

# DESIGN AND CONSTRUCTION GENERAL NOTES FOR FTTH:

1. CALL 1-800-478-3121 FOR LOCATION OF OTHER UTILITIES PRIOR TO DIGGING. CAUTION BURIED POWER, GAS, TELEPHONE, COMMUNICATION, & HIGHWAY CONTROL. CABLES ARE KNOWN TO EXIST IN THE AREA TO BE EXCAVATED. NUMEROUS EXISTING UTILITIES MAY EXIST ALONG THE PROPOSED FOC ROUTE. EXISTING UTILITIES HAVE NOT BEEN DELINEATED ON THE PLAN SHEETS DUE TO THE UNRELIABILITY OF RECORD INFORMATION. VERIFY LOCATION BY OBTAINING UTILITY LOCATES PRIOR TO BEGINNING CONSTRUCTION. COORDINATE WITH FIELD ENGINEER ANY CONFLICTS BETWEEN PROPOSED FOC ALIGNMENT AND EXISTING UTILITIES. USE EXTREME CAUTION & WHEN REQUIRED, POTHOLE PRIOR TO COMMENCING WORK.
2. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION, RECORD LOCATIONS AND CHANGES TO UTILITIES IN SURVEY NOTES AND ON AS-BUILT DRAWINGS.
3. PLOWABLE UNDERGROUND UTILITY MARKING TAPE SHALL BE "SAFETY ALERT ORANGE", 5.0 MIL. THICK WITH A TENSILE STRENGTH OF 28 LB/IN (5,600PSI).
4. ONE CABLE OF SINGLE MODE FIBER OPTIC CABLE SHALL BE INSTALLED. 200 FEET OF THE F.O.C. SHALL BE COILED IN EACH SPLICE MANHOLE (100' TAILS) AND 100 FEET COILED IN EACH INTERMEDIATE HANDHOLE, OR AS SPECIFIED ON PLANS.
5. VERIFY THAT QUALITY ASSURANCE HAS MADE O.T.D.R. READINGS ON REEL BEFORE TAKING TO THE FIELD. IF REQUIRED.
6. DURING FIGURE EIGHT OPERATIONS USE CAUTION TO ENSURE THAT MINIMUM RADIUS IS NOT VIOLATED, THAT KINKING DOES NOT OCCUR, AND THAT THE CABLE IS NOT CRUSHED. DO NOT LEAVE GROUND LAID F.O.C. UNATTENDED!!! BENDING RADIUS OF FIBER OPTIC CABLE VARIES PER TYPE OF FIBER OPTIC CABLE.
7. TRENCH FOR THE CABLE SHALL BE PLOWED WITH A MINIMUM OF 12 INCHES COVER PROVIDED OVER THE TOP OF THE CABLE. UNDERGROUND UTILITY MARKING TAPE SHALL BE INSTALLED APPROXIMATELY 6 INCHES BELOW THE GROUND SURFACE.
8. SIGN AND/OR FLAG WORK LOCATIONS WITHIN OR ADJACENT TO HIGHWAY/ROAD ROW IN ACCORDANCE WITH STATE & BOROUGH SAFETY PROCEDURES. TRAFFIC CONTROL & SAFETY PLANS WILL HAVE TO BE PREPARED BY THE CONTRACTOR & SUBMITTED TO ADOT FOR APPROVAL PRIOR TO START OF CONSTRUCTION.
9. TIE WRAP F.O.C. CABLE DESIGNATION TAGS IN EACH HAND HOLE OVER CABLE. MINIMUM 1 PER HOLE UNDER CLAMP IN AERIAL BUILD.
10. RETURN ALL EXCAVATED AREAS OR AREAS DISTURBED BY CONSTRUCTION BACK TO AS GOOD OR BETTER THAN ORIGINAL CONDITION. DO NOT DISTURB LOT PINS OR SURVEY MARKERS. ALL SURVEY STAKES & LATH PLACED BY THE CONTRACTOR ARE TO BE REMOVED AND CLEANED UP PRIOR TO COMPLETION OF CONSTRUCTION.
11. ALL AREAS IN THE HWY ROW DISTURBED BY CONSTRUCTION ACTIVITY WILL HAVE TO BE RESEEDDED.
12. DISTANCES AND STATIONING OF CONSTRUCTION WORK IS IN FEET.
13. STATIONING IS MEASURED ALONG CENTERLINE OF FOC.

