAIN CROSSING
EH ENDANGERED SPECIES HABITAT	SC SANDHILL CRANE NESTING
FH FISH HABITAT	SCM SANDHILL CRANE MIGRATION & RESTING
GE GOLDEN EAGLE	WB WATERBIRD NESTING
GYR GYRFALCON	WBM WATERBIRD MIGRATION & RESTING
ML MINERAL LICK	

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

NO	DATE	REVISION	BY	CHKD	APP
1	8-21-81	RELINQUISH OR DISMISS CHARTER COMPLIANCE	Ref	Ref	Ref

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b>			
48" NATURAL GAS PIPELINE			
ENVIRONMENTAL MASTER GUIDE			
MP 460.5 TO MP 466.8			
TOWNSHIP 11N, 12N RANGE 12E, 13E MERIDIAN FAIRBANKS			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
PROJECT	DATE	DESIGN	DATE
Ref	8-21-81	Ref	8-21-81
SCALE IN FEET		DRAWING NUMBER	
1" = 1000'		4680-14-00-B-E-082	
REV		3	

Prepared by ALASKA PHOTOGRAPHIC CONSULTANTS GROUP

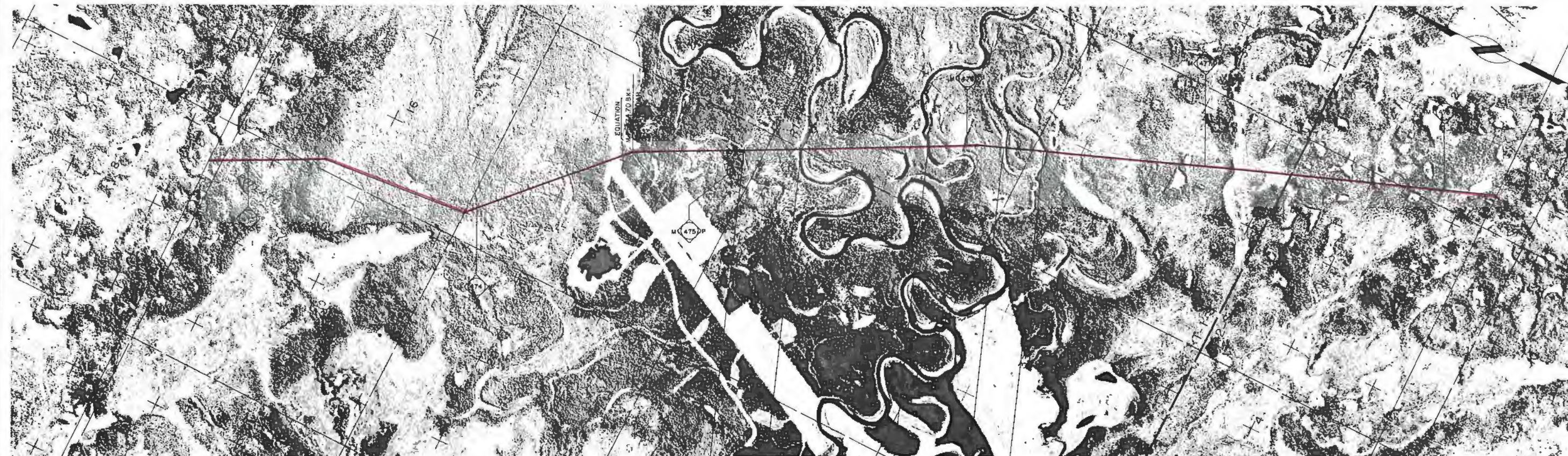
SCALE 1" = 1000'





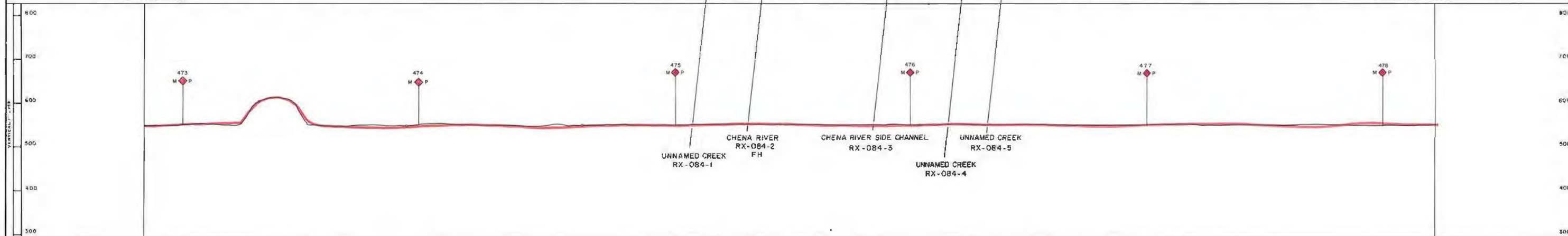


SITES NOT ON ALIGNMENT SHEET  
EH-084-1(84)



AP PLRA-2-3-5(80)

PLRA-2-3-6(80)



SITES NOT ON ALIGNMENT SHEET  
AS-084-1(FAI-072)

#### LEGEND

AP - AERIAL PHOTO  
AS - ARCHAEOLOGICAL SITE  
BE - BALD EAGLE  
DS - DALL SHEEP  
DSL - DALL SHEEP LAMBING  
EH - ENDANGERED SPECIES HABITAT  
FH - FISH HABITAT  
GE - GOLDEN EAGLE  
GYR - GYRFALCON  
ML - MINERAL LICK  
OS - OSPREY  
PLRA - PIPELINE REROUTE "A"  
RF - REFLIGHT  
RLH - ROUGH-LEGGED HAWK  
RX - RIVER & FLOODPLAIN CROSSING  
SC - SANDHILL CRANE NESTING  
SCM - SANDHILL CRANE MIGRATION & RESTING  
WB - WATERBIRD NESTING  
WBM - WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-084-2												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
EH-084-1					*							

NO	DATE	REVISION	BY	CHKD	APP
1	4/27/81	RELEASE FOR DESIGN	R.P.	R.S.	084
2		CRANT COMPLIANCE			
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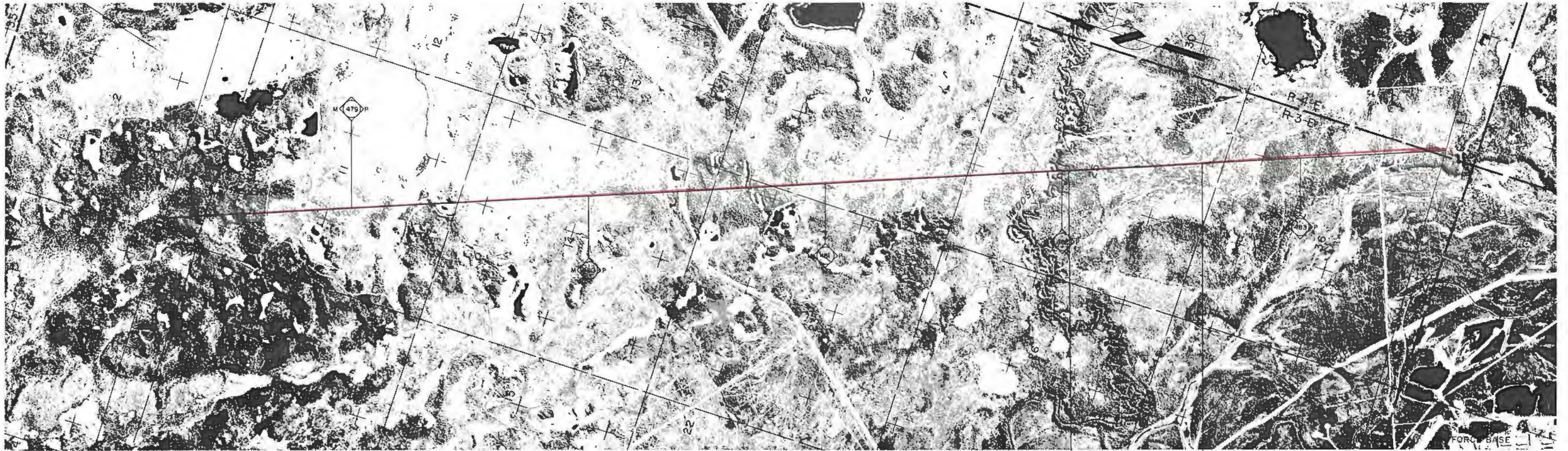
**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b>			
48" NATURAL GAS PIPELINE			
<b>ENVIRONMENTAL MASTER GUIDE</b>			
MP 472.8 TO MP 478.2			
TOWNSHIP T15, T25 RANGE R2E, R3E MERIDIAN FAIRBANKS			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
PHOTO	DATE	FLUOR	DATE
R.P.	4/27/81	R.S.	4/27/81
SCALE IN FEET		DRAWING NUMBER	
1" = 1000'		4680-14-00-B-E-084	
		REV	
		3	

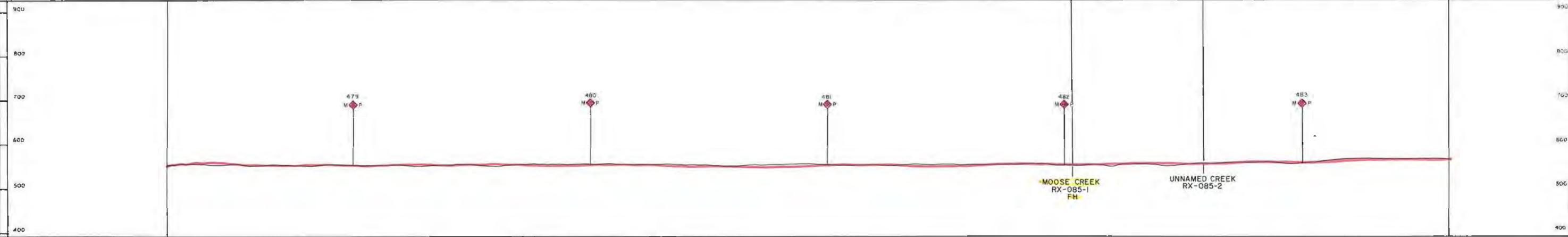
DISTRIBUTION CODE





AP PLRA-2-3-5(80)

PLRA-2-3-1(80)



SITES NOT ON ALIGNMENT SHEET  
BE-085-2 (823)

#### LEGEND

AP	AERIAL PHOTO	DS	OSPREY
AS	ARCHAEOLOGICAL SITE	PLRA	PIPELINE REFROUTE 'A'
BE	BALD EAGLE	RE	REFUGIT
DS	DALL SHEEP	RLH	ROUGH LEGGED HAWK
DSL	DALL SHEEP LAMBING	RX	RIVER & FLOODPLAIN CROSSING
EH	ENDANGERED SPECIES HABITAT	SC	SANDHILL CRANE NESTING
FH	FISH HABITAT	SCM	SANDHILL CRANE MIGRATION & RESTING
GE	GOLDEN EAGLE	WB	WATERBIRD NESTING
GYR	GYRFALCON	WBM	WATERBIRD MIGRATION & RESTING
ML	MINERAL LICK		

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-085-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BE-085-2												

NO.	DATE	REVISION	BY	CHKD	APP
1	1/1/81	REVISION FOR DESIGN			
2	1/1/81	REVISION FOR DESIGN			
3	1/1/81	REVISION FOR DESIGN			
4	1/1/81	REVISION FOR DESIGN			
5	1/1/81	REVISION FOR DESIGN			
6	1/1/81	REVISION FOR DESIGN			
7	1/1/81	REVISION FOR DESIGN			
8	1/1/81	REVISION FOR DESIGN			
9	1/1/81	REVISION FOR DESIGN			
10	1/1/81	REVISION FOR DESIGN			

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

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#### ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY

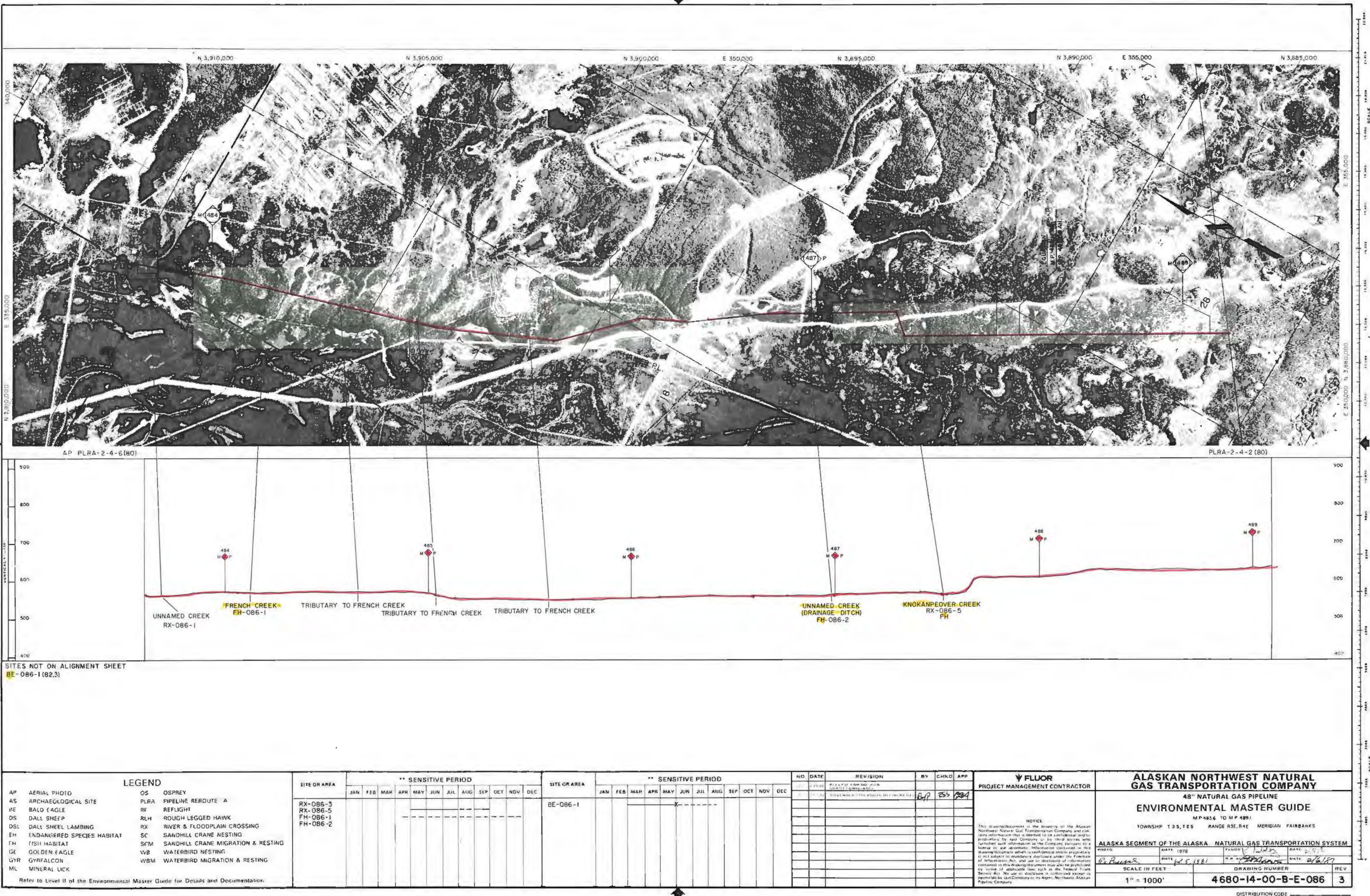
#### 48" NATURAL GAS PIPELINE ENVIRONMENTAL MASTER GUIDE

MP 478.2 TO MP 483.5  
TOWNSHIP T23, T33 RANGE R3E, R4E MERIDIAN FAIRBANKS

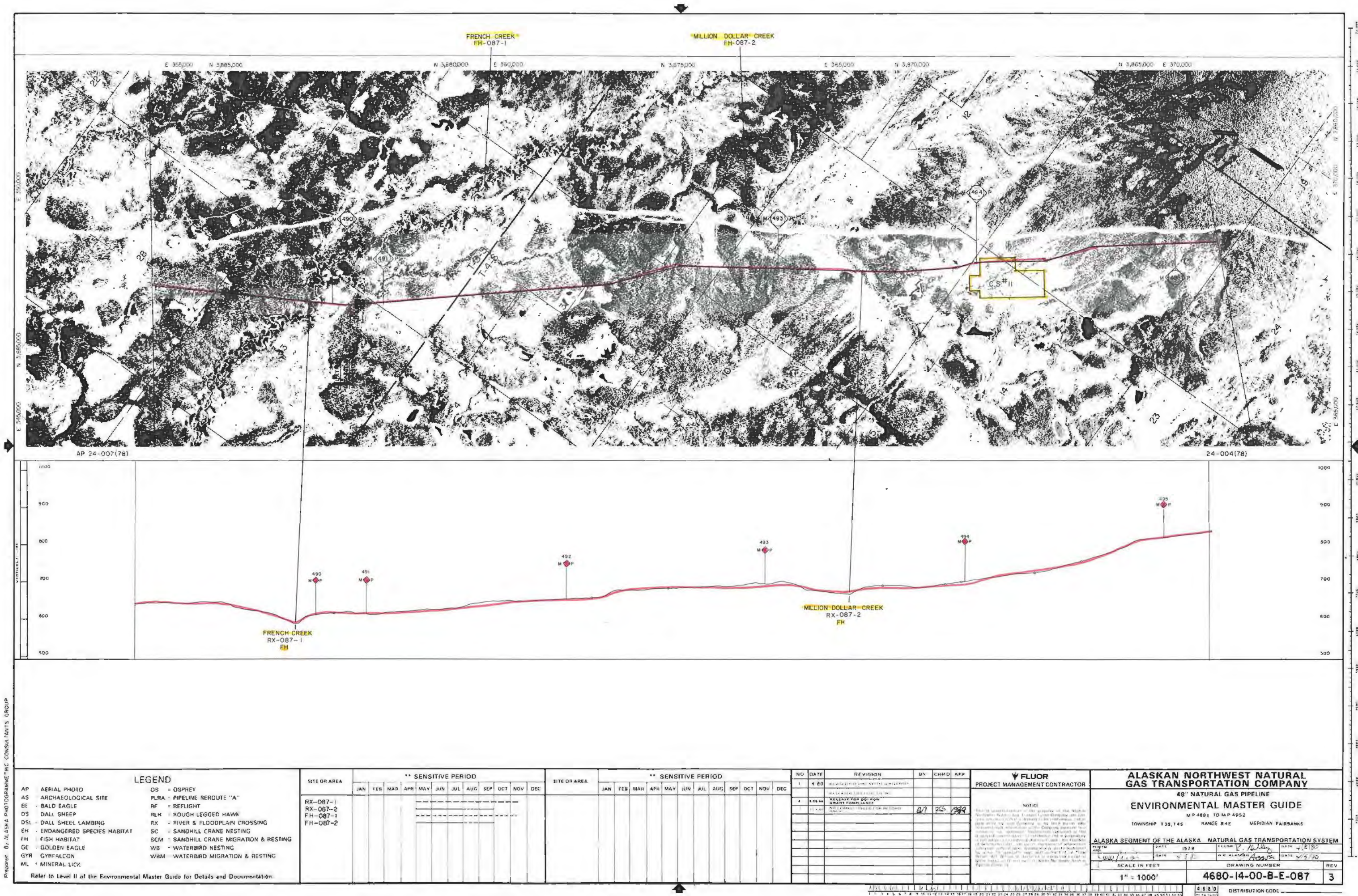
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SCALE IN FEET		DRAWING NUMBER	
1" = 1000'		4680-14-00-B-E-085	
		REV	
		3	

DISTRIBUTION CODE









# LEGEND

- AP - AERIAL PHOTO
- AS - ARCHAEOLOGICAL SITE
- BE - BALD EAGLE
- OS - OALL SHEEP
- DSL - DALL SHEEL LAMBING
- FH - FISH HABITAT
- GE - GOLDEN EAGLE
- GYR - GYRFALCON
- ML - MINERAL LICK
- OS - OSPREY
- PLRA - PIPELINE ROUTE "A"
- RF - REFUGIT
- RLH - ROUGH LEGGED HAWK
- RX - RIVER & FLOODPLAIN CROSSING
- SC - SANDHILL CRANE NESTING
- SCM - SANDHILL CRANE MIGRATION & RESTING
- WB - WATERBIRD NESTING
- WBM - WATERBIRD MIGRATION & RESTING

## SITE OR AREA

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-087-1												
RX-087-2												
FH-087-1												
FH-087-2												

## SITE OR AREA

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

NO.	DATE	REVISION	BY	CHKD	APP
1	4-20	REVISIONS AND NOTATIONS			
2	4-24-84	REVISION FOR 500' MIN. SPACING COMPLIANCE	B/T	P/S	P/S
3	11-1-84	NO CHANGE TO 500' MIN. SPACING			

## FLUOR PROJECT MANAGEMENT CONTRACTOR

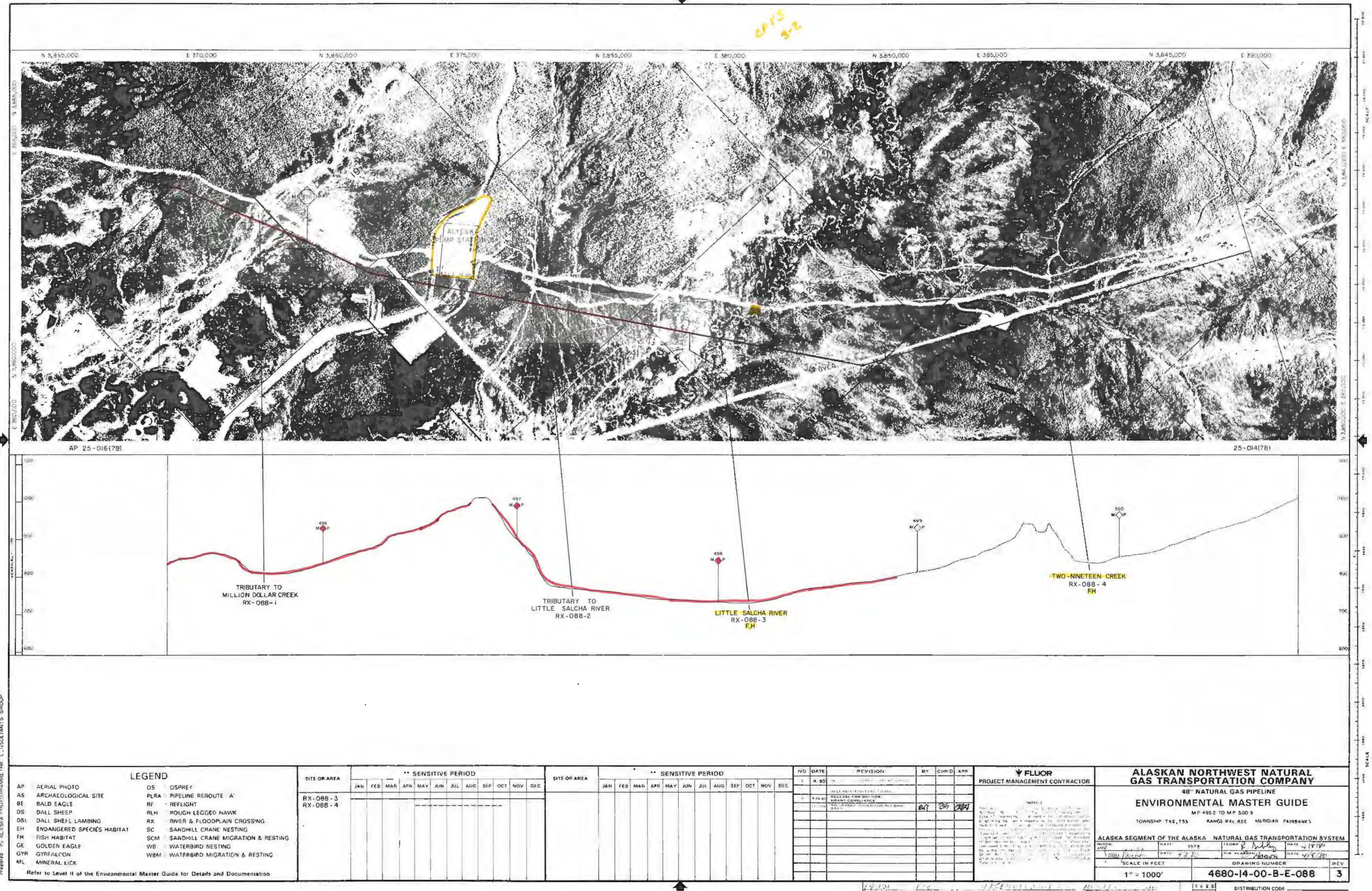
NOTICE: This is a preliminary drawing of the proposed 48" natural gas pipeline. It is not to be used for construction or for any other purpose without the approval of the project manager. The project manager is responsible for the accuracy and completeness of the information provided in this drawing. The project manager is also responsible for the accuracy and completeness of the information provided in the accompanying documents. The project manager is not responsible for the accuracy and completeness of the information provided in the accompanying documents.

## ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY

48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 488.1 TO MP 495.2  
TOWNSHIP T35, T45 RANGE R4E MERIDIAN FAIRBANKS  
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM  
SCALE IN FEET: 1" = 1000'  
DRAWING NUMBER: 4680-14-00-B-E-087  
REV: 3



Prepared By: ALASKA INDUSTRIES INC. L-CONSULTANTS GROUP







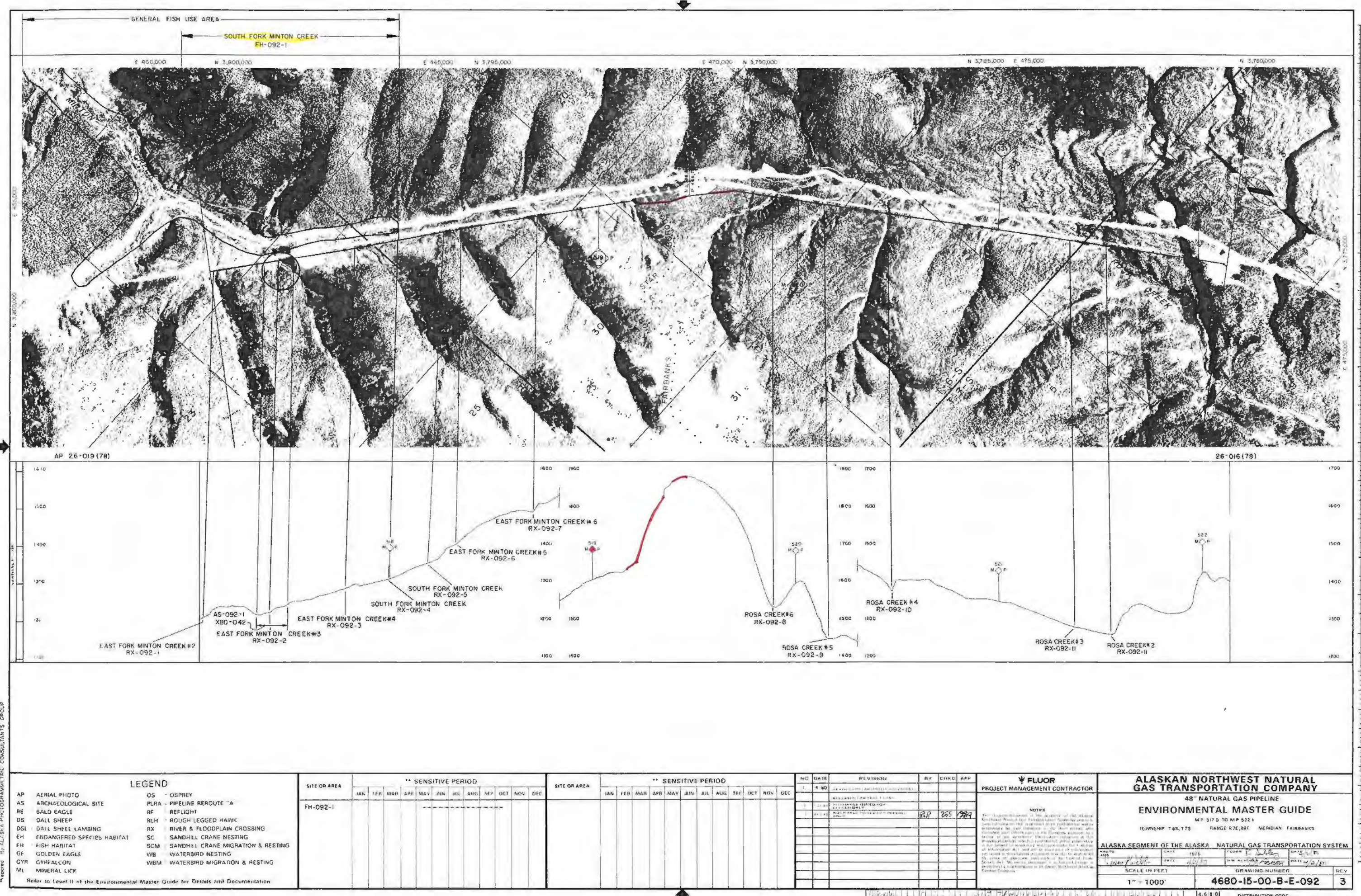












Prepared by ALASKA PHOTOGRAMMETRIC CONSULTANTS GROUP

- LEGEND**
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| AP AERIAL PHOTO               | OS OSPREY                              |
| AS ARCHAEOLOGICAL SITE        | PLRA PIPELINE REROUTE "A"              |
| BE BALD EAGLE                 | RF REFLIGHT                            |
| DS DALL SHEEP                 | RLH ROUGH LEGGED HAWK                  |
| DSL DALL SHEEP LAMBING        | RX RIVER & FLOODPLAIN CROSSING         |
| EH ENDANGERED SPECIES HABITAT | SC SANDHILL CRANE NESTING              |
| FH FISH HABITAT               | SCM SANDHILL CRANE MIGRATION & RESTING |
| GE GOLDEN EAGLE               | WB WATERBIRD NESTING                   |
| GYR GYRFALCON                 | WBM WATERBIRD MIGRATION & RESTING      |
| ML MINERAL LICK               |  |

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
FH-092-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

NO	DATE	REVISION	BY	CHKD	APP
1	4-90	ISSUED FOR CONSTRUCTION			
2	11-90	REVISIONS (CONSTRUCTION)			
3	11-90	REVISIONS (CONSTRUCTION)			
4	11-90	REVISIONS (CONSTRUCTION)			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**

**48" NATURAL GAS PIPELINE**

**ENVIRONMENTAL MASTER GUIDE**

MP 517.0 TO MP 522.1

TOWNSHIP 14S, 17S RANGE 7E, 8E MERIDIAN FAIRBANKS

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

SCALE IN FEET	1" = 1000'
DRAWING NUMBER	4680-15-00-B-E-092
REV	3

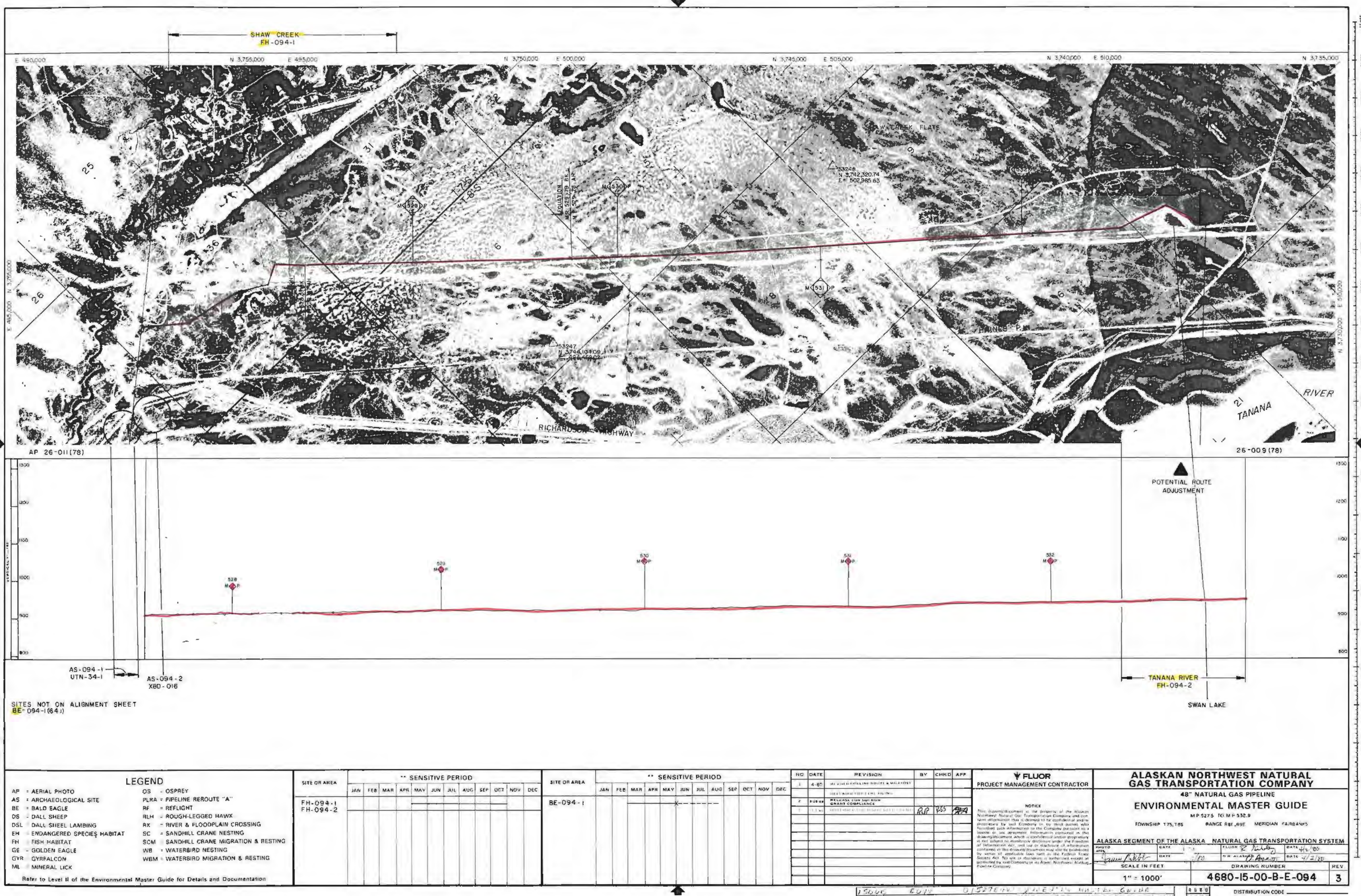
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AS-094-1  
UTN-34-1  
SITES NOT ON ALIGNMENT SHEET  
BE-094-1 (64.1)

AS-094-2  
X80-016

TANANA RIVER  
FH-094-2  
SWAN LAKE

LEGEND

- |                                 |  |
|---------------------------------|--|
| AP = AERIAL PHOTO               | OS = OSPREY                              |
| AS = ARCHAEOLOGICAL SITE        | PLRA = PIPELINE REROUTE "A"              |
| BE = BALD EAGLE                 | RF = REFLIGHT                            |
| DS = DALL SHEEP                 | RLM = ROUGH-LEGGED HAWK                  |
| DSL = DALL SHEEP LAMBING        | RX = RIVER & FLOODPLAIN CROSSING         |
| EH = ENDANGERED SPECIES HABITAT | SC = SANDHILL CRANE NESTING              |
| FE = FISH HABITAT               | SCM = SANDHILL CRANE MIGRATION & RESTING |
| GE = GOLDEN EAGLE               | WB = WATERBIRD NESTING                   |
| GVR = GYRFALCON                 | WBM = WATERBIRD MIGRATION & RESTING      |
| ML = MINERAL LICK               |  |

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
FH-094-1												
FH-094-2												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BE-094-1												

NO.	DATE	REVISION	BY	CHKD	APP
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2	8-88	RELOCATE FROM SHIP ROAD			
3	1-90	RELOCATE FROM SHIP ROAD			

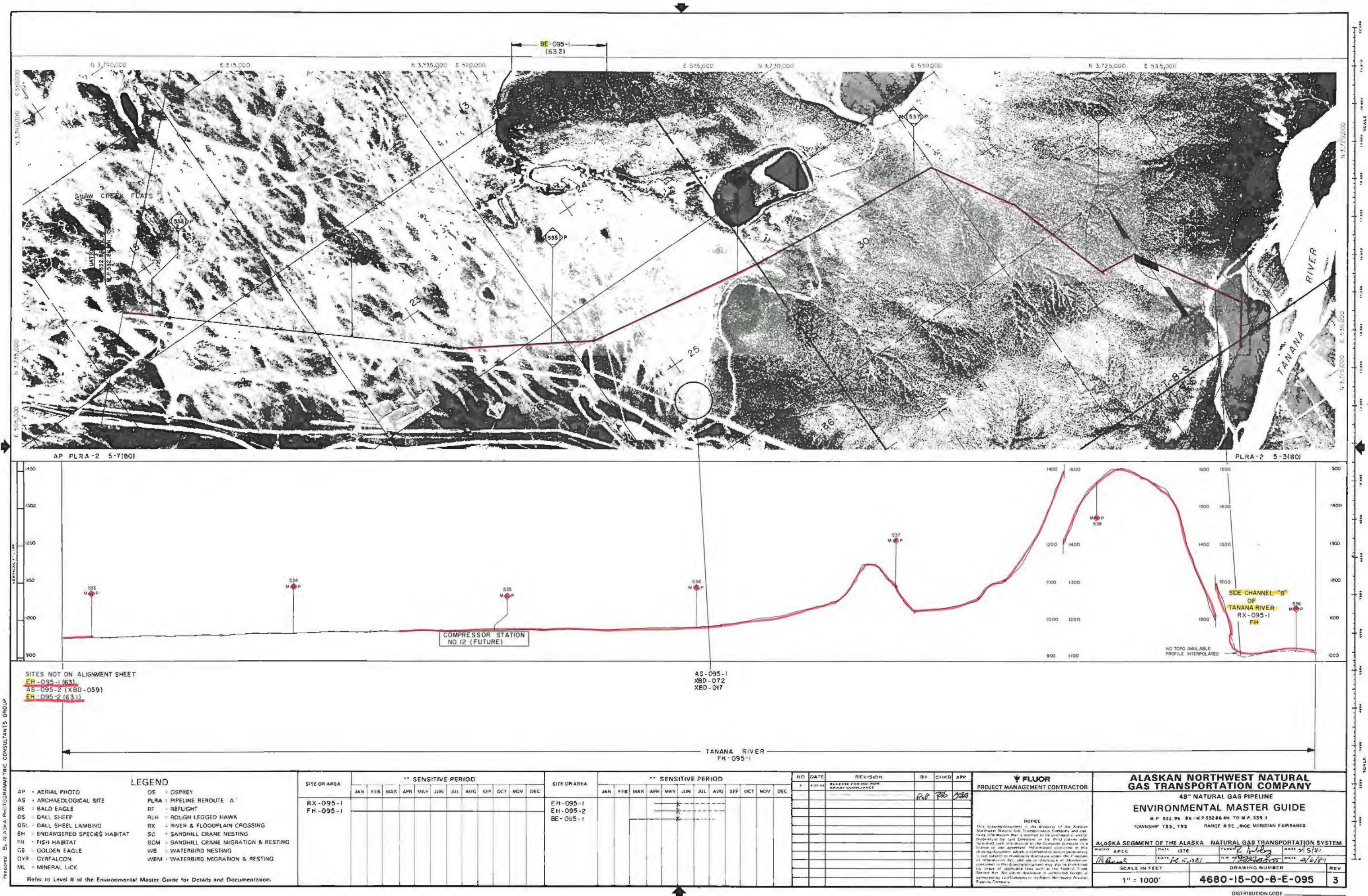
FLUOR  
PROJECT MANAGEMENT CONTRACTOR

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<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b>			
<b>48" NATURAL GAS PIPELINE</b>			
<b>ENVIRONMENTAL MASTER GUIDE</b>			
MP 327.5 TO MP 332.9			
TOWNSHIP 17S, T6S RANGE 18E, 69E MERIDIAN 14R64NPS			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
SCALE IN FEET	1" = 1000'	DRAWING NUMBER	4680-15-00-B-E-094
REV			3

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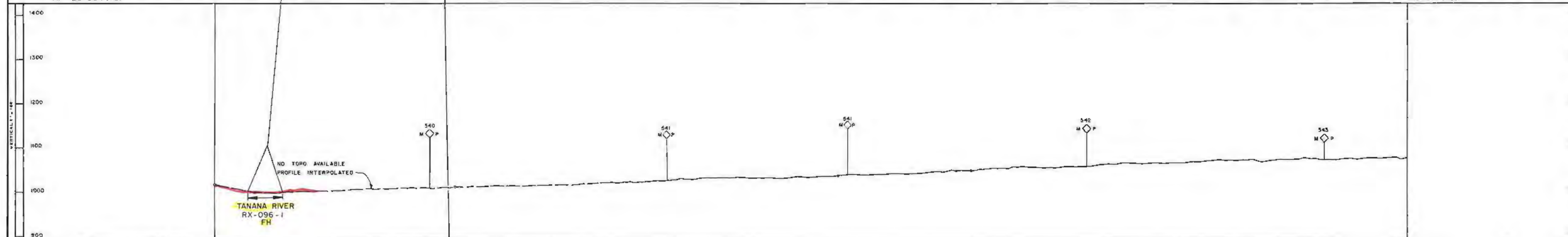


SITES NOT ON ALIGNMENT SHEET  
EH-096-1 (60 a)



AP 26-004 (7B)

26-001(78)



SITES NOT ON ALIGNMENT SHEET  
SC-1  
SCM-1

AS - 096 - 1  
XBD - 057

— DELTA RIVER  
FH-096-1

### LEGEND

OS = OSPREY  
PLRA = PIPELINE REROUTE "A"  
RF = REFLIGHT  
RLH = ROUGH LEGGED HAWK  
RX = RIVER & FLOODPLAIN CROSSING  
SC = SANDHILL CRANE NESTING  
SCM = SANDHILL CRANE MIGRATION & RESTING  
WB = WATERBIRD NESTING  
WBM = WATERBIRD MIGRATION & RESTING

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SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DIC
SC -096- I SCM-096-I EH-096-I					- -				- -			

[illegible]

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

	PROJECT MANAGEMENT CONTRACTOR
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**ALASKAN NORTHWEST NATURAL  
GAS TRANSPORTATION COMPANY**

48" NATURAL GAS PIPELINE

ENVIRONMENTAL MASTER GUIDE

TOWNSHIP T8S, T9S      RANGE R5E, R10E      MERIDIAN FAIRBANKS

A SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION

DATE	1978	PLUM	2 holes	DATE	7/5
DATE	1978	NW 1/4	1/4	DATE	7/5

SCALE IN FEET	DRAWING NUMBER
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1" = 1000' 4680-15-00-B-E-096

Refer to Level II of the Environmental Master Guide for Details and Documentation

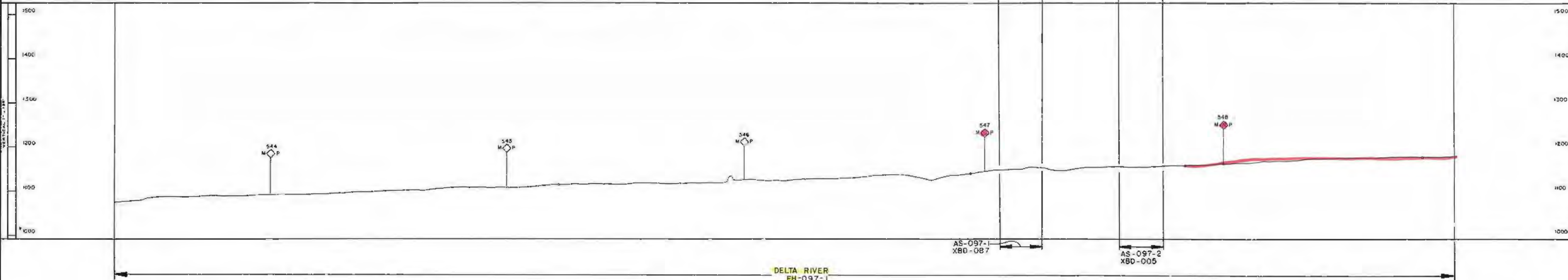
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BE-097-1(59)

BE-097-2(58)



LEGEND

- |                                 |  |
|---------------------------------|--|
| AP = AERIAL PHOTO               | OS = OSPREY                              |
| AS = ARCHAEOLOGICAL SITE        | PLRA = PIPELINE ROUTE "A"                |
| BE = BALD EAGLE                 | RF = REFLIGHT                            |
| DS = DALL SHEEP                 | RLH = ROUGH-LEGGED HAWK                  |
| DSL = DALL SHEEP LAMBING        | RK = RIVER & FLOODPLAIN CROSSING         |
| EH = ENDANGERED SPECIES HABITAT | SC = SANDHILL CRANE NESTING              |
| FH = FISH HABITAT               | SCM = SANDHILL CRANE MIGRATION & RESTING |
| GE = GOLDEN EAGLE               | WB = WATERBIRD NESTING                   |
| GFR = GYRFALCON                 | WBM = WATERBIRD MIGRATION & RESTING      |
| ML = MINERAL LICK               |  |

Refer to Level II of the Environmental Master Guide for Details and Documentation.

