## BID UNIT TAB BIRD POINT FIBER TIE IN - WO# C2430003 ISSUED FOR CONMSTRUCTION - REV 1

			UNIT MATERIAL		EXTENDED MATERIAL		EXTENDE		
ASSEMBLY UNIT	TASK	QTY.	UNIT	UNIT DESCRIPTION	COST	LABOR COST	COST	COST	COST
SURL	Provide	1	LOT	SURL (LANDSCAPING)					
TRAFFIC CTRL	Provide	1	LOT	TRAFFIC CTRL (TRAFFIC CONTROL)					
				SWPPP-BP (STORM WATER POLLUTION PREVENTION					
SWPPP-BP	Provide	1	LOT	PLAN - BEST PRACTICES)					
SURVEY	Provide	1	LOT	SURVEY					
WINTER	Provide	1	LOT	WINTER CONSTRUCTION ADDER					
FO-TEST	Provide	1	LOT	FIBER OPTIC TESTING					
<b>FO-OH</b>	Provide	3,510	FOOT	AERIAL FIBER OPTIC CABLE					
FO-UG	Provide	2,738	FOOT	UNDERGROUND FIBER OPTIC CABLE					
FO-ANGL	Provide	2	EACH	FIBER OPTIC ANGLE ATTACHMENT					
FO-DE	Provide	12	EACH	FIBER OPTIC DEADEND ATTACHMENT					
FO-DE-RT	Provide	. 4	EACH	FO DEADEND ATTACH., REDUCED TENSION					
FO-TAN	Provide	5	EACH	FIBER OPTIC TANGENT ATTACHMENT					
FO-VDMP	Provide	16		DO ON LOS ENOLOGUES AND ENOLOGUES					
	L			FO SPLICE ENCLOSURE AND ENCLOSURE					
FO-COY/DFNDR	Provide	3	EACH	PROTECTION					
FO-DL-CLMP	Provide	24	EACH	FIBER OPTIC DOWN LEAD CLAMP					
FO-SPLICE	Provide	216	EACH	FIVER OPTIC FUSION SPLICE					
FO-STORAGE	Provide	6	EACH	FIBER OPTIC STORAGE ON POLE RACK					
E1-5	Provide	11	EACH	DOWN GUY, 16M					
E3-10	Provide	1	EACH	GUY MARKER					
SPLIT-BOLT	Provide	1	EACH	SPLIT-BOLT					
FO-UM52	Provide	4	EACH	FIBER OPTIC RISER ON POLE   FIBER OPTIC RISERS ON COMMUNICATIONS					
ENG BODO	L		E. CII						
ENC-RSRS	Provide	2	EACH	MODULE					
FO-HH	Provide		EACH	FIBER OPTIC HANDHOLE					
FO-MARKER	Provide	14	EACH	FIBER OPTIC MARKER					
HDPE2-ORNG	Provide	3,198	FOOT	SCHEDULE 40, HDPE, 2", ORANGE COLOR					
HDDEA DED	L		БООТ	SCHEDULE 40, HDPE, 2", RED COLOR OR BLACK WITH RED STRIPES					
HDPE2-RED	Provide	530	FOOT	CONDUIT ELBOW, 2", RIGID GAVANIZED STEEL, 48"					
LIME200C4	Dunasia.	8	EACH	RADIUS					
UME290S4	Provide	. 8	EACH	CONDUIT, OFFSET, 2", RIGID GALVANIZED STEEL,					
OFFSET2	Duovida	1 1	EACH	FIELD BENT					
OFFSE12	Provide		EACH	FIELD DENI	.				
UM31A	Provide		EACH	FILL, NON FROST SUSCEPTIBLE, YARD, COMPACTED					
UR2-48	Provide	943	FOOT	TRENCH, 48" MINIMUM EMBEDMENT	·				
UN4-40	Frovide	943	F001	1 REACH, 70 MINIMUM EMBEDMENT	·				
UR2-48C	Provide	10	FOOT	TRENCH, 48" MINIMUM EMBEDMENT, COMPACTION					
UN4-40U	1 1 ovide	10	1001	1 REACH, 40 MINIMUM EMBEDMENT, COMFACTION	·				
				TRENCH, 48" MINIMUM EMBEDMENT, COMPACTION.					
UR2-48CR	Provide	155	FOOT	RECYCLED ASPHALT REMOVAL AND REPLACEMENT	1				
CILE-TOCK	1101140	133		DIRECTION DRILLING CONDUIT INSTALLATION OF	·				
DDRILL-3-2	Provide	530	FOOT	(3) 2" HDPE DUCTS.					
SR1-16	Provide	370	FOOT	CLEARING AND GRUBBING, 16' WIDE	·				
DILI-IU	1101140	3,0	1001	CELIMITO IND GRODDING, 10 TIDE	·				
					·			TOTAL COST	ř <b>i</b>
					·			1011111 0001	·
				- <del> </del>	·				

Project: <u>C2430003</u>

Structure: 00. GENERAL

Remarks:

THE DIRECTION NORTH ON THE DRAWINGS IS TO THE UPPER LEFT SIDE OF THE PLAN SHEETS. REFERENCES ON THE DRAWINGS AND THESE STAKING SHEETS TO N, S, E, AND W ARE "PAGE" REFERENCES FOR THE DRAWINGS: NORTH (PAGE UP), SOUTH (PAGE DOWN), EAST (PAGE RIGHT), AND WEST (PAGE LEFT).

IN THESE STAKING SHEETS AND ON THE DRAWINGS, PROJECT SPECIFIC ASSEMBLIES AND CHUGACH STANDARD ASSEMBLIES ARE CALLED OUT. MOST CHUGACH STANDARD ASSEMBLIES HAVE AN "S" AS THE FIRST LETTER OF THEIR NAME. REFERENCE DETAILS SHOWN ON THE DRAWINGS FOR PROJECT SPECIFIC ASSEMBLIES, AND MOST RECENT CHUGACH CONSTRUCTION STANDARDS FOR CHUGACH ASSEMBLIES.