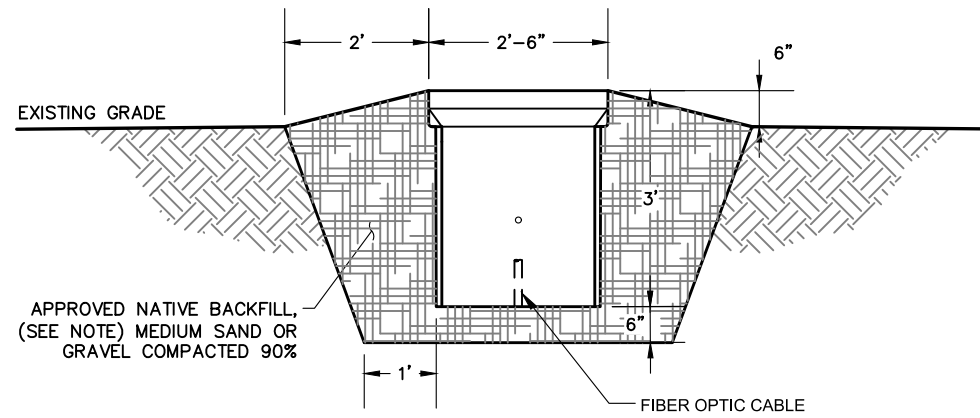
14. ALL DRAWINGS WERE DERIVED FROM ADOT HWY PROJECT DRAWINGS, RECORDED PLATS OR SIMILAR SOURCES.
  15. DIMENSIONS SHOWN ARE TO CENTER OF PLATTED ROW, FACE OF BLDG., OR CENTERLINE OF FOC UNLESS NOTED OTHERWISE.
  16. DISCHARGE OF SILT LADEN RUNOFF FROM THE JOB SITE IS FORBIDDEN.
  17. MAINTAIN A SUPPLY OF OIL ABSORBENT FABRIC ON SITE TO CLEAN UP MINOR SPILLS.
  18. KEEP SITE FREE OF LITTER.
  19. MINIMIZE OFF-SITE VEHICLE TRACKING OF SEDIMENTS. WATER EXPOSED SOILS AS NECESSARY TO CONTROL GENERATION OF DUST.
  20. THE INSPECTOR WILL INSPECT THE SITE PRIOR TO PLACING FILL AND AT REGULAR INTERVALS UNTIL COMPLETION OF THE WORK.
  21. ALL CONSTRUCTION WILL MEET ALL APPLICABLE STATE OF ALASKA, CODES, RULES AND REGULATIONS.
  22. DEWATERING MAY BE REQUIRED FOR EXCAVATIONS THAT PENETRATE THE GROUND SURFACE.
  23. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE REGULATIONS FOR NOISE, HOURS OF OPERATION AND DUST CONTROL.
  24. CONTAMINATED SOILS ARE NOT ANTICIPATED TO BE ENCOUNTERED THROUGHOUT THIS JOB. ANY CONTAMINATED SOILS WHICH ARE ENCOUNTERED ARE OUTSIDE THE SCOPE OF WORK FOR THIS PROJECT. IF CONTAMINATED SOILS ARE ENCOUNTERED, CEASE ANY EXCAVATION AND NOTIFY THE ENGINEER AT ONCE, WHO WILL THEN MAKE APPROPRIATE NOTIFICATION TO ADEC.
  25. CARSONITE MARKERS WILL BE USED AT INTERVISIBLE INTERVALS OR 500' MAX SPACING. MARKERS ARE TO BE INSTALLED AT EVERY HARD ANGLE POINT, ROAD CROSSINGS AND AT EACH HANDHOLE OR MANHOLE.
  26. CLEARING OF RIGHT-OF-WAY. (THE ENGINEER WILL BE RESPONSIBLE FOR SPECIFYING ANY SPECIAL CONDITIONS OR INSTRUCTIONS CONCERNING THE RIGHT-OF-WAY CLEARING ON THE CONSTRUCTION DRAWINGS), THE CLEARING WIDTH SHALL BE OF SUFFICIENT WIDTH FOR THE OPERATION OF THE CABLE PLOWING AND CABLE REEL INSTALLATION EQUIPMENT, WITH A MINIMUM CLEARING WIDTH OF 15 FEET. DISRUPTION OF THE GROUND SURFACE SHALL BE KEPT TO A MINIMUM AND THE CABLE PLOWING OPERATION WILL FOLLOW THE TERRAIN OF THE EXISTING GROUND. GRUBBING OF ROOTS SHALL NOT BE ALLOWED UNDER THIS UNIT TO PROTECT THE GROUND SURFACE.
- NOTE 1:** TREES THAT ARE FELLED THAT ARE 6" DIAMETER AT BREAST HEIGHT OR GREATER SHALL BE CUT TO 8 FOOT LENGTHS AND STACKED ON THE SIDE OF THE RIGHT-OF-WAY FOR THE LANDOWNER, OR AS DIRECTED BY FIELD ENGINEER.
- NOTE 2:** TREES LESS THAN 6", BRUSH, BRANCHES, AND REFUSE FROM THE CLEARING OPERATIONS SHALL BE MECHANICALLY CLEARED WITH A HYDRO AX OR CHIPPER AND DISPOSED OF AS DIRECTED BY THE FIELD ENGINEER.
27. ACQUIRE AND PROVIDE GPS POSITION OF AS LAID FOC TO AN ACCURACY MINIMUM OF +/- 7.5 METERS.

Unit Descriptions	
<b>BHF-2</b>	HANDHOLE 28INx38INx34IN, AFL Switchblade Fiber conatinment vault, with cover & knockouts w/accessories * Includes (2) BM 53-1 - SIGN WARNING F/O BURIED CABLE or 1 if adding BM-40 SIP KIT * Includes BM 2 5/8 - ROD,GROUND,5/8IN x 8FT,BLACK * Includes 10 ft 1.25 HDPE DUCT
<b>HO-1</b>	FUSION SPLICE, ONE FIBER (FO)
<b>A 35-5</b>	INSTALL POLE, 35 FT CLASS 5
<b>BM 86-2*</b>	2" DIA RISER TO BE INSTALLED ON EXISTING POLE
<b>CO 48 (10M)</b>	CABLE F/O 48 - HANG NEW STRAND AND LASH NEW FIBER
<b>BFO 48 (SC)</b>	CABLE F/O 48 - DBL JKT, SNGL-ARMOR, DIRECT BURIED SUBMARINE CABLE IN A SAWCUT TRENCH AT 12 INCH DEPTH
<b>FOG 48</b>	CABLE F/O 48 - DBL JKT, SNGL-ARMOR SURFACE LAYED
<b>PF 2-7A KIT (ANCHOR)</b>	15.4M ROD ANCHOR & PLATE AND 8' YELLOW GUY GUARD
<b>PE 1-3 KIT(DOWN GUY)</b>	DOWNGUY (11.2M) NEW , INCLUDES GUY GUARD 8FT YELLOW (EXISTING ANCHOR)
<b>PE 2-3(O/H GUY)</b>	OVERHEAD GUY (11.2M) - NEW
<b>DROP &amp; 50FT LOOP</b>	FIBER DROP TO STRUCTURE WITH EXTRA FIBER FOR CONENCTION
<b>BM60</b>	BORE RIVER/CREEK