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
FH-097-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SC-097-1												
SCM-097-1												
WBM-097-9												
BE-097-1												
BE-097-2												

NO.	DATE	REVISION	BY	CHKD	APP
1	6-80	REVISED PIPELINE ROUTE & MILLAGE			
2	8-80	RELEASED FOR FERC FILING			
3	11-80	RECEIVED FOR RECORD ONLY			
4	11-80	RECEIVED FOR RECORD ONLY			

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PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY

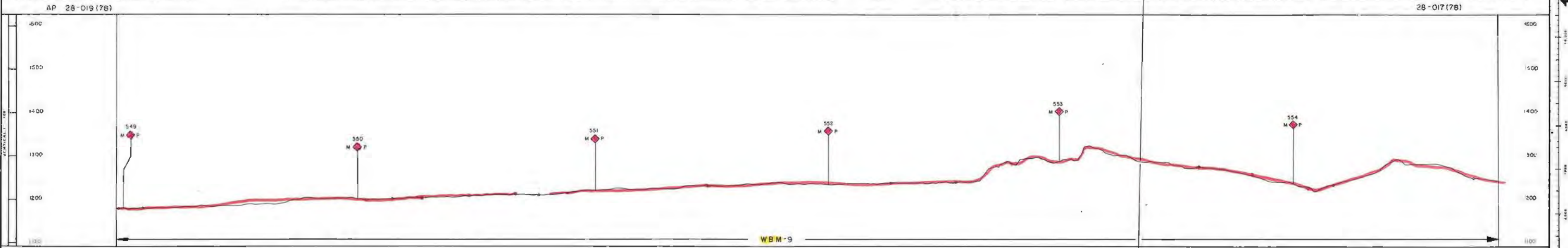
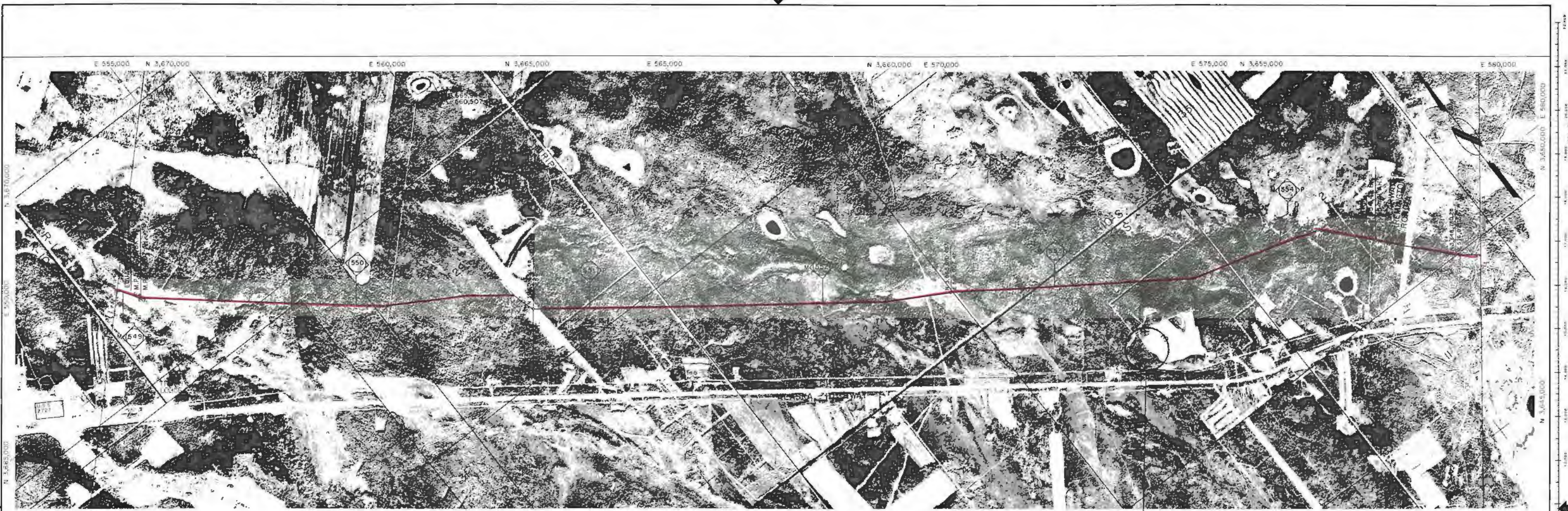
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE

M.P. 543.5 TO M.P. 549.0  
TOWNSHIP T 93, T105 RANGE R10E, R11E MERIDIAN FAIRBANKS

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	DATE	FLUOR	DATE
PHOTO	1978	R. Miller	4/2/80
DATE	4/2/80	DATE	4/2/80
SCALE IN FEET	1" = 1000'	DRAWING NUMBER	4680-15-00-B-E-097
REV			3

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LEGEND	
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AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE PERROUTE A
BE - BALD EAGLE	RF - REFLIGHT
DS - DALL SHEEP	RLH - ROUGH LEGGED HAWK
DSL - DALL SHEEL LAMBING	RX - RIVER & FLOODPLAIN CROSSING
EH - ENDANGERED SPECIES HABITAT	SC - SANDHILL CRANE NESTING
FM - FISH HABITAT	SCM - SANDHILL CRANE MIGRATION & RESTING
GE - GOLDEN EAGLE	WB - WATERBIRD NESTING
GYR - GYRFALCON	WBM - WATERBIRD MIGRATION & RESTING
ML - MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation

SITE OR AREA	** SENSITIVE PERIOD											
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WBM-098-9												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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NO	DATE	REVISION	BY	CHKD	APP
1	4-80	ISSUED FOR CONSTRUCTION			
2	1-81	REVISED TO SHOW CHANGES			
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FLUOR  
PROJECT MANAGEMENT CONTRACTOR

ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 549 TO MP 554.9  
TOWNSHIP 110S, T10S RANGE 11E MERIDIAN 14W

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

SCALE IN FEET  
1" = 1000'

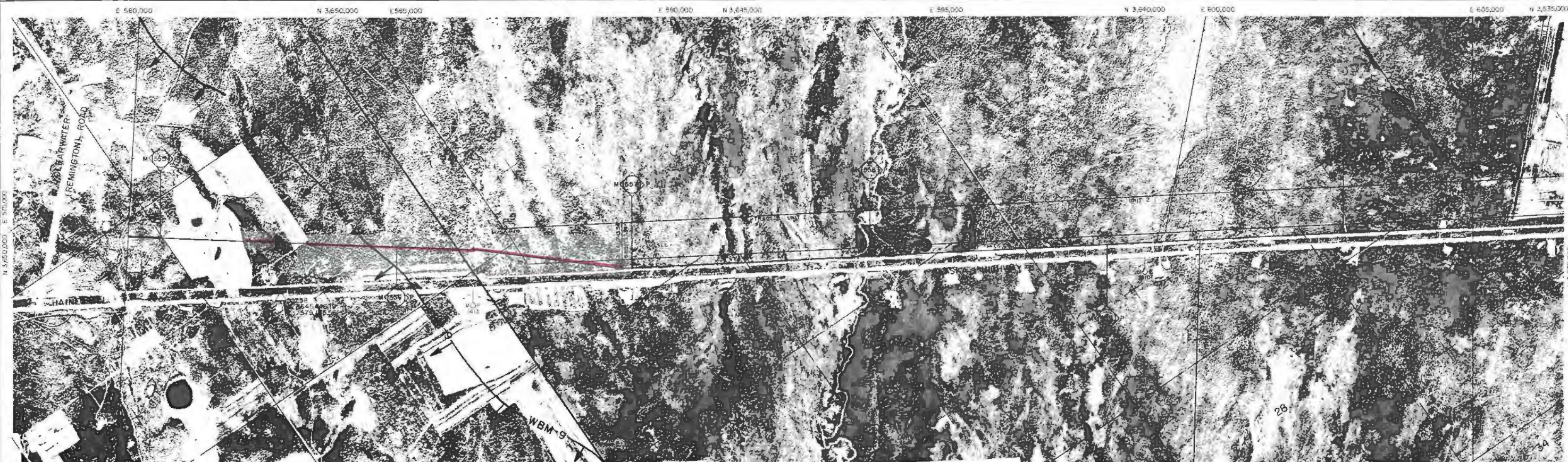
DRAWING NUMBER  
4680-15-00-B-E-098

REV  
3

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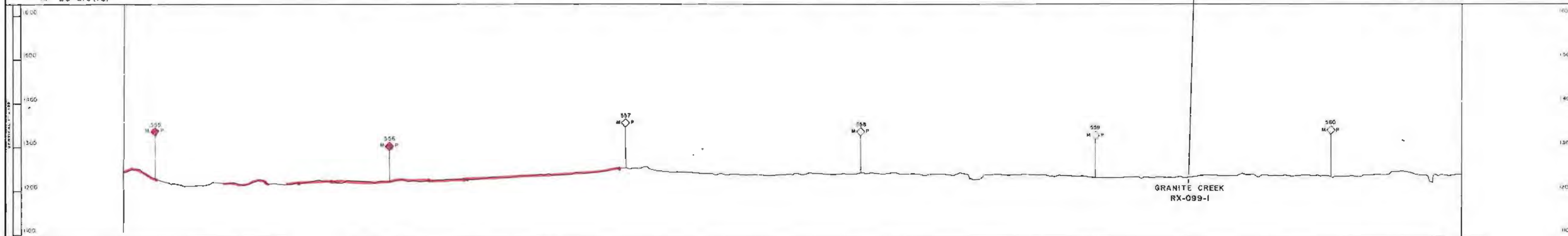


SITES NOT ON ALIGNMENT SHEET:  
EH-099-1(55)



AP 28-016 (78)

28-013 (78)



#### LEGEND

- |                                 |  |
|---------------------------------|--|
| AP - AERIAL PHOTO               | OS - OSPREY                              |
| AS - ARCHAEOLOGICAL SITE        | PLRA - PIPELINE ROUTE "A"                |
| BE - BALD EAGLE                 | RF - REFUGIT                             |
| DS - DALL SHEEP                 | RLH - ROUGH LEGGED HAWK                  |
| DSL - DALL SHEEP LAMBING        | RX - RIVER & FLOODPLAIN CROSSING         |
| EH - ENDANGERED SPECIES HABITAT | SC - SANDHILL CRANE NESTING              |
| FH - FISH HABITAT               | SCM - SANDHILL CRANE MIGRATION & RESTING |
| GE - GOLDEN EAGLE               | WB - WATERBIRD NESTING                   |
| GVR - GYRFALCON                 | WBM - WATERBIRD MIGRATION & RESTING      |
| ML - MINERAL LICK               |  |

Refer to Level II of the Environmental Master Guide for Details and Documentation

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WBM-099-9 EH-099-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WBM-099-9 EH-099-1												

NO.	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISED SHEET			
2	3-80	REVISED SHEET			
3	1-80	REVISED SHEET			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

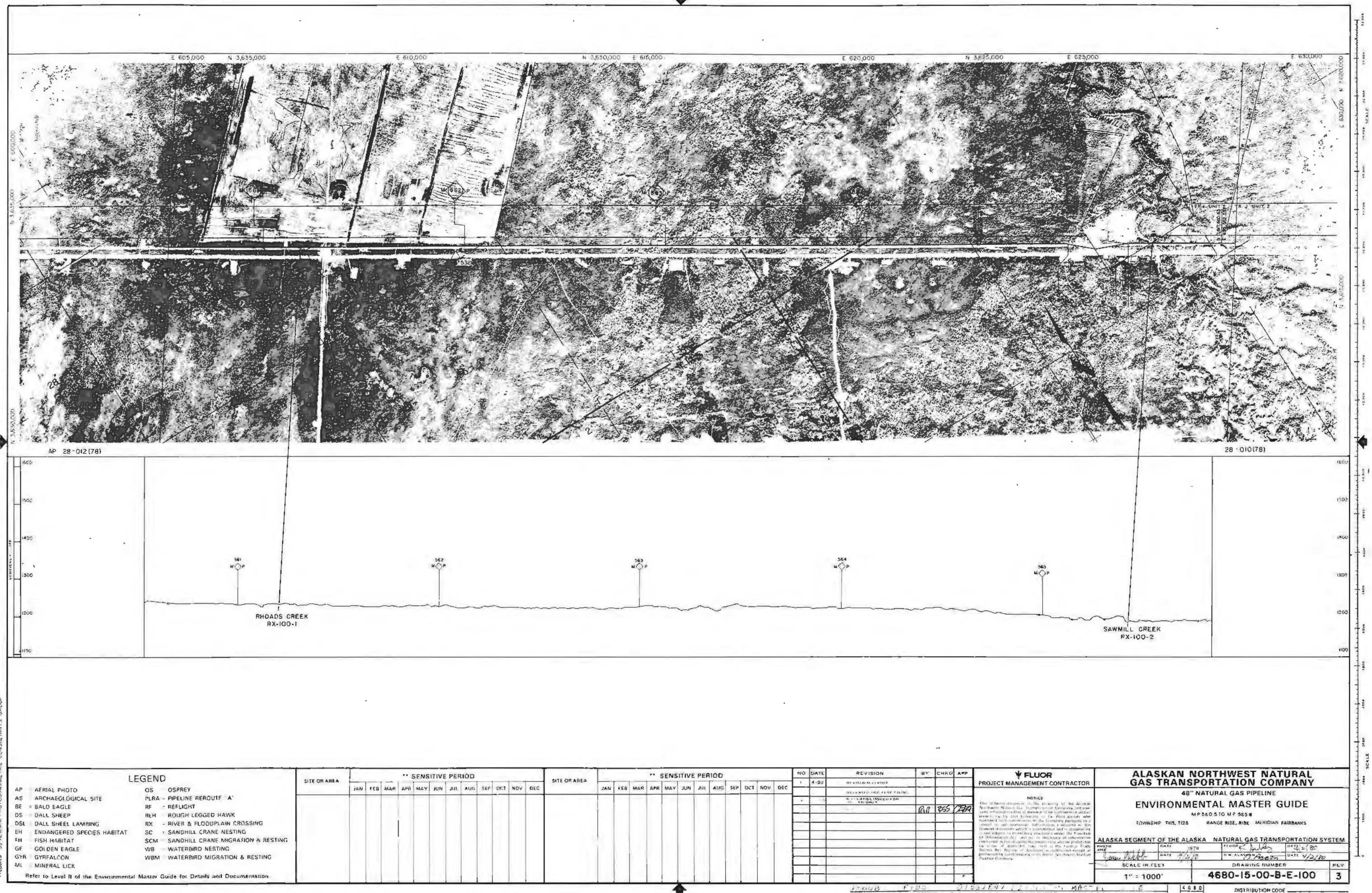
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<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b>			
48" NATURAL GAS PIPELINE			
<b>ENVIRONMENTAL MASTER GUIDE</b>			
M.P. 554.9 TO M.P. 560.5			
TOWNSHIP T11S RANGE R11E, R12E MERIDIAN FAIRBANKS			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
PHOTO	DATE	BY	DATE
4/80	4/80	4/80	4/80
SCALE IN FEET		DRAWING NUMBER	
1" = 1000'		4680-15-00-B-E-099	
		REV	
		3	

DISTRIBUTION CODE



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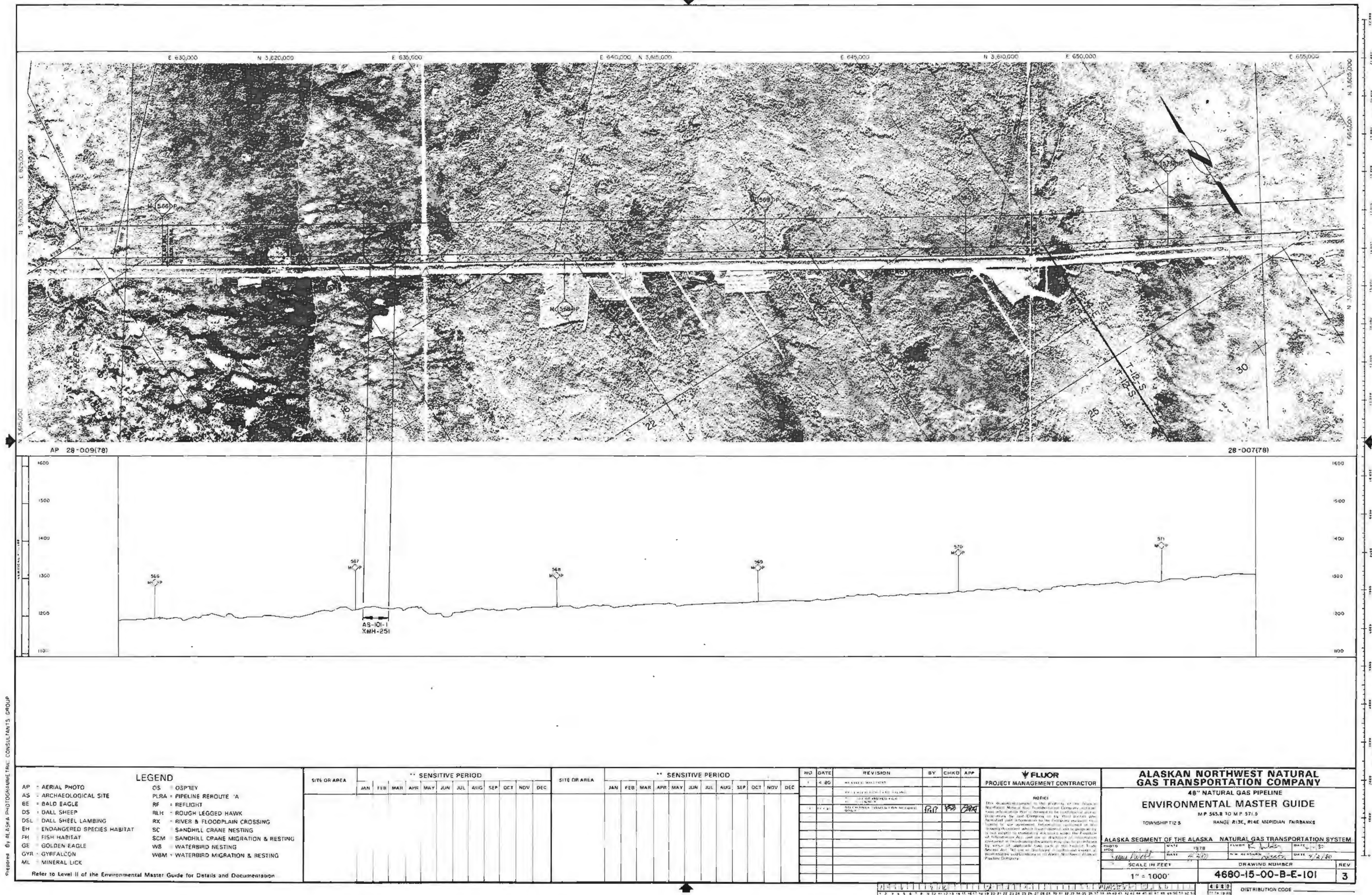
LEGEND	
AP - AERIAL PHOTO	OS - OSPREY
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE REROUTE 'A'
BE - BALD EAGLE	RF - REFUGIT
DS - DALL SHEEP	RLH - ROUGH LEGGED HAWK
DSL - DALL SHEEP LAMBING	RX - RIVER & FLOODPLAIN CROSSING
EH - ENDANGERED SPECIES HABITAT	SC - SANDHILL CRANE NESTING
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GE - GOLDEN EAGLE	WB - WATERBIRD NESTING
GYR - GYRFALCON	WBM - WATERBIRD MIGRATION & RESTING
ML - MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation.

SITE OR AREA	** SENSITIVE PERIOD												SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	SEE ATTACHED FOR CORRECTIONS			
		REVISION 1: ADD LICKS			
2		REVISION 2: ADD LICKS			
3		REVISION 3: ADD LICKS			
4		REVISION 4: ADD LICKS			
5		REVISION 5: ADD LICKS			
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- LEGEND**
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| AP - AERIAL PHOTO               | OS - OSP1EY                              |
| AS - ARCHAEOLOGICAL SITE        | PLRA - PIPELINE REROUTE 'A'              |
| BE - BALD EAGLE                 | RF - REFLIGHT                            |
| DS - DALL SHEEP                 | RLH - ROUGH LEGGED HAWK                  |
| DSL - DALL SHEEP LAMBING        | RX - RIVER & FLOODPLAIN CROSSING         |
| EH - ENDANGERED SPECIES HABITAT | SC - SANDHILL CRANE NESTING              |
| FM - FISH HABITAT               | SCM - SANDHILL CRANE MIGRATION & RESTING |
| GE - GOLDEN EAGLE               | WB - WATERBIRD NESTING                   |
| GVR - GYRFALCON                 | WBM - WATERBIRD MIGRATION & RESTING      |
| ML - MINERAL LICK               |  |

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

NO	DATE	REVISION	BY	CHKD	APP
1	4-20	NO STATE ROAD POINT			
2	5-10	REVISION TO STATE ROAD POINT			
3	5-10	REVISION TO STATE ROAD POINT			
4	5-10	REVISION TO STATE ROAD POINT			
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9	5-10	REVISION TO STATE ROAD POINT			
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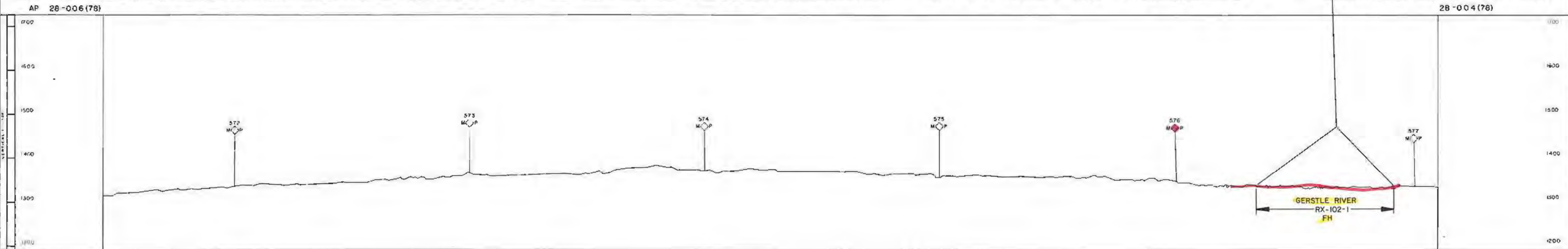
**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b>			
<b>48" NATURAL GAS PIPELINE</b>			
<b>ENVIRONMENTAL MASTER GUIDE</b>			
MP 565.8 TO MP 571.5			
TOWNSHIP T12 S RANGE R13E, R14E MERIDIAN FAIRBANKS			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM		DRAWING NUMBER	
4680-15-00-B-E-101		3	
SCALE IN FEET		1" = 1000'	
DISTRIBUTION CODE		4680	



SC-4  
SCM-3  
EH-102-1(52)



AP - AERIAL PHOTO

AS - ARCHAEOLOGICAL SITE

BE - BALD EAGLE

DS - DALL SHEEP

DSL - DALL SHEEP LAMBING

EH - ENDANGERED SPECIES HABITAT

FM - FISH HABITAT

GE - GOLDEN EAGLE

GYR - GYRFALCON

ML - MINERAL LICK

OS - OSPREY

PURA - PIPELINE ROUTE A'

RF - REFLIGHT

RLH - ROUGH LEGGED HAWK

RX - RIVER & FLOODPLAIN CROSSING

SC - SANDHILL CRANE NESTING

SCM - SANDHILL CRANE MIGRATION & RESTING

WB - WATERBIRD NESTING

WBM - WATERBIRD MIGRATION & RESTING

Refer to Level II of the Environmental Master Guide for Details and Documentation.

SITE OR AREA

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APR

MAY

JUN

JUL

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RX-102-1

SITE OR AREA

JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

SC-102-4

SC-102-5

SCM-102-3

SCM-102-4

EH-102-1

NO

DATE

REVISION

BY

CHD

APP

1

4-80

INITIAL REVIEW (check)

2

6-80

ADDITIONAL COMMENTS

3

11-80

NO CHANGE (check if no revision)

RLH

RF

WBM

FLUOR

PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY

48" NATURAL GAS PIPELINE

ENVIRONMENTAL MASTER GUIDE

MP 371.5 TO MP 372.1

TOWNSHIP 12S, 13E RANGE 14E, 15E MERIDIAN FAIRBANKS

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

SCALE IN FEET

1" = 1000'

DRAWING NUMBER

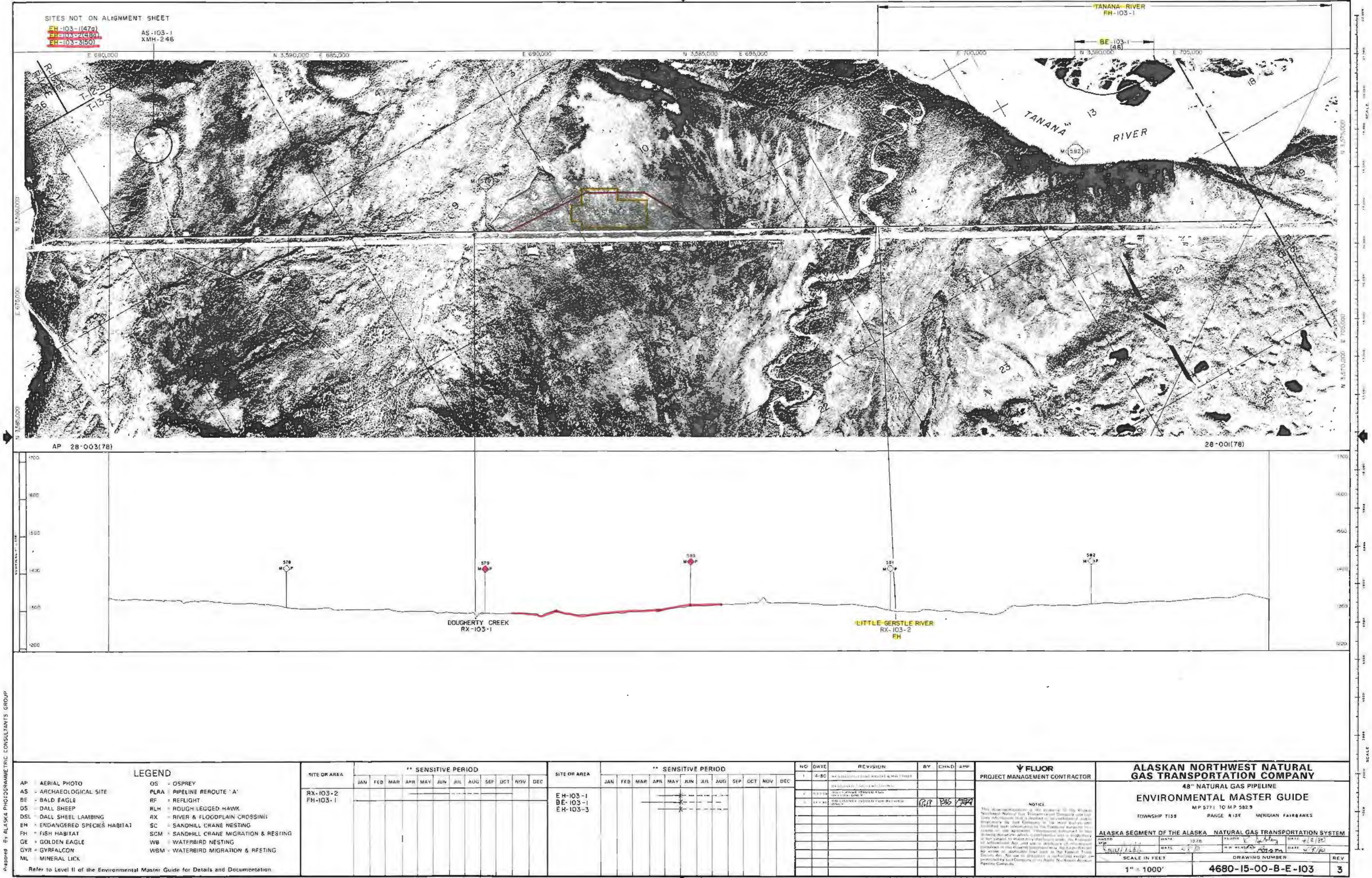
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REV

3



48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 577.1 TO MP 582.9  
TOWNSHIP 115S RANGE 115E MERIDIAN FAIRBANKS  
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM  
DRAWING NUMBER 4680-15-00-B-E-103  
REV 3  
DISTRIBUTION CODE



SITES NOT ON ALIGNMENT SHEET  
EH-103-1(470)  
EH-103-2(480)  
EH-103-3(500)  
AS-103-1  
XMH-246

LEGEND

AP = AERIAL PHOTO	OS = OSPREY
AS = ARCHAEOLOGICAL SITE	PLRA = PIPELINE REROUTE 'A'
BE = BALD EAGLE	RF = REFLIGHT
DS = DALL SHEEP	RLH = ROUGH LEGGED HAWK
DSL = DALL SHEEP LAMBING	RX = RIVER & FLOODPLAIN CROSSING
EH = ENDANGERED SPECIES HABITAT	SC = SANDHILL CRANE NESTING
FH = FISH HABITAT	SCM = SANDHILL CRANE MIGRATION & RESTING
GE = GOLDEN EAGLE	WB = WATERBIRD NESTING
GYR = GYRFALCON	WBM = WATERBIRD MIGRATION & RESTING
ML = MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-103-2 FH-103-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
EH-103-1												
BE-103-1												
EH-103-3												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	Initial Design & Construction			
2	5-80	Revised Design & Construction			
3	11-80	Final Design & Construction			

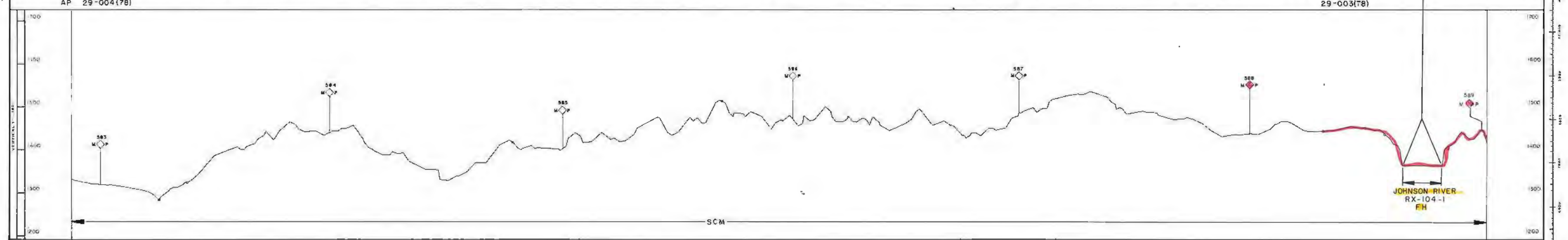
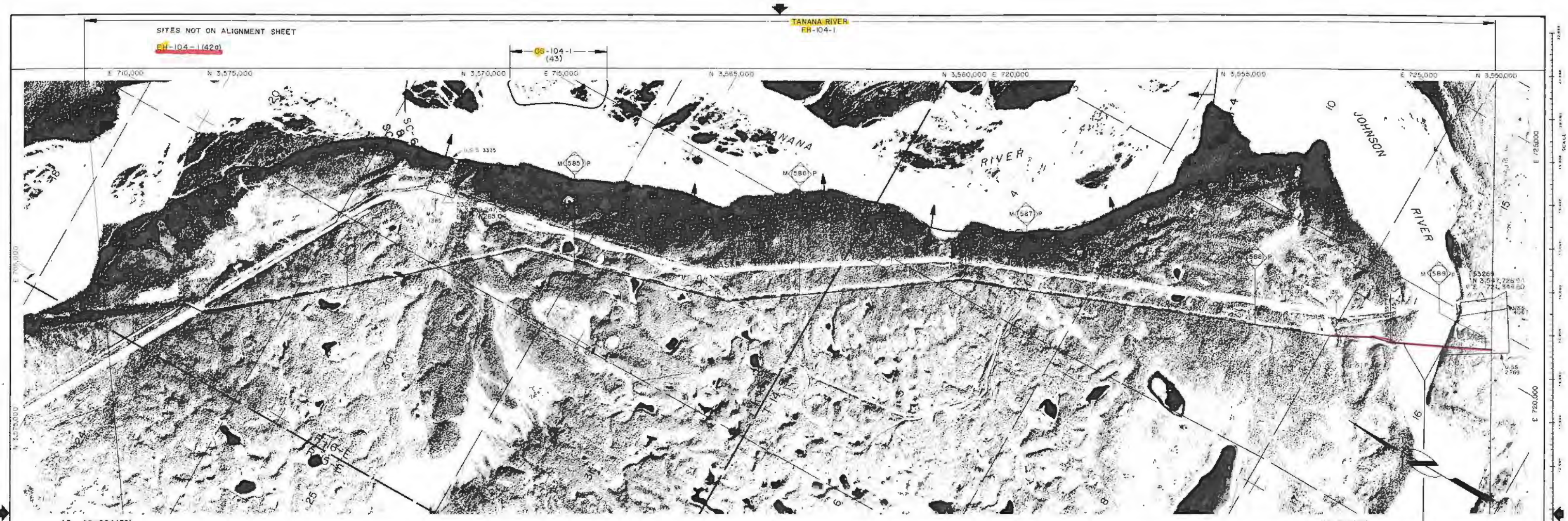
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PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
48" NATURAL GAS PIPELINE			
ENVIRONMENTAL MASTER GUIDE			
MP 577.1 TO MP 582.9			
TOWNSHIP 115S RANGE 115E MERIDIAN FAIRBANKS			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	DATE	DATE	DATE
10/10/80	10/10/80	10/10/80	10/10/80
SCALE IN FEET	DRAWING NUMBER		
1" = 1000'	4680-15-00-B-E-103		
REV			3





SITES NOT ON ALIGNMENT SHEET

SC-7  
SCM-5

**LEGEND**

AP - AERIAL PHOTO	OS - OSPREY
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE ROUTE A
BE - BALD EAGLE	RF - REFLIGHT
DS - DALL SHEEP	RLH - ROUGH-LEGGED HAWK
DSL - DALL SHEEP LAMBING	RX - RIVER & FLOODPLAIN CROSSING
EH - ENDANGERED SPECIES HABITAT	SC - SANDHILL CRANE NESTING
FH - FISH HABITAT	SCM - SANDHILL CRANE MIGRATION & RESTING
GE - GOLDEN EAGLE	WB - WATERBIRD NESTING
GYR - GYRFALCON	WBM - WATERBIRD MIGRATION & RESTING
ML - MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-104-1												
FH-104-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OS-104-1												
SC-104-6												
SC-104-7												
SCM-104-4												
SCM-104-5												
EH-104-1												

NO	DATE	REVISION	BY	CHKD	APP.
1	4-80	REVISED TO SHOW			
2	1-81	REVISED TO SHOW			
3	1-81	REVISED TO SHOW			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 582.5 TO MP 589.0  
TOWNSHIP 115S, 14E RANGE 15E, 16E MERIDIAN FAIRBANKS

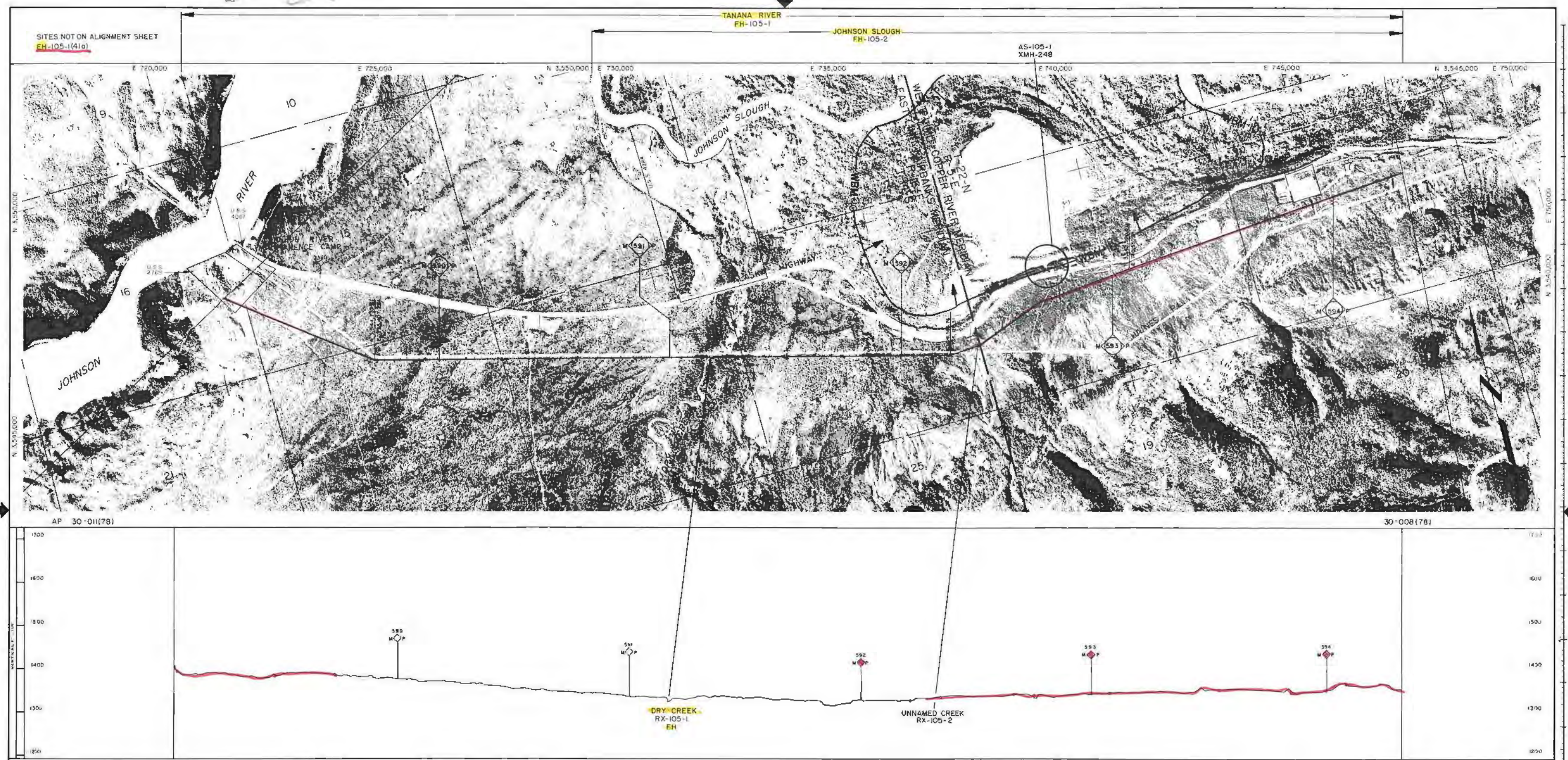
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

PROJECT NO.	DATE	SCALE	DRAWING NUMBER	REV
4680-15-00-B-E-104	4/8/80	1" = 1000'	4680-15-00-B-E-104	3

DISTRIBUTION CODE



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C.R. note R. 140  
A 140



**LEGEND**

AP - AERIAL PHOTO	OS - OSPREY
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE REROUTE "A"
BE - BALD EAGLE	RF - REFLIGHT
DS - DALL SHEEP	RLH - ROUGH LEGGED HAWK
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Refer to Level II of the Environmental Master Guide for Details and Documentation.