THE ASSOCIATED DISTRIBUTION PROJECT WILL INSTALL ALL POLES AND ANCHORS.

NO MATERIALS ARE PROPOSED TO BE PROVIDED TO THE CONTRACTOR BY CHUGACH FOR THIS PROJECT.

CONTRACTOR SHALL SUPPLY ALL MATERIALS.

SUBMITTALS ARE REQUIRED FOR ALL MATERIALS TO BE INCORPORATED IN THE PROJECT.

ALL MATERIALS SHALL MEET OEM SPECIFICATIONS AND REQUIREMENTS.

 $\underline{\text{FO-OH:}}$  FIBER OPTIC AERIAL CABLE SHALL BE: AFL #AC0489C521CL0, 48 COUNT, SINGLE-MODE DNA-33072 AFL-ADSS. NO SUBSTITUTIONS.

<u>FO-UG:</u> FIBER OPTIC UNDERGROUND CABLE SHALL BE: FIBER OPTIC UNDERGROUND CABLE SHALL BE: CORNING #048EA-T4E01A20, ADSS LOOSE TUBE, GEL FILLED, DUAL JACKET, 48 COUNT, SINGLE-MODE (OS2). NO SUBSTITUTIONS.

<u>WINTER:</u> THE WINTER UNIT IS A LOT UNIT AND INCLUDES <u>ALL</u> ADDITIONAL EFFORTS FOR CONDTRUCTION IN WINTER CONDITIONS. IT INCLUDES BUT IS NOT LIMITED TO: THAWING, SNOW REMOVAL/PLOWING, WEATHER DELAYS ACCOMODATION, DECREASED WORK EFFICIENCY.

SAG FO-OH PER SAG CHARTS PROVIDED.

INSTALL FO-OH ON SAME SIDE OF POLES AS THE NEUTRAL, WHERE THE NEUTRAL IS FRAMED TANGENT OR AT A SMALL ANGLE.

SPLICING CONDUIT IS PROHIBITED FOR DIRECTIONALLY DRILLED INSTALLATION. SPLICING OF CONDUIT IS TO BE AVOIDED. IF REQUIRED, IT SHALL BE BY THE BUTT-FUSION WELDING METHOD.

PROVIDE PULL LINES (MULE TAPE) IN ALL SPARE DUCTS.

PLUG OR SEAL ALL CONDUIT/DUCTS. SEE DETAILS FOR REQUIREMENTS.

FIBER OPTIC CIRCUITS ARE TO BE INSTALLED CONTINUOUS WITHOUT SPLICES

FROM END-TO-END:

BETWEEN STRUCTURE 22-6 AND POLE 3110

AND

BETWEEN POLE 3110 AND ENCLOSURE BCC-MODULE(W).

AND

BETWEEN ENCLOSURE BBC-MODULE(N) AND POLE 3904.

AND

BETWEEN POLE 3904 AND POLE 5111

AND

BETWEEN POLE 5111 AND STRUCTURE 22-8.

FIBER SPLICING UNITS ARE CALLED OUT AT THESE LOCATIONS: FO-SPLICE.

THE COMPLETED FIBER OPTIC INSTALLATION SHALL BE TESTED END-TO-END BETWEEN GIRDWOOD SUBSTATION AND INDIAN SUBSTATION. TESTING SHALL INCLUDE OTDR AND LIGHT LEVEL TESTS. PERFORMANCE REQUIREMENTS SHALL BE TO INDUSTRY STANDARDS. IF THE THE TEST RESULTS ARE UNSATISFACTORY, THE CONTRACTOR SHALL MAKE REPAIRS, AND RETEST UNTIL ALL THE FIBERS IN THE CIRCUIT PASS BOTH TESTS. THESE REQUIRED TESTS SRE INCLUDED IN THE UNIT: FOTEST. IT IS A LUMP SUM UNIT FOR THE ENTIRE PROJECT.

CONTRACTOR SHALL THOROUGHLY REVIEW THE SCOPE OF WORK AND INTENT OF PROJECT AND REQUEST CLARIFICATION PRIOR TO BIDDING TO DETERMINE AND QUANTIFY ALL ADDITIONAL WORK EFFORTS AND REQUIRED MATERIALS FOR PROVISIONING THE REQUIRED FACILITIES TO PROVIDE A COMPLETE AND EFFICACIOUS FIBER OPTIC SYSTEM.

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OUT.

UN-UNITIZED WORK: MOST WORK EFFORTS INCLUDED IN THESE STAKING IS UNITIZED (PROVIDED WITH AN ASSOCIATED ASSEMBLY UNIT).

HOWEVER, SOME WORK EFFORTS REQUIRED AND IDENTIFIED IN THE REMARKS COLUMN OR ON THE DRAWINGS DO NOT HAVE AN ASSOCIATED ASSEMBLY UNIT.

REVIEW THE STAKING SHEETS FOR THESE EFFORTS AND ANY MATERIALS THESE EFFORTS MAY REQUIRE.

INCLUDE THE COST OF THESES WORK EFFORTS AND MATERIAL COSTS IN OTHER ASSEMBLY UNITS LISTED ON THE BID UNIT TAB.

NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR THESE WORK EFFORTS AND MATERIALS.

THE SPAN LENGTHS SHOWN ON THE DRAWINGS ARE HORIZONTAL DISTANCES.