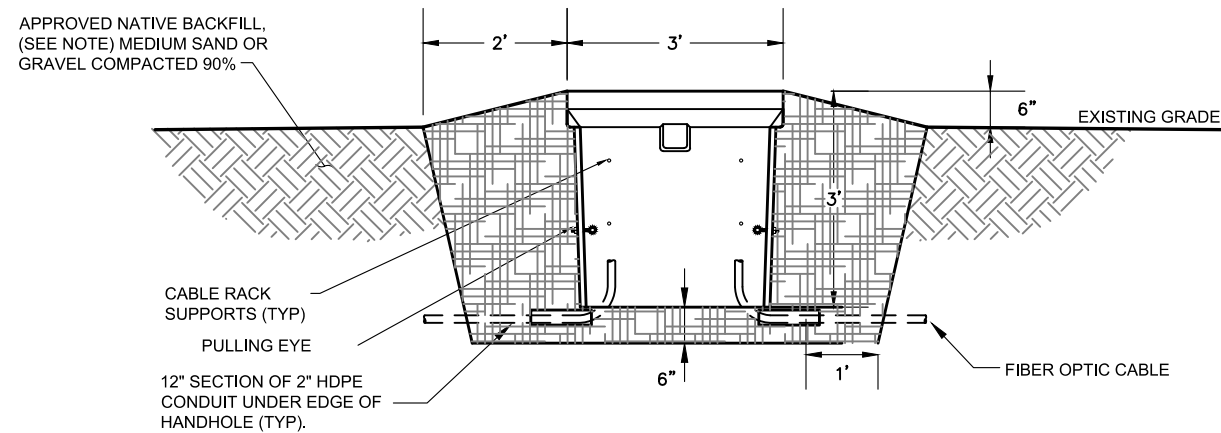
WORK UNITS	BHF-2	HO-1	A 35-5	BM 86-2*	CO 48 (10M)	BFO 48 (SC)	FOG 48	PF 2-7A KIT (ANCHOR)	PE 1-3 KIT (DOWN GUY)	PE 2-3 (O/H GUY)	DROP & 50FT LOOP	BM60
<b>DESIGN TOTALS</b>	6	48		5	13115	1761	18561	5	13		140	935

12-6-2023

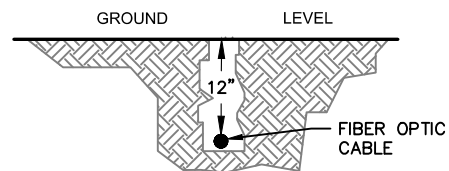
 <b>Tanana Chiefs Conference</b>		<b>PRELIMINARY</b> <b>TANANA CHIEFS CONFERENCE</b> <b>NORTHWAY TRANSPORT</b> CONSTRUCTION NOTES													
		PROJECT NO: TCC PRJ16192													
		ADDITIONAL INFO: MP ##													
		SCALE: NTS	DESIGNED BY: MSF												
		DRAWN BY: RRM/LEP	CHECKED BY: STW												
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NO.	REVISION DESCRIPTIONS	DATE													
001	REVISED ROUTE AND UNITS	07/01/2024													
		G-02													
		SHEET: 02 OF 15													