SITE OR AREA	** SENSITIVE PERIOD											
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FH-105-1												
FH-105-2												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WBM-105-10												
EH-105-1												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	ISSUED FOR CONSTRUCTION			
2	8-80	REVISED TO REFLECT FIELD DATA			
3	8-80	REVISED TO REFLECT FIELD DATA			
4	8-80	REVISED TO REFLECT FIELD DATA			
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50	8-80	REVISED TO REFLECT FIELD DATA			
51	8-80	REVISED TO REFLECT FIELD DATA			

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**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 589.0 TO MP 594.3  
TOWNSHIP 14N, T22N RANGE 18E, R5E MERIDIAN FAIRBANKS, COPPER RIVER

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

PROJECT	DATE	FLUOR	DATE
48" NGP	4/80	48" NGP	4/80

SCALE IN FEET: 1" = 1000'

DRAWING NUMBER: 4680-15-00-B-E-105

REV: 3

DISTRIBUTION CODE: 45880

Prepared By: ALASKA PHOTOGRAMMETRIC CONSULTANTS GROUP



Prepared by ALASKA PHOTOGRAMMETRIC CONSULTANTS GROUP



LEGEND	
AP - AERIAL PHOTO	OS - OSPREY
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE REROUTE "A"
BE - BALD EAGLE	RI - REFLIGHT
DS - DALL SHEEP	RLN - RIVER & FLOODPLAIN CROSSING
DSL - DALL SHEEP LAMBING	RX - RIVER & FLOODPLAIN CROSSING
EH - ENDANGERED SPECIES HABITAT	SC - SANDHILL CRANE NESTING
FN - FISH HABITAT	SCM - SANDHILL CRANE MIGRATION & RESTING
GE - GOLDEN EAGLE	WB - WATERBIRD NESTING
GYR - GYRFALCON	WBM - WATERBIRD MIGRATION & RESTING
ML - MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation.

SITE OR AREA	** SENSITIVE PERIOD												SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-106-1													EH-106-1				X								
RX-106-2													WB-106-17				X								
RX-106-3													WBM-106-11												
FH-106-1																									
FH-106-2																									
FH-106-3																									

NO	DATE	REVISION	BY	CHKD	APP
1	8-80	REVISED: HOLEPOST			
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PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
**ENVIRONMENTAL MASTER GUIDE**  
MP 584.3 TO MP 600.2  
TOWNSHIP 122N RANGE 15E, 16E MERIDIAN COPPER RIVER

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

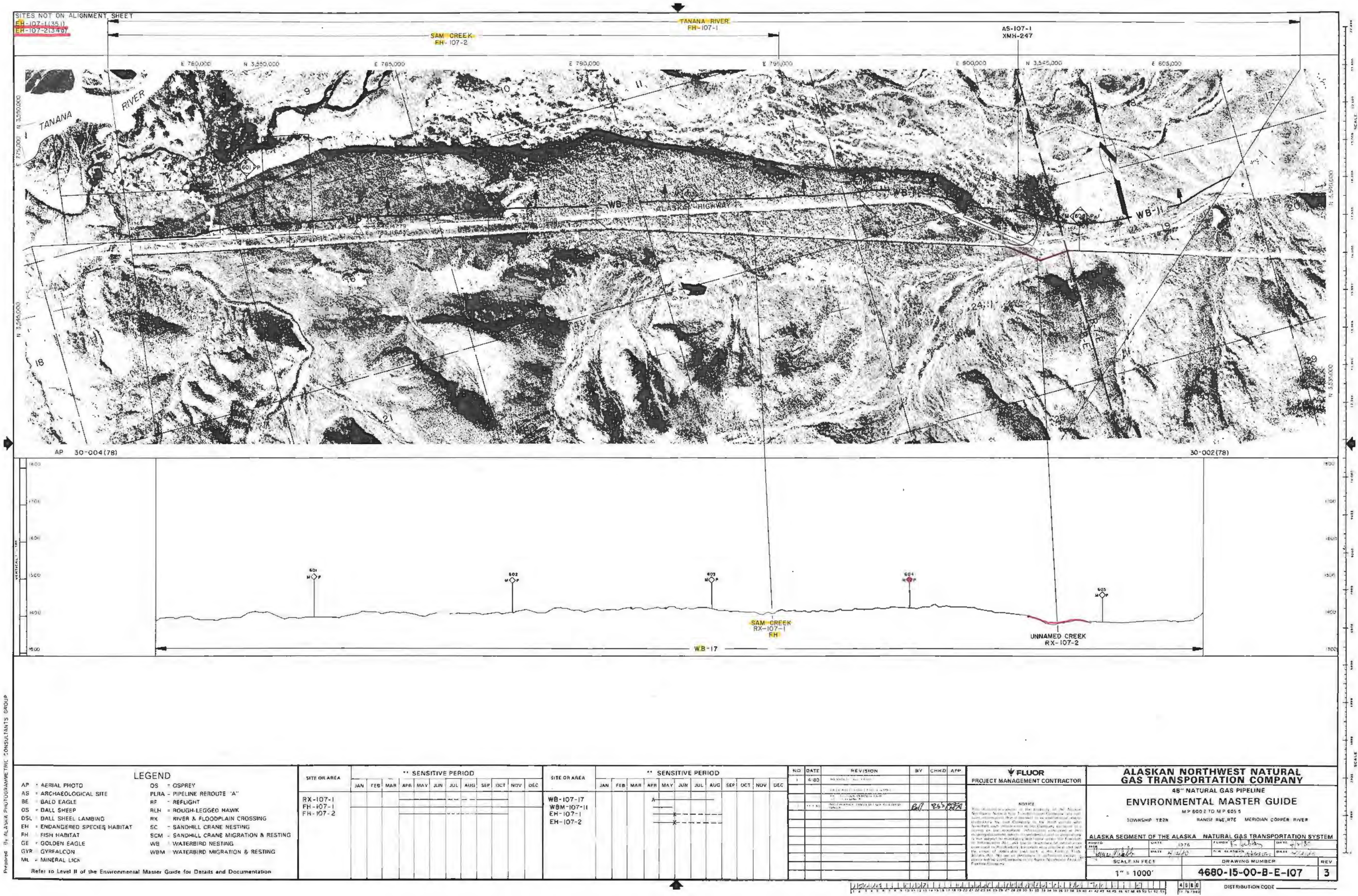
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DRAWING NUMBER: 4680-15-00-B-E-106

REV: 3

DISTRIBUTION CODE





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LEGEND

- AP - AERIAL PHOTO
- AS - ARCHAEOLOGICAL SITE
- BE - BALD EAGLE
- OS - OLL SHEEP
- OSL - OLL SHEEP LAMBING
- EH - ENDANGERED SPECIES HABITAT
- PH - FISH HABITAT
- GE - GOLDEN EAGLE
- GYR - GYRFALCON
- ML - MINERAL LICK
- OS - OSPREY
- PLRA - PIPELINE ROUTE "A"
- RF - REFLIGHT
- RLH - ROUGH-LEGGED HAWK
- RX - RIVER & FLOODPLAIN CROSSING
- SC - SANDHILL CRANE NESTING
- SCM - SANDHILL CRANE MIGRATION & RESTING
- WB - WATERBIRD NESTING
- WBM - WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-107-1												
FH-107-1												
FH-107-2												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WB-107-17												
WBM-107-11												
FH-107-1												
FH-107-2												

NO	DATE	REVISION	BY	CHKD	APP
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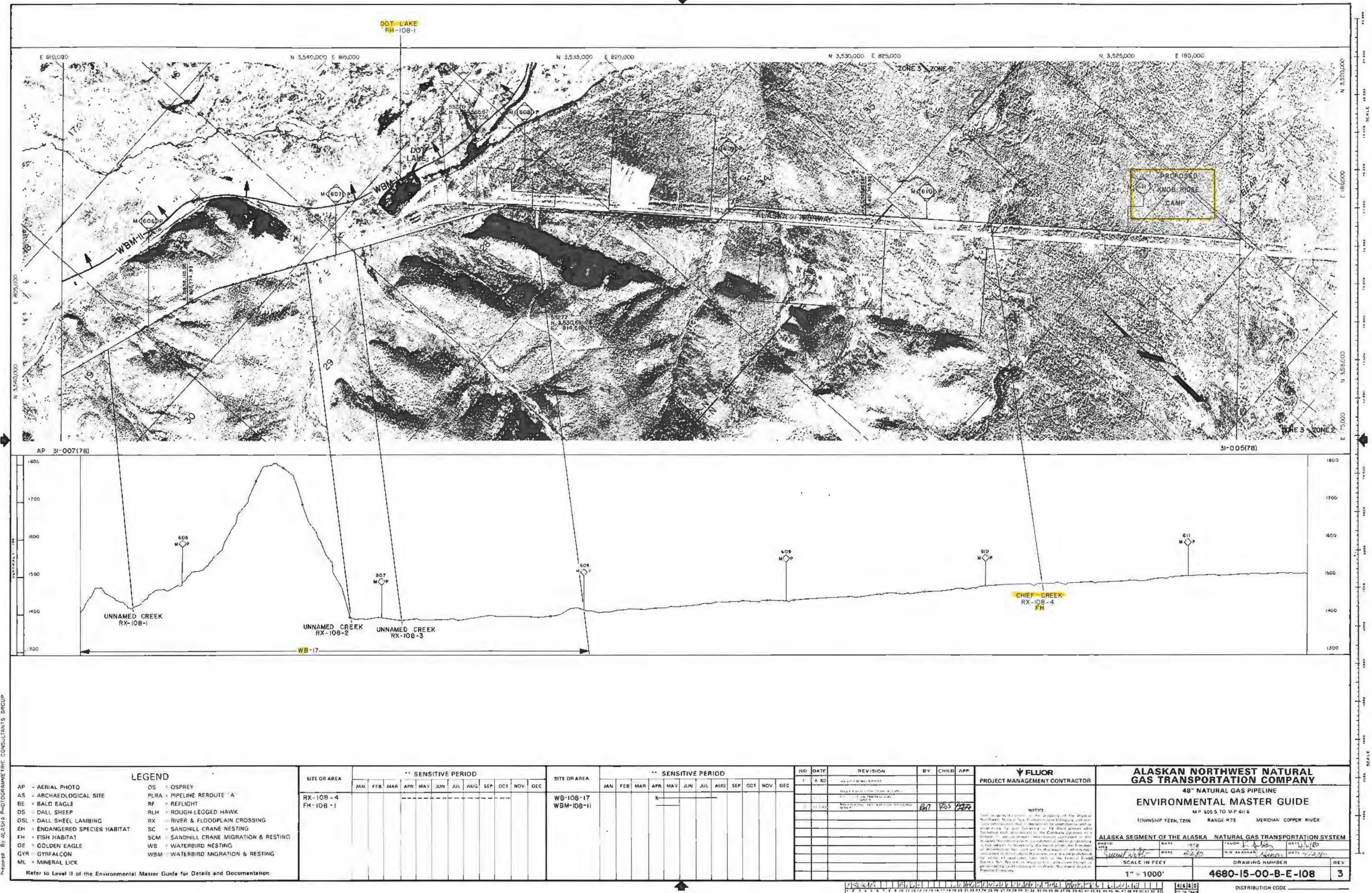
FLUOR  
PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
48" NATURAL GAS PIPELINE			
ENVIRONMENTAL MASTER GUIDE			
MP 600.2 TO MP 605.5			
TOWNSHIP T22N RANGE R4E, R7E MERIDIAN COPPER RIVER			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
PROJECT 4680-15-00-B-E-107	DATE 10/80	FLUOR DATE 10/80	DATE 10/80
SCALE IN FEET 1" = 1000'		DRAWING NUMBER 4680-15-00-B-E-107	
		REV 3	
DISTRIBUTION CODE			

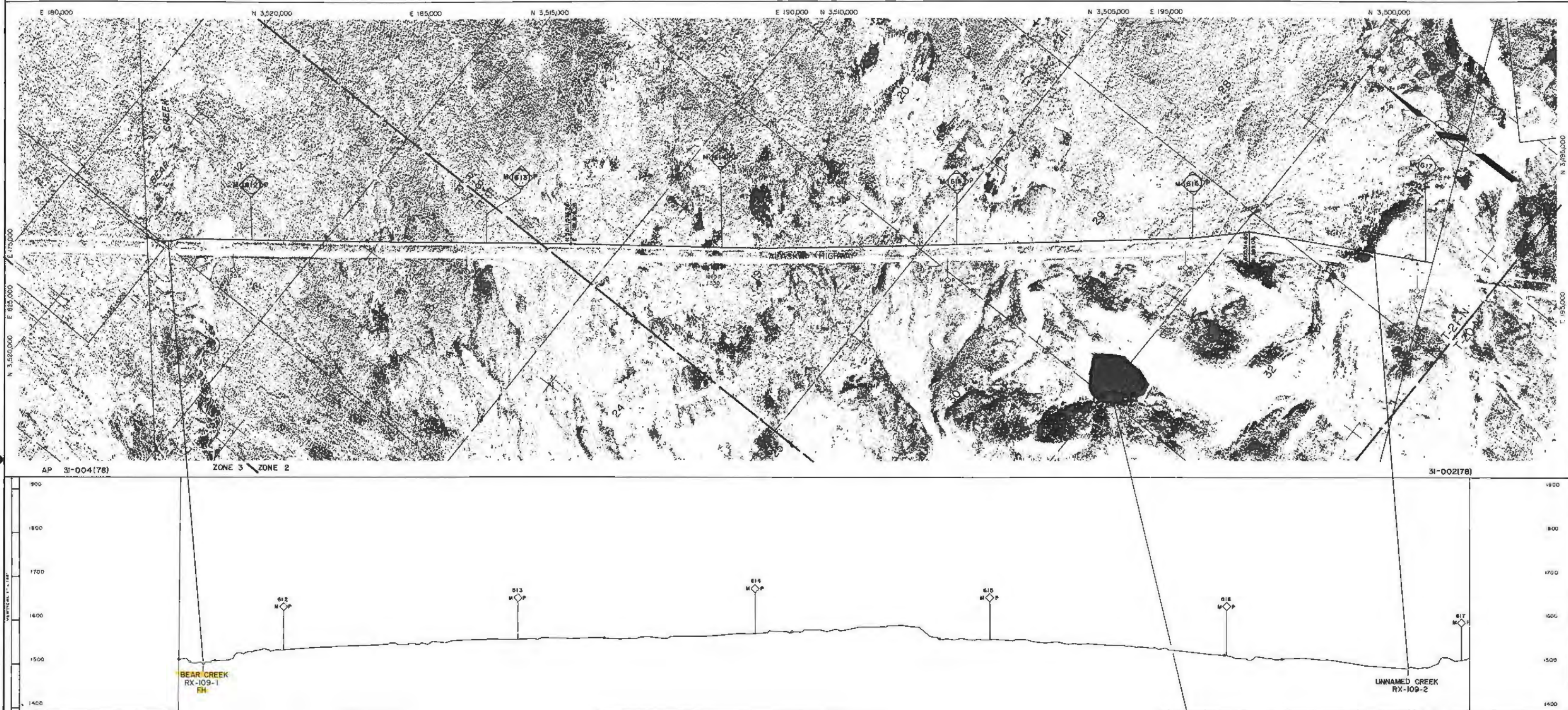


Prepared By: SLASH & PHOTOGRAMMETRIC CONSULTANTS GROUP





SITES NOT ON ALIGNMENT SHEET  
EH-109-1(29b)



# LEGEND

- AP AERIAL PHOTO
- AS ARCHAEOLOGICAL SITE
- BE BALD EAGLE
- DS DALL SHEEP
- DSL DALL SHEEP LAMBING
- EH ENDANGERED SPECIES HABITAT
- GE GOLDEN EAGLE
- GYR GYRFALCON
- ML MINERAL LICK
- OS OSPREY
- PLRA PIPELINE REROUTE "A"
- RF REFLIGHT
- RLH ROUGH-LEGGED HAWK
- RX RIVER & FLOODPLAIN CROSSING
- SC SANDHILL CRANE NESTING
- SCM SANDHILL CRANE MIGRATION & RESTING
- WB WATERBIRD NESTING
- WBM WATERBIRD MIGRATION & RESTING

## SITE OR AREA

RX-109-1  
FH-109-1

## \*\* SENSITIVE PERIOD

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

## SITE OR AREA

EH-109-1

## \*\* SENSITIVE PERIOD

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

## NO

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## REVISION

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1	4-80	REVISION	BY	CHKD	APP

## BY

1	4-80	BY	CHKD	APP
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## CHKD

1	4-80	CHKD	APP
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## APP

1	4-80	APP
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## FLUOR PROJECT MANAGEMENT CONTRACTOR

1	4-80	FLUOR PROJECT MANAGEMENT CONTRACTOR
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## NOTICE

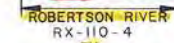
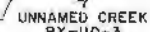
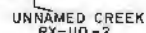
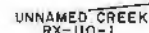
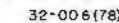
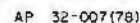
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## ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY

48" NATURAL GAS PIPELINE	ENVIRONMENTAL MASTER GUIDE
MP 516 TO MP 610	TOWNSHIP 12N RANGE 17E, 18E MERIDIAN COPPER RIVER
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	SCALE IN FEET 1" = 1000'
DATE 4/80	DRAWING NUMBER 4680-15-00-B-E-109
DATE 4/80	REV 3

DISTRIBUTION CODE





LEGEND

OS	OSPREY
PIRA	PIPELINE ROUTE A
RF	REFUGIT
RLH	ROUGH-LEGGED HAWK
RX	RIVER & FLOODPLAIN CROSSING
SC	SANDHILL CRANE NESTING
SCM	SANDHILL CRANE MIGRATION & RESTING
WB	WATERBIRD NESTING
WBM	WATERBIRD MIGRATION & RESTING

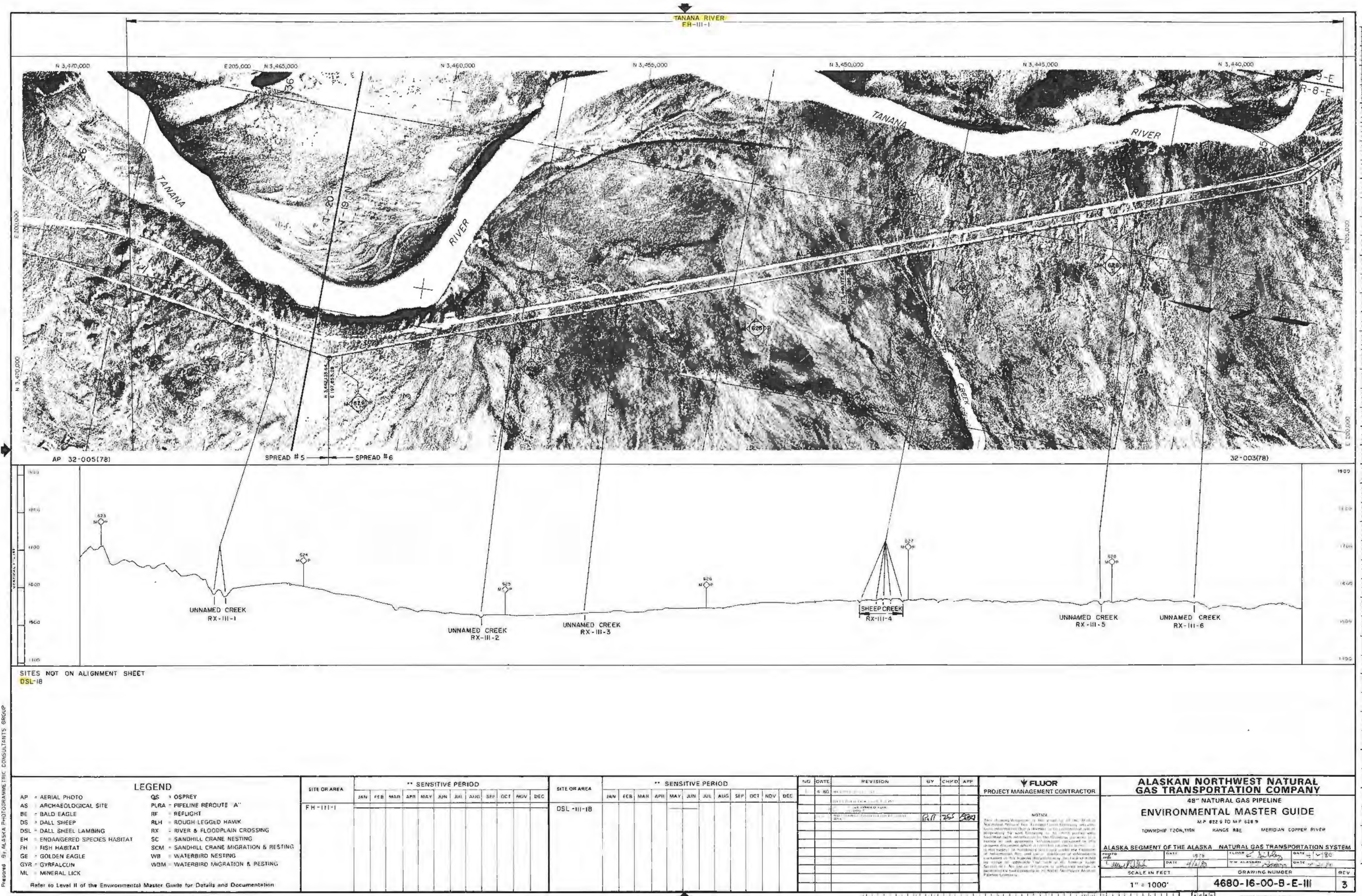
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SITE OR AREA	-- SENSITIVE PERIOD											
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EH-110-1						X						

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
48" NATURAL GAS PIPELINE			
ENVIRONMENTAL MASTER GUIDE			
MP 617.0 TO MP 622.0			
TOWNSHIP T21N, T20N		RANGE R0E	
		MERIDIAN COPPER RIVER	
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
PROJECT NO. mini P-122	DATE 4-12-88	FLUGH P. Allen	DATE 4-12-88
	DATE 4-12-88	N. ALASKA N. Allen	DATE 4-12-88
SCALE IN FEET 1" = 1000'		DRAWING NUMBER 4680-15-00-B-F-110	
		REV 3	





SITES NOT ON ALIGNMENT SHEET  
DSL-18

**LEGEND**

AP = AERIAL PHOTO	QS = OSPREY
AS = ARCHAEOLOGICAL SITE	PLRA = PIPELINE ROUTE 'A'
BE = BALD EAGLE	RF = REFLIGHT
DS = DALL SHEEP	RLH = ROUGH LEGGED HAWK
DSL = DALL SHEEP LAMBING	RX = RIVER & FLOODPLAIN CROSSING
EM = ENDANGERED SPECIES HABITAT	SC = SANDHILL CRANE NESTING
FH = FISH HABITAT	SCM = SANDHILL CRANE MIGRATION & RESTING
GE = GOLDEN EAGLE	WB = WATERBIRD NESTING
GYR = GYRFALCON	WDM = WATERBIRD MIGRATION & RESTING
ML = MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
FH-III-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DSL-III-18												

NO	DATE	REVISION	BY	CHKD	APP
1	4/80	REVISION 1			
2	4/80	REVISION 2			
3	4/80	REVISION 3			

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PROJECT MANAGEMENT CONTRACTOR

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**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**

48" NATURAL GAS PIPELINE

**ENVIRONMENTAL MASTER GUIDE**

MP 622.9 TO MP 628.9

TOWNSHIP T20N,19N RANGE R8E MERIDIAN COPPER RIVER

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

SCALE IN FEET: 1" = 1000'

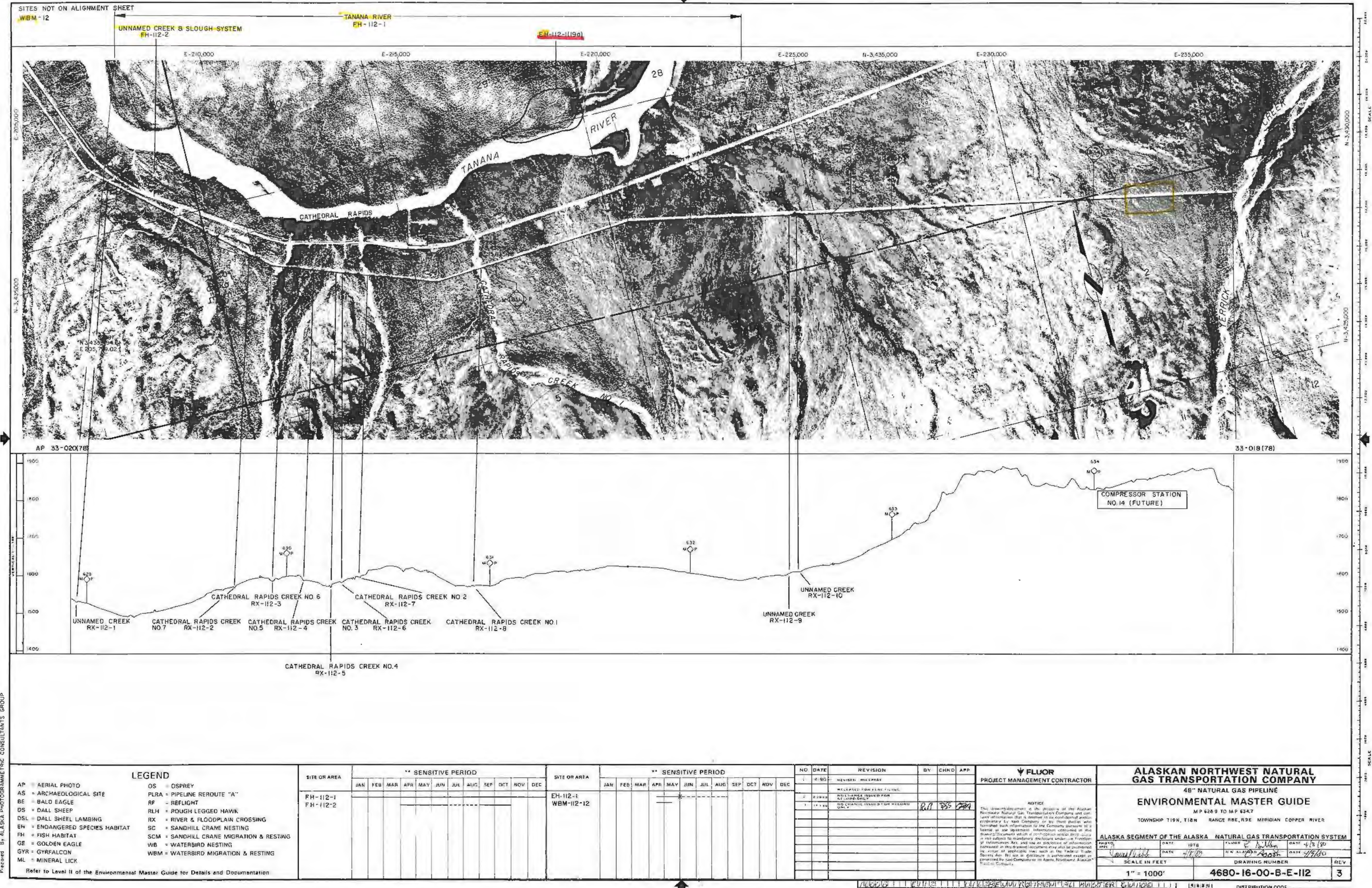
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REV: 3

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- AP = AERIAL PHOTO
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  - BE = BALD EAGLE
  - DS = DALL SHEEP
  - DSL = DALL SHEEP LAMBING
  - EH = ENDANGERED SPECIES HABITAT
  - FH = FISH HABITAT
  - GE = GOLDEN EAGLE
  - GYR = GYRFALCON
  - ML = MINERAL LICK
  - OS = OSPREY
  - PLRA = PIPELINE ROUTE "A"
  - RF = REFLIGHT
  - RLH = ROUGH LEGGED HAWK
  - RX = RIVER & FLOODPLAIN CROSSING
  - SC = SANDHILL CRANE NESTING
  - SCM = SANDHILL CRANE MIGRATION & RESTING
  - WB = WATERBIRD NESTING
  - WBM = WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
FH-112-1												
FH-112-2												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
EH-112-1												
WBM-112-12												

NO	DATE	REVISION	BY	CHKD	APP
1	2-80	REVISED: ANCHORAGE			
2	2-80	REVISED: FOR FIELD USE			
3	11-80	REVISED: FOR FIELD USE			
4	11-80	REVISED: FOR FIELD USE			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
**ENVIRONMENTAL MASTER GUIDE**  
MP 628.9 TO MP 634.7  
TOWNSHIP T19N, T18W RANGE R8E, R9E MERIDIAN COPPER RIVER

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

DATE	1978	DATE	4/18/80
SCALE IN FEET	1" = 1000'	DRAWING NUMBER	4680-16-00-B-E-112
REV	3	DISTRIBUTION CODE	



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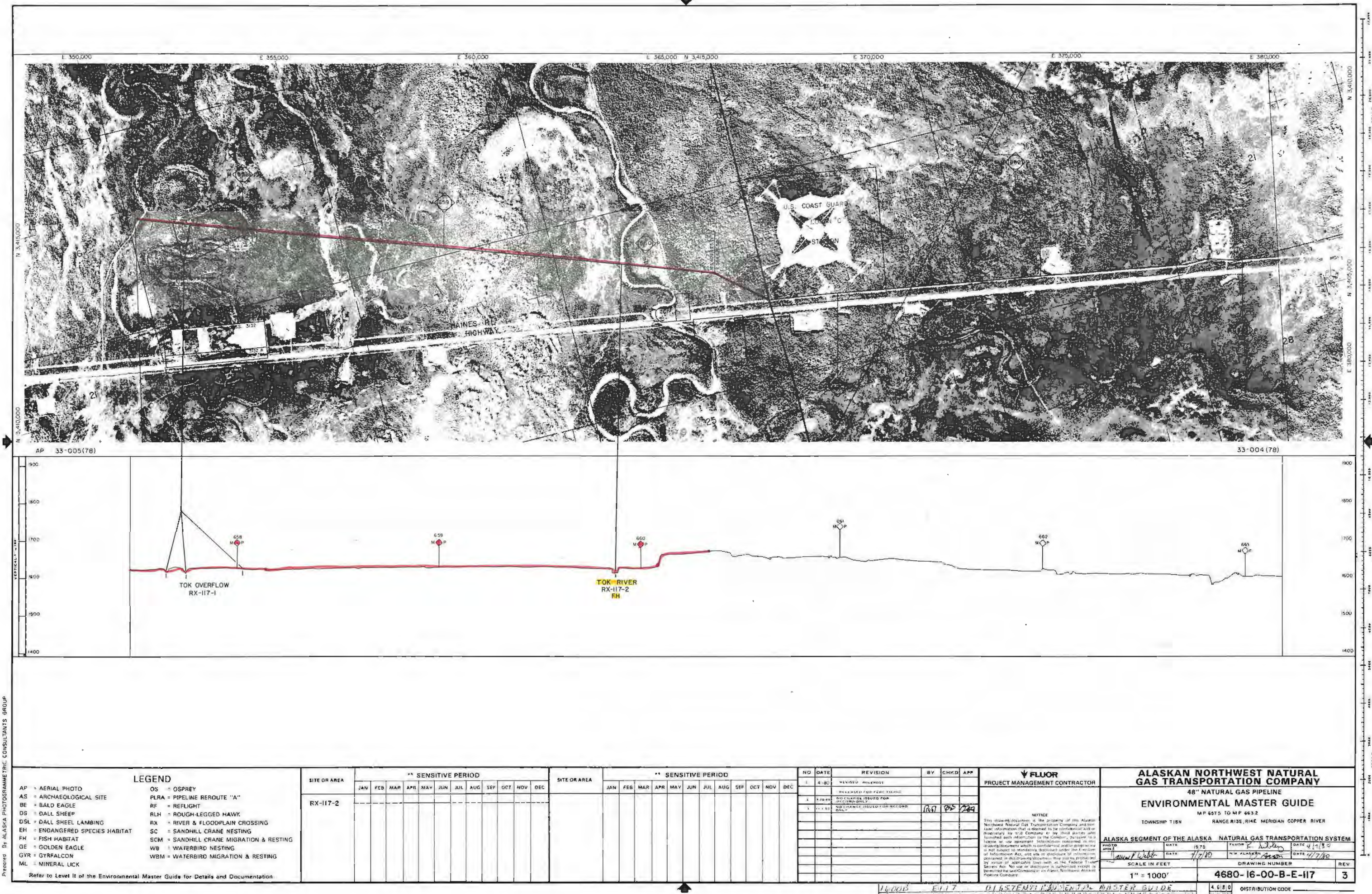


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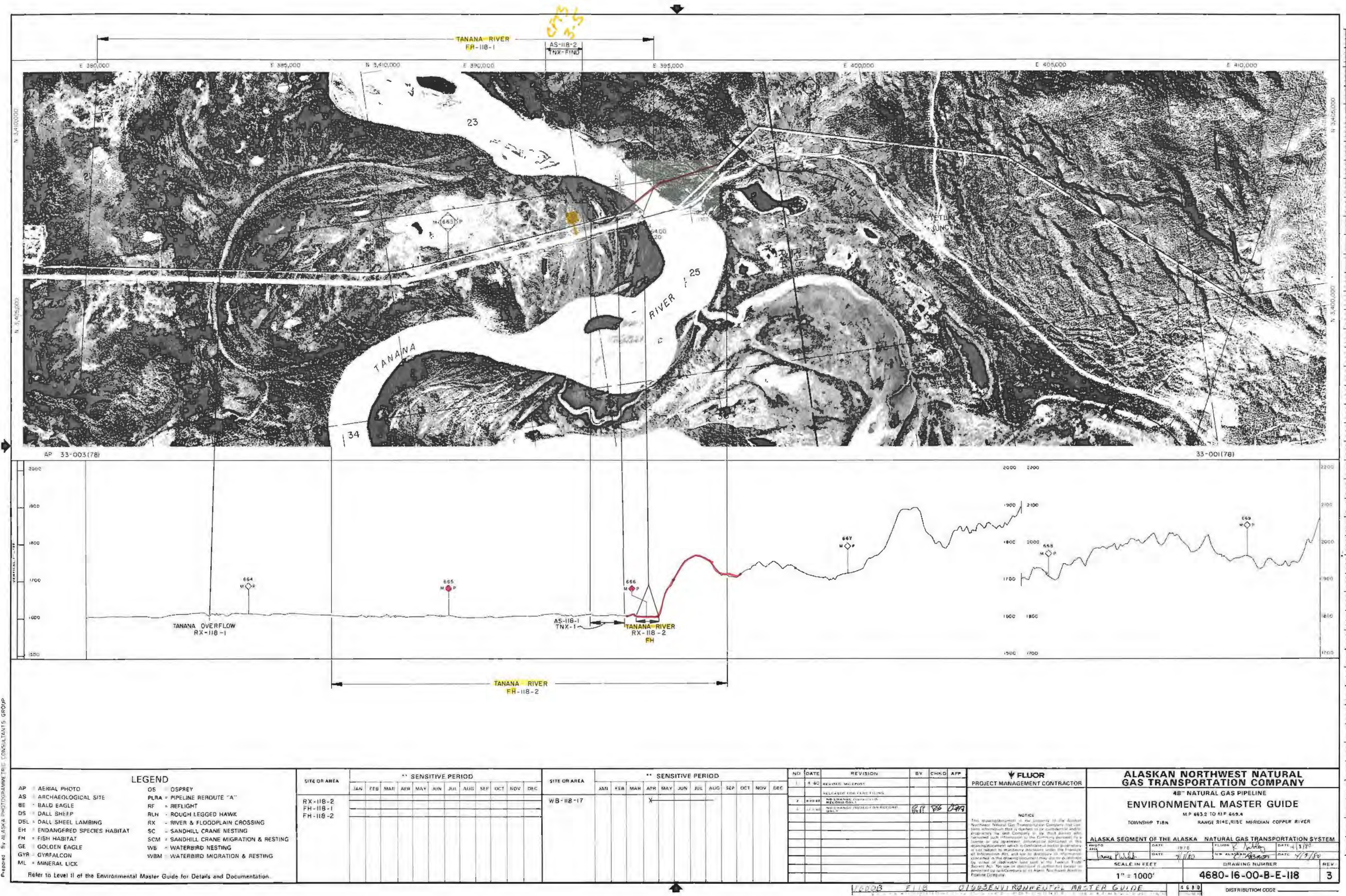












LEGEND

- AP - AERIAL PHOTO
- AS - ARCHAEOLOGICAL SITE
- BE - BALD EAGLE
- DS - DALL SHEEP
- DSL - DALL SHEEP LAMBING
- EH - ENDANGERED SPECIES HABITAT
- FH - FISH HABITAT
- GE - GOLDEN EAGLE
- GYR - GYRFALCON
- ML - MINERAL LICK
- OS - OSPREY
- PLRA - PIPELINE ROUTE "A"
- RF - REFLIGHT
- RLH - ROUGH LEGGED HAWK
- RX - RIVER & FLOODPLAIN CROSSING
- SC - SANDHILL CRANE NESTING
- SCM - SANDHILL CRANE MIGRATION & RESTING
- WB - WATERBIRD NESTING
- WBM - WATERBIRD MIGRATION & RESTING

SITE OR AREA
RX-118-2
FH-118-1
FH-118-2

** SENSITIVE PERIOD											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

SITE OR AREA
WB-118-17

** SENSITIVE PERIOD											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
			X								

NO	DATE	REVISION	BY	CHKD	APP
1	8-80	REMOVED MILEPOST			
2	8-80	RELEASED FOR PUBLIC FILING			
3	8-80	NO CHANGE CORRECTION REQUIRED ONLY			
4	12-1-80	NO CHANGE REQUIRED FOR RECORD ONLY			

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
48" NATURAL GAS PIPELINE			
ENVIRONMENTAL MASTER GUIDE			
MP 663.2 TO MP 669.4			
TOWNSHIP 118N RANGE 214E, 15E MERIDIAN COPPER RIVER			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM		DATE 10/78	
DATE 7/78		DATE 4/1/80	
SCALE IN FEET		DRAWING NUMBER	
1" = 1000'		4680-16-00-B-E-118	
		REV. 3	

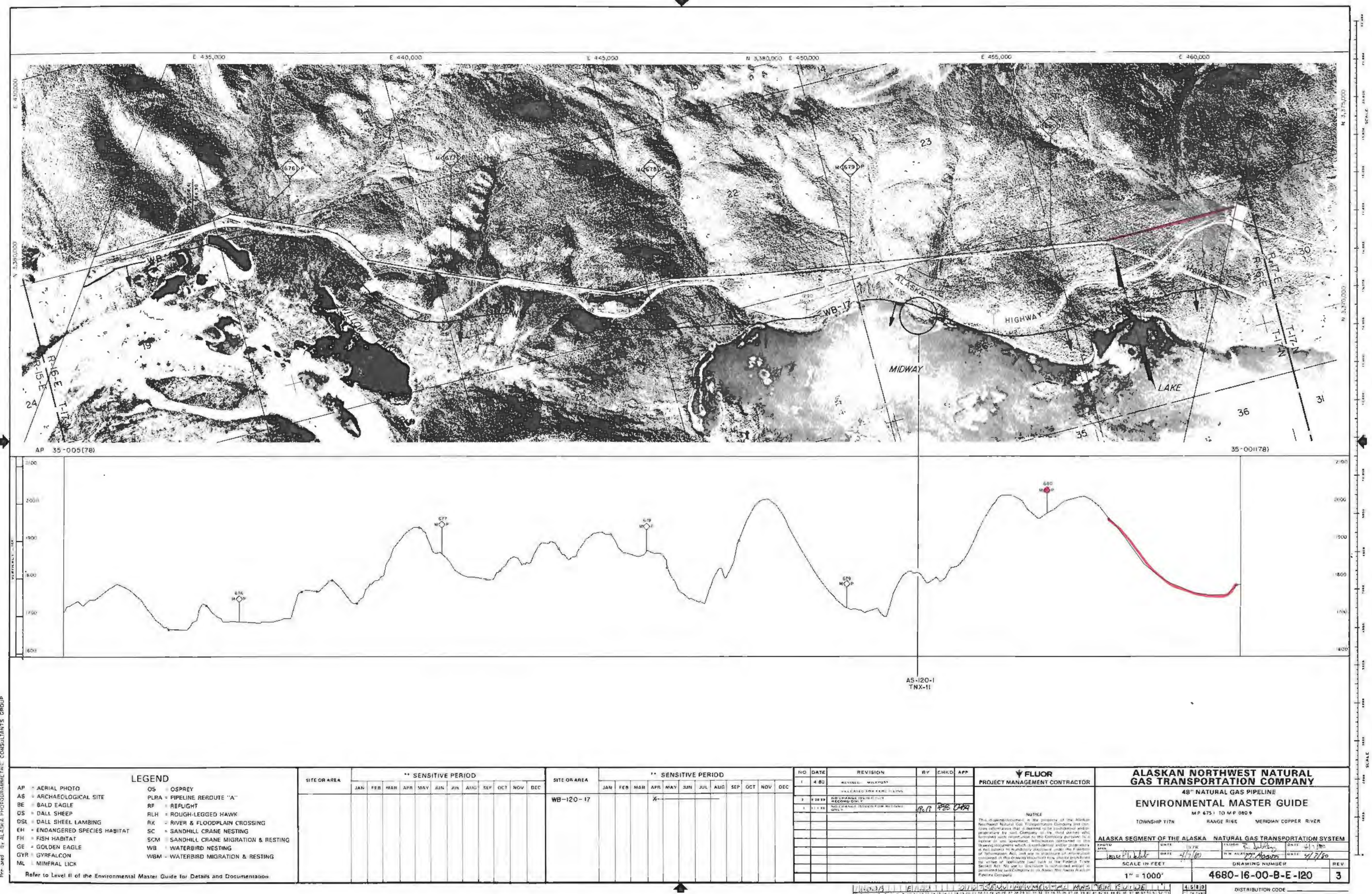
Refer to Level II of the Environmental Master Guide for Details and Documentation.