THE QUANTITIES SHOWN ON THE BID TAB FOR ASSEMBLY UNITS THAT ARE MEASURED ON A PER FOOT BASIS ARE THE SUMMATION OF THESE HORIZONTAL LENGTHS, AND DO <u>NOT</u> INCLUDE ADDITONAL REQUIRED MATERIALS FOR: SAGS, JUMPERING, RISERS, TRENCH ELEVATION CHANGES, DIRECTIONAL DRILLING, CONDUIT TAILS, COILS, RISERS, ETC. NOTE: WHERE FIBER STORAGE IS SPECIFIED, A SEPARATE CALL-OUT FOR ITS PROVISION IS CALLED

INCLUDE THE COST OF THESE ADDITIONAL REQUIRED MATERIALS AND ASSOCIATED WORK EFFORTS IN THE PER FOOT PRICING OF THESE ASSEMBLY UNITS. EXAMPLES OF ASSEMBLY UNITS WHERE THIS APPLIES ARE: FO-OH, FO-UG, HDPE2-ORNG, HDPE2-RED, DDRLL-3-2, ETC.

ADDITIONAL PAYMENT FOR THESE GREATER QUANTITIES OF MATERIALS AND ASSOCIATED LABOR WILL NOT BE PROVIDED.

<u>CLEARING</u>: REQUIRED AERIAL CLEARING FOR CIRCUIT RE-ALIGNMENTS AND FOR ANCHOR INSTALLATIONS ARE TO BE PROVIDED UNDER THE ASSOCIATED DISTRIBUTION WORK ORDER.

CLEARING AND GRUBBING (SR1-16) ARE REQUIRED FOR SECTIONS OF THE UNDERGROUND FIBER OPTIC INSTALLATION.

QUANTITES REQUIRED ARE SHOWN ON THESE STAKING SHEETS AND ARE SUMMED IN THE BID UNIT TAB.

IN GENERAL, PROVIDE THE MINIMUM CLEARING REQUIRED TO FACILITATE THE INSTALLATION OF THE SPECIFIED FACILITIES.

LOCATIONS WHERE CLEARING IS NOT PERMITTED ARE IDENTIFIED ON THE DRAWINGS.

IT IS IMPERATIVE, THAT TO THE GREATEST EXTENT POSSIBLE, THE CLEARING WITHIN THE STATE DOT SEWARD HIGHWAY ROW IS NOT VISIBLE FROM THE HIGHWAY.

NO WORK ACTIVITIES ARE PERMITTED ON BLM LOT 2 (SOUTH SIDE OF HIGHWAY, SHEET ES202). CONTRACTOR SHALL HAVE PROPERTY LINES OF THIS LOT STAKED PRIOR TO CLEARING AND CONSTRUCTION: FROM 50' WEST OF HANDHOLE 2806 TO THE NORTHEAST CORNER OF THE LOT; AND A FURTHER 35' SOUTH ALONG THE LOT'S EASTERN PROPERTY LINE.

SURL: LANDSCAPING. THE CONTRACTOR SHALL ENDEAVOR TO PROTECT THE EXISTING CONDITIONS WITHIN THE PROJECT SITE. THE SURL UNIT IS FOR RETURNING THE DISTURBED AREAS OF CONSTRUCTION TO NOMINALLY SAME CONDITIONS AS FOUND.

 $\underline{\mathsf{TRAFFIC}\;\mathsf{CONTROL}};\;\;\mathsf{PROVIDE},\;\mathsf{GET}\;\mathsf{APPROVAL}\;\mathsf{FOR},\;\mathsf{AND}\;\mathsf{IMPLEMENT}\;\mathsf{A}\;\mathsf{TRAFFIC}\;\mathsf{CONTROL}\;\mathsf{PLAN}.$ 

STORM WATER POLLUTION PREVENTION PLAN - BEST PRACTICES (SWPPP): PROVIDE AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN, UTILIZING BEST PRACTICES. GET APPROVAL FOR PLAN, FROM AUTHORITY HAVING JURISDICTION, IF REQUIRED.

SURVEY: AFTER AWARD, THE CONTRACTOR WILL BE PROVIDED WITH A BASE DRAWING IN AUTOCAD, VERSION 18, FOR THEIR USE. CONTRACTOR SHALL HIRE A PROFESSIONAL SURVEYOR REGISTERED IN THE STATE OF ALASKA TO PROVIDE ALL REQUIRED SURVEY EFFORTS FOR THE PROJECT. THE CONTRACTOR'S SURVEYOR SHALL PROVIDE STAKING FOR: WORK BOUNDARIES, CLEARING, POLES, ANCHORS, EQUIPMENT, CENTERLINE OF TRENCH, ETC. FOR THE CONSTRUCTION OF THE PROJECT. THE CONTRACTOR'S SURVEYOR SHALL PROVIDE STAMPED ASBUILT DRAWINGS FOR THE PROJECT AFTER CONSTRUCTION AND AN AUTOCAD DRAWING IN VERSION 18 OF THE SAME.

Structure:	01. GENERAL				
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
FO-TEST	Provide	1	FO-TEST (FIBER OPTIC TESTING)		
SURL	Provide	1	LANDSCAPING (LOT)		
TRAFFIC CONTROL	Provide	1	TRAFFIC CONTROL (LOT)		
			STORM WATER POLLUTION PREVENTION		
SWPPP-BP	Provide	1	PLAN- BEST PRACTICES		
SURVEY	Provide	1	SURVEY		
Remarks: S	EE GENERAL NO	ΓES.			-
Structure:	02. 22-6				
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
85/H5	Existing	2	85/H5 POLE		
FO-OH	Existing	~660	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-OH	Existing	-	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-STORAGE	Existing	~100	FO-STORAGE (FIBER OPTIC STORAGE)		
FO-DL-CLAMP	Existing	8	FO-DL-CLAMP (FO DOWN LEAD CLAMP)		
FO-ENCLOSURE	Existing	1	FO-ENCLOSURE		
FO-OH	Provide	100	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-DE-RT	Provide	1	FO-DE (FO DEADEND, REDUCED TENSION)		
FO-DL-CLAMP	Provide	3	FO-DL-CLAMP (FO DOWN LEAD CLAMP)		
FO-SPLICE	Provide	24	FO-SPLICE (FIBER OPTIC SPLICE)		
Remarks:	NSTALL 100' OF FO	O-OH ON EXIST	TING RACK		
A	TTACH FO-DE AT	3' BELOW CRO	OSSARMS BRACES' BOLT.		