**A** **HANDHOLE SECTION**  
SCALE: 3/8" = 1'-0"

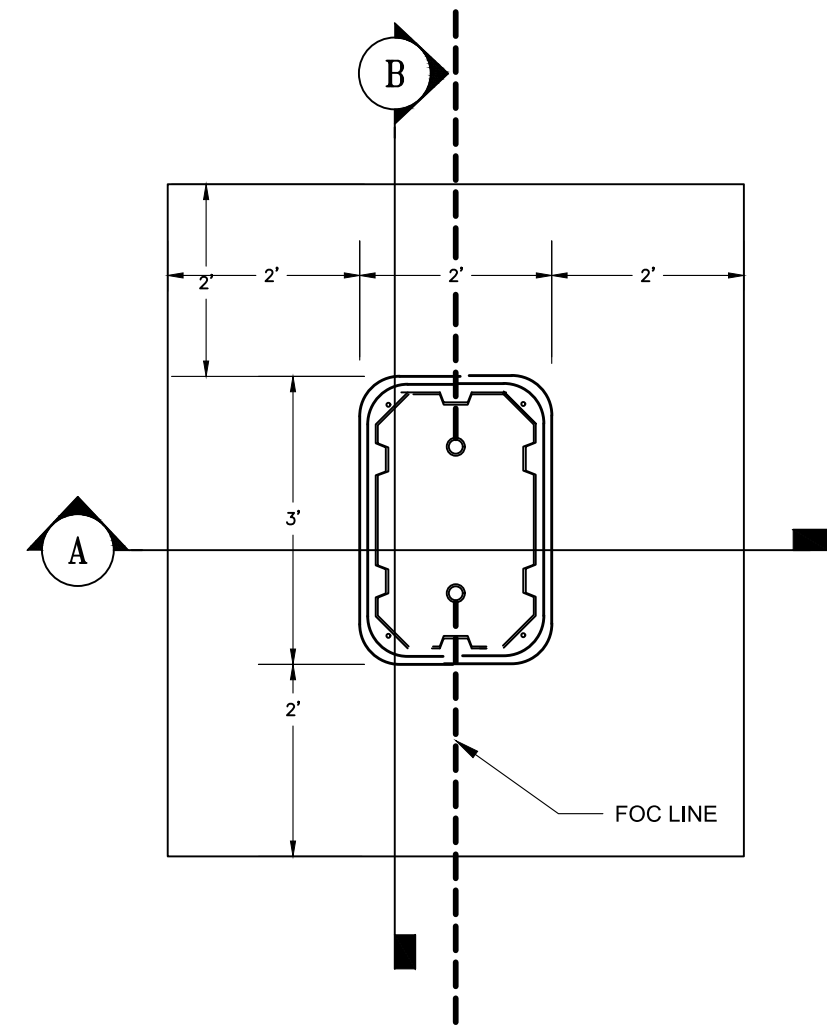


**B** **HANDHOLE SECTION**  
SCALE: 3/8" = 1'-0"





**2** **PLOWED CABLE**  
SCALE: NTS

\* **BACKFILL NOTE:**  
BACKFILL MAY NOT CONTAIN ORGANICS OR OTHER DELETERIOUS MATERIALS,  
SHALL NOT CONTAIN SATURATED SOILS, AND SHALL BE FREE DRAINING MATERIALS



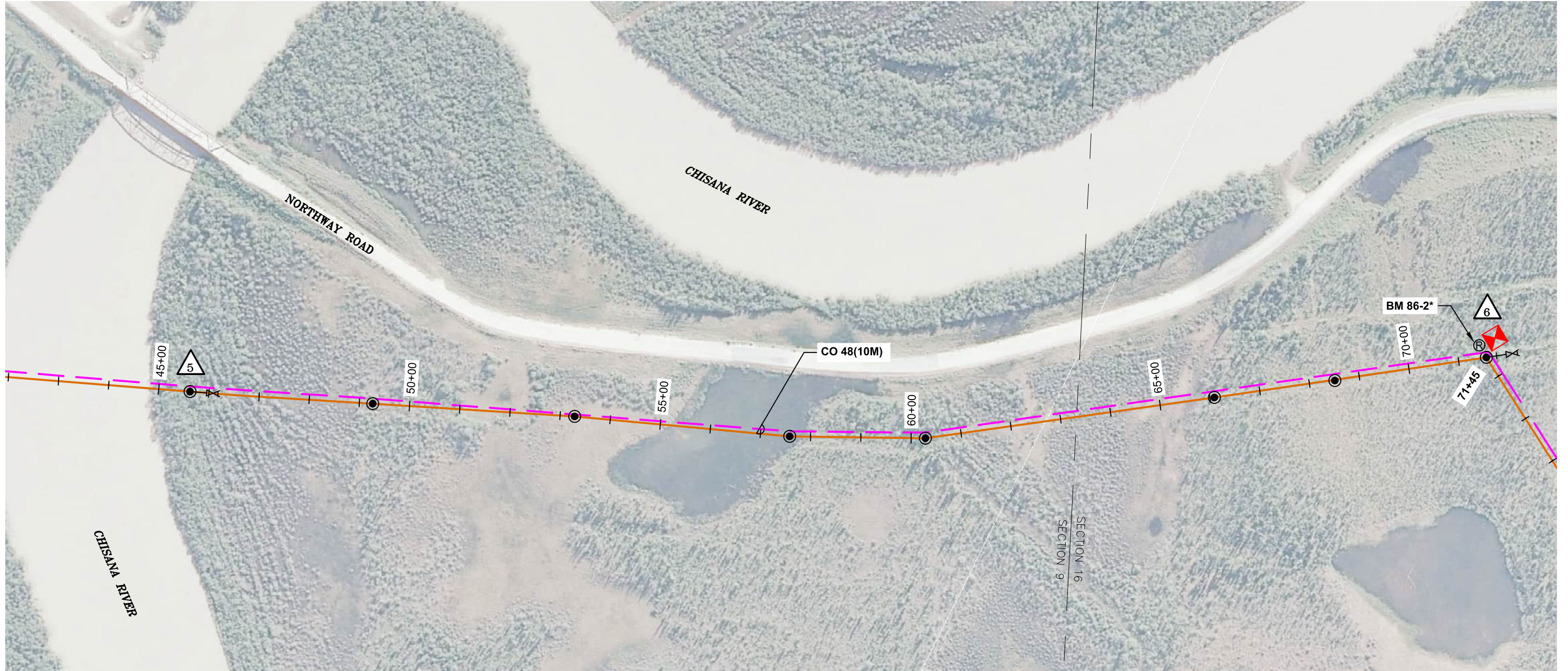
**1** **HANDHOLE PLAN VIEW**  
SCALE: 1/2" = 1'-0"

12-6-2023

		<b>PRELIMINARY</b> <b>TANANA CHIEFS CONFERENCE</b> <b>NORTHWAY TRANSPORT</b> VAULT DETAILS													
		PROJECT NO:	TCC PRJ16192												
		ADDITIONAL INFO: ----													
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DRAWN BY: RRM/LEP		CHECKED BY: STW													
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		NO.	REVISION DESCRIPTIONS	DATE											
		001	REVISED ROUTE AND UNITS	07/01/2024											
SHEET:		04 OF 15													

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SECTION 9&16, T14N, R19E, C.M.