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**LEGEND**

AP - AERIAL PHOTO	OS - OSPREY
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE REROUTE "A"
BE - BALD EAGLE	RF - REFUGIT
DS - DALL SHEEP	RLH - ROUGH-LEGGED HAWK
DSL - DALL SHEEP LAMBING	AK - RIVER & FLOODPLAIN CROSSING
EH - ENDANGERED SPECIES HABITAT	SC - SANDHILL CRANE NESTING
FH - FISH HABITAT	SCM - SANDHILL CRANE MIGRATION & RESTING
GE - GOLDEN EAGLE	WB - WATERBIRD NESTING
GYR - GYRFALCON	WBM - WATERBIRD MIGRATION & RESTING
ML - MINERAL LICK	

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WB-120-17												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WB-120-17												

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISED: WORKPOST			
2	9-28-89	NO CHANGE (EXCEPT RECORD ONLY)			
3	11-1-89	NO CHANGE (EXCEPT RECORD ONLY)			

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PROJECT MANAGEMENT CONTRACTOR

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**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**

**48" NATURAL GAS PIPELINE**

**ENVIRONMENTAL MASTER GUIDE**

MP 675.1 TO MP 680.9

TOWNSHIP 17N RANGE 16E MERIDIAN COPPER RIVER

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

SCALE IN FEET: 1" = 1000'

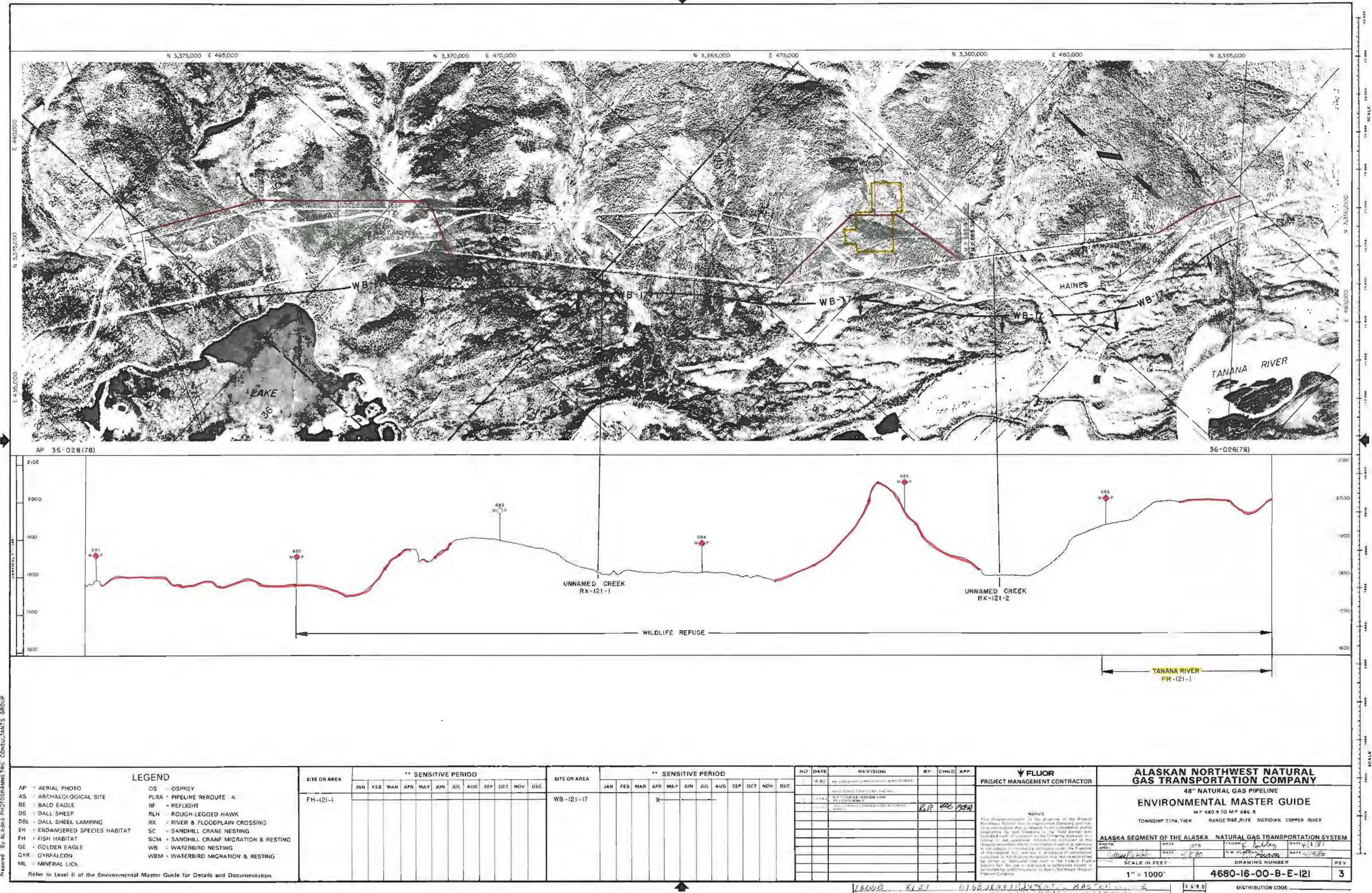
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- GYR - GYRFALCON
- ML - MINERAL LICK
- OS - OSPREY
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- WBM - WATERBIRD MIGRATION & RESTING

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
FH-121-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WB-121-17				X								

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	REVISION TO ADD SENSITIVE PERIODS			
2	1-81	REVISION TO ADD SENSITIVE PERIODS			
3	1-81	REVISION TO ADD SENSITIVE PERIODS			
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12	1-81	REVISION TO ADD SENSITIVE PERIODS			

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

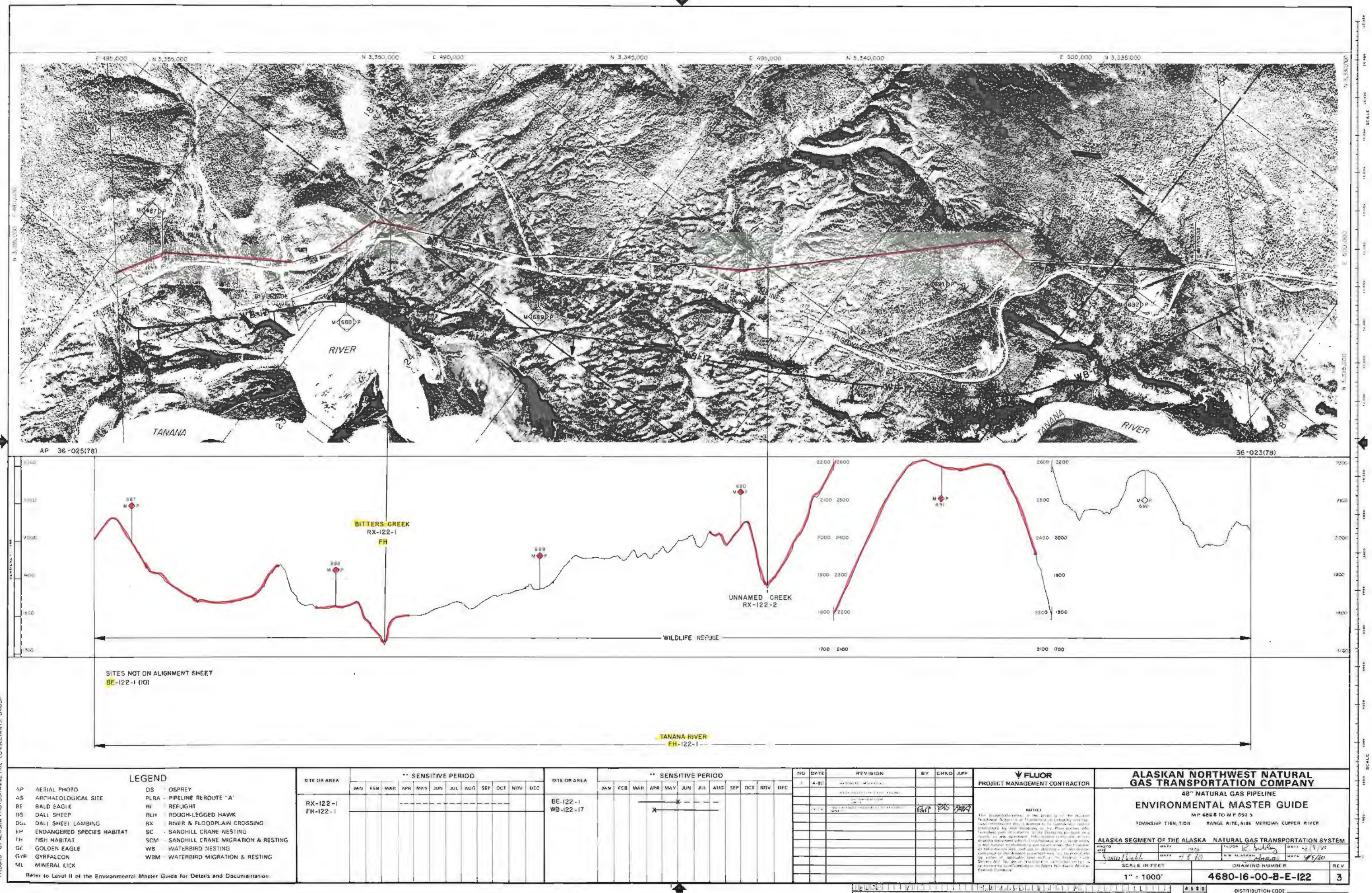
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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
48" NATURAL GAS PIPELINE			
ENVIRONMENTAL MASTER GUIDE			
MP 680.9 TO MP 686.8			
TOWNSHIP 17N, 16E RANGE 16E, 12E MERIDIAN COPPER RIVER			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM		DRAWING NUMBER	
1" = 1000'		4680-16-00-B-E-121	
DATE 1/81		REV 3	
SCALE IN FEET		DISTRIBUTION CODE	



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LEGEND	
AP AERIAL PHOTO	OS OSPREY
AS ARCHAEOLOGICAL SITE	PLRA PIPELINE ROUTE 'A'
BE BALD EAGLE	RLH ROUGH-LEGGED HAWK
DS DALI SHEEP	RX RIVER & FLOODPLAIN CROSSING
DSL DALI SHEEP LAMBING	SC SANDHILL CRANE NESTING
EH ENDANGERED SPECIES HABITAT	SCM SANDHILL CRANE MIGRATION & RESTING
FH FISH HABITAT	WB WATERBIRD NESTING
GE GOLDEN EAGLE	WBM WATERBIRD MIGRATION & RESTING
GYR GYRFALCON	
ML MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation

SITE OR AREA	** SENSITIVE PERIOD												SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-122-1 FH-122-1													BE-122-1 WB-122-17				X								
																	X								

NO	DATE	REVISION	BY	CHKD	APP
1	4-80	INITIAL DESIGN			
2	4-80	REVISED DESIGN			
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**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
**ENVIRONMENTAL MASTER GUIDE**  
MP 688 TO MP 692.3  
TOWNSHIP 16N, 15W RANGE 14E, 15E MERIDIAN CUPPER RIVER

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

PHOTO	DATE	BY	CHKD	APP
1/18/80	1/18/80	1/18/80	1/18/80	1/18/80

SCALE IN FEET  
1" = 1000'

DRAWING NUMBER  
**4680-16-00-B-E-122**

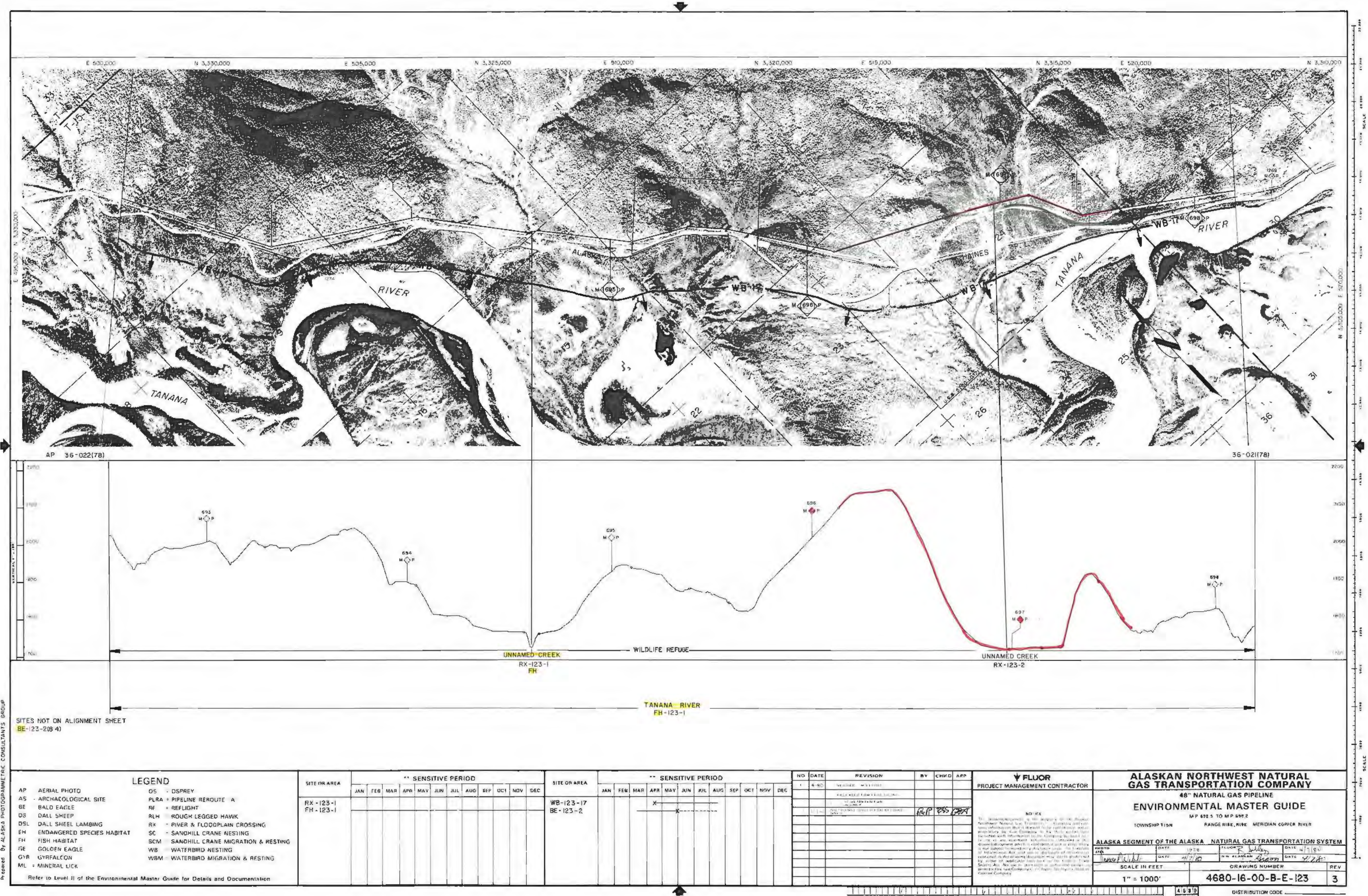
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**3**

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SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-123-1												
FH-123-1												

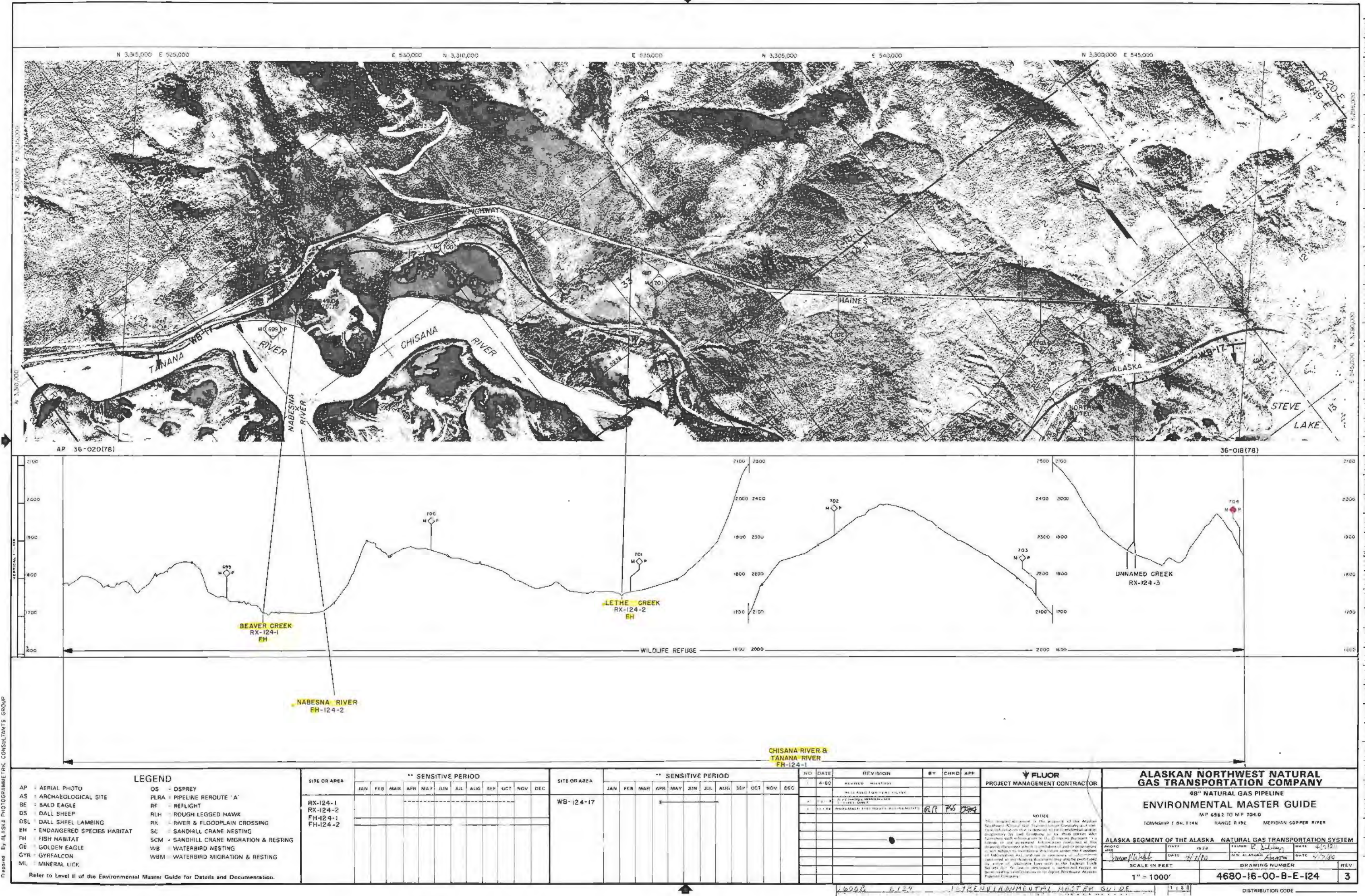
SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WB-123-1												
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NO	DATE	REVISION	BY	CHKD	APP
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2	10-80	ADDED SITE DATA			
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PROJECT MANAGEMENT CONTRACTOR

ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 692.5 TO MP 698.2  
TOWNSHIP T15N RANGE R15E MERIDIAN C100R  
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM  
SCALE IN FEET 1" = 1000'  
DRAWING NUMBER 4680-16-00-B-E-123  
REV 3  
DISTRIBUTION CODE





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- RK = RIVER & FLOODPLAIN CROSSING
- SC = SANDHILL CRANE NESTING
- SCM = SANDHILL CRANE MIGRATION & RESTING
- WB = WATERBIRD NESTING
- WBM = WATERBIRD MIGRATION & RESTING

SITE OR AREA  
RX-124-1  
RX-124-2  
FH-124-1  
FH-124-2

** SENSITIVE PERIOD											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

SITE OR AREA  
WB-124-17

** SENSITIVE PERIOD											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

NO	DATE	REVISION	BY	CHKD	APP
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2	7-80	REVISED			
3	11-80	REVISED			
4	1-81	REVISED			
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99	11-96	REVISED			
100	1-97	REVISED			

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 680.2 TO MP 704.0  
TOWNSHIP 15N, 14E RANGE 19E MERIDIAN COPPER RIVER

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

SCALE IN FEET  
1" = 1000'

DRAWING NUMBER  
4680-16-00-B-E-124

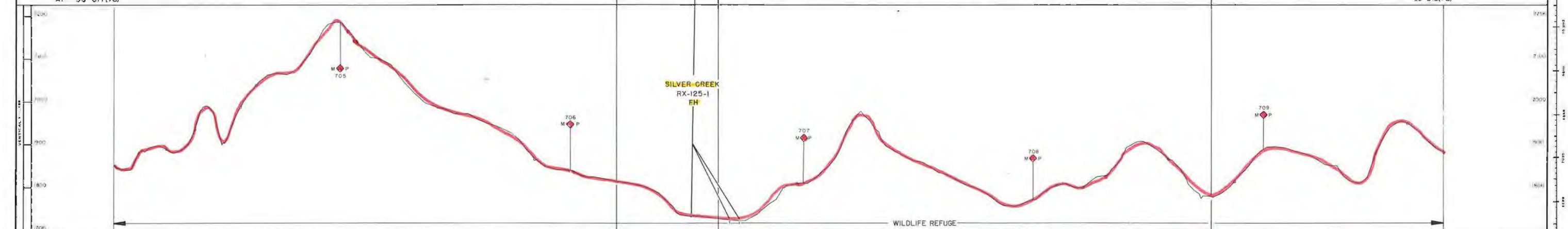
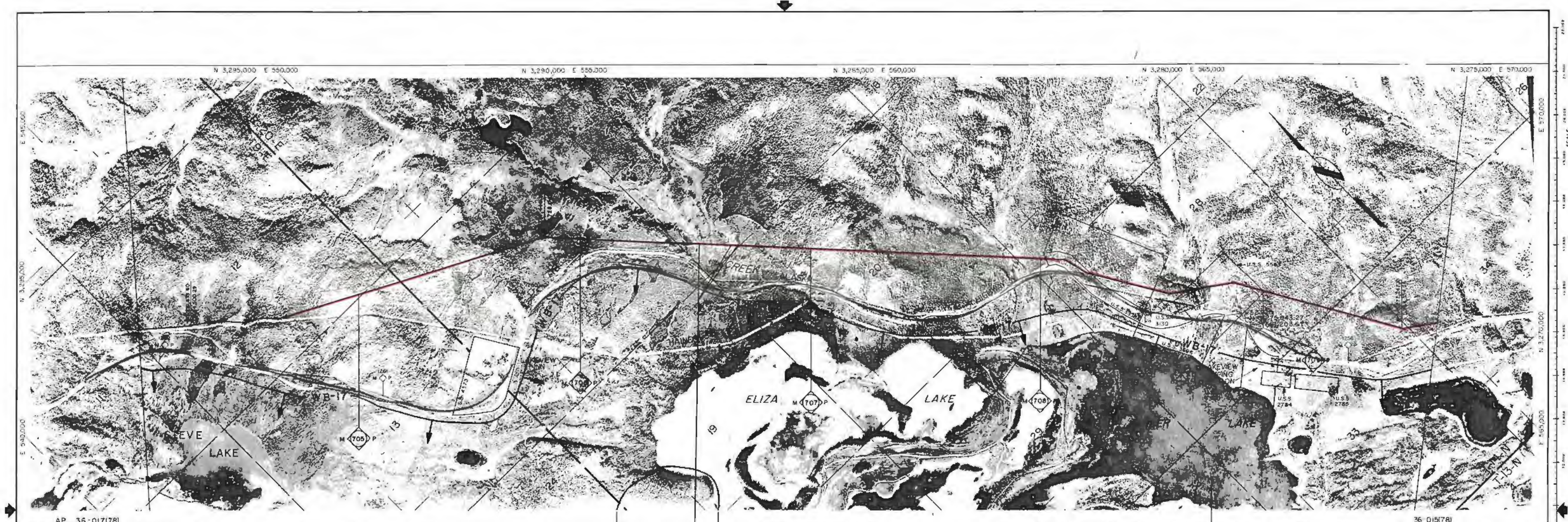
REV  
3

DISTRIBUTION CODE

Refer to Level II of the Environmental Master Guide for Details and Documentation.

4680-16-00-B-E-124 ENVIRONMENTAL MASTER GUIDE





SITES NOT ON ALIGNMENT SHEET  
BE-125-2 (6)  
BE-125-3 (43)  
BE-125-4 (71)

**LEGEND**

AP - AERIAL PHOTO	OS - OSPREY
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE ROUTE A
BE - BALD EAGLE	RF - REFLIGHT
DS - DALL SHEEP	RLH - ROUGH-LEGGED HAWK
DSI - DALL SHEEP JAMMING	RX - RIVER & FLOODPLAIN CROSSING
FH - ENDANGERED SPECIES HABITAT	SC - SANDHILL CRANE NESTING
FM - FISH HABITAT	SCM - SANDHILL CRANE MIGRATION & RESTING
GE - GOLDEN EAGLE	WB - WATERBIRD NESTING
GYP - GYRFALCON	WBM - WATERBIRD MIGRATION & RESTING
ML - MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation.

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RX-125-1												
FH-125-1												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WB-125-17												
BE-125-2												
BE-125-3												
BE-125-4												

NO	DATE	REVISION	BY	CHKD	APP
1	4/10/10	ISSUED FOR CONSTRUCTION			
2	4/10/10	REVISED TO REFLECT FIELD DATA			
3	4/10/10	REVISED TO REFLECT FIELD DATA			
4	4/10/10	REVISED TO REFLECT FIELD DATA			
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100	4/10/10	REVISED TO REFLECT FIELD DATA			

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 704.0 TO MP 709.0  
TOWNSHIP 114N RANGE 116E, R20E MERIDIAN COPPER RIVER

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

DATE	DATE	DATE	DATE
4/10/10	4/10/10	4/10/10	4/10/10

SCALE IN FEET: 1" = 1000'

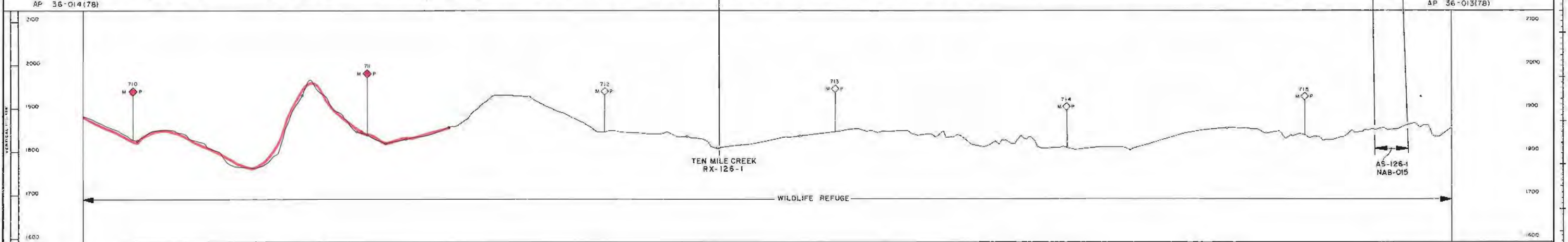
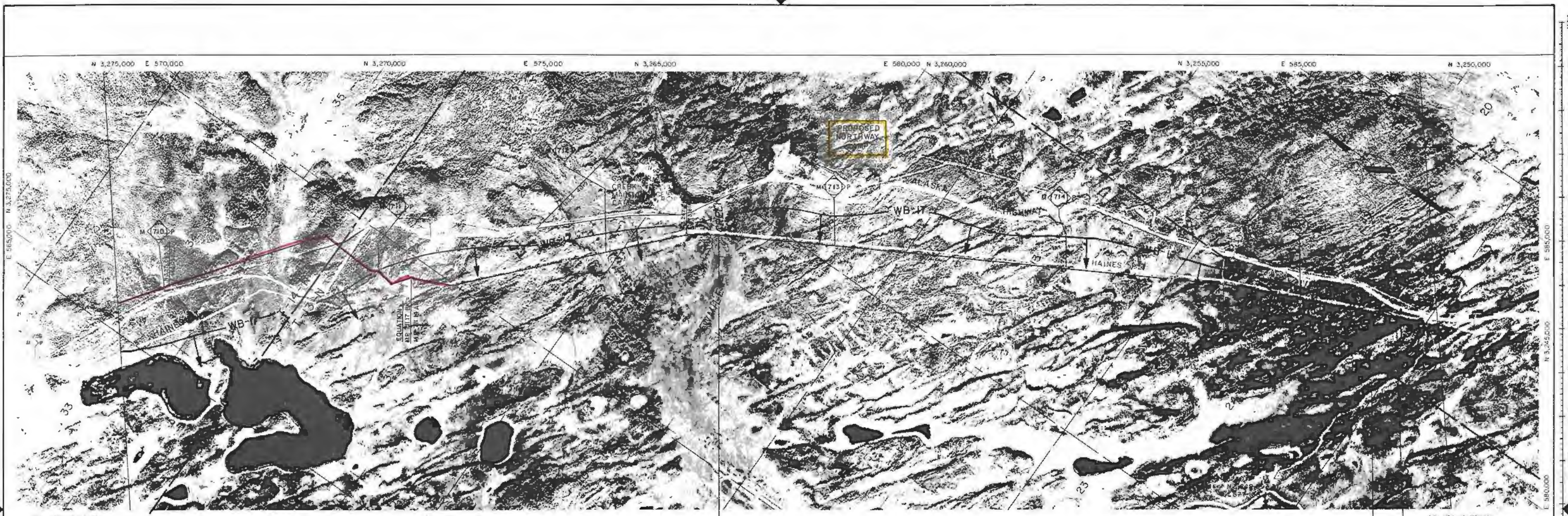
DRAWING NUMBER: 4680-16-00-B-E-125

REV: 3

DISTRIBUTION CODE:

Prepared By: ALASKA PHOTOGRAMMETRIC CONSULTANTS GROUP





SITES NOT ON ALIGNMENT SHEET  
BE-126-1 (4.2)

**LEGEND**

AP - AERIAL PHOTO	OS - OSPREY
AS - ARCHAEOLOGICAL SITE	PLRA - PIPELINE ROUTE "A"
BE - BALD EAGLE	RF - REFLIGHT
DS - DALL SHEEP	RLH - ROUGH-LEGGED HAWK
DSL - DALL SHEEP LAMBING	RX - RIVER & FLOODPLAIN CROSSING
EH - ENDANGERED SPECIES HABITAT	SC - SANDHILL CRANE NESTING
FH - FISH HABITAT	SCM - SANDHILL CRANE MIGRATION & RESTING
GE - GOLDEN EAGLE	WB - WATERBIRD NESTING
GYR - GYRFALCON	WBM - WATERBIRD MIGRATION & RESTING
ML - MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation

SITE OR AREA	** SENSITIVE PERIOD												SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WB-126-17																									
BE-126-1																									

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
48" NATURAL GAS PIPELINE  
ENVIRONMENTAL MASTER GUIDE  
MP 705.8 TO MP 715.6  
TOWNSHIP T14N, T15N RANGE R20E, R21E MERIDIAN COPPER RIVER

**ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM**

DATE	DATE	DATE	DATE
4/7/80	4/7/80	4/7/80	4/7/80

SCALE IN FEET: 1" = 1000'

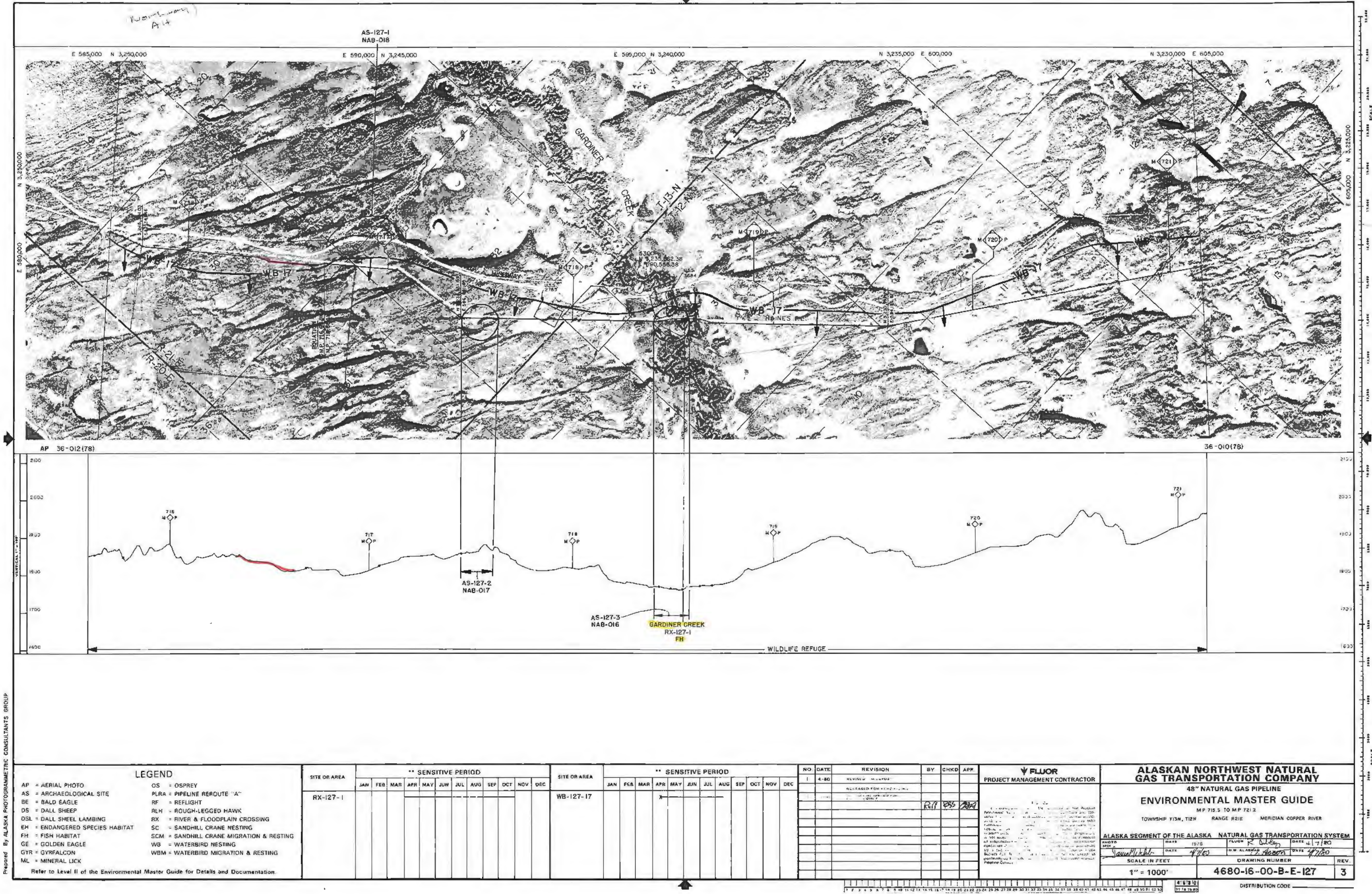
DRAWING NUMBER: 4680-16-00-B-E-126

REV: 3

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LEGEND	
AP = AERIAL PHOTO	OS = OSPREY
AS = ARCHAEOLOGICAL SITE	PLRA = PIPELINE REROUTE 'A'
BE = BALD EAGLE	RF = REFLIGHT
DS = DALL SHEEP	RLH = ROUGH LEGGED HAWK
DSL = DALL SHEEP LAMBING	RX = RIVER & FLOODPLAIN CROSSING
EH = ENDANGERED SPECIES HABITAT	SC = SANDHILL CRANE NESTING
FH = FISH HABITAT	SCM = SANDHILL CRANE MIGRATION & RESTING
GE = GOLDEN EAGLE	WB = WATERBIRD NESTING
GYR = GYRFALCON	WBM = WATERBIRD MIGRATION & RESTING
ML = MINERAL LICK	

Refer to Level II of the Environmental Master Guide for Details and Documentation

SITE OR AREA	** SENSITIVE PERIOD											
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EH-131-1												
EH-131-2												

SITE OR AREA	** SENSITIVE PERIOD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BE-131-1												
WB-131-17												
SC-131-14												
SCM-131-6												

NO	DATE	REVISION	BY	CHKD	APP
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FLUOR	
PROJECT MANAGEMENT CONTRACTOR	
NOTICE	
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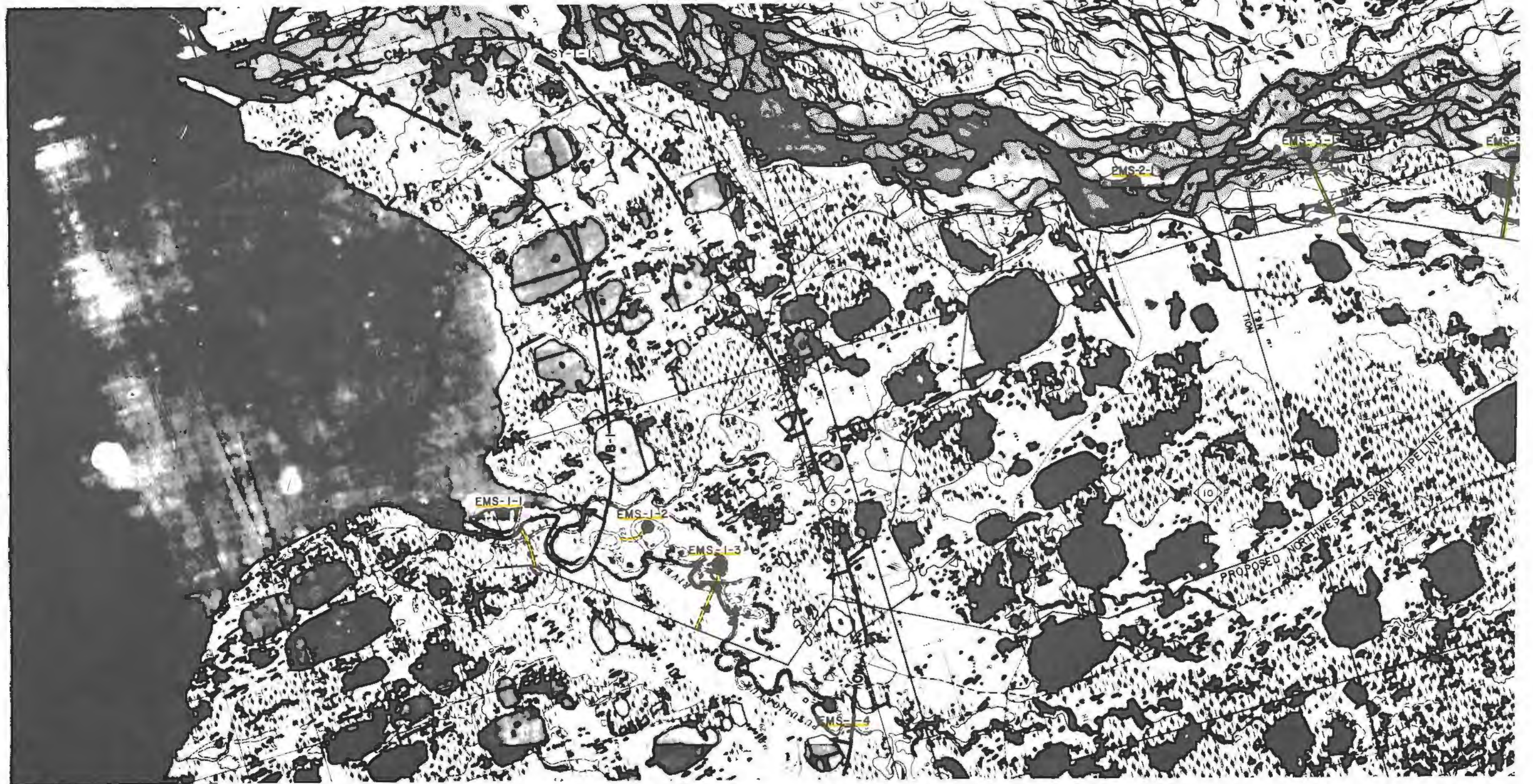
ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
48" NATURAL GAS PIPELINE			
ENVIRONMENTAL MASTER GUIDE			
MP 738.9 TO MP 745.1			
TOWNSHIP 10N, T.10N RANGE 12E MERIDIAN COPPER RIVER			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
PROJECT NO.	DATE	FLUOR	DATE
4680-16-00-B-E-131	4/7/80	Fluor	4/7/80
SCALE IN FEET		DRAWING NUMBER	
1" = 1000'		4680-16-00-B-E-131	
REV			3
DISTRIBUTION CODE			



4680-II-00-C-E-001

4680-II-00-B-E-002

- 003



AS — ARCHAEOLOGICAL SITE  
B — BISON HABITAT  
BM — BISON MOVEMENT  
BB — BLACK BEAR  
BE — BALD EAGLE  
C — CARIBOU HABITAT  
CC — CARIBOU CALVING  
CM — CARIBOU MOVEMENT

DSL — DALL SHEEP HABITAT  
DSL — DALL SHEEP LAMBING  
DSM — DALL SHEEP MOVEMENT  
EH — ENDANGERED SPECIES HABITAT  
EMS — EXPLORATION MATERIAL SITE  
GB — GRIZZLY BEAR  
GE — GOLDEN EAGLE  
GGO — GREAT GRAY OWL