Structure:	03. POLE 233	2 (173L2 IN FIEI	LD)		
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
45/3	Existing	1	45/3 POLE		
F1-4P-TRPL	Existing	1	F1-4P-TRPL (PLATE ANCHOR, TRIPLE-EYE)		
FO-OH	Provide	53	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-DE-RT	Provide	1	FO-DE (FO DEADEND, REDUCED TENSION)		
FO-DE	Provide	1	FO-DE (FIBER OPTIC DEADEND)		
FO-DL-CLAMP	Provide	1	FO-DL-CLAMP (FO DOWN LEAD CLAMP)		
E1-5	Provide	1	E1-5 (DOWN GUY)		

Remarks: POLE TO BE REPLACED UNDER DISTRIBUTION WORK ORDER.

ANCHOR TO BE PROVIDED UNDER DISTRIBUTION WORK ORDER. INSTALL FO-OH AT REDUCED TENSION IN SPAN TO STRUCTURE 22-6.

ATTACH FO-DE FOR SPAN TO POLE 2028 AT 5' 6" BELOW BELOW SOUTH NEUTRAL (AT 25'-6"). INSTALL FO-DE FOR SPAN TO POLE 22-6 AT 90 DEGREES TO THE LINE ON THE WEST FACE

OF POLE, 4" LOWER. ATTACH GUY 4"LOWER.

Structure:	05. POLE 2028				
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
50/2	Existing	1	50/2 POLE		
F1-4P-TRPL	Existing	1	F1-4P-TRPL (PLATE ANCHOR, TRIPLE-EYE)		
FO-OH	Provide	274	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-ANGL	Provide	1	FO-ANGL (FIBER OPTIC SMALL ANGLE)		
FO-VDMP	Provide	1	FO-VDMP (FO VIBRATION DAMPER)		
E1-5	Provide	1	E1-5 (DOWN GUY)		
Remarks:	POLE TO BE REPL	ACED UNDER I	DISTRIBUTION WORK ORDER.		<u> </u>

ANCHOR TO BE PROVIDED UNDER DISTRIBUTION WORK ORDER.

INSTALL FO-ANGL AT 6'-6" BELOW NEUTRAL (AT 29'-6").

ATTACH GUY 4" LOWER.

INSTALL VIBRATION DAMPER ON SPAN TO 1525.

Structure:	06. POLE 1525				
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
45/3	Existing	1	45/3 POLE		
F1-4P-TRPL	Existing	1	F1-4P-TRPL (PLATE ANCHOR, TRIPLE-EYE)		
FO-OH	Provide	301	FO-OH (FO-OH FIBER OPTIC CABLE)		
<b>FO-OH</b>	Provide	100	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-DE	Provide	1	FO-DE (FIBER OPTIC DEADEND)		
FO-DE-RT	Provide	1	FO-DE (FO DEADEND, REDUCED TENSION)		
FO-VDMP	Provide	1	FO-VDMP (FO VIBRATION DAMPER)		
FO-DL-CLAMP	Provide	3	FO-DL-CLAMP (FO DOWN LEAD CLAMP)		
FO-STORAGE	Provide	1	FO-STORAGE (FIBER OPTIC STORAGE)		

POLE AND ANCHOR TO BE PROVIDED UNDER DISTRIBUTION WORK ORDER. Remarks:

SECOND CALL-OUT OF FO-OH IS FOR CABLE INSTALLED ON FO STORAGE RACK. INSTALL FO-DE FOR SPAN TO POLE 2028 AT 9'-0" BELOW CROSSARM (AT 27'-6").

ATTACH ITS GUY 4" LOWER.

INSTALL FO-DE FOR SPAN TO POLE 1425 ON EAST FACE OF POLE, AT 90 DEGREES TO THE LINE, 6"

ABOVE NORTH ATTACHMENT.

INSTALL FO-STORAGE ON EAST FACE OF POLE (ROAD SIDE).

INSTALL STORAGE RACK WITH ITS OUTER UPPER COILS AT 19'-0" ABOVE GRADE.

INSTALL VIBRATION DAMPER ON SPAN TO 2028

Structure:	07. POLE 1425 (	173 IN FIELD)			
Assembly Unit	<u>Activity</u>	#Cond Qty	Unit Description	Complete	Qty
50/2	Existing	1	Existing		
F1-4P-TRPL	Existing	1	Existing		
FO-OH	Provide	41	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-DE-RT	Provide	1	FO-DE (FO DEADEND, REDUCED TENSION)		
FO-DE	Provide	1	FO-DE (FIBER OPTIC DEADEND)		
FO-VDMP	Provide	1	FO-VDMP (FO VIBRATION DAMPER)		
E1-5	Provide	1	E1-5 (DOWN GUY)		
Remarks:	POLE TO BE REPLA	CED UNDER D	ISTRIBUTION WORK ORDER.		
	ANCHOR TO BE PRO	OVIDED UNDE	R DISTRIBUTION WORK ORDER.		
	INSTALL FO-DE FO	R SPAN TO POI	LE 1920 AT 8' BELOW E/W NEUTRAL (AT 27'-6").		

ATTACH ITS GUY 4" LOWER.

INSTALL FO-DE FOR SPAN TO POLE 1525 AT 6" ABOVE EAST ATTACHMENT.

INSTALL AT REDUCED TENSION FOR SPAN TO 1525.