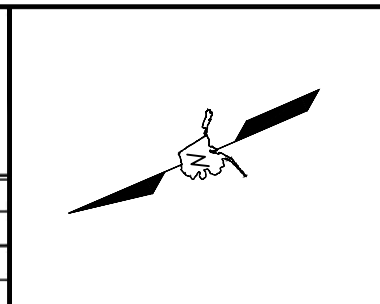


STA 42+00 MATCHLINE - SHEET 5

STA 72+50 MATCHLINE - SHEET 7

12-6-2023

WORK LOCATION	BHF-2	HO-1	A 35-5	BM 86-2*	CO 48 (10M)	BFO 48 (5C)	FOG 48	PF 2-7A KIT (ANCHOR)	PE 1-3 KIT (DOWN GUY)	PE 2-3 (O/H GUY)											
5								1													
6	1							2													
TOTALS	1							3													



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**TANANA CHIEFS CONFERENCE**  
**NORTHWAY TRANSPORT**  
STA 42+00 - 72+50

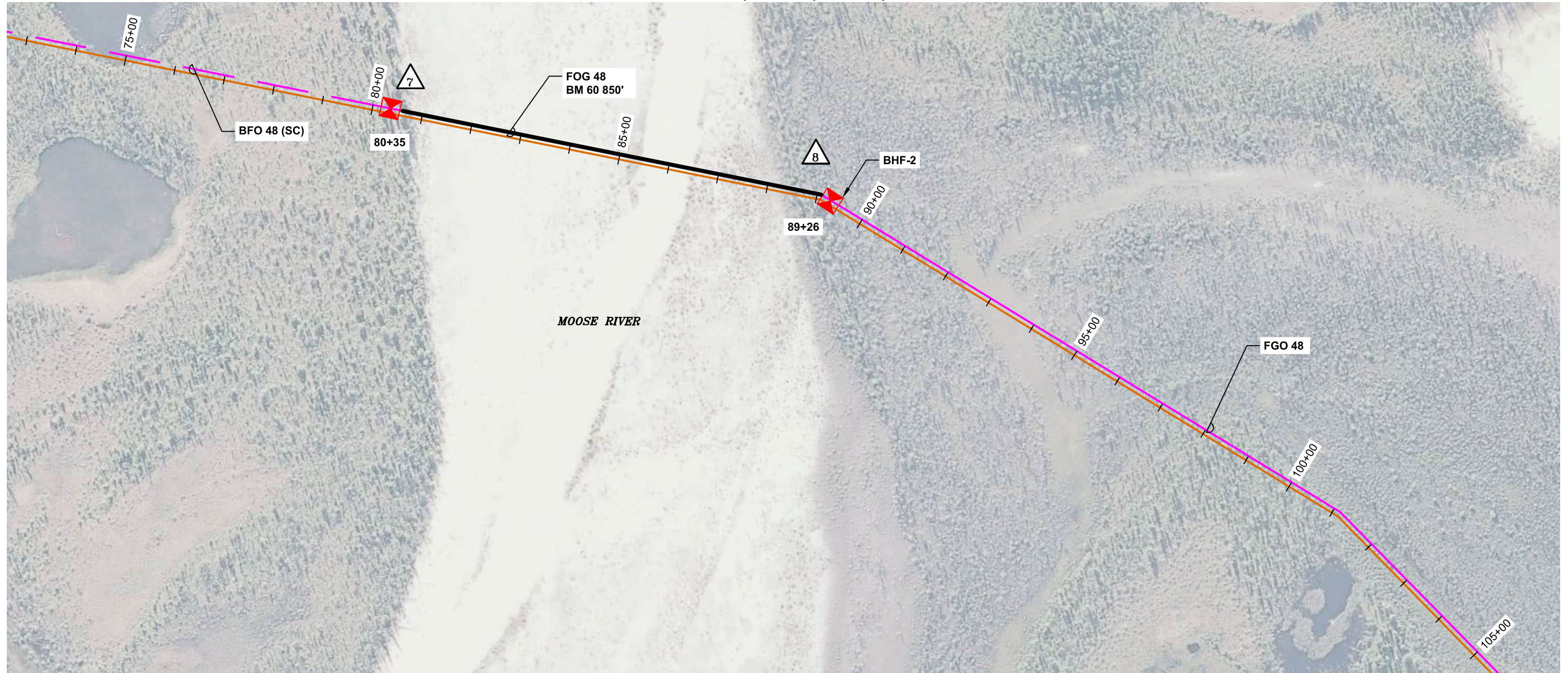
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 ADDITIONAL INFO: ####  
 SCALE: 1" = 200' DESIGNED BY: MSF  
 DRAWN BY: RRM/LEP CHECKED BY: STW

NO.	REVISION DESCRIPTIONS	DATE

**JN-02**

SHEET: 6 OF 15

SECTION 16, T14N, R19E, C.M.