## LEGEND

GHO — GREAT HORNED OWL  
GOS — GOSHAWK  
GYR — GYRFALCON  
M — MOOSE HABITAT  
MC — MOOSE CALVING  
MM — MOOSE MOVEMENT  
ML — MINERAL LICK  
MP — MILE POST

OS — OSPREY  
RLH — ROUGH LEGGED HAWK  
RTH — RED TAILED HAWK  
SC — SANDHILL CRANE NESTING  
SCM — SANDHILL CRANE MIGRATION & RESTING  
SWD — SOLID WASTE DISPOSAL SITE  
SY — STORAGE YARD  
WB — WATERBIRD NESTING  
WBM — WATERBIRD MIGRATION & RESTING

REV. NO.	DATE	REVISION	BY	DRAWN	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	BA	BA	BA

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL  
GAS TRANSPORTATION COMPANY

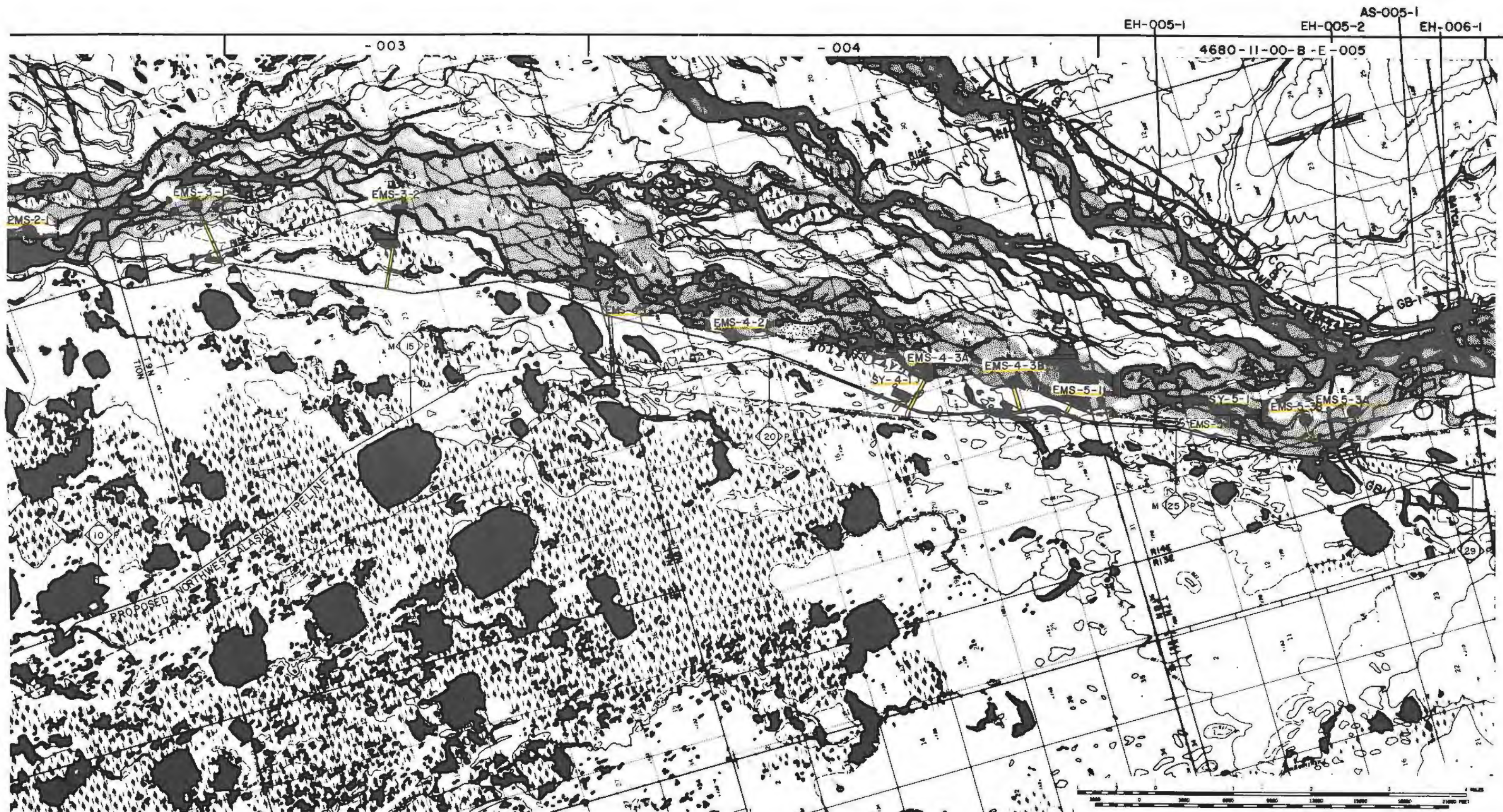
ENVIRONMENTAL MASTER GUIDE  
TOPOGRAPHIC SUPPLEMENT

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

DATE: 11/1/80  
DRAWN: BA  
APP: BA  
SCALE: 1" = 5280'

DRAWING NUMBER: 4680-II-30-E-E-001 A  
REV: 3





AS — ARCHAEOLOGICAL SITE  
B — BISON HABITAT  
BM — BISON MOVEMENT  
BB — BLACK BEAR  
BE — BALD EAGLE  
C — CARIBOU HABITAT  
CC — CARIBOU CALVING  
CM — CARIBOU MOVEMENT

DS — DALL SHEEP HABITAT  
DSL — DALL SHEEP LAMBING  
DSM — DALL SHEEP MOVEMENT  
EH — ENDANGERED SPECIES HABITAT  
EMS — EXPLORATION MATERIAL SITE  
GB — GRIZZLY BEAR  
GE — GOLDEN EAGLE  
GGO — GREAT GRAY OWL

# LEGEND

GHO — GREAT HORNED OWL  
GOS — GOSHAWK  
GYR — GYRFALCON  
M — MOOSE HABITAT  
MC — MOOSE CALVING  
MM — MOOSE MOVEMENT  
ML — MINERAL LICK  
MP — MILE POST

OS — OSPREY  
RLH — ROUGH-LEGGED HAWK  
RTH — RED-TAILED HAWK  
SCN — SANDHILL CRANE NESTING  
SCM — SANDHILL CRANE MIGRATION & RESTING  
SWD — SOLID WASTE DISPOSAL SITE  
SY — STORAGE YARD  
WB — WATERBIRD NESTING  
WBM — WATERBIRD MIGRATION & RESTING

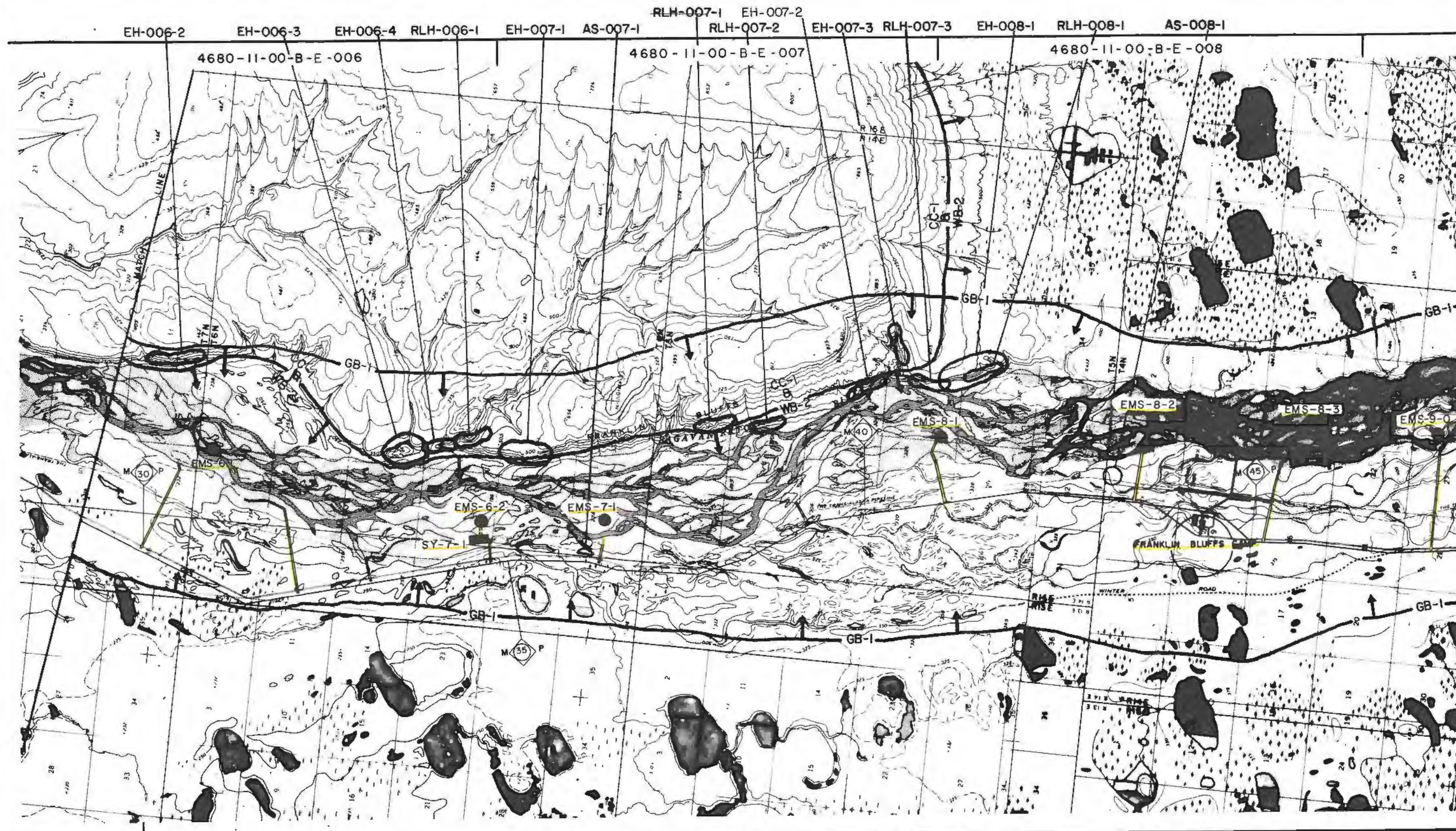
REV NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	BAF	PM	709

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM		DATE	DATE
Rg. Bureau		11-1-80	11-1-80
SCALE IN FEET		DRAWING NUMBER	REV
1" = 5280'		4680-11-30-E-E-001 B	3



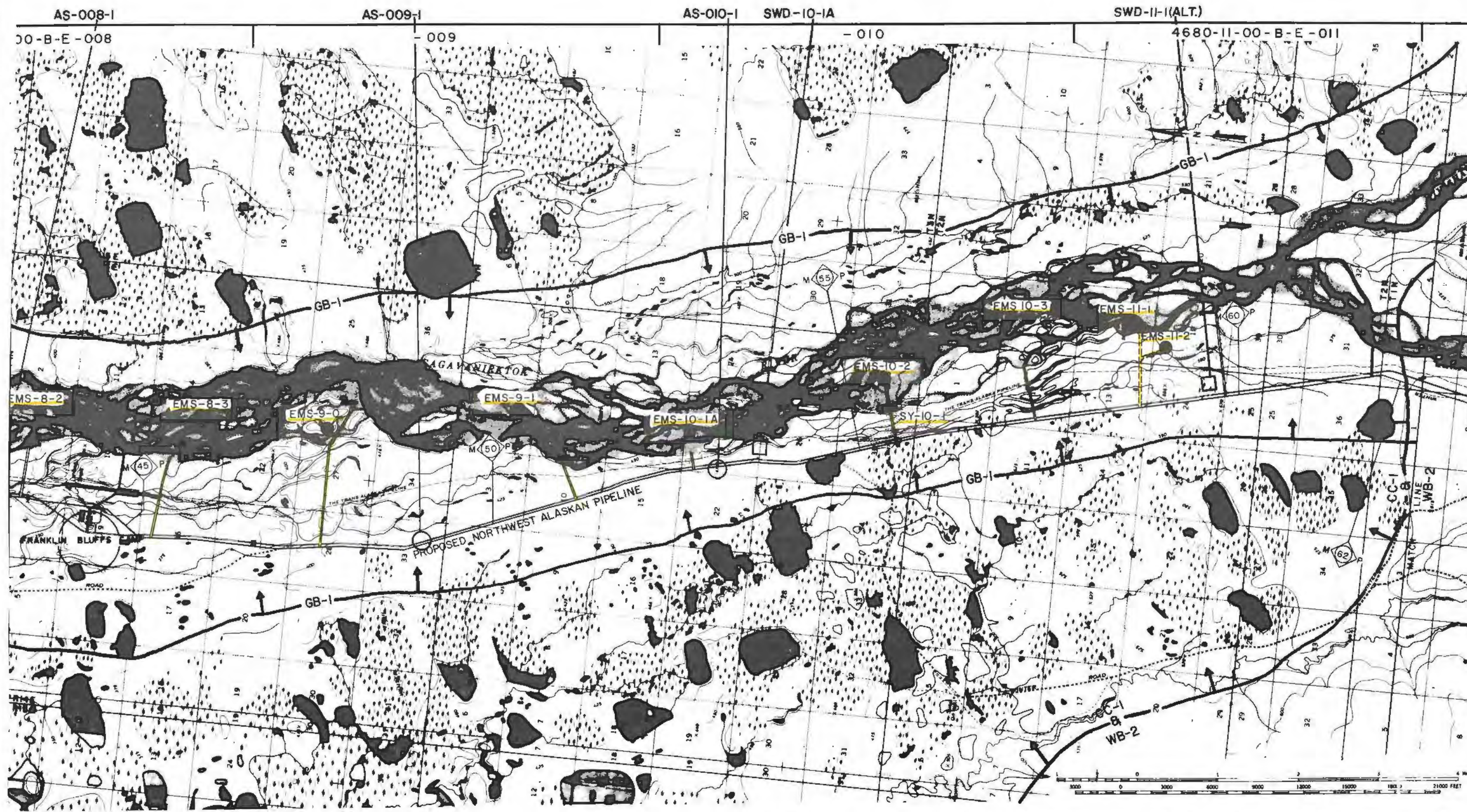


COMPRESSOR STATION  
NO.1 (FUTURE)

LEGEND				REVISION				FLUOR PROJECT MANAGEMENT CONTRACTOR				ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
AS	ARCHAEOLOGICAL SITE	DS	DALL SHEEP HABITAT	GHO	GREAT HORNED OWL	OS	OSPREY	REV	DATE	BY	APP	DATE	BY	APP	REV
B	BISON HABITAT	DSL	DALL SHEEP LAMBING	GDS	GOOSE HABITAT	RLH	ROUGH-LEGGED HAWK	3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RAJ	2-2-81	RAJ	2-2-81	1
BM	BISON MOVEMENT	DSM	DALL SHEEP MOVEMENT	GYS	GOOSE YARD	RTH	RED-TAILED HAWK								
BB	BLACK BEAR	EH	ENDANGERED SPECIES HABITAT	M	MOOSE HABITAT	SC	SANDHILL CRANE NESTING								
BE	BALD EAGLE	EMS	ENDANGERED MATERIAL SITE	MC	MOOSE CALVING	SCM	SANDHILL CRANE MIGRATION & RESTING								
C	CARIBOU HABITAT	GB	GRIZZLY BEAR	MM	MOOSE MOVEMENT	SWD	SOLID WASTE DISPOSAL SITE								
CC	CARIBOU CALVING	GE	GOLDEN EAGLE	ML	MINERAL LICK	SV	SOLID WASTE DISPOSAL SITE								
CM	CARIBOU MOVEMENT	GGO	GREAT GRAY OWL	MP	MILE POST	WB	WATERBIRD NESTING								
						WBM	WATERBIRD MIGRATION & RESTING								

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	FLUOR	DATE	REV
11-1-80	RAJ	2-2-81	1
SCALE IN FEET	4680-11-30-E-E-002A		
1" = 5280'			





LEGEND			
AS — ARCHAEOLOGICAL SITE	DS — DALL SHEEP HABITAT	GHO — GREAT HORNED OWL	OS — OSPREY
B — BISON HABITAT	DSL — DALL SHEEP LAMBING	GOS — GOSHAWK	RLH — ROUGH LEGGED HAWK
BM — BISON MOVEMENT	DSM — DALL SHEEP MOVEMENT	GYR — GYRFALCON	RTH — RED-TAILED HAWK
BE — BLACK BEAR	EH — ENDANGERED SPECIES HABITAT	M — MOOSE HABITAT	SC — SANDHILL CRANE NESTING
CE — CARIBOU HABITAT	EMS — EXPLORATION MATERIAL SITE	MC — MOOSE CALVING	SCM — SANDHILL CRANE MIGRATION & RESTING
CC — CARIBOU CALVING	GB — GRIZZLY BEAR	MM — MOOSE MOVEMENT	SWD — SOLID WASTE DISPOSAL SITE
CM — CARIBOU MOVEMENT	GE — GOLDEN EAGLE	ML — MINERAL LICK	SY — STORAGE YARD
	GGO — GREAT GRAY OWL	MP — MILE POST	WB — WATERBIRD NESTING
			WBM — WATERBIRD MIGRATION & RESTING

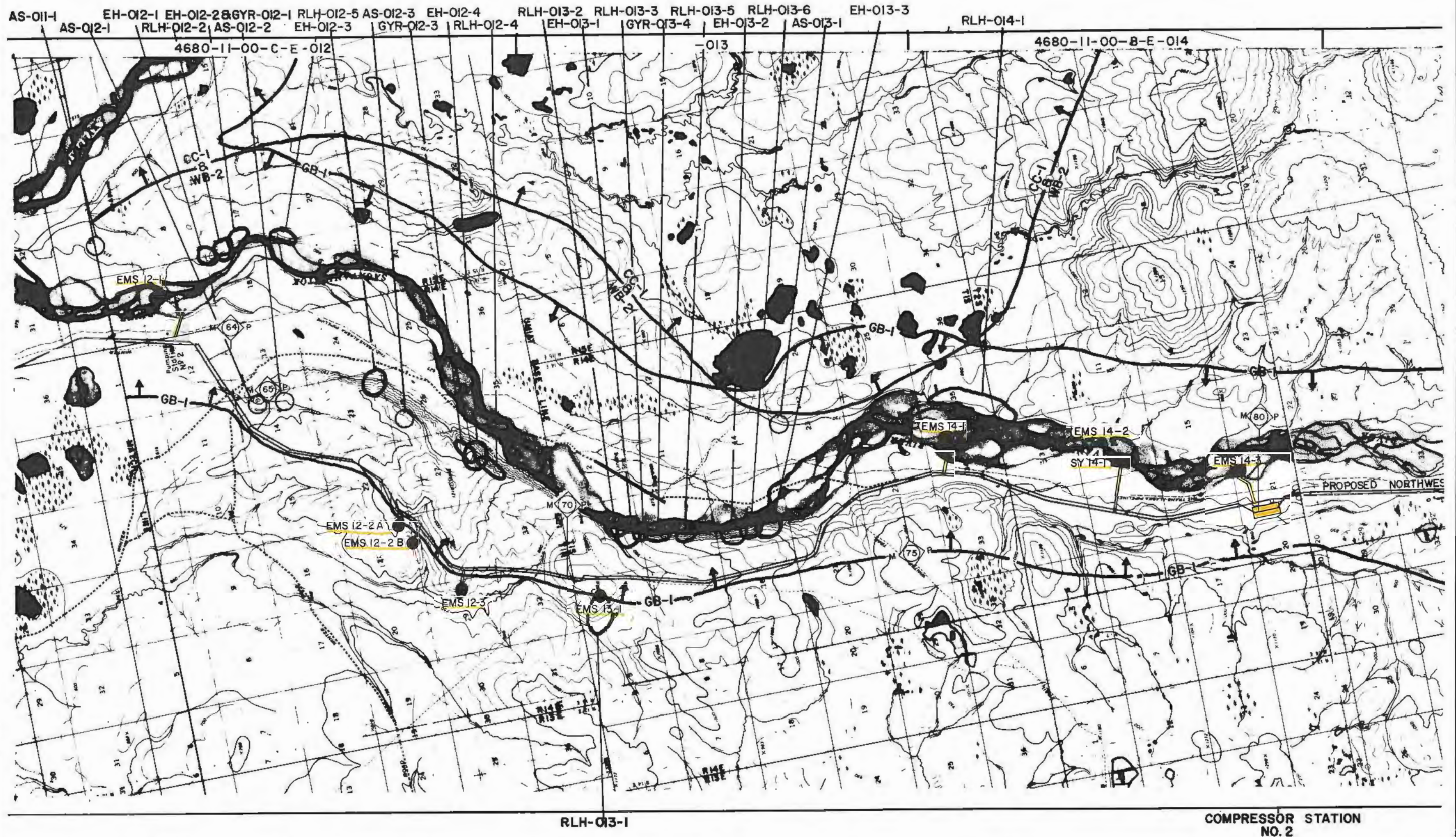
REV. NO.	DATE	REVISION	BY	DRAWN	CHECK	APP.
1	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	647	2-5	289	

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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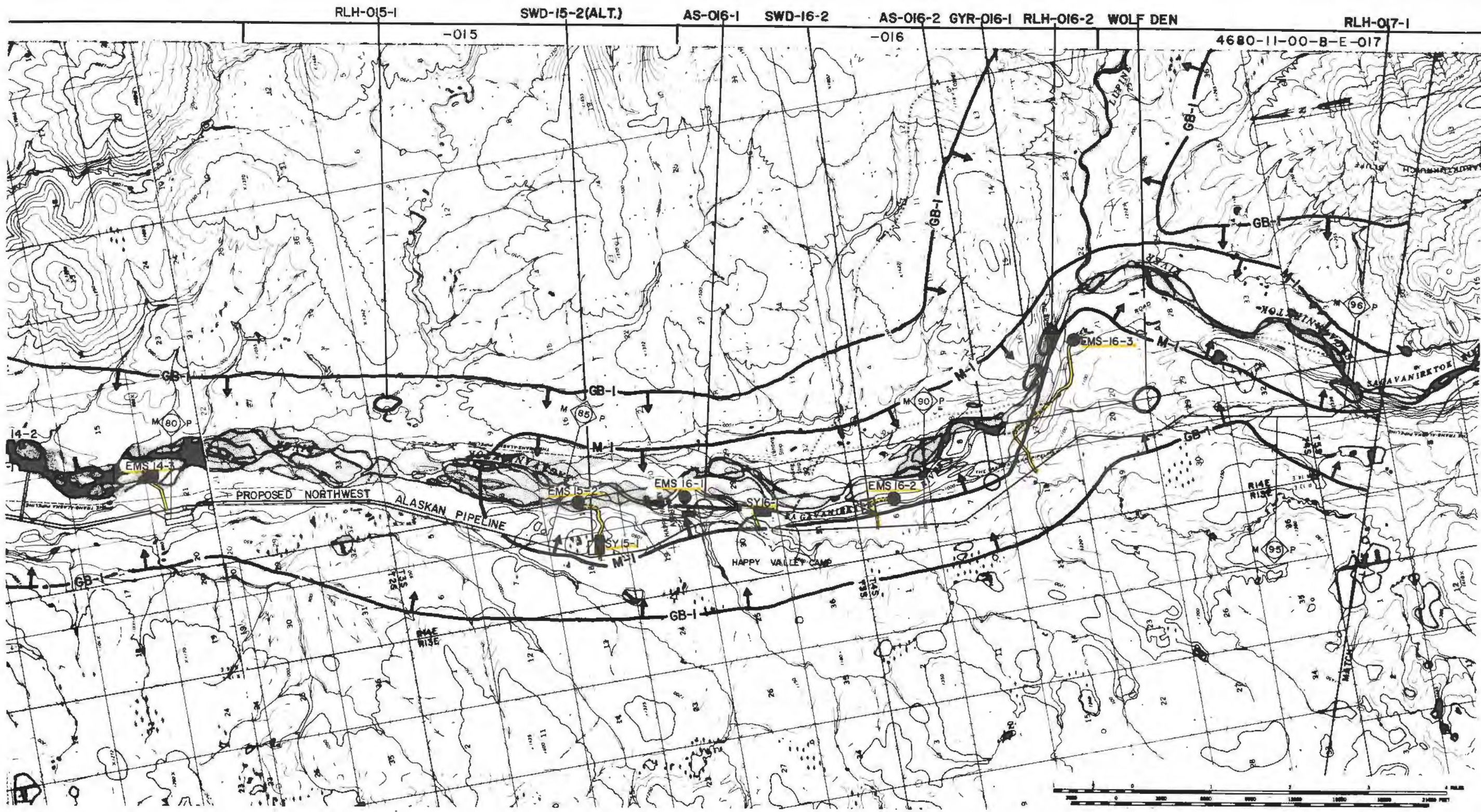
ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	FLUOR	DATE	REV.
11/5/1981	2-5	11/5/1981	26/81
SCALE IN FEET	DRAWING NUMBER		
1" = 5280'	4680-11-30-E-E-002 B		





<b>LEGEND</b> AS -- ARCHAEOLOGICAL SITE B -- BISON HABITAT BM -- BISON MOVEMENT BB -- BLACK BEAR BE -- BALD EAGLE C -- CARIBOU HABITAT CC -- CARIBOU CALVING CM -- CARIBOU MOVEMENT DS -- DALL SHEEP HABITAT DSL -- DALL SHEEP LAMBING DSM -- DALL SHEEP MOVEMENT EH -- ENDANGERED SPECIES HABITAT EMS -- EXPLORATION MATERIAL SITE GB -- GRIZZLY BEAR GE -- GOLDEN EAGLE GGO -- GREAT GRAY OWL GHO -- GREAT HORNED OWL GUS -- GOSHAWK GYR -- GYRFALCON M -- MOOSE HABITAT MC -- MOOSE CALVING MM -- MOOSE MOVEMENT ML -- MINERAL LICK MP -- MILE POST OS -- OSPREY RLH -- ROUGH LEGGED HAWK RTH -- RED-TAILED HAWK SC -- SANDHILL CRANE NESTING SCM -- SANDHILL CRANE MIGRATION & RESTING SWD -- SOLID WASTE DISPOSAL SITE SY -- STORAGE YARD WB -- WATERBIRD NESTING WBM -- WATERBIRD MIGRATION & RESTING				<b>FLUOR</b> PROJECT MANAGEMENT CONTRACTOR NOTICE This drawing is the property of the Alaska Northwest Natural Gas Transportation Company and contains information that is deemed to be confidential and proprietary to the Company. No part of this drawing may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without the prior written permission of the Company. The use of this drawing for any purpose other than that for which it was prepared is prohibited. The Company assumes no responsibility for errors or omissions in this drawing.				<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b> ENVIRONMENTAL MASTER GUIDE TOPOGRAPHIC SUPPLEMENT ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM DATE: 11/1/80 DRAWN: R. J. [illegible] CHECKED: [illegible] APPROVED: [illegible] SCALE: 1" = 5280' DRAWING NUMBER: 4680-11-30-E-E-003 A REV: 3			
REV. NO. DATE REVISION 3 11-1-80 NOVEMBER 1980 ROUTE REFINEMENTS				BY: [illegible] DRAWN: [illegible] CHECK: [illegible] APP: [illegible]				DATE: 11/1/80 DRAWN: R. J. [illegible] CHECKED: [illegible] APPROVED: [illegible]			





COMPRESSOR STATION  
NO. 2

AS -- ARCHAEOLOGICAL SITE	DS -- DALL SHEEP HABITAT	GHO -- GREAT HORNED OWL	OS -- OSPREY
B -- BISON HABITAT	DSL -- DALL SHEEP LAMBING	GOS -- GOSHAWK	RLH -- ROUGH LEGGED HAWK
BM -- BISON MOVEMENT	DSM -- DALL SHEEP MOVEMENT	GYR -- GYRFALCON	RTH -- RED-TAILED HAWK
BB -- BLACK BEAR	EH -- ENDANGERED SPECIES HABITAT	M -- MOOSE HABITAT	SC -- SANDHILL CRANE NESTING
BE -- BALD EAGLE	EMS -- EXPLORATION MATERIAL SITE	MC -- MOOSE CALVING	SCM -- SANDHILL CRANE MIGRATION & RESTING
C -- CARIBOU HABITAT	GB -- GRIZZLY BEAR	MM -- MOOSE MOVEMENT	SWD -- SOLID WASTE DISPOSAL SITE
CC -- CARIBOU CALVING	GE -- GOLDEN EAGLE	ML -- MINERAL LICK	SY -- STORAGE YARD
CM -- CARIBOU MOVEMENT	GGO -- GREAT GRAY OWL	MP -- MILE POST	WB -- WATERBIRD NESTING
			WBM -- WATERBIRD MIGRATION & RESTING

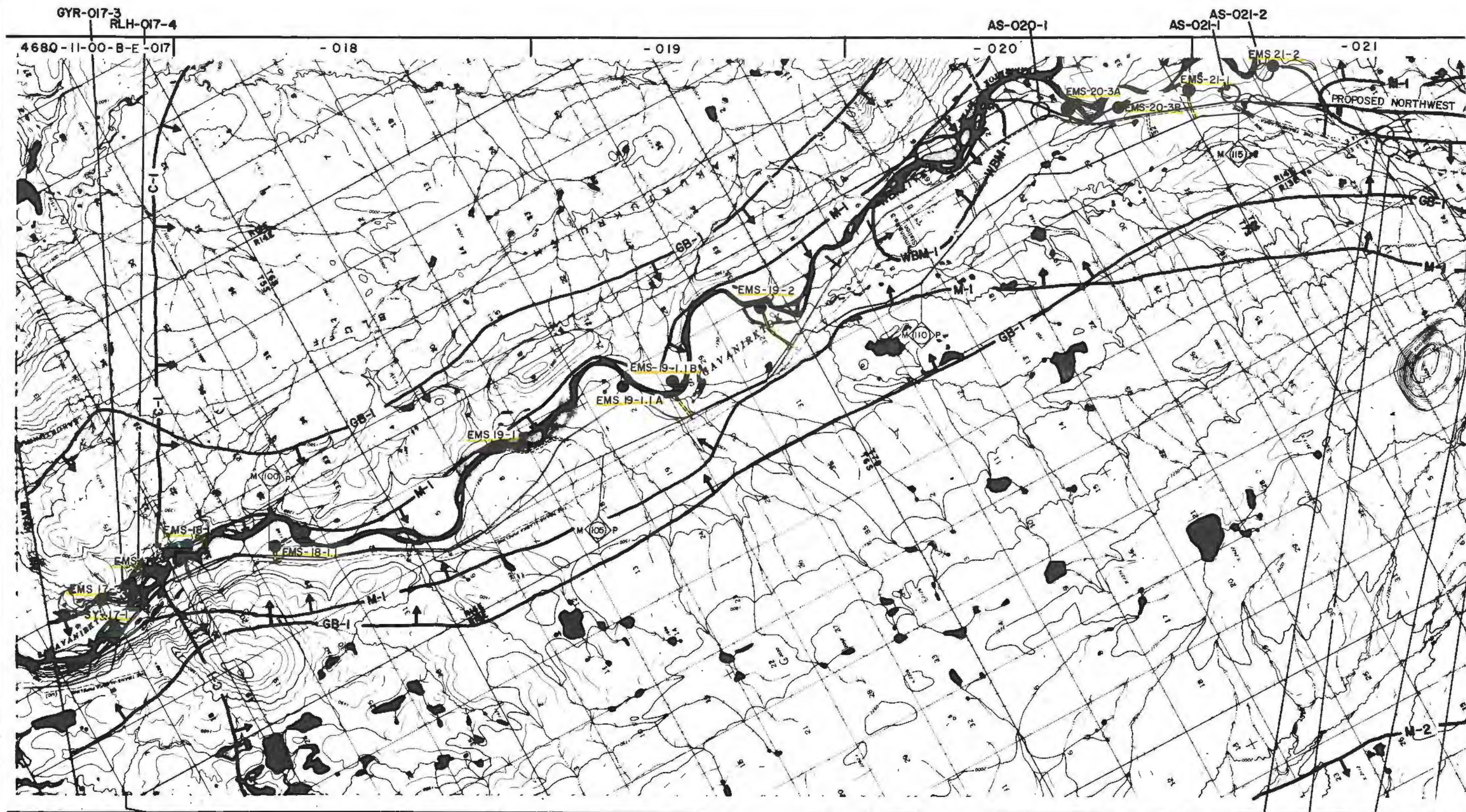
REV. NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RLH	RLH	RLH

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PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA	NATURAL GAS TRANSPORTATION SYSTEM	DATE	DATE
11-1-80	11-1-80	11-1-80	11-1-80
SCALE IN FEET	DRAWING NUMBER	REV	REV
1" = 5280'	4680-11-30-E-E-003 B	3	3





COMPRESSOR STATION NO. 3 (FUTURE) AS-021-3 AS-021-4 AS-021-5

AS --- ARCHAEOLOGICAL SITE  
B --- BISON HABITAT  
BM --- BISON MOVEMENT  
BB --- BLACK BEAR  
BE --- BALD EAGLE  
C --- CARIBOU HABITAT  
CC --- CARIBOU CALVING  
CM --- CARIBOU MOVEMENT

DS --- DALL SHEEP HABITAT  
DSL --- DALL SHEEP LAMBING  
DSM --- DALL SHEEP MOVEMENT  
EH --- ENDANGERED SPECIES HABITAT  
EMS --- EXPLORATION MATERIAL SITE  
GB --- GRIZZLY BEAR  
GE --- GOLDEN EAGLE  
GGO --- GREAT GRAY OWL

# LEGEND

GHO --- GREAT HORNED OWL  
GOS --- GOSHAWK  
GYR --- GYRFALCON  
M --- MOOSE HABITAT  
MC --- MOOSE CALVING  
MM --- MOOSE MOVEMENT  
ML --- MINERAL LICK  
MP --- MILE POST

OS --- OSPREY  
RLH --- ROUGH-LEGGED HAWK  
RTH --- RED-TAILED HAWK  
SC --- SANDHILL CRANE NESTING  
SCM --- SANDHILL CRANE MIGRATION & RESTING  
SWD --- SOLID WASTE DISPOSAL SITE  
SY --- STORAGE YARD  
WB --- WATERBIRD NESTING  
WBM --- WATERBIRD MIGRATION & RESTING

REV. NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RH	RS	287

FLUOR PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY  
ENVIRONMENTAL MASTER GUIDE  
TOPOGRAPHIC SUPPLEMENT  
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM  
DATE 11/1/80  
SCALE IN FEET 1" = 5280'  
DRAWING NUMBER 4680-11-30-E-E-004 A  
REV. 3

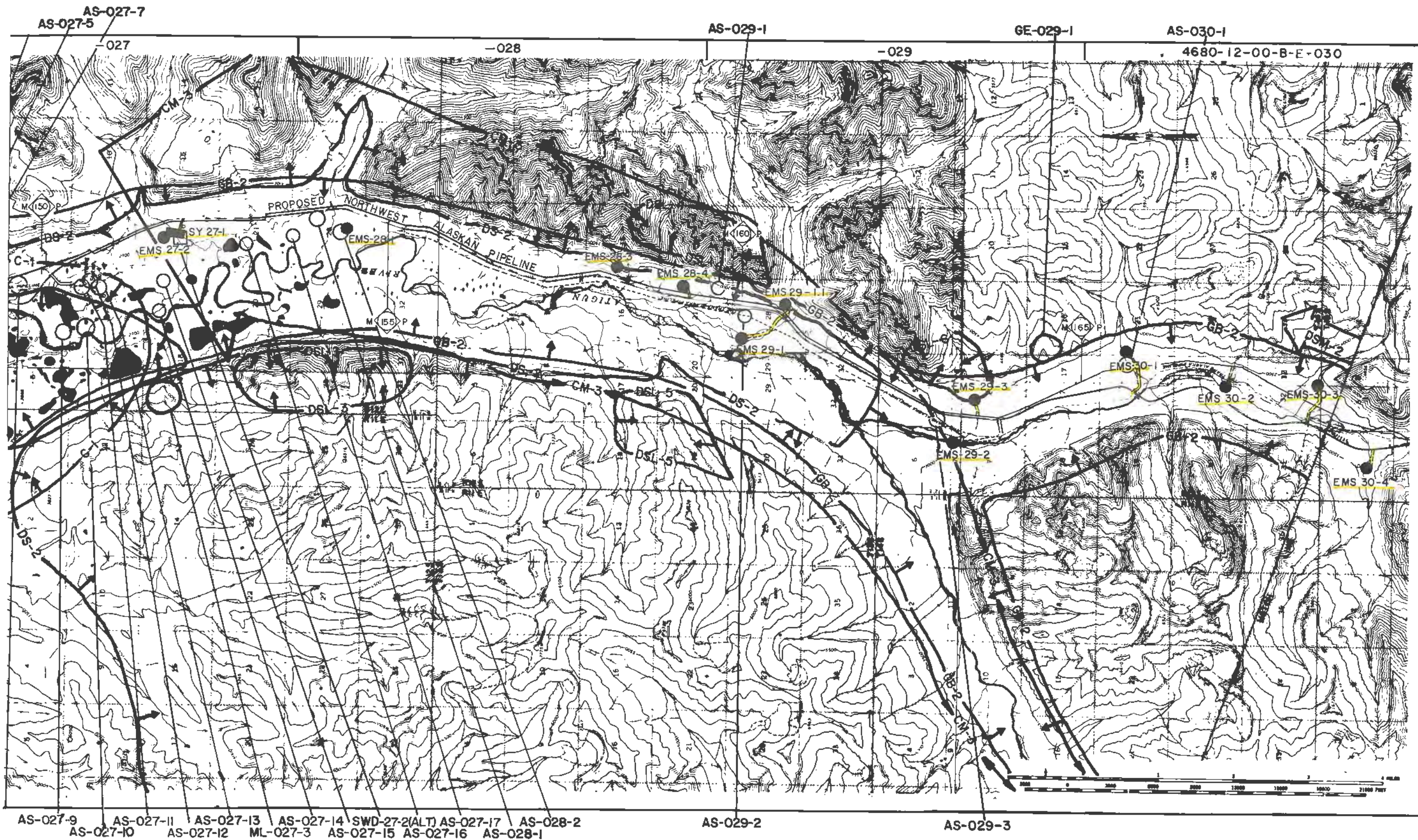












# LEGEND

AS -- ARCHAEOLOGICAL SITE  
B -- BISON HABITAT  
BM -- BISON MOVEMENT  
BB -- BLACK BEAR  
BE -- BALD EAGLE  
CB -- CARIBOU HABITAT  
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DSL -- DALL SHEEP LAMBING  
DSM -- DALL SHEEP MOVEMENT  
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REV NO	DATE	REVISION	BY	DRAWN	CHECK	APP.
3	11/80	NOVEMBER 1980 ROUTE REFINEMENTS	BA	BA	BA	BA

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	DATE	FLUOR	DATE
BA	11/80	BA	11/80
SCALE IN FEET	1" = 5280'	DRAWING NUMBER	4680-12-30-E-E-005 B
			3





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REV NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RLH	RLH	RLH

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PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA	NATURAL GAS TRANSPORTATION SYSTEM	DATE	REV.
100 Percent	100 Percent	11/1/80	1
SCALE IN FEET	DRAWING NUMBER	DATE	REV.
1" = 5280'	4680-12-30-E-E-006 A	11/1/80	3

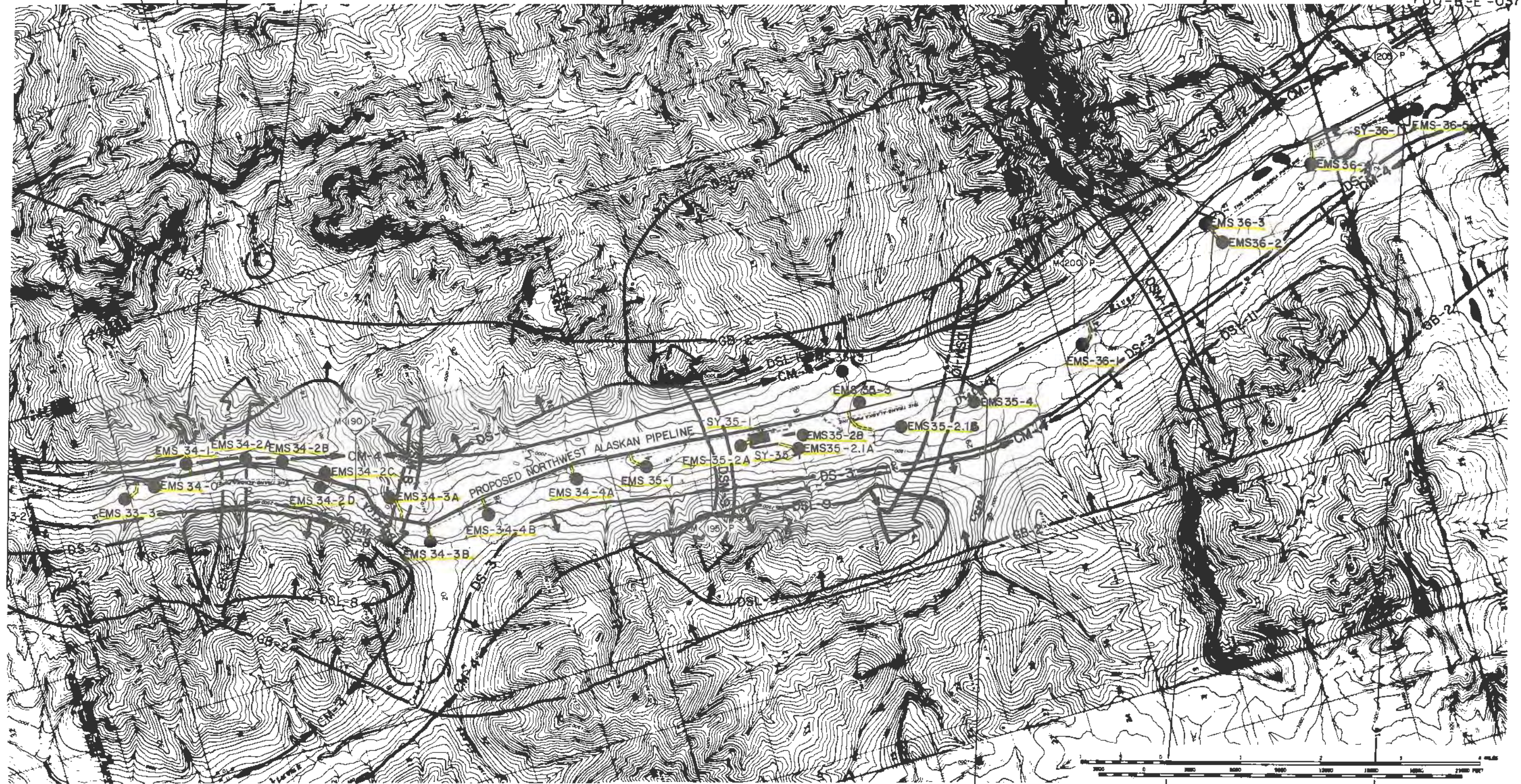


ML-033-8 GE-034-1 ML-034-9

-034

-035

-036

4680-12-  
00-B-E-037

AS-035-1

AS-036-1

SWD-36-5

AS -- ARCHAEOLOGICAL SITE  
B -- BISON HABITAT  
BM -- BISON MOVEMENT  
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MP -- MILE POST