Structure:	12. POLE 1920				
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
55/2	Existing	1	55/2 POLE		
F1-4P-TRPL	Existing	1	F1-4P-TRPL (PLATE ANCHOR, TRIPLE-EYE)		
<b>FO-OH</b>	Provide	328	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-TAN	Provide	1	FO-TAN (FIBER OPTIC TANGENT)		
FO-VDMP	Provide	2	FO-VDMP (FO VIBRATION DAMPER)		
E1-5	Provide	1	E1-5 (DOWN GUY)		
E1-5 Remarks:		l D TO DE DDO	E1-5 (DOWN GUY)  //IDED UNDER DISTRIBUTION WORK ORDER.		

INSTALL FO-TAN AT 8' BELOW E/W NEUTRAL (AT 30').

ATTACH GUY 4" LOWER.

Assembly Unit  Activity #Cond Qty Unit Description  Comp  45/3 Existing 1 45/3 POLE  F1-4P-TRPL Existing 1 F1-4P-TRPL (PLATE ANCHOR, TRIPLE-EYE)  FO-OH Provide 213 FO-OH (FO-OH FIBER OPTIC CABLE)  FO-ANGL Provide 1 FO-ANGL (FIBER OPTIC SMALL ANGLE)		
F1-4P-TRPL Existing 1 F1-4P-TRPL (PLATE ANCHOR, TRIPLE-EYE) FO-OH Provide 213 FO-OH (FO-OH FIBER OPTIC CABLE)	lete	Qty
FO-OH Provide 213 FO-OH (FO-OH FIBER OPTIC CABLE)		
· · · · · · · · · · · · · · · · · · ·		
FO-ANGL Provide 1 FO-ANGL (FIBER OPTIC SMALL ANGLE)		
FO-VDMP Provide 2 FO-VDMP (FO VIBRATION DAMPER)		
E1-5 Provide 1 E1-5 (DOWN GUY)		

POLE AND ANCHOR TO BE PROVIDED UNDER DISTRIBUTION WORK ORDER. Remarks:

INSTALL FO-ANGL AT 4'-6" BELOW NEUTRAL (AT 26').

ATTACH GUY 4" LOWER.

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Structure:	15. POLE 2813				
Assembly Unit	Activity	#Cond Qty	<u>Unit Description</u>	Complete	Qty
45/3	Existing	1	45/3 POLE		
FO-OH	Provide	220	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-OH	Provide	100	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-DE	Provide	2	FO-DE (FIBER OPTIC DEADEND)		
FO-VDMP	Provide	2	FO-VDMP (FO VIBRATION DAMPER)		
FO-DL-CLAMP	Provide	3	FO-DL-CLAMP (FO DOWN LEAD CLAMP)		
FO-STORAGE	Provide	1	FO-STORAGE (FIBER OPTIC STORAGE)		
Remarks:	POLE TO BE PROV	IDED UNDER D	ISTRIBUTION WORK ORDER.		
	SECOND CALL-OU	T OF FO-OH IS	FOR STORAGE.		
	INSTALL FO-DEs B	ACK-TO-BACK	AT 4'-6" BELOW NEUTRAL (AT 26'-6").		
	INSTALL FO-STOR.	AGE ON SOUTH	H FACE OF POLE (ROAD SIDE).		
	INSTALL STORAGE	E RACK WITH I	TS OUTER UPPER COILS AT 18' ABOVE GRADE.		

Structure:	16. 2912 (1 I	N FIELD)			
Assembly Unit	<u>Activity</u>	#Cond Qty	Unit Description	Complete	Qty
45/3	Existing	1	45/3 POLE		
<b>FO-OH</b>	Provide	217	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-TAN	Provide	1	FO-TAN (FIBER OPTIC TANGENT)		
FO-VDMP	Provide	2	FO-VDMP (FO VIBRATION DAMPER)		
Remarks			ISTING GUV ATTACHMENT BOLT (AT 27'.3")		

Structure:	17. POLE 3110				
Assembly Unit	<u>Activity</u>	#Cond Qty	Unit Description	Complete	Qty
50/2	Existing	1	50/2 POLE		
F1-4P-TRPL	Existing	1	F1-4P-TRPL (PLATE ANCHOR, TRIPLE-EYE)		
FO-OH	Provide	206	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-OH	Provide	100	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-UG	Provide	-	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-DE	Provide	1	FO-DE (FIBER OPTIC DEADEND)		
FO-VDMP	Provide	1	FO-VDMP (FO VIBRATION DAMPER)		
FO-DL-CLAMP	Provide	4	FO-DL-CLAMP (FO DOWN LEAD CLAMP)		
FO-STORAGE	Provide	1	FO-STORAGE (FIBER OPTIC STORAGE)		
			FO-COY/DFNDR (FO SPLICE ENCLOSURE/		
FO-COY/DFNDR	Provide	1	ENCLOSURE DEFENDER)		
FO-SPLICE	Provide	48	FO-SPLICE (FIBER OPTIC SPLICE)		
E1-5	Provide	1	E1-5 (DOWN GUY)		
FO-UM52	Provide	1	FO-UM52 (RISER, FIBER OPTIC)		
UME290S4	Provide	1	UME290S4 (2" RSC 90 48" RADIUS)		

POLE AND ANCHOR TO BE PROVIDED UNDER DISTRIBUTION WORK ORDER. Remarks:

SECOND CALL-OUT OF FO-OH IS FOR STORAGE. INSTALL FO-DE AT 5' BELOW NEUTRAL, 30'-0".

ATTACH GUY 6" LOWER.

INSTALL FIBER STORAGE ON SOUTH FACE OF POLE (ROAD SIDE).

INSTALL FIBER STORAGE WITH TOP COILS AT 20'-6" CONSTRUCT RISER TO BOTTOM OF STORAGE COILS.