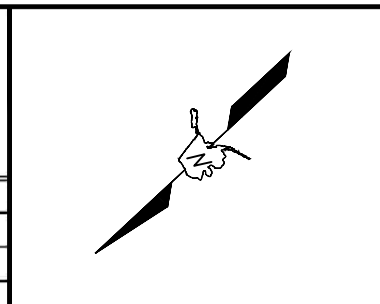


STA 72+50 MATCHLINE - SHEET 6

STA 105+00 MATCHLINE - SHEET 8

12-6-2023

WORK LOCATION	BHF-2	HO-1	A 35-5	BM 86-2*	CO 48 (10M)	BFO 48 (SC)	FOG 48	PF 2-7A KIT (ANCHOR)	PE 1-3 KIT (DOWN GUY)	PE 2-3 (O/H GUY)											
7	1		6	1	7491			1													
<b>TOTALS</b>	<b>1</b>		<b>6</b>	<b>1</b>	<b>7491</b>			<b>1</b>													



PRELIMINARY  
**TANANA CHIEFS CONFERENCE  
 NORTHWAY TRANSPORT**  
 STA 72+50 - 105+00

PROJECT NO: TCC PRJ16192  
 ADDITIONAL INFO: #####  
 SCALE: 1" = 200' DESIGNED BY: MSF  
 DRAWN BY: RRM/LEP CHECKED BY: STW

NO.	REVISION DESCRIPTIONS	DATE

**JN-03**

SHEET: 7 OF 15

SECTION 16, T14N, R19E, C.M.

STA 105+00 MATCHLINE - SHEET 7



STA 133+00 MATCHLINE - SHEET 9

SECTION 16  
SECTION 17

12-6-2023

		<b>PRELIMINARY</b> <b>TANANA CHIEFS CONFERENCE</b> <b>NORTHWAY TRANSPORT</b> STA 105+00 - 133+00																
		PROJECT NO: TCC PRJ16192 ADDITIONAL INFO: ### SCALE: 1" = 200'    DESIGNED BY: MSF DRAWN BY: RRM/LEP    CHECKED BY: STW																
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NO.	REVISION DESCRIPTIONS	DATE																

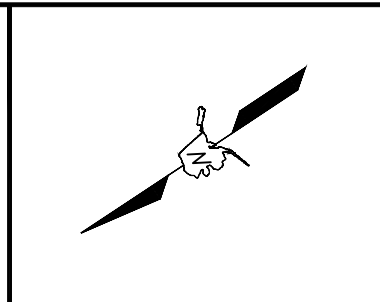
SECTION 17&20, T14N, R19E, C.M.



STA 133+00 MATCHLINE - SHEET 8

STA 161+00 MATCHLINE - SHEET 10

12-6-2023



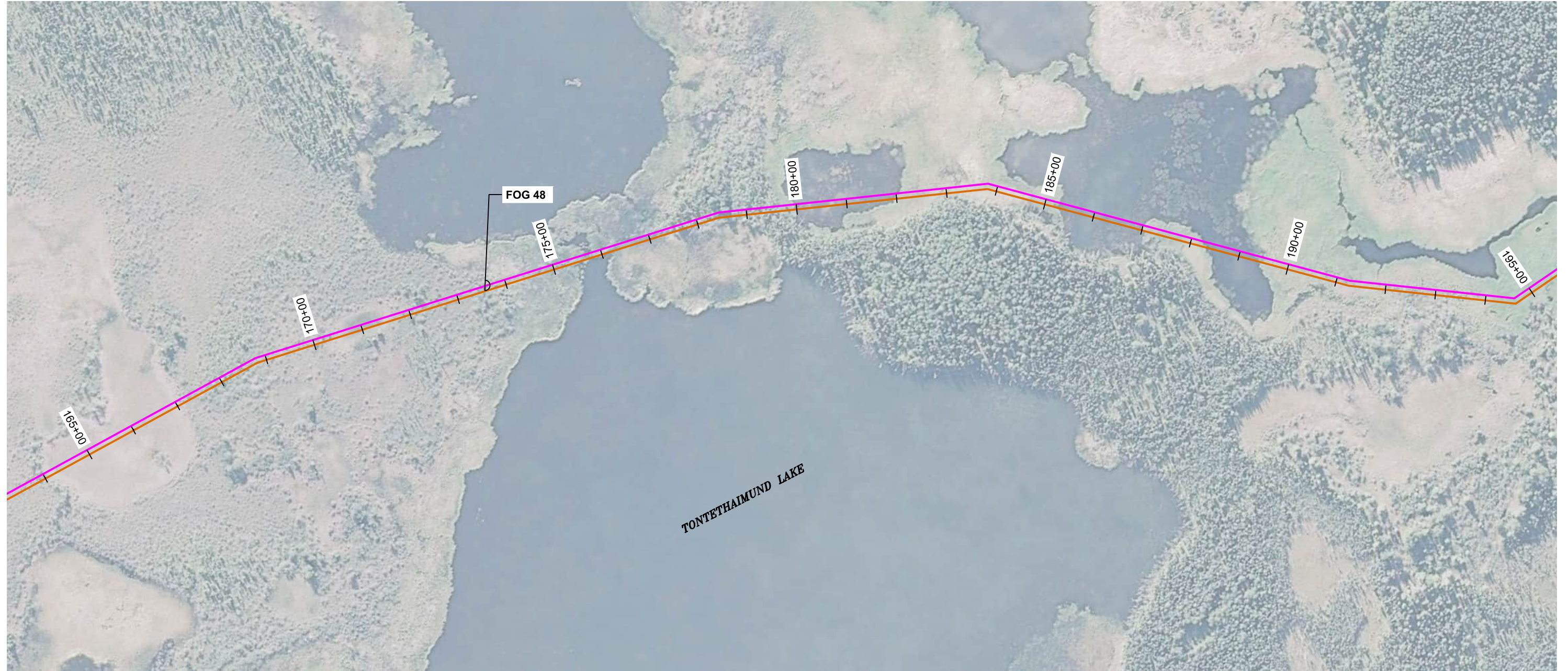
PRELIMINARY  
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 NORTHWAY TRANSPORT**  
 STA 133+00 - 161+00

PROJECT NO: TCC PRJ16192  
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NO.	REVISION DESCRIPTIONS	DATE

**JN-05**  
 SHEET: 9 OF 15

SECTIONS 20, T14N, R19E, C.M.