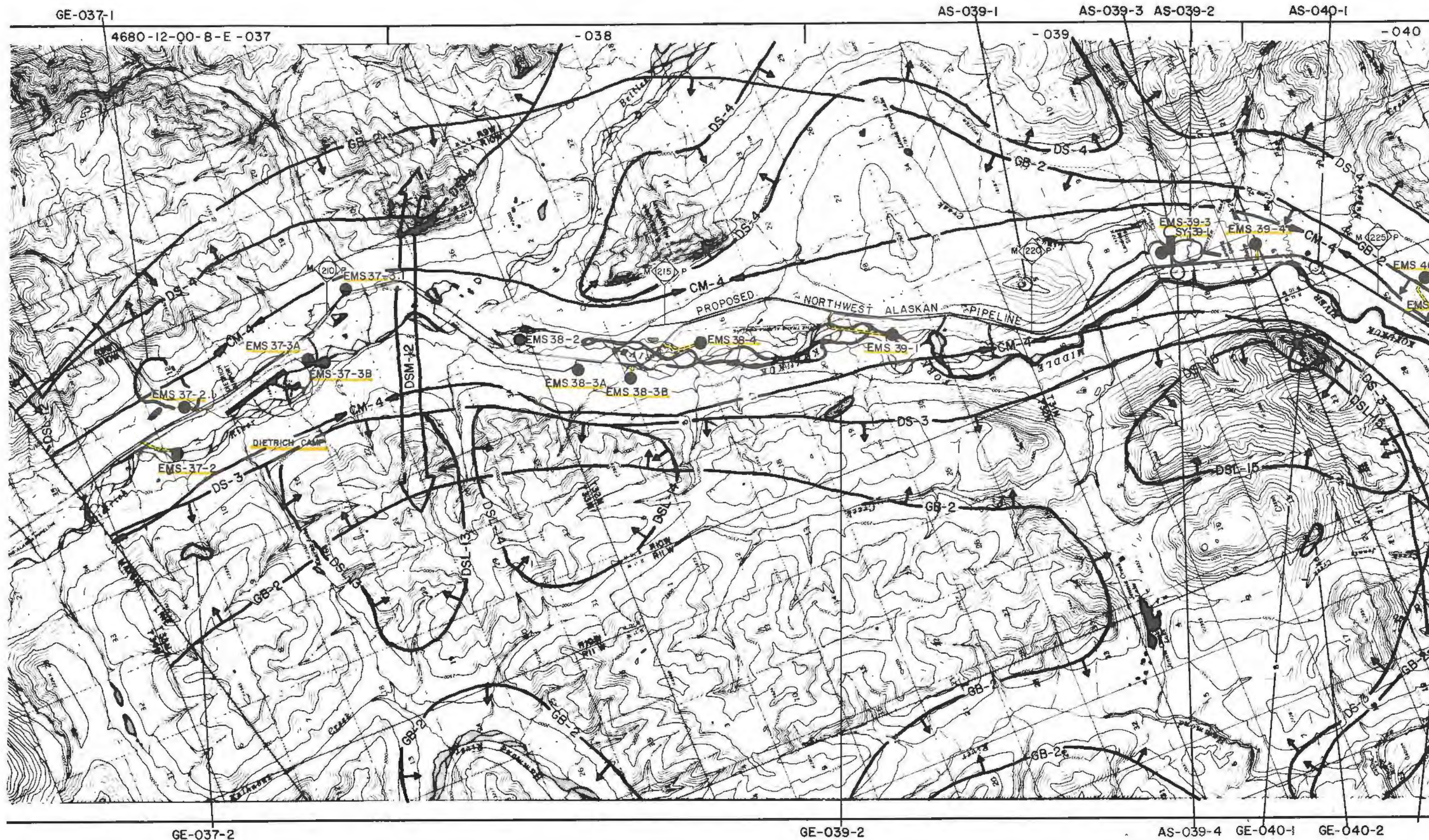
OS -- OSPREY  
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REV. NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RLH	RLH	RLH

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PROJECT MANAGEMENT CONTRACTOR
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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM		DATE 1/6/81	
SCALE IN FEET	1" = 5280'	DRAWING NUMBER	4680-12-30-E-E-006 B
			REV. 3





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REV NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	667	2-5	789

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PROJECT MANAGEMENT CONTRACTOR

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**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
ENVIRONMENTAL MASTER GUIDE  
TOPOGRAPHIC SUPPLEMENT  
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

DATE: 11/1/80  
SCALE: 1" = 5280'  
DRAWING NUMBER: 4680-12-30-E-E-007A  
REV: 3



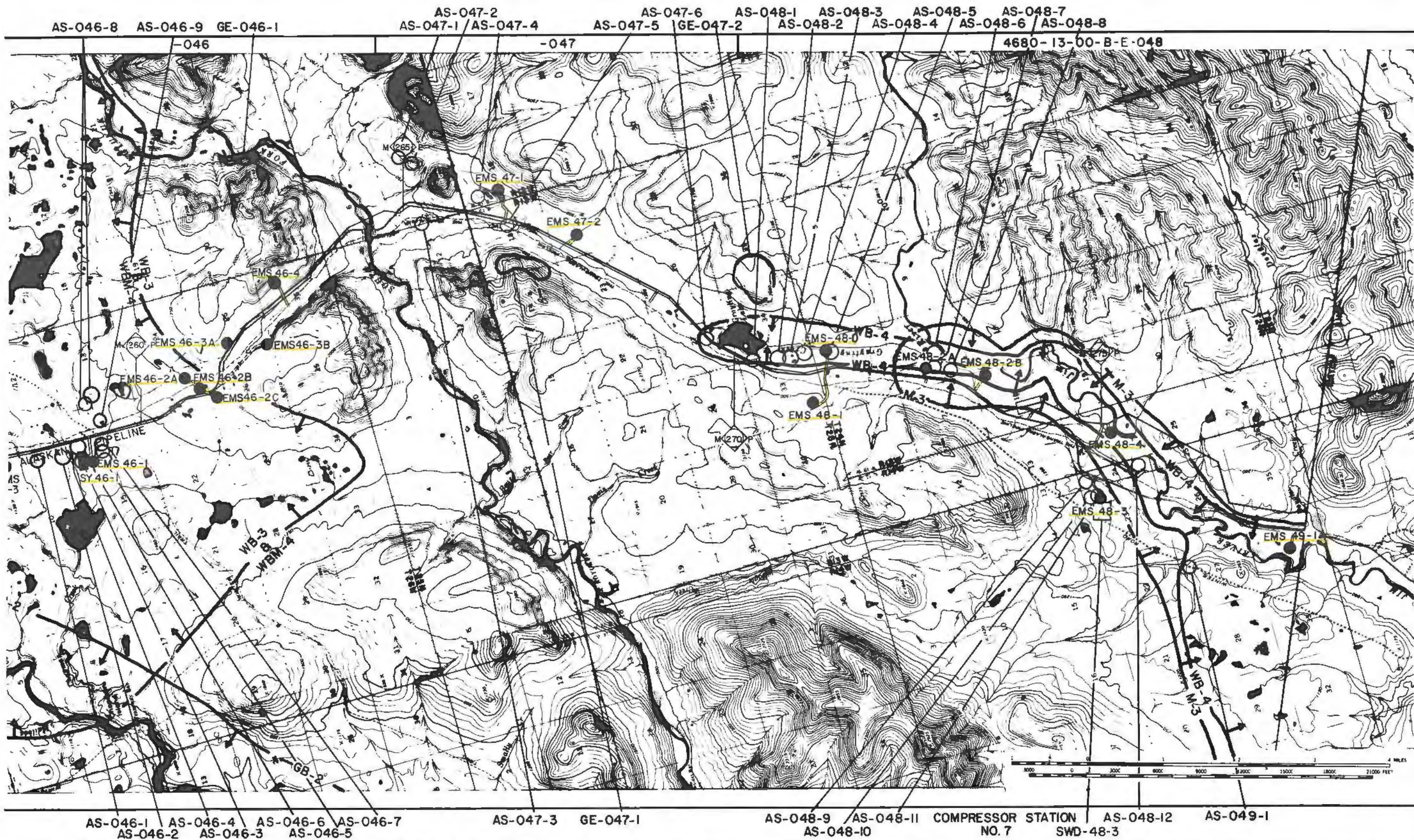






LEGEND				REV. NO. DATE REVISION				BY DRAWN CHECK APP				PROJECT MANAGEMENT CONTRACTOR				ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
AS --- ARCHAEOLOGICAL SITE	DS --- DALL SHEEP HABITAT	GHO --- GREAT HORNED OWL	OS --- OSPREY	3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	80	2/25	789	FLUOR				ENVIRONMENTAL MASTER GUIDE					
B --- BISON HABITAT	DSL --- DALL SHEEP LAMBING	GOS --- GOSHAWK	RLH --- ROUGH LEGGED HAWK					NOTICE				TOPOGRAPHIC SUPPLEMENT							
BM --- BISON MOVEMENT	DSM --- DALL SHEEP MOVEMENT	GYR --- GYRFALCON	RTH --- RED-TAILED HAWK					This document is the property of the Alaska Northwest Natural Gas Transportation Company and contains information that is confidential and/or proprietary to that Company or its third parties who have provided such information to the Company pursuant to a contract. Information contained in this document is not to be disclosed or used for any other purpose without the written consent of the Alaska Northwest Natural Gas Transportation Company. No use in disclosure is authorized except as permitted by said Company or its Agent, Northwest Alaskan Pipeline Company.				ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM							
BB --- BLACK BEAR	EH --- ENDANGERED SPECIES HABITAT	M --- MOOSE HABITAT	SC --- SANDHILL CRANE NESTING									DATE 5/1/81							
BE --- BALD EAGLE	EMS --- EXPLORATION MATERIAL SITE	MC --- MOOSE CALVING	SCM --- SANDHILL CRANE MIGRATION & RESTING									DATE 2/6/81							
C --- CARIBOU HABITAT	GB --- GRIZZLY BEAR	MM --- MOOSE MOVEMENT	SWD --- SOLID WASTE DISPOSAL SITE									SCALE IN FEET 1" = 5280'							
CC --- CARIBOU CALVING	GE --- GOLDEN EAGLE	ML --- MINERAL LICK	SY --- STORAGE YARD									DRAWING NUMBER 4680-13-30-E-E-008 A							
CM --- CARIBOU MOVEMENT	GGO --- GREAT GRAY OWL	MP --- MILE POST	WB --- WATERBIRD NESTING									REV. 3							
			WBM --- WATERBIRD MIGRATION & RESTING																





AS -- ARCHAEOLOGICAL SITE  
B -- BISON HABITAT  
BM -- BISON MOVEMENT  
BB -- BLACK BEAR  
BE -- BALD EAGLE  
C -- CARIBOU HABITAT  
CC -- CARIBOU CALVING  
CM -- CARIBOU MOVEMENT

DS -- DALL SHEEP HABITAT  
DSL -- DALL SHEEP LAMBING  
DSM -- DALL SHEEP MOVEMENT  
EM -- ENDANGERED SPECIES HABITAT  
EMS -- EXPLORATION MATERIAL SITE  
GB -- GRIZZLY BEAR  
GE -- GOLDEN EAGLE  
GGO -- GREAT GRAY OWL

#### LEGEND

GHO -- GREAT HORNED OWL  
GOS -- GOSHAWK  
GYR -- GYRFALCON  
M -- MOOSE HABITAT  
MC -- MOOSE CALVING  
MM -- MOOSE MOVEMENT  
ML -- MINERAL LICK  
MP -- MILE POST

OS -- OSPREY  
RLH -- ROUGH-LEGGED HAWK  
RTH -- RED-TAILED HAWK  
SC -- SANDHILL CRANE NESTING  
SCM -- SANDHILL CRANE MIGRATION & RESTING  
SWD -- SOLID WASTE DISPOSAL SITE  
SY -- STORAGE YARD  
WB -- WATERBIRD NESTING  
WBM -- WATERBIRD MIGRATION & RESTING

REV	NO	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS		BP	PS	789

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

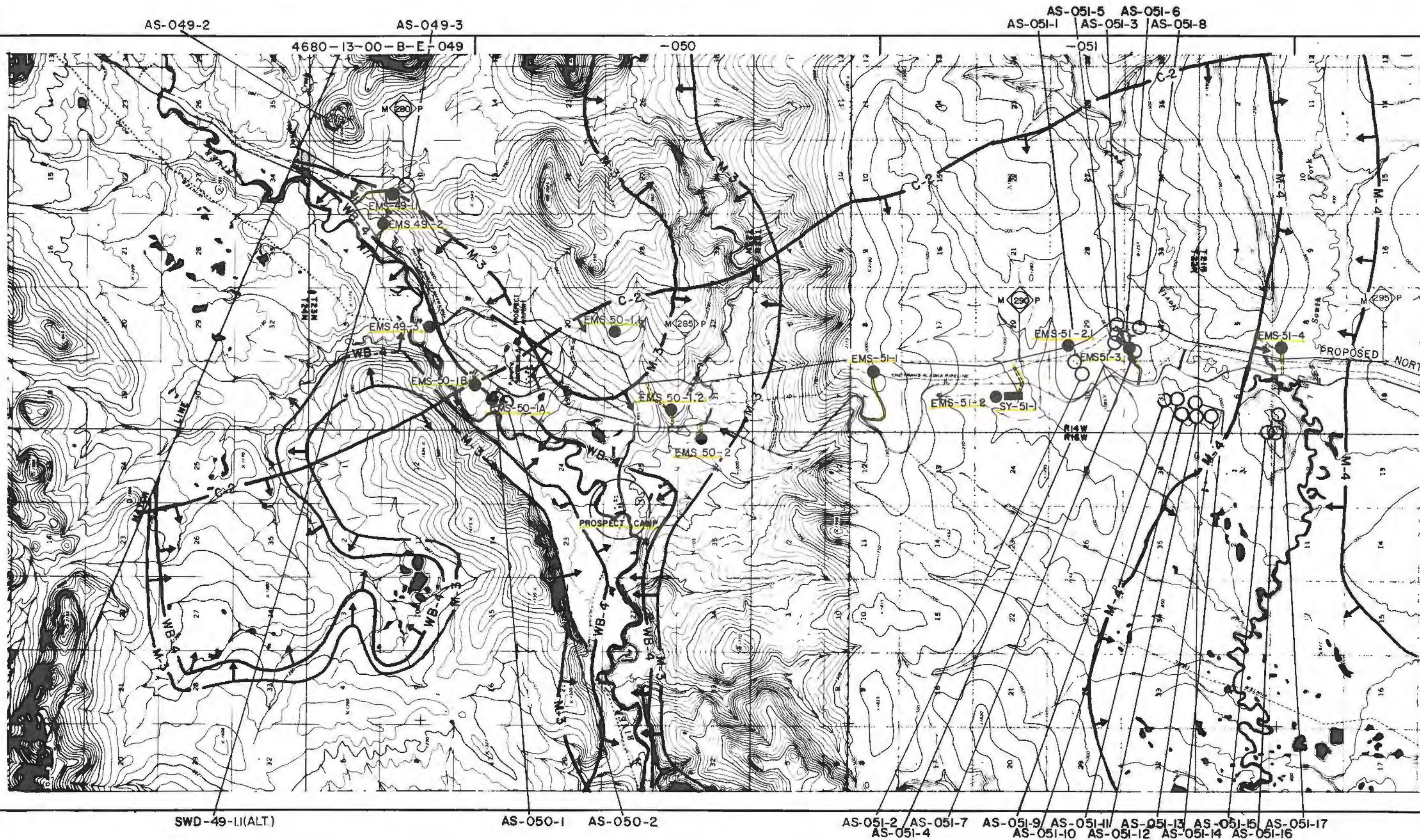
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ALASKAN NORTHWEST NATURAL  
GAS TRANSPORTATION COMPANY

ENVIRONMENTAL MASTER GUIDE  
TOPOGRAPHIC SUPPLEMENT

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	FLUOR	DATE	REV
11/5/81	FLUOR	11/5/81	1
SCALE IN FEET		DRAWING NUMBER	
1" = 5280'		4680-13-30-E-E-008 B	





<b>AS</b> -- ARCHAEOLOGICAL SITE <b>B</b> -- BISON HABITAT <b>BM</b> -- BISON MOVEMENT <b>BB</b> -- BLACK BEAR <b>BE</b> -- BALD EAGLE <b>C</b> -- CARIBOU HABITAT <b>CC</b> -- CARIBOU CALVING <b>CM</b> -- CARIBOU MOVEMENT		<b>DS</b> -- DALL SHEEP HABITAT <b>DSL</b> -- DALL SHEEP LAMBING <b>DSM</b> -- DALL SHEEP MOVEMENT <b>EH</b> -- ENDANGERED SPECIES HABITAT <b>EMS</b> -- EXPLORATION MATERIAL SITE <b>GB</b> -- GRIZZLY BEAR <b>GE</b> -- GOLDEN EAGLE <b>GGO</b> -- GREAT GRAY OWL		<b>GHO</b> -- GREAT HORNED OWL <b>GOS</b> -- GOSHAWK <b>GYR</b> -- GYRFALCON <b>M</b> -- MOOSE HABITAT <b>MC</b> -- MOOSE CALVING <b>MM</b> -- MOOSE MOVEMENT <b>ML</b> -- MINERAL LICK <b>MP</b> -- MILE POST		<b>OS</b> -- OSPREY <b>RLH</b> -- ROUGH LEGGED HAWK <b>RTH</b> -- RED TAILED HAWK <b>SC</b> -- SANDHILL CRANE NESTING <b>SCM</b> -- SANDHILL CRANE MIGRATION & RESTING <b>SWD</b> -- SOLID WASTE DISPOSAL SITE <b>SY</b> -- STORAGE YARD <b>WB</b> -- WATERBIRD NESTING <b>WBM</b> -- WATERBIRD MIGRATION & RESTING		<b>REV. NO.</b> <b>DATE</b> <b>REVISION</b> <b>BY</b> <b>DATE</b> <b>APP.</b>		<b>FLUOR</b> <b>PROJECT MANAGEMENT CONTRACTOR</b> <b>NOTICE</b> This document is the property of the Alaskan Northwest Natural Gas Transportation Company and contains information that is confidential and proprietary to that company. It is loaned to you for your use only. It is not to be distributed outside your organization. It is not to be used for any other purpose. It is not to be reproduced in any form without the written permission of the Alaskan Northwest Natural Gas Transportation Company.		<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b> <b>ENVIRONMENTAL MASTER GUIDE</b> <b>TOPOGRAPHIC SUPPLEMENT</b> <b>ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM</b> <b>SCALE IN FEET</b> <b>1" = 5280'</b> <b>4680-13-30-E-E-009 A</b> <b>3</b>	
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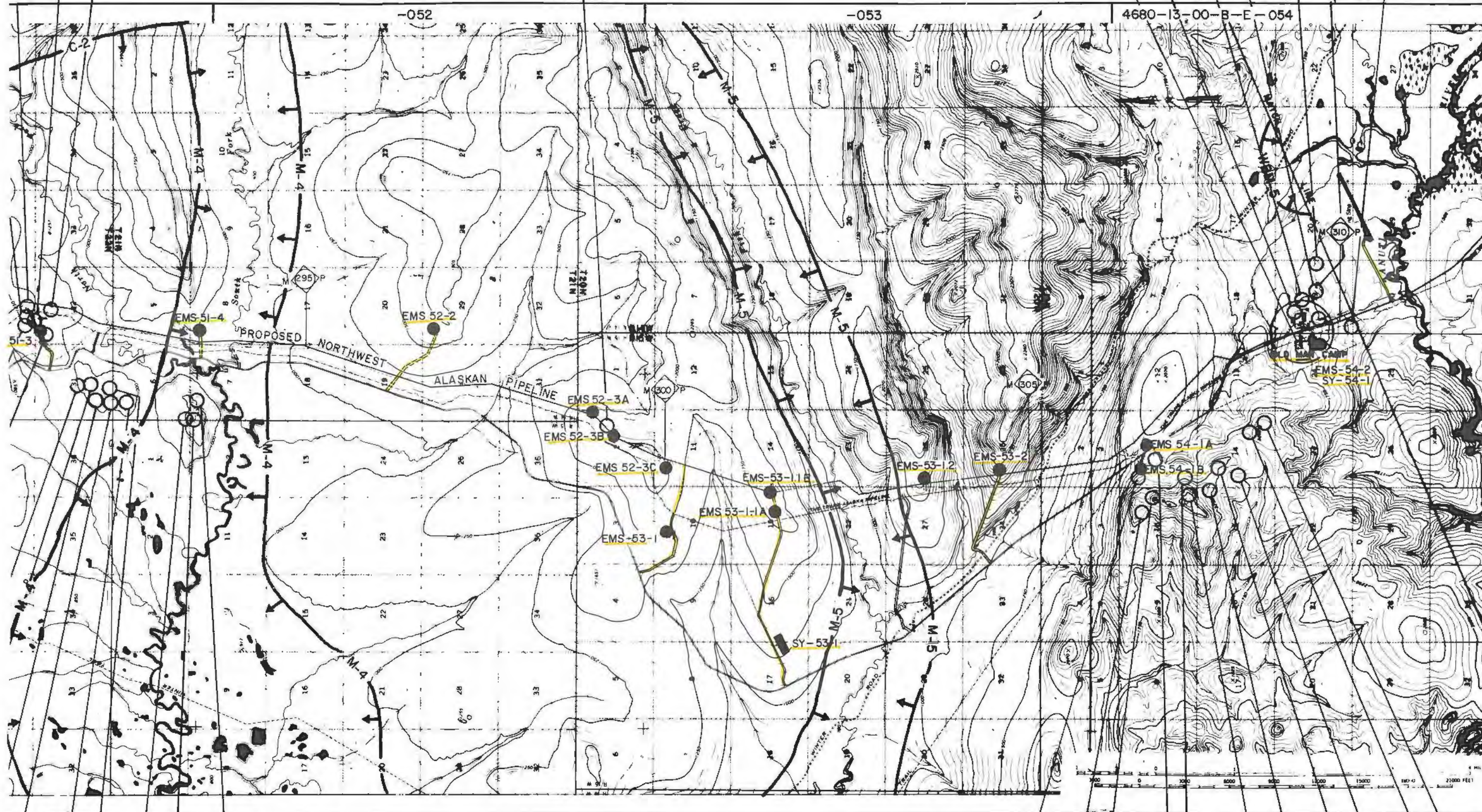


AS-051-6  
AS-051-8

AS-052-1

SWD-54-2 AS-054-13 AS-054-16 AS-054-17  
AS-054-12 AS-054-15 AS-054-14

4680-13-00-B-E-054



AS-051-13 AS-051-15 AS-051-17  
AS-051-14 AS-051-16

AS-054-3 AS-054-2 AS-054-6 AS-054-7 AS-054-9 AS-054-11  
AS-054-1 AS-054-4 AS-054-5 AS-054-8 AS-054-10

# LEGEND

AS — ARCHAEOLOGICAL SITE	DS — DALL SHEEP HABITAT	GHO — GREAT HORNED OWL	OS — OSPREY
B — BISON HABITAT	DSL — DALL SHEEP LAMBING	GOS — GOSHAWK	RLH — ROUGH LEGGED HAWK
BM — BISON MOVEMENT	DSM — DALL SHEEP MOVEMENT	GYR — GYRFALCON	RTH — RED TAILED HAWK
BE — BLACK BEAR	EH — ENDANGERED SPECIES HABITAT	M — MOOSE HABITAT	SC — SANDHILL CRANE NESTING
BB — BALD EAGLE	EMS — EXPLORATION MATERIAL SITE	MC — MOOSE CALVING	SCM — SANDHILL CRANE MIGRATION & RESTING
C — CARIBOU HABITAT	GB — GRIZZLY BEAR	MM — MOOSE MOVEMENT	SWD — SOLID WASTE DISPOSAL SITE
CC — CARIBOU CALVING	GE — GOLDEN EAGLE	ML — MINERAL LICK	SY — STORAGE YARD
CM — CARIBOU MOVEMENT	GGO — GREAT GRAY OWL	MP — MILE POST	WB — WATERBIRD NESTING
			WBM — WATERBIRD MIGRATION & RESTING

REV. NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RAE	RAE	RAE

<b>FLUOR</b>
PROJECT MANAGEMENT CONTRACTOR
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<b>ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY</b>			
<b>ENVIRONMENTAL MASTER GUIDE</b>			
<b>TOPOGRAPHIC SUPPLEMENT</b>			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	FLUOR	DATE	REV
11/1/80	RAE	11/1/80	1
SCALE IN FEET		DRAWING NUMBER	
1" = 5280'		4680-13-30-E-E-009 B	
		REV 3	



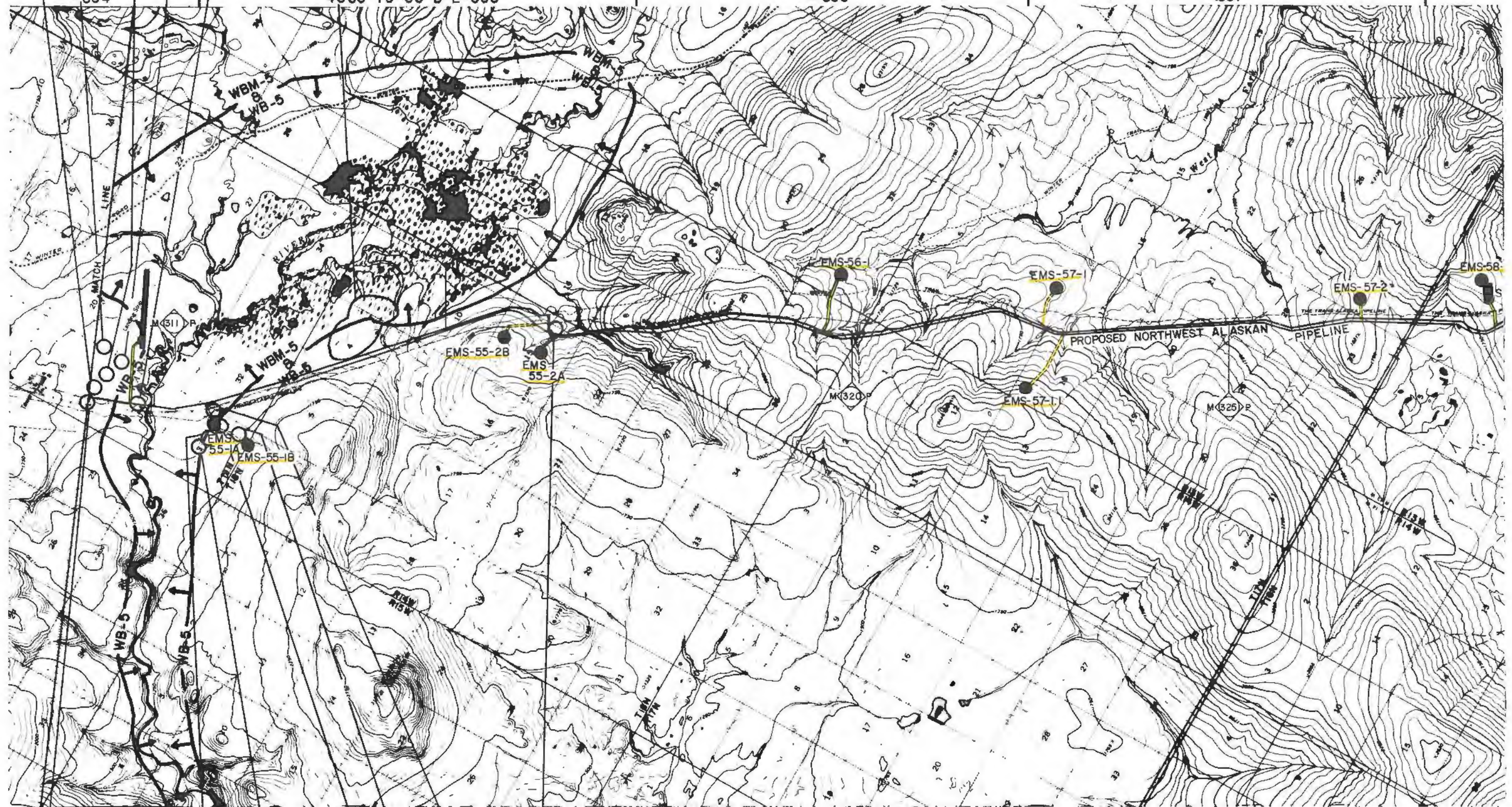
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AS-055-6

4680-13-00-B-E-055

-056

-057



AS-054-18

AS-055-1  
AS-055-3

AS-055-4  
AS-055-5

AS-055-2

AS-055-7

COMPRESSOR STATION  
NO.8(FUTURE)

AS --- ARCHAEOLOGICAL SITE  
B --- BISON HABITAT  
BM --- BISON MOVEMENT  
BB --- BLACK BEAR  
BE --- BALD EAGLE  
C --- CARIBOU HABITAT  
CC --- CARIBOU CALVING  
CM --- CARIBOU MOVEMENT

DS --- DALL SHEEP HABITAT  
DSL --- DALL SHEEP LAMBING  
DSM --- DALL SHEEP MOVEMENT  
EH --- ENDANGERED SPECIES HABITAT  
EMS --- EXPLORATION MATERIAL SITE  
GB --- GRIZZLY BEAR  
GE --- GOLDEN EAGLE  
GGO --- GREAT GRAY OWL

LEGEND

GHO --- GREAT HORNED OWL  
GOS --- GOSHAWK  
GYR --- GYRFALCON  
M --- MOOSE HABITAT  
MC --- MOOSE CALVING  
MM --- MOOSE MOVEMENT  
ML --- MINERAL LICK  
MP --- MILE POST

OS --- OSPREY  
RLH --- ROUGH LEGGED HAWK  
RTH --- RED-TAILED HAWK  
SC --- SANDHILL CRANE NESTING  
SCM --- SANDHILL CRANE MIGRATION & RESTING  
SWD --- SOLID WASTE DISPOSAL SITE  
SY --- STORAGE YARD  
WB --- WATERBIRD NESTING  
WBM --- WATERBIRD MIGRATION & RESTING

REV. NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RH	END	END

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

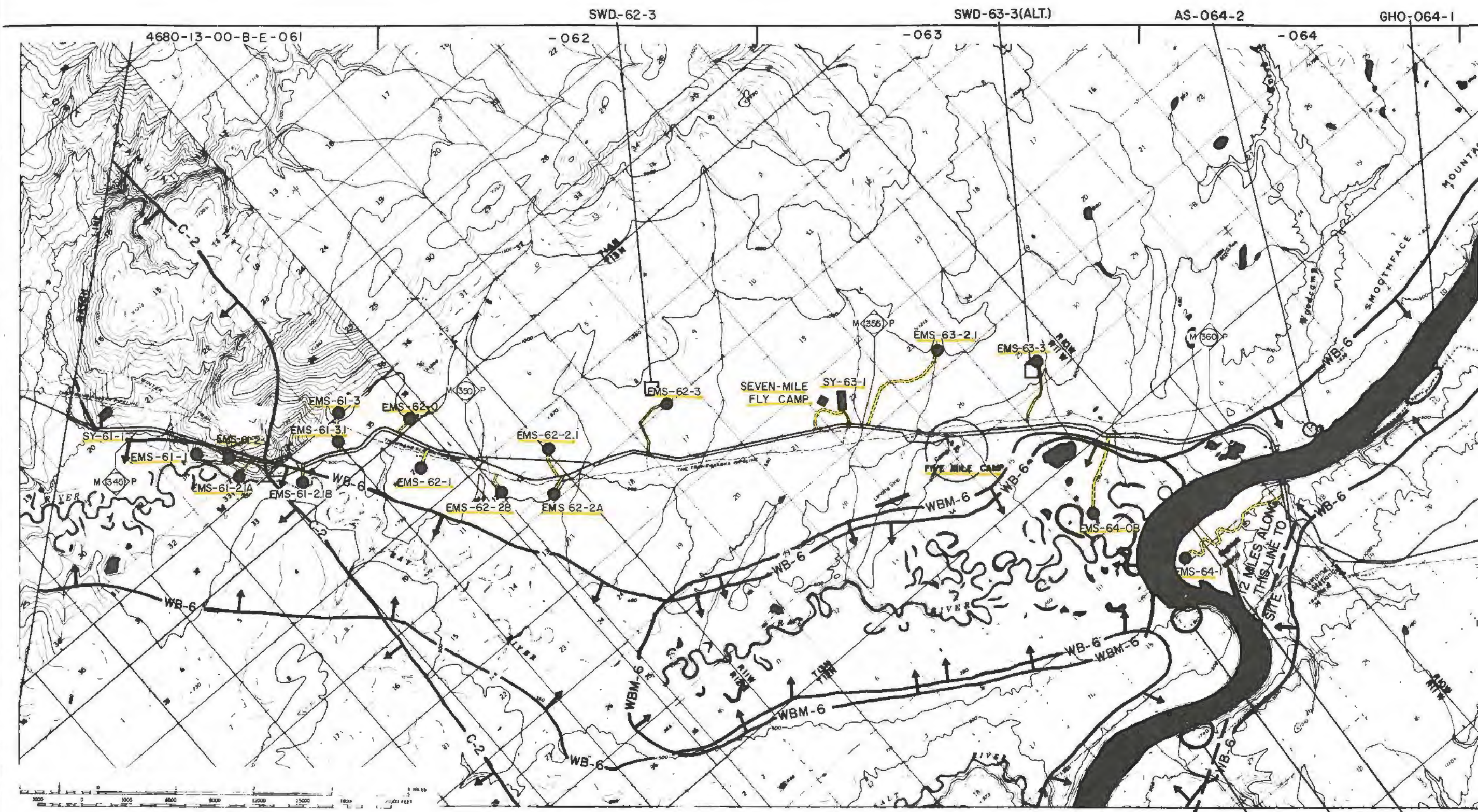
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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	DATE	DATE	DATE
11/1/80	11/1/80	11/1/80	11/1/80
SCALE IN FEET	DRAWING NUMBER	REV.	REV.
1" = 5280'	4680-13-30-E-E-010 A	3	3







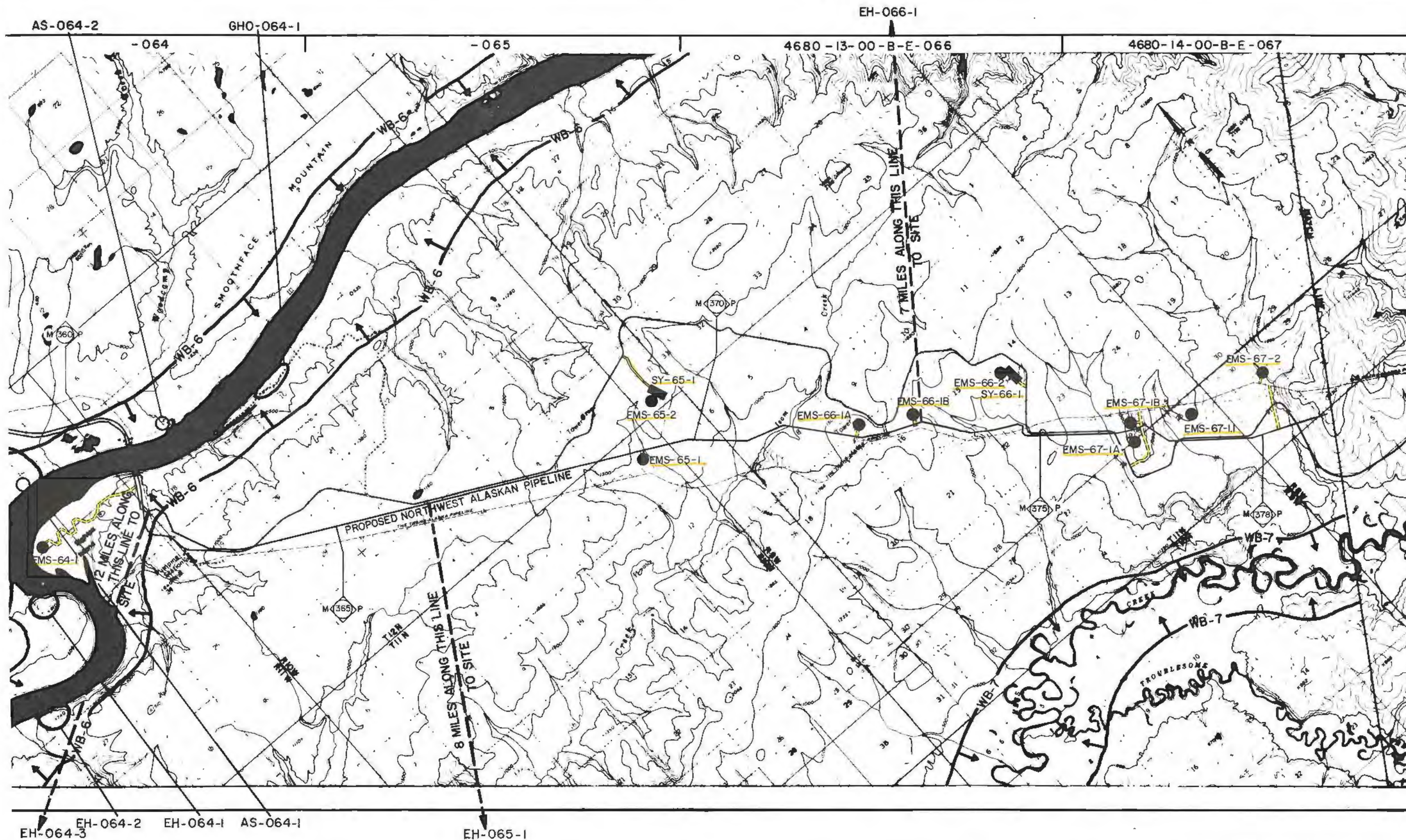


4680-13-00-B-E-061 SWD-62-3 -062 SWD-63-3(ALT.) -063 AS-064-2 -064 GH0-064-1

EH-064-3 EH-064-2 EH-064-1 AS-064-1

LEGEND												REV. NO. DATE REVISION			BY CHECK APP.			FLUOR PROJECT MANAGEMENT CONTRACTOR		ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
												3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS		BA	BA	BA					
																			NOTES		ENVIRONMENTAL MASTER GUIDE TOPOGRAPHIC SUPPLEMENT		
												This drawing is the property of the Alaskan Northwest Natural Gas Transportation Company and contains information that is deemed to be confidential and proprietary by the Company. It is to be used only for the purposes for which it was prepared and is not to be distributed or used for any other purpose without the written consent of the Company. The Company assumes no responsibility for the accuracy or completeness of the information contained herein. The user of this drawing is advised that it is not a contract and that it is subject to change without notice.										ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	
AS --- ARCHAEOLOGICAL SITE												DS --- DALL SHEEP HABITAT		GHO --- GREAT HORNED OWL		OS --- OSPREY		DATE		FLUOR		DATE	
B --- BISON HABITAT												DSL --- DALL SHEEP LAMBING		GOS --- GOSHAWK		RLH --- ROUGH LEGGED HAWK		BA		11/5/81			
BM --- BISON MOVEMENT												DSM --- DALL SHEEP MOVEMENT		GYR --- GYRFALCON		RTH --- RED-TAILED HAWK		CC		11/5/81		11/5/81	
BB --- BLACK BEAR												EH --- ENDANGERED SPECIES HABITAT		M --- MOOSE HABITAT		SC --- SANDHILL CRANE NESTING		BA		11/5/81		11/5/81	
BE --- BALD EAGLE												EMS --- EXPLORATION MATERIAL SITE		MC --- MOOSE CALVING		SCM --- SANDHILL CRANE MIGRATION & RESTING		BA		11/5/81		11/5/81	
C --- CARIBOU HABITAT												GB --- GRIZZLY BEAR		MM --- MOOSE MOVEMENT		SWD --- SOLID WASTE DISPOSAL SITE		BA		11/5/81		11/5/81	
CC --- CARIBOU CALVING												GE --- GOLDEN EAGLE		ML --- MINERAL LICK		SY --- STORAGE YARD		BA		11/5/81		11/5/81	
CM --- CARIBOU MOVEMENT												GGO --- GREAT GRAY OWL		MP --- MILE POST		WB --- WATERBIRD NESTING		BA		11/5/81		11/5/81	
																WBM --- WATERBIRD MIGRATION & RESTING		BA		11/5/81		11/5/81	