Structure:	17A. HANDHOL	E 3110A			
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
FO-UG	Provide	15	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-UG	Provide	100	FO-UG (FO-UG FIBER OPTIC CABLE)		
<b>FO-HH</b>	Provide	1	FO-HH (FIBER OPTIC HANDHOLE)		
FO-MARKER	Provide	1	FO-MARKER (FIBER OPTIC MARKER)		
HDPE2-ORNG	Provide	15	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
UR2-48	Provide	15	UR2-48 (TRENCH, 48" EMBEDMENT)		
Remarks:	SECOND CALL-OL	T OF FO LIG IS	EOR STORAGE		

Remarks: SECOND CALL-OUT OF FO-UG IS FOR STORAGE.

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Structure:	18. HANDHO	LE 3507			
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
FO-UG	Provide	135	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-UG	Provide	100	FO-UG (FO-UG FIBER OPTIC CABLE)		
<b>ГО-НН</b>	Provide	1	FO-HH (FIBER OPTIC HANDHOLE)		
FO-MARKER	Provide	1	FO-MARKER (FIBER OPTIC MARKER)		
HDPE2-ORNG	Provide	135	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
HDPE2-ORNG	Provide	135	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
UR2-48	Provide	135	UR2-48 (TRENCH, 48" EMBEDMENT)		

Remarks: SECOND CALL-OUT OF FO-UG IS FOR STORAGE.

PROVIDE SPARE HDPE2-ORNG.

#Cond Qty 310 100	Unit Description  FO-UG (FO-UG FIBER OPTIC CABLE)  FO-UG (FO-UG FIBER OPTIC CABLE)  FO-HH (FIBER OPTIC HANDHOLE)	Complete	Qty
	FO-UG (FO-UG FIBER OPTIC CABLE)		
100 1			
1	FO-HH (FIBER OPTIC HANDHOLE)		
310	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
310	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
310	HDPE2-RED (HDPE, 2", RED COLOR)		
310	DDRILL-3-2 (DRCTINLLY DRILL (3) 2" DUCTS)		
3	FO-MARKER (FIBER OPTIC MARKER)		
	310 310	310 HDPE2-RED (HDPE, 2", RED COLOR) 310 DDRILL-3-2 (DRCTINLLY DRILL (3) 2" DUCTS)	310 HDPE2-RED (HDPE, 2", RED COLOR) 310 DDRILL-3-2 (DRCTINLLY DRILL (3) 2" DUCTS)

Remarks: DIRECTIONALLY DRILL BETWEEN HANDHOLES FOR (3) 2" HDPE DUCTS.

DO NOT CLEAR ANY TREES ON NORTH SIDE OF HIGHWAY IN DOT ROW. ON SOUTH SIDE OF HIGHWAY DO NOT CLEAR ON HIGHWAY SIDE OF BERM.

SEE PROFILE DETAIL PROVIDED.

SECOND CALL-OUT OF FO-UG IS FOR STORAGE.

PROVIDE SPARE HDPE2-ORNG. PROVIDE SPARE HDPE2-RED.

INSTALL ADDITIONAL FO-MARKERS AT EDGE OF EXISTING HIGHWAY CLEARING ON NORTH AND

SOUTH SIDE, DIRECTLY OVER DIRECTIONALLY DRILLED CONDUIT.

Structure:	22. HANDHO	LE 3100			
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
FO-UG	Provide	370	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-UG	Provide	100	FO-UG (FO-UG FIBER OPTIC CABLE)		
<b>ГО-НН</b>	Provide	1	FO-HH (FIBER OPTIC HANDHOLE)		
HDPE2-ORNG	Provide	370	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
HDPE2-ORNG	Provide	370	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
UR2-48	Provide	370	UR2-48 (TRENCH, 48" EMBEDMENT)		
SR1-16	Provide	370	SR1-16 (CLEARING AND GRUBBING, 16' W.)		
FO-MARKER	Provide	2	FO-MARKER (FIBER OPTIC MARKER)		

Remarks: REVIEW CLEARING NOTE FOR STAKING PROPERTY LINE(S) OF BLM LOT 2.

DO NOT CLEAR OR PERFORM ANY WORK ON BLM LOT 2.

CLEAR AND GRUB MINIMUM REQUIRED TO INSTALL SPECIFIED FACILITIES.

BEARING TREES IN VICINITY.

DO NOT CUT, TRIM, OR IMPACT BEARING TREES.

DO NOT MOVE BEARING TREE SIGNAGE.

DO NOT TRENCH WITHIN BEARING TREES BRANCH'S DRIP LINES.

PROVIDE SPARE HDPE2-ORNG.

SECOND CALL-OUT OF FO-UG IS FOR STORAGE.

INSTALL ADDITIONAL FO MARKER AT TRENCH ANGLE POINT.

Proiect: C2430003

Structure:	23. ENCLOSU	RE BCC-MODU	LE(W)		
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
FO ENCLOSURE	Existing	1	FO ENCLOSURE (FIBER OPTIC ENCLOSURE)		
FO-ISP	Existing	100	FO-ISP (FO-ISP FIBER OPTIC CABLE)		
FO-UG	Provide	30	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-UG	Provide	100	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-SPLICE	Provide	24	FO-SPLICE (FIBER OPTIC SPLICE)		
HDPE2-ORNG	Provide	30	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
HDPE2-ORNG	Provide	30	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
UME290S4	Provide	2	UME290S4 (2" RSC 90 48" RADIUS)		
ENC-RSRS	Provide	1	ENC-RSRS (RISERS TO FO ENCLOSURE)		
UR2-48CR	Provide	30	UR2-48CR (TRENCH, COMPACTION, ASPHLT)		

Remarks: FO ENCLOSURE TO BE PROVIDED BY OTHERS.

REMOVE RECYCLED ASPHALT FROM SITE.

THOROUGHLY COMPACT TRENCH.

PROVIDE EQUAL OR THICKER REPLACEMENT RECYCLED ASPHALT.

THOROUGHLY COMPACT RECYCLED ASPHALT. SECOND CALL-OUT OF FO-UG IS FOR STORAGE.