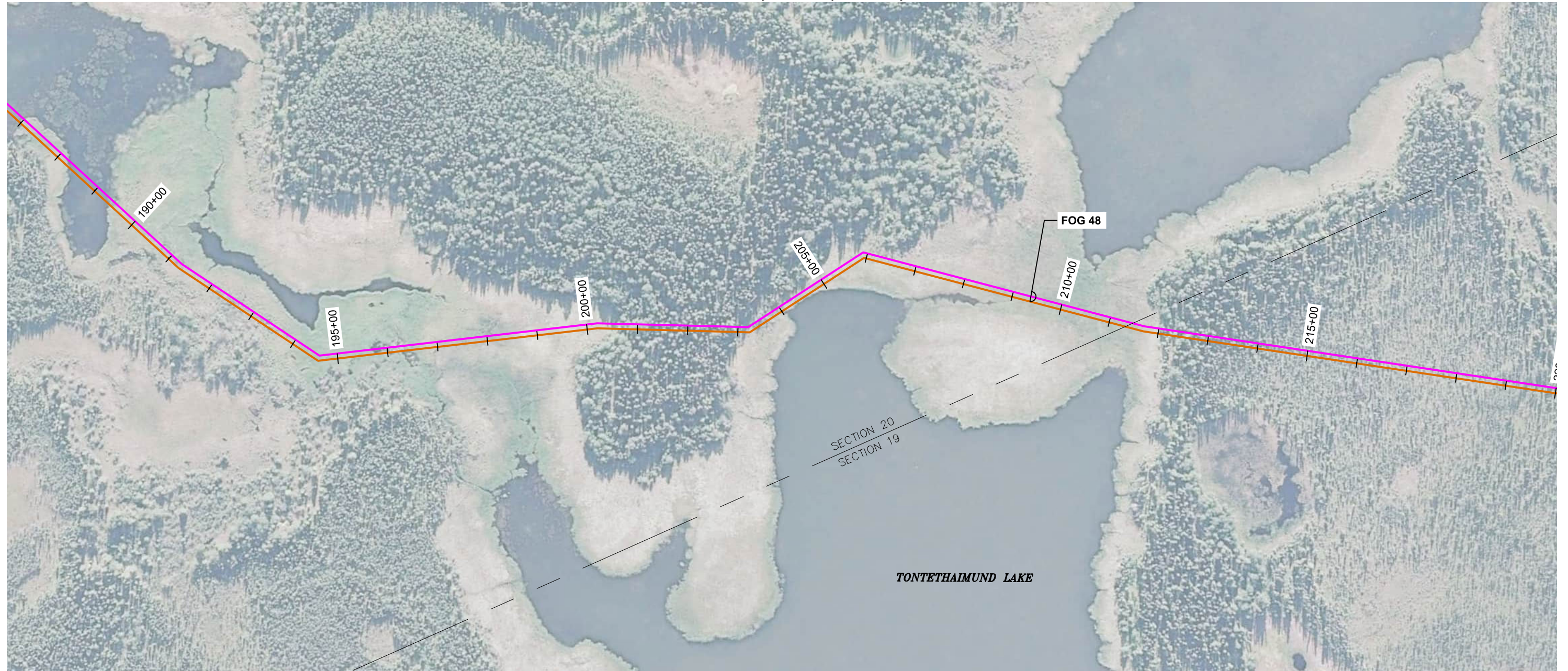
STA 161+00 MATCHLINE - SHEET 9

STA 187+00 MATCHLINE - SHEET 11

12-6-2023

		<b>PRELIMINARY</b> <b>TANANA CHIEFS CONFERENCE</b> <b>NORTHWAY TRANSPORT</b> STA 161+00 - 187+00																
		PROJECT NO: TCC PRJ16192 ADDITIONAL INFO: ##### SCALE: 1" = 200'    DESIGNED BY: MSF DRAWN BY: RRM/LEP    CHECKED BY: STW																
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NO.	REVISION DESCRIPTIONS	DATE																
SHEET:		10 OF 15																

SECTION 20&19, T14N, R19E, C.M.



STA 187+00 MATCHLINE - SHEET 10

STA 218+00 MATCHLINE - SHEET 12

12-6-2023

			<b>PRELIMINARY</b> <b>TANANA CHIEFS CONFERENCE</b> <b>NORTHWAY TRANSPORT</b> STA 187+00 - 218+00	
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			SHEET: 11 OF 15	



SECTION 19&30, T14N, R19E, C.M.