LEGEND			
AS -- ARCHAEOLOGICAL SITE	DS -- DALL SHEEP HABITAT	GHO -- GREAT HORNED OWL	OS -- OSPREY
B -- BISON HABITAT	DSL -- DALL SHEEP LAMBING	GOS -- GOSHAWK	RLH -- ROUGH LEGGED HAWK
BM -- BISON MOVEMENT	DSM -- DALL SHEEP MOVEMENT	CYR -- GYRFALCON	RTH -- RED TAILED HAWK
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EE -- BALD EAGLE	EMS -- EXPLORATION MATERIAL SITE	MM -- MOOSE MOVEMENT	SWD -- SOLID WASTE DISPOSAL SITE
CC -- CARIBOU HABITAT	GB -- GRIZZLY BEAR	ML -- MINERAL LICK	SY -- STORAGE YARD
CE -- CARIBOU CALVING	GE -- GOLDEN EAGLE	MP -- MILE POST	WB -- WATERBIRD NESTING
CM -- CARIBOU MOVEMENT	GGO -- GREAT GRAY OWL		WBM -- WATERBIRD MIGRATION & RESTING

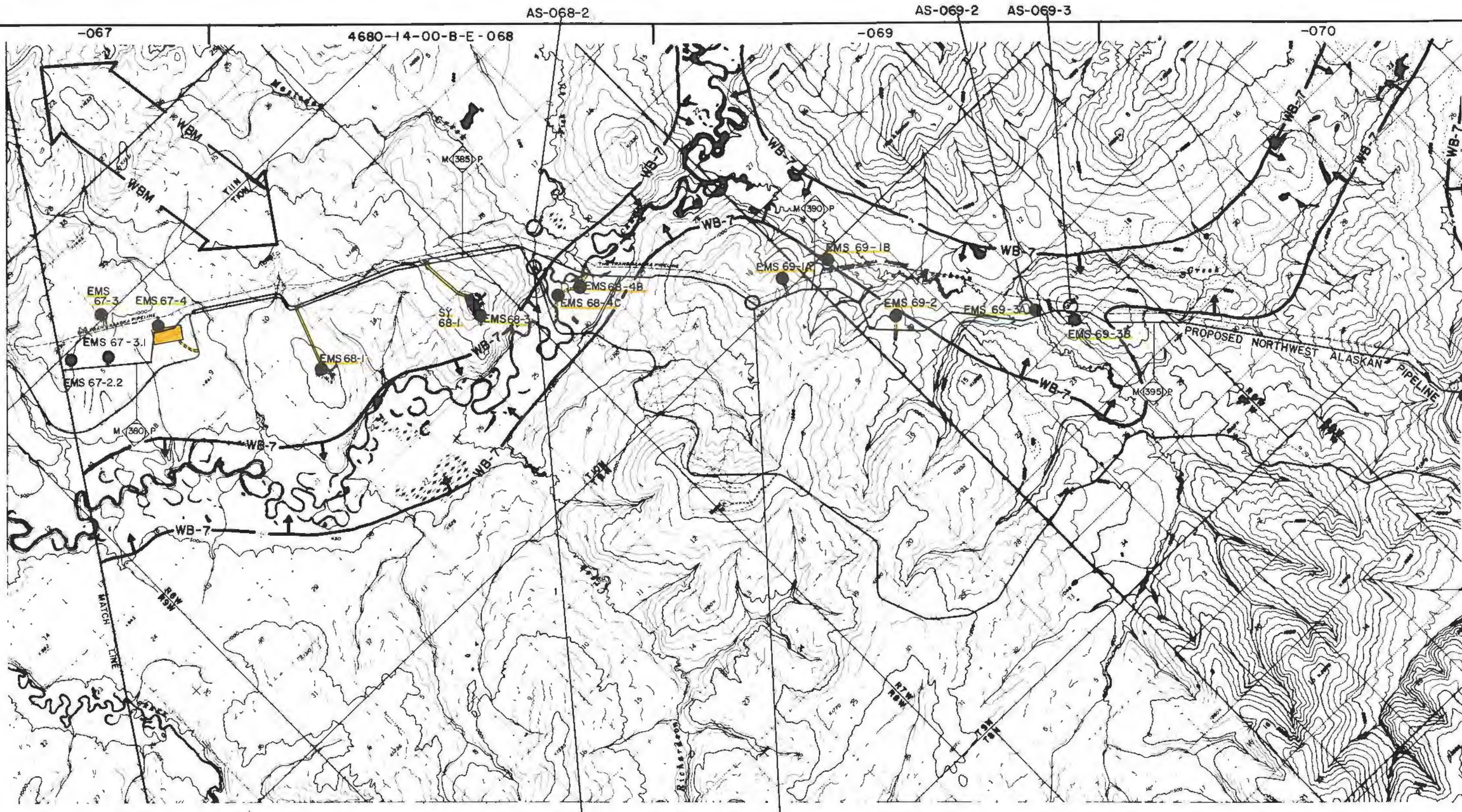
REV. NO.	DATE	REVISION	BY	CHKD.	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	660	2-2	289

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	DATE	FLUOR	DATE
10/1/80	11/1/81	2/1/81	2/1/81
SCALE IN FEET	DRAWING NUMBER	REV.	
1" = 5280'	4680-13-30-E-E-011 B	3	





COMPRESSOR STATION  
NO. 9

AS-068-1

AS-069-1

AS — ARCHAEOLOGICAL SITE  
B — BISON HABITAT  
BM — BISON MOVEMENT  
BB — BLACK BEAR  
BE — BALD EAGLE  
C — CARIBOU HABITAT  
CC — CARIBOU CALVING  
CM — CARIBOU MOVEMENT

DS — DALL SHEEP HABITAT  
DSL — DALL SHEEP LAMBING  
DSM — DALL SHEEP MOVEMENT  
EH — ENDANGERED SPECIES HABITAT  
EMS — EXPLORATION MATERIAL SITE  
GB — GRIZZLY BEAR  
GE — GOLDEN EAGLE  
GGO — GREAT GRAY OWL

LEGEND

GHO — GREAT HORNED OWL  
GOS — GOSHAWK  
GYR — GYRFALCON  
M — MOOSE HABITAT  
MC — MOOSE CALVING  
MM — MOOSE MOVEMENT  
ML — MINERAL LICK  
MP — MILE POST

OS — OSPREY  
RLH — ROUGH LEGGED HAWK  
RTH — RED TAILED HAWK  
SC — SANDHILL CRANE NESTING  
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SWD — SOLID WASTE DISPOSAL SITE  
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REV. NO.	DATE	REVISION	BY	DRAWN	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RAH	RAH	RAH	RAH

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL  
GAS TRANSPORTATION COMPANY

ENVIRONMENTAL MASTER GUIDE  
TOPOGRAPHIC SUPPLEMENT

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

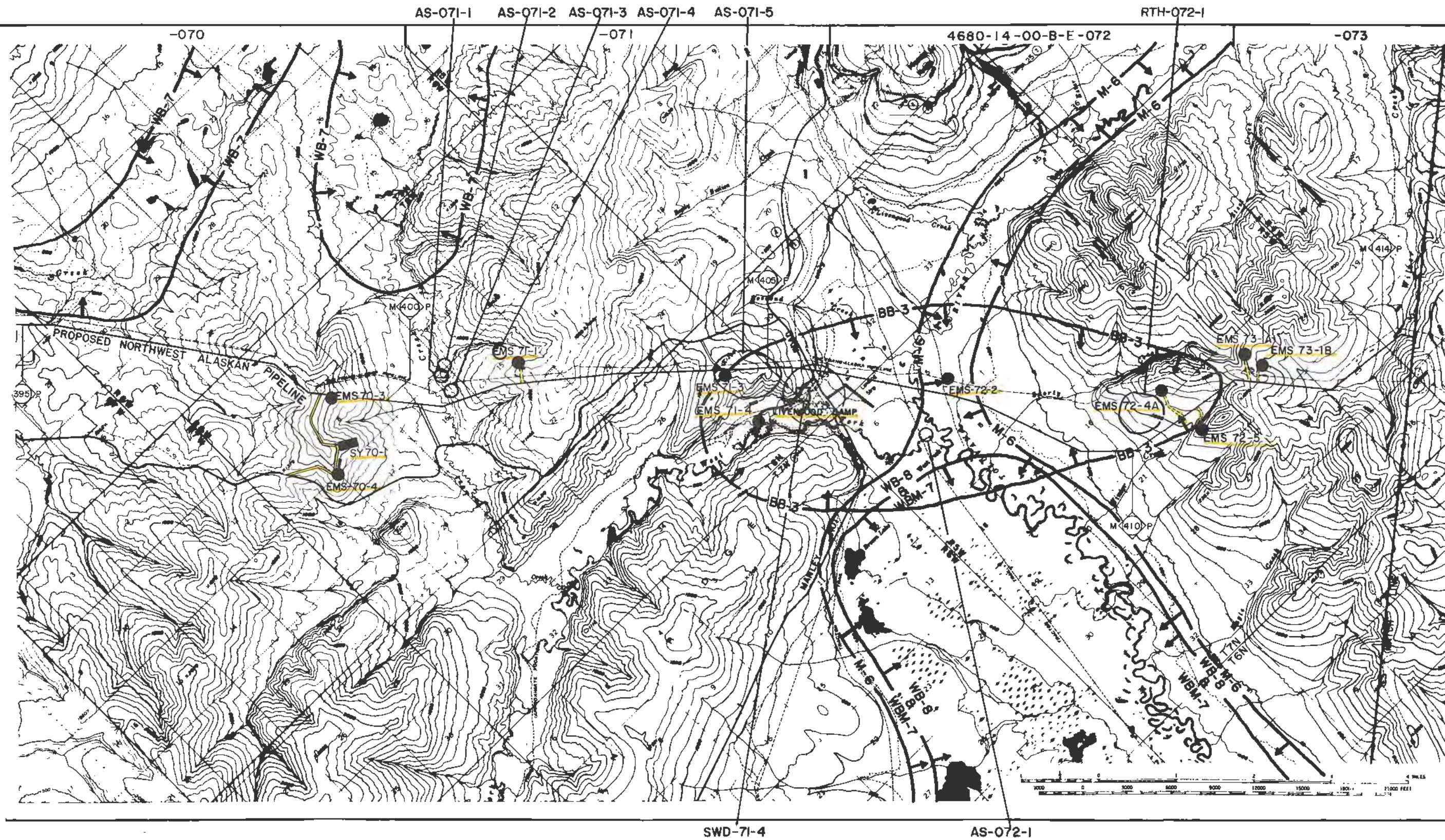
DATE 11/1/80 DRAWN RAH CHECK RAH APP RAH

SCALE IN FEET 1" = 5280'

DRAWING NUMBER 4680-14-30-E-E-012 A

REV. 3





REV NO. DATE REVISION			BY DRAWN CHECK APP.			PROJECT MANAGEMENT CONTRACTOR			ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY		
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RAH	RAH	RAH	FLUOR			ENVIRONMENTAL MASTER GUIDE		
						NOTICE			ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM		
						This document is the property of the Alaskan Northwest Natural Gas Transportation Company and contains information that is classified as confidential and proprietary by said Company or by third parties who have furnished such information to the Company pursuant to a license or use agreement. Information contained in this document is not to be disclosed or distributed outside the Company without the prior written consent of the Company. This document is not to be used for any purpose other than that for which it was prepared. No part of this document may be reproduced in any form or by any means electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system, without the prior written permission of the Alaskan Northwest Natural Gas Transportation Company.			DATE: 5/1981		
						SCALE IN FEET			DRAWING NUMBER		
						1" = 5280'			4680-14-30-E-E-012 B		
									REV		
									3		

LEGEND							
AS	ARCHAEOLOGICAL SITE	DS	DALL SHEEP HABITAT	GHO	GREAT HORNED OWL	OS	OSPREY
B	BISON HABITAT	DSL	DALL SHEEP LAMBING	GOS	GOSHAWK	RLH	ROUGH LEGGED HAWK
BM	BISON MOVEMENT	DSM	DALL SHEEP MOVEMENT	CYR	GYRFALCON	RTH	RED-TAILED HAWK
BB	BLACK BEAR	EH	ENDANGERED SPECIES HABITAT	M	MOOSE HABITAT	SC	SANDHILL CRANE NESTING
BE	BALD EAGLE	EMS	EXPLORATION MATERIAL SITE	MC	MOOSE CALVING	SCM	SANDHILL CRANE MIGRATION & RESTING
C	CARIBOU HABITAT	GB	GRIZZLY BEAR	MM	MOOSE MOVEMENT	SWD	SOLID WASTE DISPOSAL SITE
CC	CARIBOU CALVING	GE	GOLDEN EAGLE	ML	MINERAL LICK	SY	STORAGE YARD
CM	CARIBOU MOVEMENT	GGO	GREAT GRAY OWL	MP	MILE POST	WB	WATERBIRD NESTING
						WBM	WATERBIRD MIGRATION & RESTING



AS-073-1

4680-14-00-B-E-073

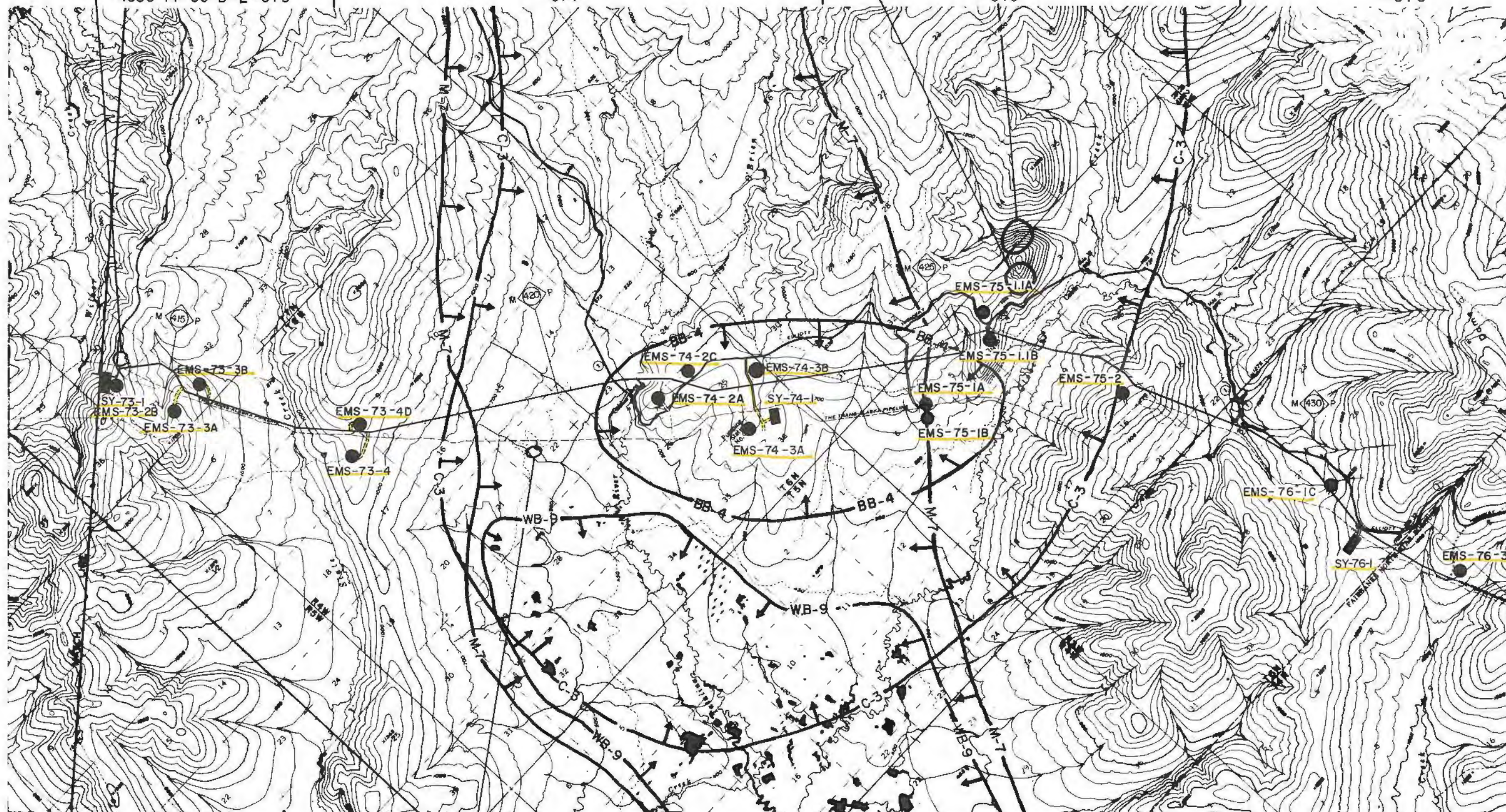
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EH-075-1

EH-075-2

-075

-076



ML-074-10

COMPRESSOR STATION  
NO. 10 (FUTURE)

LEGEND			
AS --- ARCHAEOLOGICAL SITE	DS --- DALL SHEEP HABITAT	GHO --- GREAT HORNED OWL	OS --- OSPREY
B --- BISON HABITAT	DSL --- DALL SHEEP LAMBING	GOS --- GOSHAWK	RLH --- ROUGH-LEGGED HAWK
BM --- BISON MOVEMENT	DSM --- DALL SHEEP MOVEMENT	GYR --- GYRFALCON	RTH --- RED-TAILED HAWK
BB --- BALD BEAR	EH --- ENDANGERED SPECIES HABITAT	M --- MOOSE HABITAT	SCM --- SANDHILL CRANE MIGRATION & RESTING
BE --- BALD EAGLE	EMS --- EXPLORATION MATERIAL SITE	MC --- MOOSE CALVING	SWD --- SOLID WASTE DISPOSAL SITE
C --- CARIBOU HABITAT	GB --- GRIZZLY BEAR	MM --- MOOSE MOVEMENT	SY --- STORAGE YARD
CC --- CARIBOU CALVING	GE --- GOLDEN EAGLE	ML --- MINERAL LICK	WB --- WATERBIRD NESTING
CM --- CARIBOU MOVEMENT	GGD --- GREAT GRAY OWL	MP --- MILE POST	WBM --- WATERBIRD MIGRATION & RESTING

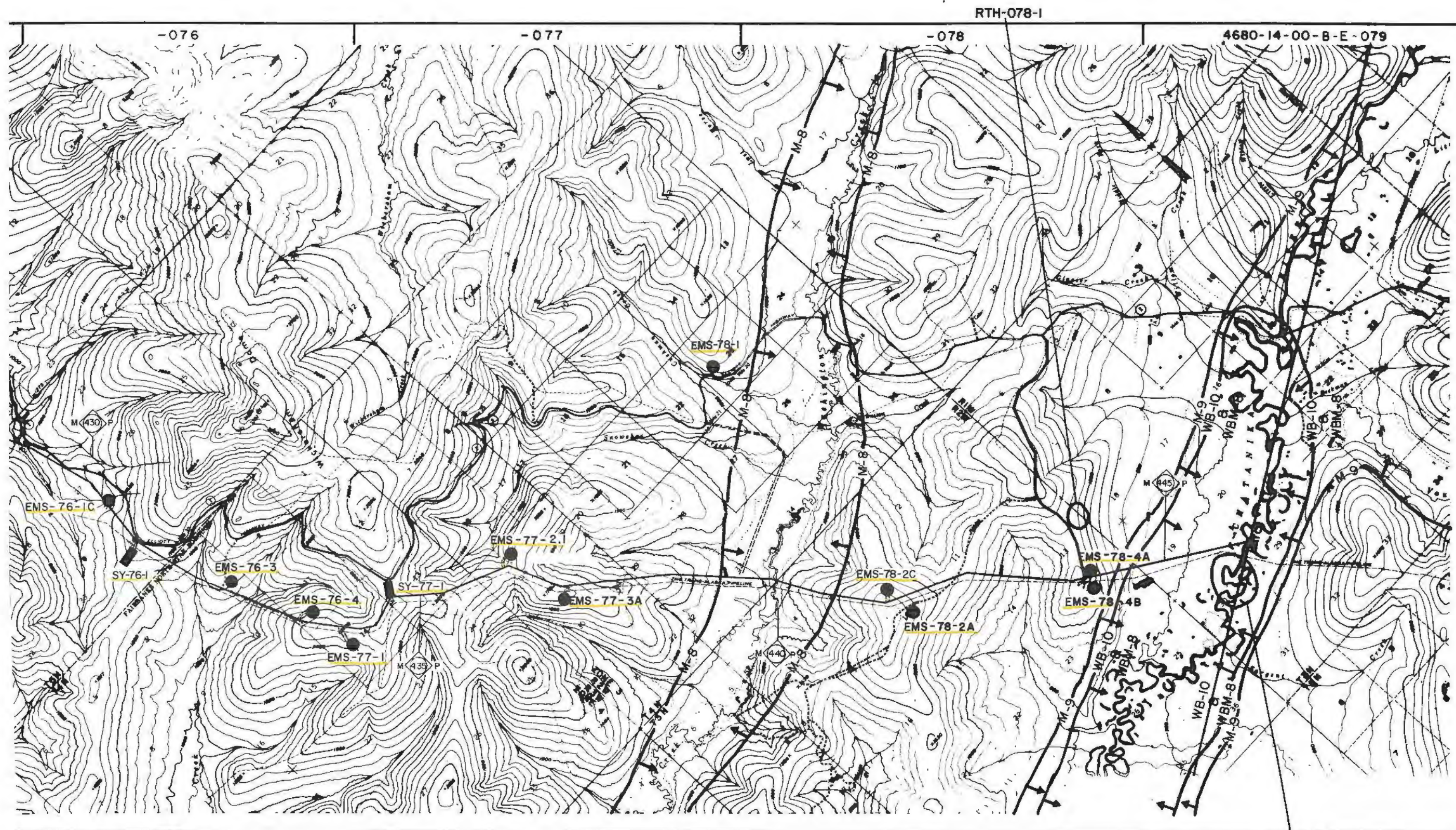
REV. NO.	DATE	REVISION	BY	DRAWN	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RA	2-5	789

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	FLUOR	DATE	REV
11/1/80	2-5	11/1/80	3
SCALE IN FEET		DRAWING NUMBER	
1" = 5280'		4680-14-30-E-E-Q13 A	
		3	





COMPRESSOR STATION  
NO. 10 (FUTURE)

BE-079-1

LEGEND			
AS — ARCHAEOLOGICAL SITE	DS — DALL SHEEP HABITAT	GHO — GREAT HORNED OWL	OS — OSPREY
B — BISON HABITAT	DSL — DALL SHEEP LAMBING	GOS — GOSHAWK	RLH — ROUGH LEGGED HAWK
BM — BISON MOVEMENT	DSM — DALL SHEEP MOVEMENT	GYR — GYRFALCON	RTH — RED-TAILED HAWK
BE — BLACK BEAR	EM — ENDANGERED SPECIES HABITAT	M — MOOSE HABITAT	SC — SANDHILL CRANE NESTING
C — BALD EAGLE	EMS — EXPLORATION MATERIAL SITE	MC — MOOSE CALVING	SCM — SANDHILL CRANE MIGRATION & RESTING
CH — CARIBOU HABITAT	GB — GRIZZLY BEAR	MM — MOOSE MOVEMENT	SWD — SOLID WASTE DISPOSAL SITE
CC — CARIBOU CALVING	GE — GOLDEN EAGLE	ML — MINERAL LICK	SY — STORAGE YARD
CM — CARIBOU MOVEMENT	GGO — GREAT GRAY OWL	MP — MILE POST	WB — WATERBIRD NESTING
			WBM — WATERBIRD MIGRATION & RESTING

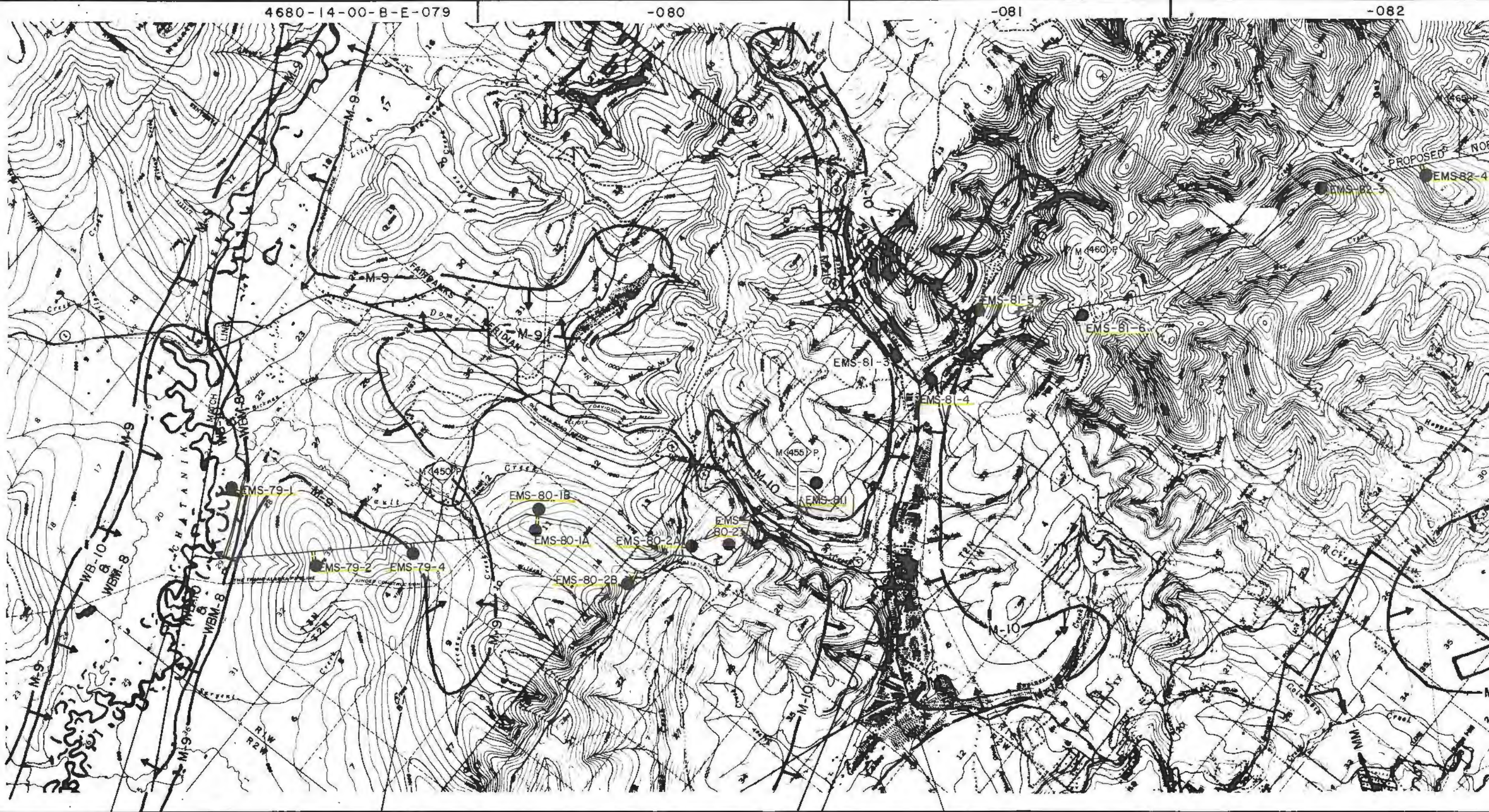
REV. NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RLH	RLH	RLH

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	PLANNED	DATE	REV.
5/1/81	5/1/81	5/1/81	5/1/81
SCALE IN FEET		DRAWING NUMBER	
1" = 5280'		4680-14-30-E-E-013 B	
		3	





AS --- ARCHAEOLOGICAL SITE  
B --- BISON HABITAT  
BM --- BISON MOVEMENT  
BB --- BLACK BEAR  
BE --- BALD EAGLE  
C --- CARIBOU HABITAT  
CC --- CARIBOU CALVING  
CM --- CARIBOU MOVEMENT

DS --- DALL SHEEP HABITAT  
DSL --- DALL SHEEP LAMBING  
DSM --- DALL SHEEP MOVEMENT  
EH --- ENDANGERED SPECIES HABITAT  
EMS --- EXPLORATION MATERIAL SITE  
GB --- GRIZZLY BEAR  
GE --- GOLDEN EAGLE  
GGO --- GREAT GRAY OWL

#### LEGEND

GHO --- GREAT HORNED OWL  
GOS --- GOSHAWK  
GYR --- GYRFALCON  
M --- MOOSE HABITAT  
MC --- MOOSE CALVING  
MM --- MOOSE MOVEMENT  
ML --- MINERAL LICK  
MP --- MILE POST

OS --- OSPREY  
RLH --- ROUGH-LEGGED HAWK  
RTH --- RED-TAILED HAWK  
SC --- SANDHILL CRANE NESTING  
SCM --- SANDHILL CRANE MIGRATION & RESTING  
SWD --- SOLID WASTE DISPOSAL SITE  
SY --- STORAGE YARD  
WB --- WATERBIRD NESTING  
WBM --- WATERBIRD MIGRATION & RESTING

REV. NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RAJ	RAJ	RAJ

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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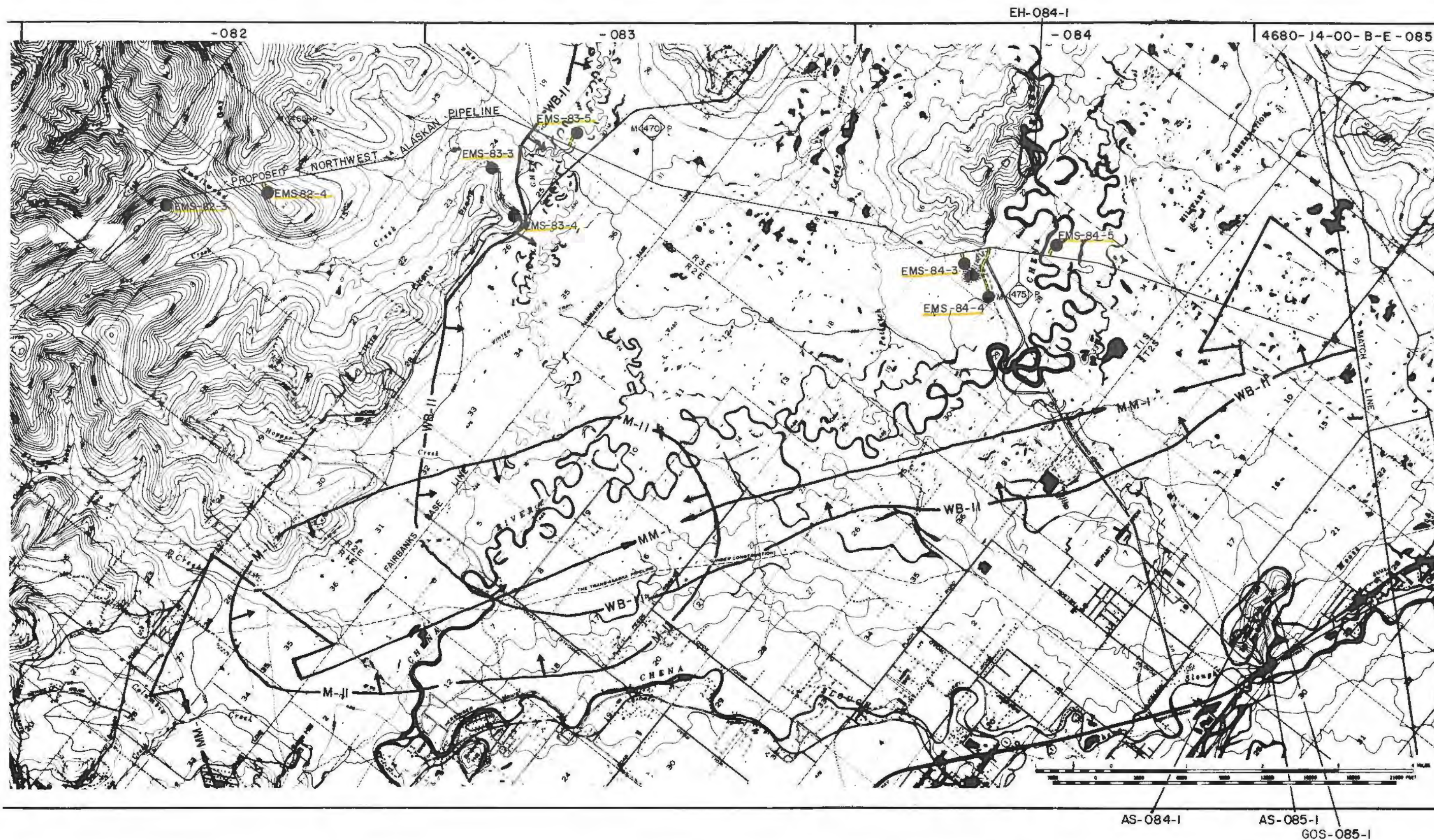
ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	FLOW	DATE	REV
11/1/80	RAJ	11/1/80	1
11/1/80	RAJ	11/1/80	2
11/1/80	RAJ	11/1/80	3
11/1/80	RAJ	11/1/80	4
11/1/80	RAJ	11/1/80	5
11/1/80	RAJ	11/1/80	6
11/1/80	RAJ	11/1/80	7
11/1/80	RAJ	11/1/80	8
11/1/80	RAJ	11/1/80	9
11/1/80	RAJ	11/1/80	10
11/1/80	RAJ	11/1/80	11
11/1/80	RAJ	11/1/80	12
11/1/80	RAJ	11/1/80	13
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11/1/80	RAJ	11/1/80	15
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11/1/80	RAJ	11/1/80	96
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11/1/80	RAJ	11/1/80	98
11/1/80	RAJ	11/1/80	99
11/1/80	RAJ	11/1/80	100

SCALE IN FEET  
1" = 5280'

DRAWING NUMBER  
4680-14-30-E-E-014 A

REV  
3





AS --- ARCHAEOLOGICAL SITE  
 B --- BISON HABITAT  
 BM --- BISON MOVEMENT  
 BE --- BLACK BEAR  
 C --- CARIBOU HABITAT  
 CC --- CARIBOU CALVING  
 CM --- CARIBOU MOVEMENT

DS --- DALL SHEEP HABITAT  
 DSL --- DALL SHEEP LAMBING  
 DSM --- DALL SHEEP MOVEMENT  
 EH --- ENDANGERED SPECIES HABITAT  
 EMS --- EXPLORATION MATERIAL SITE  
 GB --- GRIZZLY BEAR  
 GE --- GOLDEN EAGLE  
 GGU --- GREAT GRAY OWL

#### LEGEND

GHO --- GREAT HORNED OWL  
 GOS --- GOSHAWK  
 GYR --- GYRFALCON  
 M --- MOOSE HABITAT  
 MC --- MOOSE CALVING  
 MM --- MOOSE MOVEMENT  
 ML --- MINERAL LICK  
 MP --- MILE POST

OS --- OSPREY  
 RLH --- ROUGH LEGGED HAWK  
 RTH --- RED TAILED HAWK  
 SC --- SANDHILL CRANE NESTING  
 SCM --- SANDHILL CRANE MIGRATION & RESTING  
 SWD --- SOLID WASTE DISPOSAL SITE  
 SY --- STORAGE YARD  
 WB --- WATERBIRD NESTING  
 WBM --- WATERBIRD MIGRATION & RESTING

REV. NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	BA	BS	287

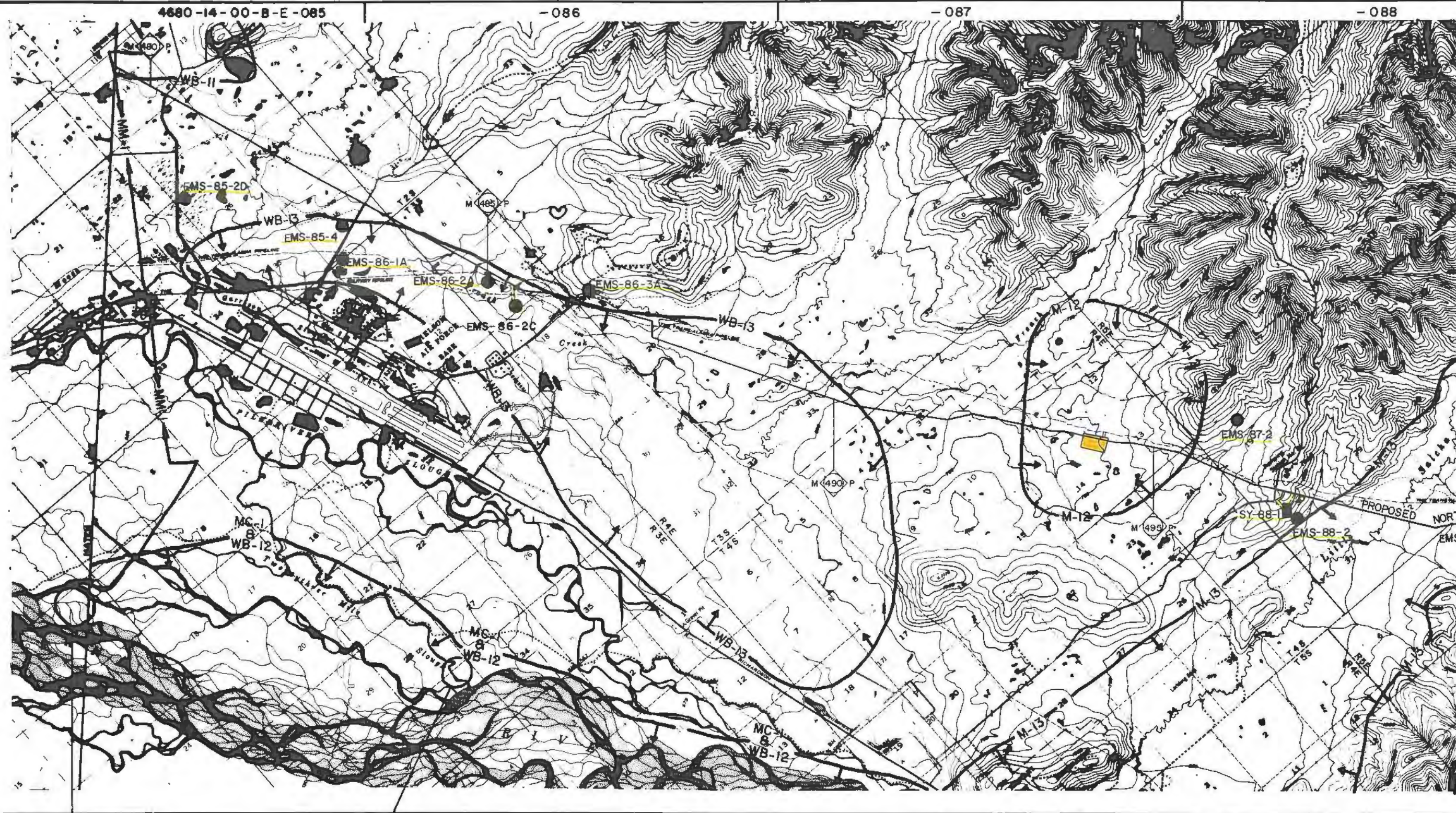
**FLUOR**  
 PROJECT MANAGEMENT CONTRACTOR

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**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
 ENVIRONMENTAL MASTER GUIDE  
 TOPOGRAPHIC SUPPLEMENT  
 ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

DATE: 5/1/81  
 SCALE IN FEET: 1" = 5280'  
 DRAWING NUMBER: 4680-14-30-E-E-014 B  
 REV. 3





BE-085-2

BE-086-1

COMPRESSOR STATION  
NO. 11

AS --- ARCHAEOLOGICAL SITE  
B --- BISON HABITAT  
BM --- BISON MOVEMENT  
BB --- BLACK BEAR  
BE --- BALD EAGLE  
C --- CARIBOU HABITAT  
CC --- CARIBOU CALVING  
CM --- CARIBOU MOVEMENT

DS --- DALL SHEEP HABITAT  
DSL --- DALL SHEEP LAMBING  
DSM --- DALL SHEEP MOVEMENT  
EH --- ENDANGERED SPECIES HABITAT  
EMS --- EXPLORATION MATERIAL SITE  
GB --- GRIZZLY BEAR  
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GGO --- GREAT GRAY OWL

LEGEND

GHO --- GREAT HORNED OWL  
GOS --- GOSHAWK  
GYR --- GYRFALCON  
M --- MOOSE HABITAT  
MC --- MOOSE CALVING  
MM --- MOOSE MOVEMENT  
ML --- MINERAL LICK  
MP --- MILE POST