INSTALL 1ST CONDUIT ELBOW AND RISER 4" OFF MODULE FOUNDATION AND ALIGNED WITH SOUTH

SIDE OF FO ENCLOSURE.

INSTALL 2ND SPARE CONDUIT ELBOW 4" OFF MODULE FOUNDATION AND ALIGNED WITH NORTH

SIDE OF FO ENCLOSURE.

Structure:	24. ENCLOSU	RE BCC-MODU	JLE(N)		
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
FO ENCLOSURE	Existing	1	FO ENCLOSURE (FIBER OPTIC ENCLOSURE)		
FO-ISP	Existing	100	FO-ISP (FO-ISP FIBER OPTIC CABLE)		
FO-UG	Provide	100	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-SPLICE	Provide	24	FO-SPLICE (FIBER OPTIC SPLICE)		
ENC-RSRS	Provide	1	ENC-RSRS (RISERS TO FO ENCLOSURE)		
UME290S4	Provide	2	UME290S4 (2" RSC 90 48" RADIUS)		

Remarks: FO ENCLOSURE TO BE PROVIDED BY OTHERS.

FO-UG CALL-OUT IS FOR STORAGE IN ENCLOSURE.

INSTALL 1ST CONDUIT ELBOW AND RISER 4" OFF MODULE FOUNDATION AND ALIGNED WITH EAST

SIDE OF ENCLOSURE.

INSTALL 2ND SPARE CONDUIT ELBOW 4" OFF MODULE FOUNDATION AND ALIGNED WITH WEST SIDE

OF ENCLOSURE.

Assembly Unit	Activity	#C1 Ot	The second secon		
		#Cond Qty	Unit Description	Complete	Qty
FO-UG	Provide	125	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-UG	Provide	100	FO-UG (FO-UG FIBER OPTIC CABLE)		
<b>FO-HH</b>	Provide	1	FO-HH (FIBER OPTIC HANDHOLE)		
FO-MARKER	Provide	1	FO-MARKER (FIBER OPTIC MARKER)		
HDPE2-ORNG	Provide	125	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
HDPE2-ORNG	Provide	125	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
UR2-48CR	Provide	125	UR2-48CR (TRENCH, COMPACTION, ASPHLT)		

Remarks: BEARING TREES IN VICINITY

DO NOT CUT, TRIM, OR IMPACT BEARING TREES.

DO NOT MOVE BEARING TREE SIGNAGE.

DO NOT TRENCH WITHIN BEARING TREES BRANCH'S DRIP LINES.

REMOVE RECYCLED ASPHALT FROM SITE.

THOROUGHLY COMPACT TRENCH.

PROVIDE EQUAL OR THICKER REPLACEMENT RECYCLED ASPHALT.

THOROUGHLY COMPACT RECYCLED ASPHALT. SECOND CALL-OUT OF FO-UG IS FOR STORAGE.

Proiect: C2430003

Structure:	26. HANDHOL	E 3804			
Assembly Unit	Activity	#Cond Qty	<u>Unit Description</u>	Complete	Qty
FO-UG	Provide	220	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-UG	Provide	100	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-HH	Provide	1	FO-HH (FIBER OPTIC HANDHOLE)		
FO-MARKER	Provide	3	FO-MARKER (FIBER OPTIC MARKER)		
HDPE2-ORNG	Provide	220	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
HDPE2-ORNG	Provide	220	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
HDPE2-RED	Provide	220	HDPE2-RED (HDPE, 2", RED COLOR)		
DDRILL-3-2	Provide	220	DDRILL-3-2 (DRCTINLLY DRILL (3) 2" DUCTS)		
D 1	DIRECTIONALLY				

DIRECTIONALLY DRILL BETWEEN HANDHOLES. Remarks:

ON SOUTH SIDE OF HIGHWAY DO NOT CLEAR MORE THAN 10' NORTH OF HANDHOLE 3301.

DO NOT CLEAR ON NORTH SIDE OF HIGHWAY IN DOT ROW.

SEE PROFILE DETAIL PROVIDED.

SECOND CALL-OUT OF FO-UG IS FOR STORAGE.

PROVIDE SPARE HDPE2-ORNG. PROVIDE SPARE HDPE2-RED.

INSTALL ADDITIONAL FO-MARKERS AT EDGE OF EXISTING HIGHWAY CLEARING ON NORTH AND

SOUTH SIDE, DIRECTLY OVER DIRECTIONALLY DRILLED CONDUIT.

Structure:	27. HANDHO	LE 3805			
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
FO-UG	Provide	115	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-UG	Provide	100	FO-UG (FO-UG FIBER OPTIC CABLE)		
<b>ГО-НН</b>	Provide	1	FO-HH (FIBER OPTIC HANDHOLE)		
FO-MARKER	Provide	1	FO-MARKER (FIBER OPTIC MARKER)		
HDPE2-ORNG	Provide	115	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
HDPE2-ORNG	Provide	115	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
UR2-48	Provide	115	UR2-48 (TRENCH, 48" EMBEDMENT)		
Remarks:	SECOND CALL-O	UT OF FO-UG IS	FOR STORAGE.		
	PROVIDE SPARE	HDPE2-ORNG.			