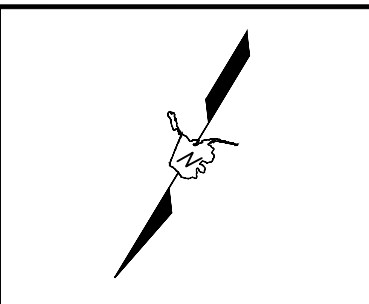


STA 218+00 MATCHLINE - SHEET 11

STA 241+00 MATCHLINE - SHEET 13

SECTION 30  
SECTION 19

12-6-2023



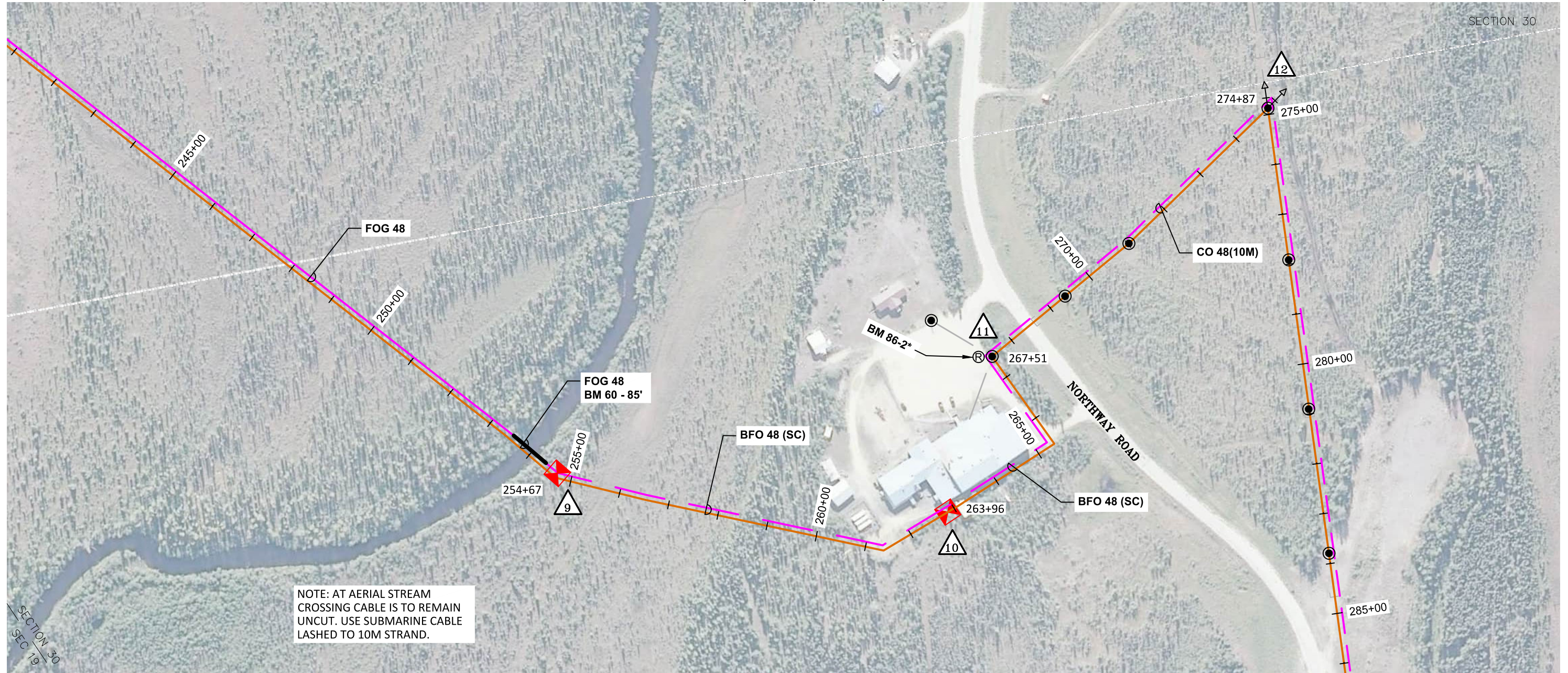
PRELIMINARY  
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NORTHWAY TRANSPORT  
STA 218+00 - 241+00

PROJECT NO: TCC PRJ16192  
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NO.	REVISION DESCRIPTIONS	DATE

JN-08  
SHEET: 12 OF 15

SECTION 30, T14N, R19E, C.M.



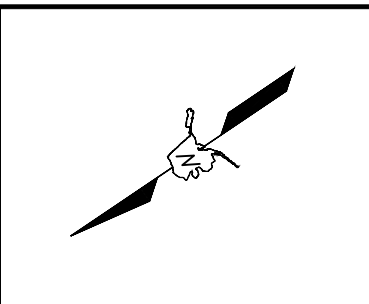
NOTE: AT AERIAL STREAM CROSSING CABLE IS TO REMAIN UNCUT. USE SUBMARINE CABLE LASHED TO 10M STRAND.

STA 241+00 MATCHLINE - SHEET 12

STA 256+50 MATCHLINE - SHEET 14

12-6-2023

WORK LOCATION	BHF-2	HO-1	A 35-5	BM 86-2*	CO 48 (10M)	BFO 48 (SC)	FOG 48	PF 2-7A KIT (ANCHOR)	PE 1-3 KIT (DOWN GUY)	PE 2-3 (O/H GUY)									
8	1			1		11369	5242	1											
9	1			1	169			1											
10	1					1059													
11										1									
12									2										
<b>TOTALS</b>	<b>3</b>			<b>2</b>	<b>169</b>	<b>12428</b>	<b>5242</b>	<b>2</b>	<b>2</b>	<b>1</b>									



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STA 241+00 - 256+50

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NO.	REVISION DESCRIPTIONS	DATE

**JN-09**

SHEET: 13 OF 15