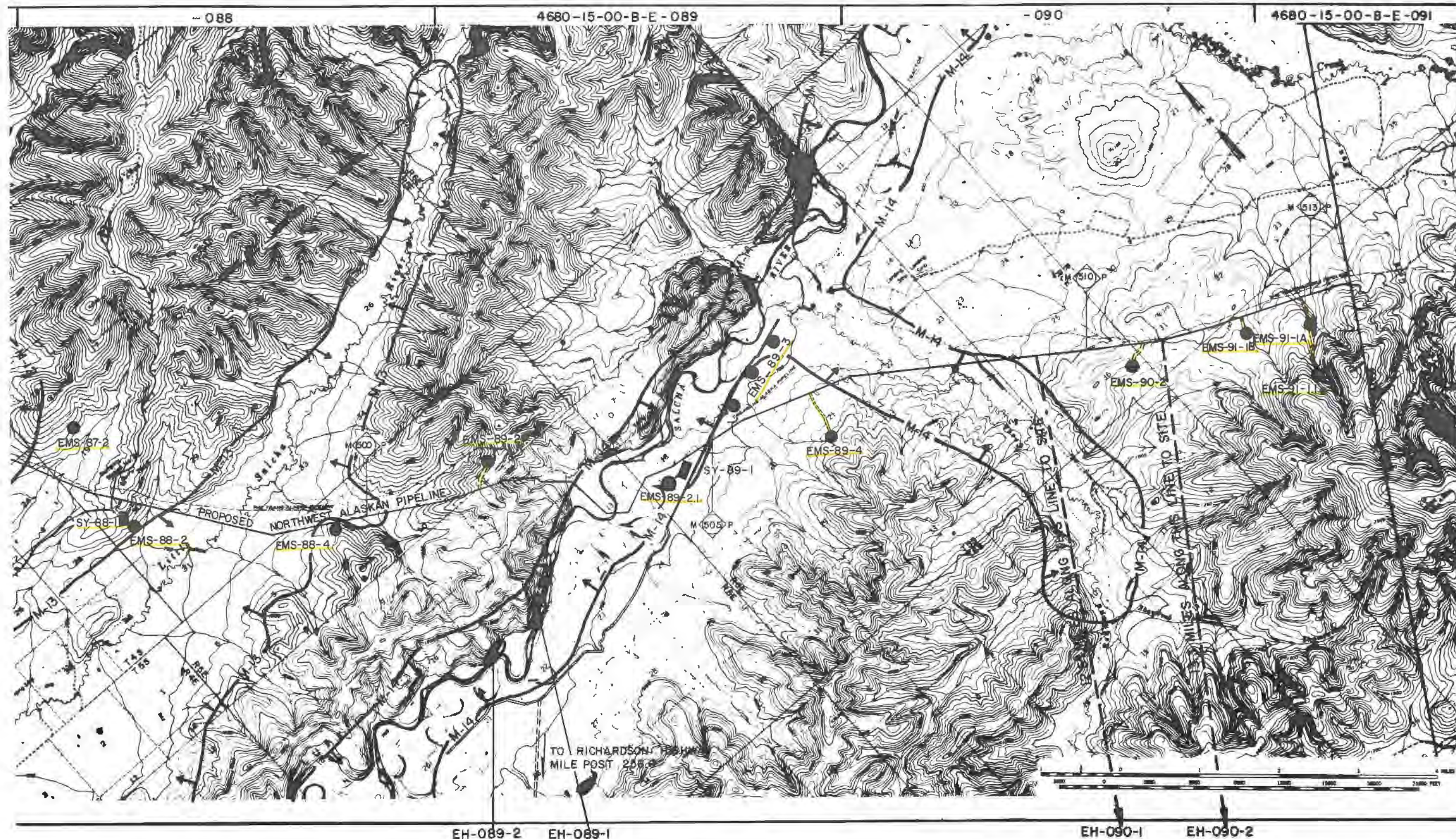
OS --- OSPREY  
RLH --- ROUGH LEGGED HAWK  
RTH --- RED-TAILED HAWK  
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REV. NO.	DATE	REVISION
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS

BY	DRAWN	CHECK	APP.
RF	RF	RF	RF

ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	FLUOR	DATE	REV.
6/4/81	RF	6/4/81	1
SCALE IN FEET	DRAWING NUMBER	REV.	
1" = 5280'	4680-14-30-E-E-015 A	3	





EH-089-2 EH-089-1

EH-090-1 EH-090-2

AS --- ARCHAEOLOGICAL SITE  
B --- BISON HABITAT  
BM --- BISON MOVEMENT  
BB --- BLACK BEAR  
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CM --- CARIBOU MOVEMENT

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GGO --- GREAT GRAY OWL

LEGEND

GHO --- GREAT HORNED OWL  
GOS --- GOSHAWK  
GYR --- GYRFALCON  
M --- MOOSE HABITAT  
MC --- MOOSE CALVING  
MM --- MOOSE MOVEMENT  
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WBM --- WATERBIRD MIGRATION & RESTING

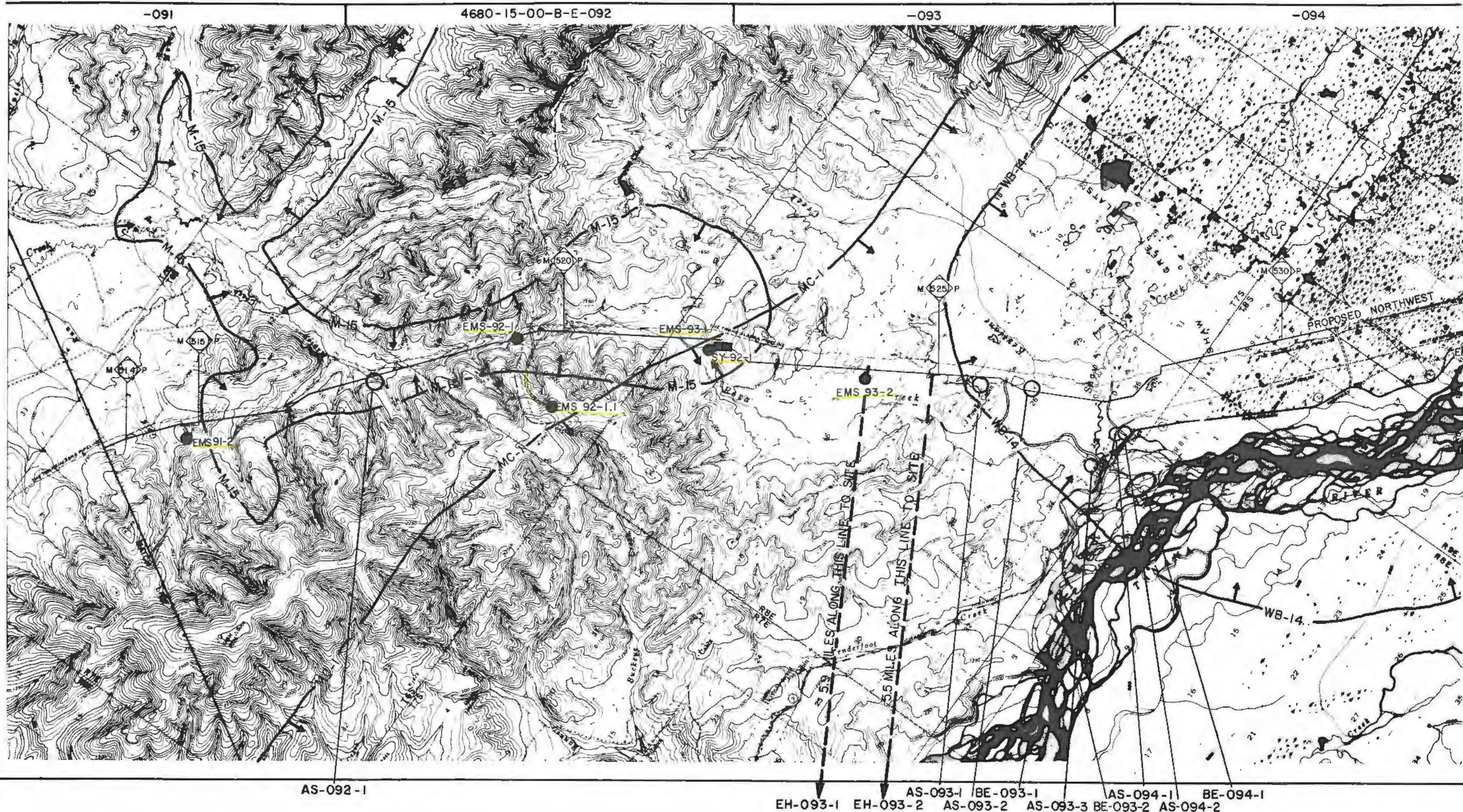
REV	DATE	REVISION	BY	CHKD	APP
3	11/18/80	NOVEMBER 1980 ROUTE REFINEMENTS	201	202	203

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
SCALE IN FEET	DATE	DRAWING NUMBER	REV
1" = 5280'	Ed. 5/1/81	4680-14-30-E-E-015 B	3





AS --- ARCHAEOLOGICAL SITE  
B --- BISON HABITAT  
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CM --- CARIBOU MOVEMENT

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#### LEGEND

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GOS --- GOSHAWK  
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MC --- MOOSE CALVING  
MM --- MOOSE MOVEMENT  
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WBM --- WATERBIRD MIGRATION & RESTING

REV. NO.	DATE	REVISION	BY	DRAWN	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RA	BS	RA

FLUOR  
PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL  
GAS TRANSPORTATION COMPANY

ENVIRONMENTAL MASTER GUIDE  
TOPOGRAPHIC SUPPLEMENT

ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	DATE	FILED	DATE	FILED	DATE	FILED
11-1-80	11-1-80	11-1-80	11-1-80	11-1-80	11-1-80	11-1-80
11-1-80	11-1-80	11-1-80	11-1-80	11-1-80	11-1-80	11-1-80
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11-1-80	11-1-80	11-1-80	11-1-80	11-1-80	11-1-80	11-1-80

SCALE IN FEET  
1" = 5280'

DRAWING NUMBER  
4680-15-30-E-E-016 A

REV  
3

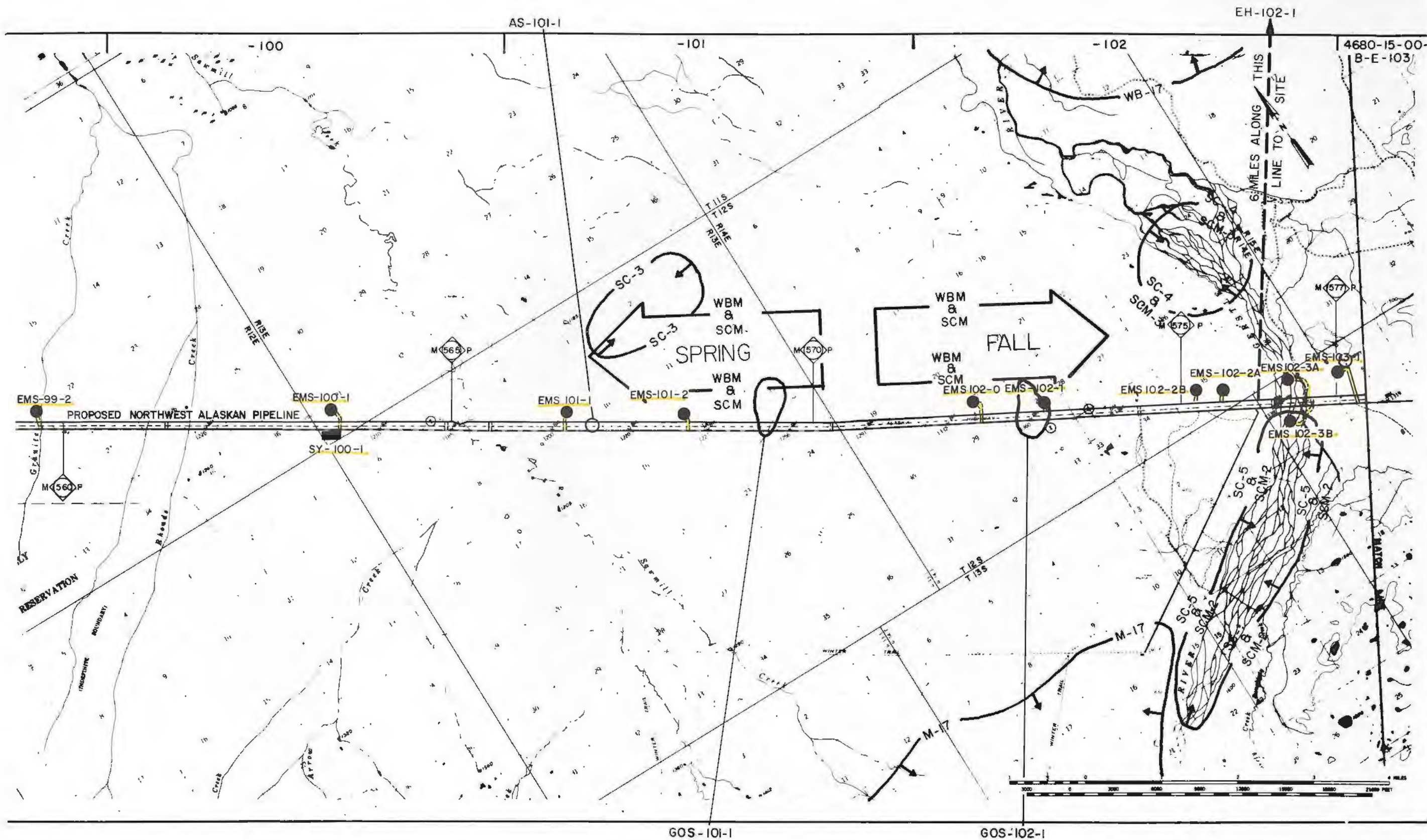












AS -- ARCHAEOLOGICAL SITE  
B -- BISON HABITAT  
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BB -- BLACK BEAR  
BE -- BALD EAGLE  
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DSL -- DALL SHEEP LAMBING  
DSM -- DALL SHEEP MOVEMENT  
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REV. NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RAH	ZWS	ZWS

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

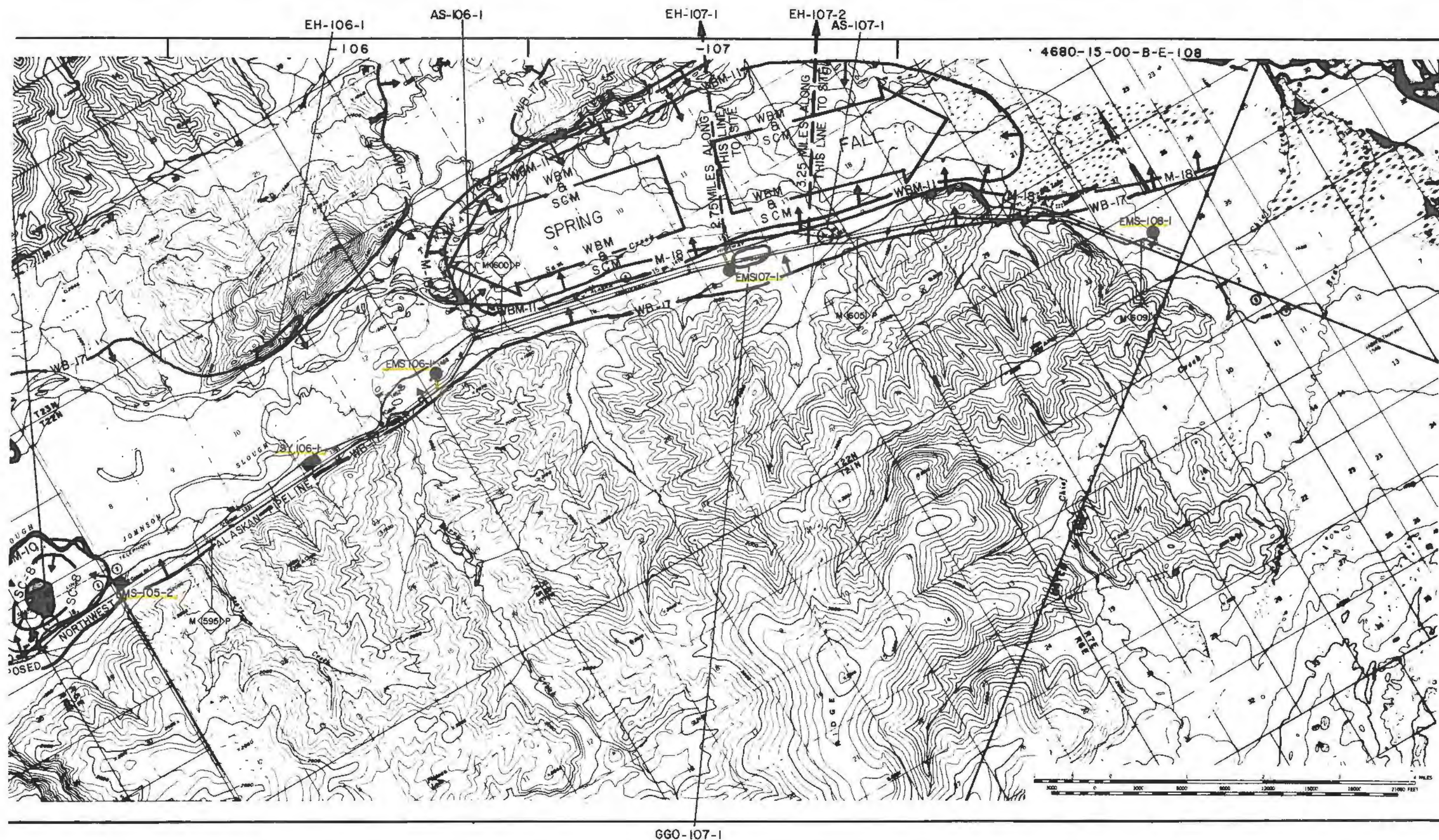
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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	DATE	DATE	DATE
11/1/80	11/1/80	11/1/80	11/1/80
SCALE IN FEET	DRAWING NUMBER	REV.	
1" = 5280'	4680-15-30-E-E-017 B	3	









AS — ARCHAEOLOGICAL SITE  
B — BISON HABITAT  
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CM — CARIBOU MOVEMENT

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#### LEGEND

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WBM — WATERBIRD MIGRATION & RESTING

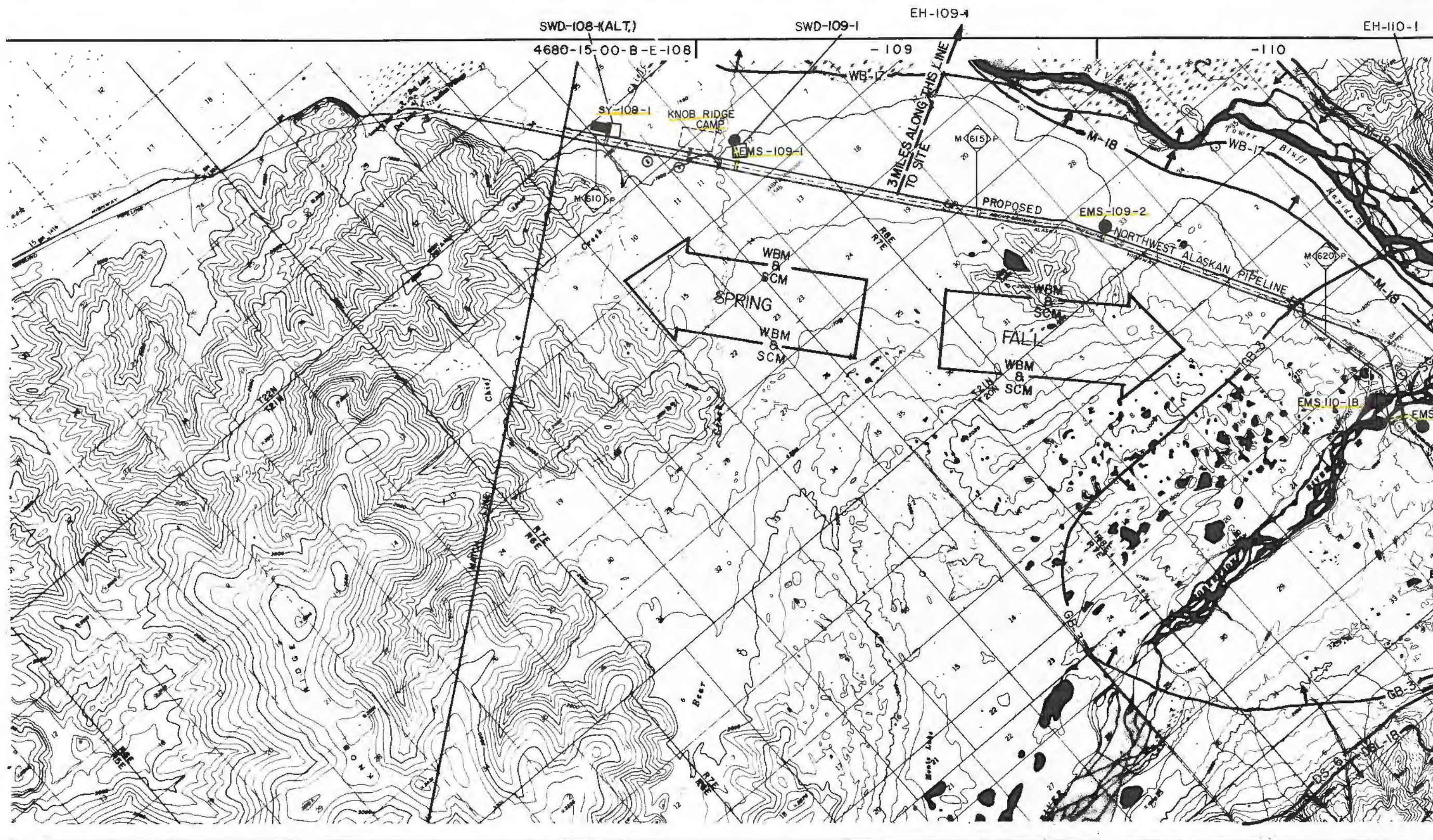
REV. NO.	DATE	REVISION	BY	DRAWN	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RF	RF	RF	RF

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

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ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY			
ENVIRONMENTAL MASTER GUIDE			
TOPOGRAPHIC SUPPLEMENT			
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	DATE	PLANS	DATE
RF	11/1/81	RF	11/1/81
SCALE IN FEET	DRAWING NUMBER		REV.
1" = 5280'	4680-15-30-E-E-018 B		3





AS -- ARCHAEOLOGICAL SITE  
B -- BISON HABITAT  
BM -- BISON MOVEMENT  
BB -- BLACK BEAR  
BE -- BALD EAGLE  
C -- CARIBOU HABITAT  
CC -- CARIBOU CALVING  
CM -- CARIBOU MOVEMENT

DS -- DALL SHEEP HABITAT  
DSL -- DALL SHEEP LAMBING  
DSM -- DALL SHEEP MOVEMENT  
EH -- ENDANGERED SPECIES HABITAT  
EMS -- EXPLORATION MATERIAL SITE  
GB -- GRIZZLY BEAR  
GE -- GOLDEN EAGLE  
GGD -- GREAT GRAY OWL

LEGEND

GHO -- GREAT HORNED OWL  
GOS -- GOSHAWK  
GYR -- GYRFALCON  
M -- MOOSE HABITAT  
MC -- MOOSE CALVING  
MM -- MOOSE MOVEMENT  
ML -- MINERAL LICK  
MP -- MILE POST

OS -- OSPREY  
RLH -- ROUGH LEGGED HAWK  
RTH -- RED-TAILED HAWK  
SC -- SANDHILL CRANE NESTING  
SCM -- SANDHILL CRANE MIGRATION & RESTING  
SWD -- SOLID WASTE DISPOSAL SITE  
SY -- STORAGE YARD  
WB -- WATERBIRD NESTING  
WBM -- WATERBIRD MIGRATION & RESTING

REV. NO.	DATE	REVISION	BY	DRWN.	CHKD.	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RF	P-5	781	

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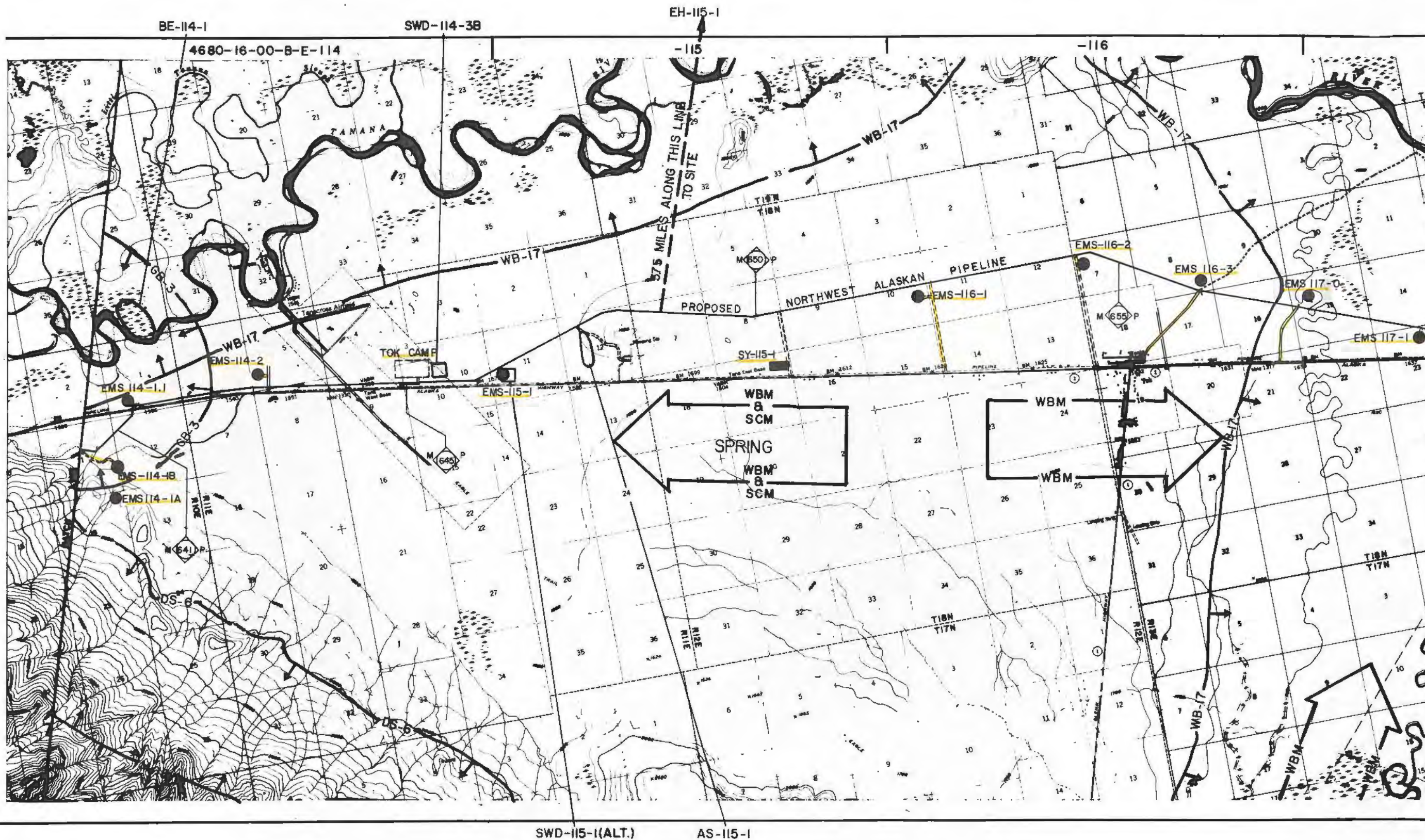
ALASKAN NORTHWEST NATURAL  
GAS TRANSPORTATION COMPANY  
ENVIRONMENTAL MASTER GUIDE  
TOPOGRAPHIC SUPPLEMENT

ALASKA SEGMENT OF THE ALASKA	NATURAL GAS TRANSPORTATION SYSTEM
DATE 11/5/81	DATE 11/5/81
SCALE IN FEET 1" = 5280'	DRAWING NUMBER 4680-15-30-E-019 A
	REV 3









- LEGEND**
- |                          |                                 |                        |  |
|--------------------------|---------------------------------|------------------------|--|
| AS — ARCHAEOLOGICAL SITE | DS — DALL SHEEP HABITAT         | GHO — GREAT HORNED OWL | OS — OSPREY                              |
| B — BISON HABITAT        | DSL — DALL SHEEP LAMBING        | GOS — GOSHAWK          | RLH — ROUGH LEGGED HAWK                  |
| BM — BISON MOVEMENT      | OSM — DALL SHEEP MOVEMENT       | GYR — GYRFALCON        | RTH — RED TAILED HAWK                    |
| BB — BLACK BEAR          | EH — ENDANGERED SPECIES HABITAT | M — MOOSE HABITAT      | SC — SANDHILL CRANE NESTING              |
| BE — BALD EAGLE          | EMS — EXPLORATION MATERIAL SITE | MC — MOOSE CALVING     | SCM — SANDHILL CRANE MIGRATION & RESTING |
| C — CARIBOU HABITAT      | GB — GRIZZLY BEAR               | MM — MOOSE MOVEMENT    | SWD — SOLID WASTE DISPOSAL SITE          |
| CC — CARIBOU CALVING     | GE — GOLDEN EAGLE               | ML — MINERAL LICK      | SY — STORAGE YARD                        |
| CM — CARIBOU MOVEMENT    | GGO — GREAT GRAY OWL            | MP — MILE POST         | WB — WATERBIRD NESTING                   |
|                          |                                 |                        | WBM — WATERBIRD MIGRATION & RESTING      |

REV. NO.	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	BAF	REB	289

**FLUOR**  
PROJECT MANAGEMENT CONTRACTOR

**ALASKAN NORTHWEST NATURAL GAS TRANSPORTATION COMPANY**  
ENVIRONMENTAL MASTER GUIDE  
TOPOGRAPHIC SUPPLEMENT  
ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM

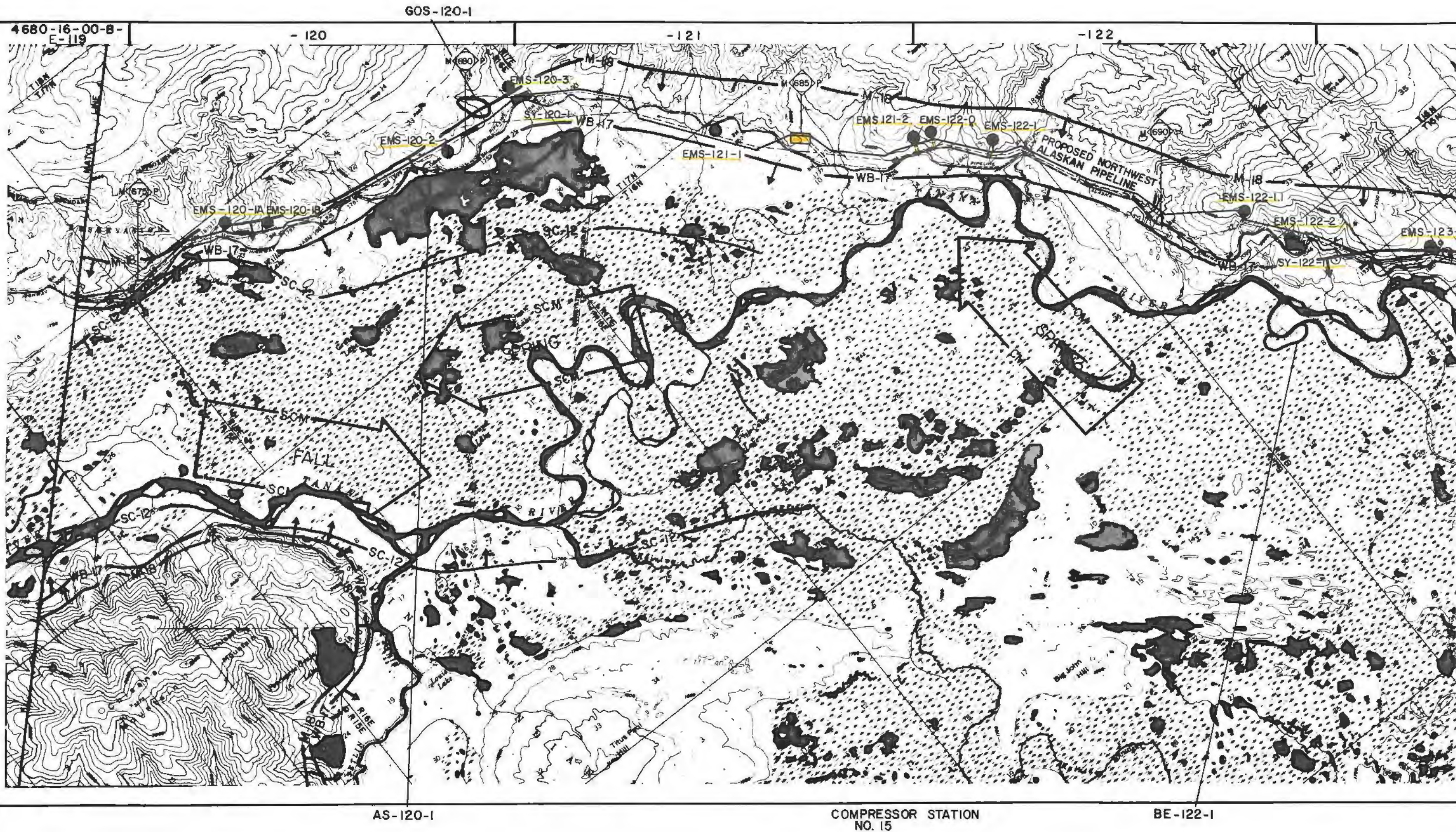
DATE: 11/1/80  
SCALE: 1" = 5280'

DRAWING NUMBER: 4680-16-30-E-E-020 A  
REV: 3









LEGEND			
AS -- ARCHAEOLOGICAL SITE	DS -- DALL SHEEP HABITAT	GHO -- GREAT HORNED OWL	OS -- OSPREY
B -- BISON HABITAT	DSL -- DALL SHEEP LAMBING	GOS -- GOSHAWK	RLH -- ROUGH LEGGED HAWK
BM -- BISON MOVEMENT	DSM -- DALL SHEEP MOVEMENT	GYR -- GYRFALCON	RTH -- RED-TAILED HAWK
BB -- BLACK BEAR	EH -- ENDANGERED SPECIES HABITAT	M -- MOOSE HABITAT	SC -- SANDHILL CRANE NESTING
BE -- BALD EAGLE	EMS -- EXPLORATION MATERIAL SITE	MC -- MOOSE CALVING	SCM -- SANDHILL CRANE MIGRATION & RESTING
C -- CARIBOU HABITAT	GB -- GRIZZLY BEAR	MM -- MOOSE MOVEMENT	SND -- SOLID WASTE DISPOSAL SITE
CC -- CARIBOU CALVING	GE -- GOLDEN EAGLE	NL -- MINERAL LICK	SY -- STORAGE YARD
CM -- CARIBOU MOVEMENT	GGO -- GREAT GRAY OWL	MP -- MILE POST	WB -- WATERBIRD NESTING
			WBM -- WATERBIRD MIGRATION & RESTING

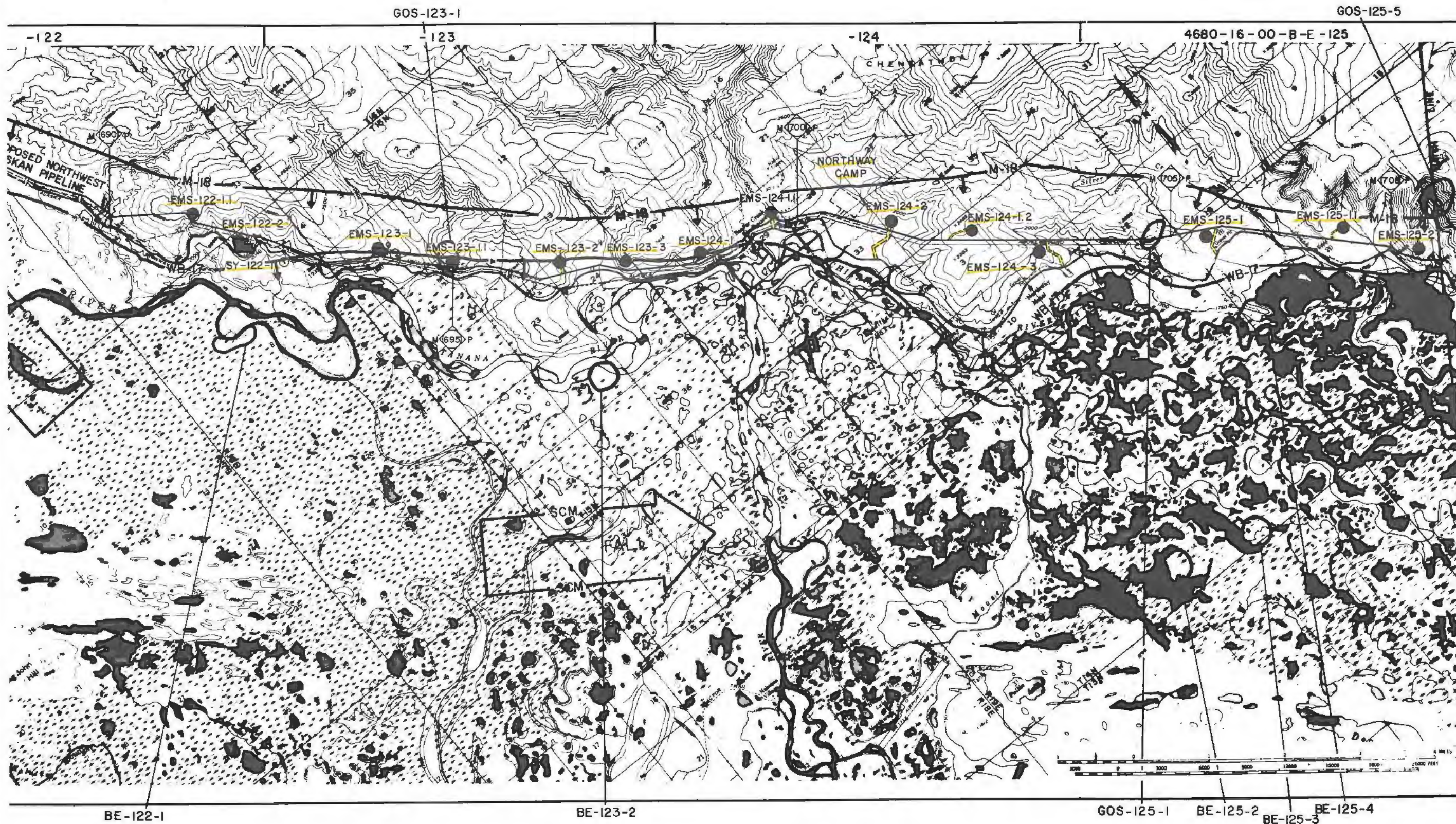
REV	DATE	REVISION	BY	CHECK	APP.
3	11-1-80	NOVEMBER 1980 ROUTE REFINEMENTS	RA	2-2	2-2

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ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM	DATE	FLUOR	DATE
RA	Feb 5, 1981	RA	2/6/81
SCALE IN FEET	DRAWING NUMBER	REV	
1" = 5280'	4680-16-30-E-E-021 A	3	





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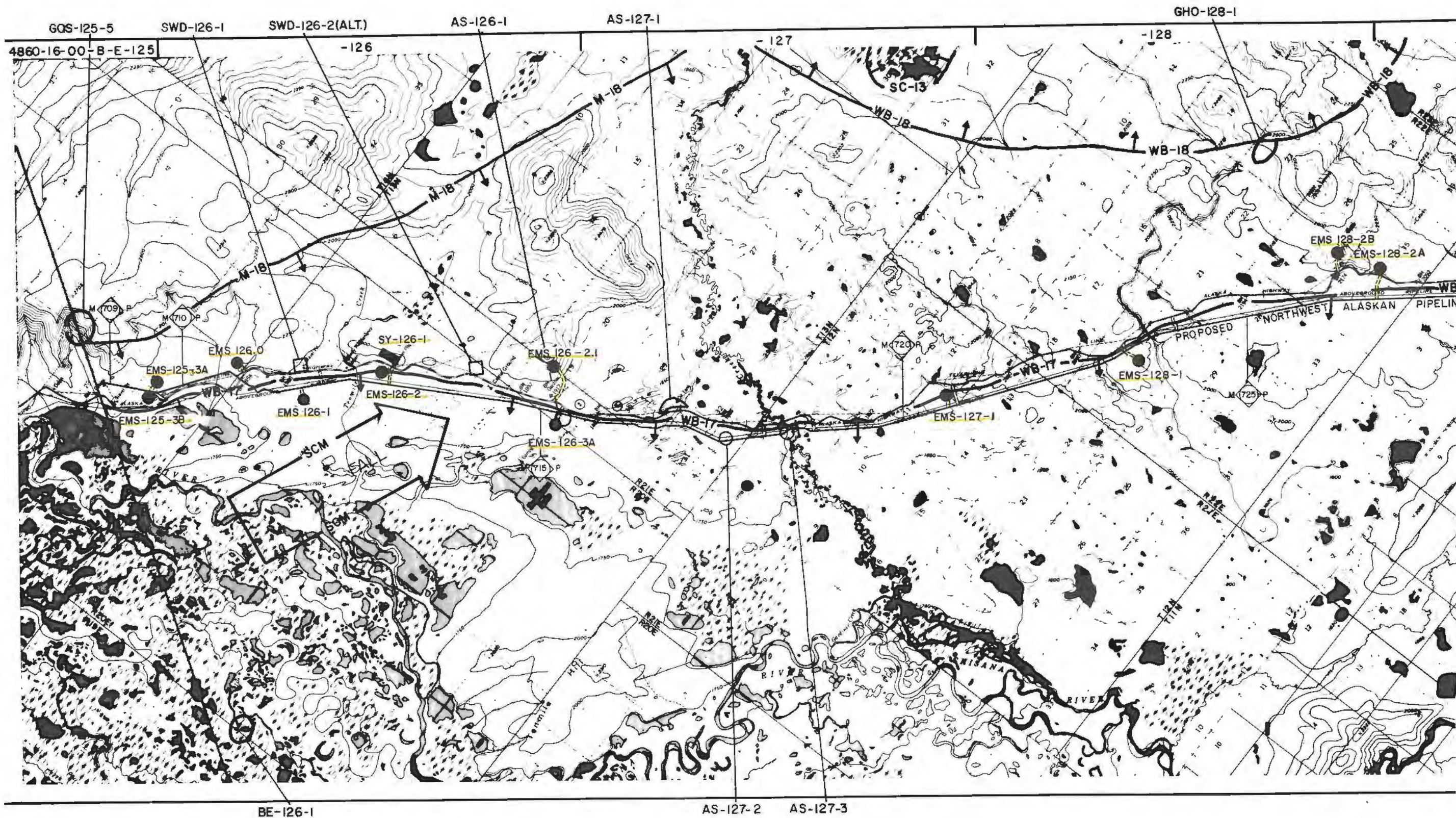
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DATE	FLUOR	DATE	REV.
11/5/81	RJP	11/5/81	1
SCALE IN FEET	DRAWING NUMBER	REV.	
1" = 5280'	4680-16-30-E-E-021 B	3	





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BY	CHWEN	APP.
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ALASKA SEGMENT OF THE ALASKA NATURAL GAS TRANSPORTATION SYSTEM			
DATE	DATE	DATE	DATE
11/1/80	11/1/80	11/1/80	11/1/80
SCALE IN FEET	DRAWING NUMBER	REV	
1" = 5280'	4680-16-30-E-E-022A	3	







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