Structure:	29. POLE 3904				
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
45/3	Existing	1	45/3 POLE		
F1-4P-TRPL	Existing	1	F1-4P-TRPL (PLATE ANCHOR, TRIPLE-EYE)		
FO-UG	Provide	15	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-OH	Provide	100	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-DE	Provide	1	FO-DE (FIBER OPTIC DEADEND)		
FO-VDMP	Provide	1	FO-VDMP (FO VIBRATION DAMPER)		
FO-DL-CLAMP	Provide	4	FO-DL-CLAMP (FO DOWN LEAD CLAMP)		
FO-STORAGE	Provide	1	FO-STORAGE (FIBER OPTIC STORAGE)		
			FO-COY/DFNDR (FO SPLICE ENCLOSURE/		
FO-COY/DFNDR	Provide	1	ENCLOSURE DEFENDER)		
FO-SPLICE	Provide	48	FO-SPLICE (FIBER OPTIC SPLICE)		
E1-5	Provide	1	E1-5 (DOWN GUY)		
HDPE2-ORNG	Provide	15	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
FO-UM52	Provide	1	FO-UM52 (RISER, FIBER OPTIC)		
UME290S4	Provide	1	UME290S4 (2" RSC 90 48" RADIUS)		
UR2-48	Provide	15	UR2-48 (TRENCH, 48" EMBEDMENT)		

POLE AND ANCHOR TO BE PROVIDED UNDER DISTRIBUTION WORK ORDER. Remarks:

INSTALL FO-DE AT 5'-0" BELOW NEUTRAL, 24'-2".

ATTACH GUY 6" LOWER.

INSTALL FIBER STORAGE ON SOUTH FACE OF POLE. INSTALL FIBER STORAGE WITH TOP COILS AT 18'.

CONSTRUCT RISER ON SECONDARY RISER'S STAND-OFF BRACKETS.

CONSTRUCT TO 11' (1 STICK OF RGS WITH PVC BELL END).

Structure:	31. POLE 410	)3			
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
45/3	45/3	Existing	45/3 POLE		
FO-OH	Provide	165	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-TAN	Provide	1	FO-TAN (FIBER OPTIC TANGENT)		
FO-VDMP	Provide	2	FO-VDMP (FO VIBRATION DAMPER)		
Remarks:	POLE TO BE PRO	VIDED UNDER D	ISTRIBUTION WORK ORDER.		
	INSTALL FO-TAN	N AT 5' BELOW N	EUTRAL (AT 26').		

Structure:	32. POLE 440	1 (178A IN FIEL)	D)		
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
40/5	Existing	1	40/5 POLE		
F1-4P-TRPL	Existing	2	F1-4P-TRPL (PLATE ANCHOR, TRIPLE-EYE)		
FO-OH	Provide	155	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-DE	Provide	2	FO-DE (FIBER OPTIC DEADEND)		
FO-VDMP	Provide	1	FO-VDMP (FO VIBRATION DAMPER)		
E1-5	Provide	2	E1-5 (DOWN GUY)		
Remarks:	ANCHORS TO BE	PROVIDED UNI	DER DISTRIBUTION WORK ORDER.		

ANCHORS TO BE PROVIDED UNDER DISTRIBUTION WORK ORDER.

INSTALL FO-DE FOR SPAN TO POLE 4103 AT 3' BELOW E/W NEUTRAL AT 25'-6".

INSTALL FO-DE FOR SPAN TO POLE 4502 AT 8"LOWER AT 24'-10".

ATTACH GUYS 4" BELOW THEIR RESPECTIVE FO-DEs. INSTALL FO-VDMP ON SPAN TO POLE 4103.

Structure:	33. POLE 450	2 (L1 IN FIELD)			
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
45/3	Existing	1	45/3 POLE		
F1-4P-TRPL	Existing	1	F1-4P-TRPL (PLATE ANCHOR, TRIPLE-EYE)		
<b>FO-OH</b>	Provide	133	FO-OH (FO-OH FIBER OPTIC CABLE)		
<b>FO-OH</b>	Provide	100	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-DE	Provide	2	FO-DE (FIBER OPTIC DEADEND)		
FO-DL-CLAMP	Provide	3	FO-DL-CLAMP (FO DOWN LEAD CLAMP)		
FO-STORAGE	Provide	1	FO-STORAGE (FIBER OPTIC STORAGE)		
E1-5	Provide	1	E1-5 (DOWN GUY)		

Remarks: ANCHOR AND POLE TO BE PROVIDED UNDER DISTRIBUTION WORK ORDER.

INSTALL FO-DEs BACK-TO-BACK AT 5' BELOW NEUTRAL AT 26'-6".

ATTACH GUY 4" LOWER.

 $100^{\circ}$  OF FO-OH CALLED OUT IS FOR FO-OH CABLE INSTALLED ON FO STORAGE RACK.

INSTALL FO-STORAGE ON EAST FACE OF POLE (ROAD SIDE).

INSTALL STORAGE RACK WITH ITS OUTER UPPER COILS AT 19'-0" ABOVE GRADE.

Structure:	34. POLE 4706 (NO# IN FIELD)					
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty	
40/5	Existing	1	40/5 POLE			
FO-OH	Provide	231	FO-OH (FO-OH FIBER OPTIC CABLE)			
FO-TAN	Provide	1	FO-TAN (FIBER OPTIC TANGENT)			
Remarks:	INSTALL FO-DE A	T 3'-7" BELOW S	SECONDARY U-GUARD RISER AND 6-3" BELOW	NEUTRAL, A	Т 22'-6".	

Structure:	35. POLE 4807				
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
60/2	Existing	1	60/2 POLE		
F1-4P-TRPL	Existing	1	F1-4P-TRPL (PLATE ANCHOR, TRIPLE-EYE)		
SUM1-SM	Existing	1	SUM1-SM (SNOW MARKER)		
FO-OH	Provide	163	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-TAN	Provide	1	FO-TAN (FIBER OPTIC TANGENT)		

POLE AND ANCHOR TO BE PROVIDED UNDER DISTRIBUTION WORK ORDER. Remarks:

INSTALL FO-TAN AT 9'-6" BELOW SPAN GUY AT 39'-6".

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Structure:	36. POLE 5111				
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
35/5	Existing		35/5		
SF4C	Existing		SF4C (CONCRET ANCHOR, DOUBLE-EYE)		
SUM1-SM	Existing		SUM1-SM (SNOW MARKER)		
FO-OH	Provide	110	FO-OH (FO-OH FIBER OPTIC CABLE)		
<b>FO-OH</b>	Provide	100	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-UG	Provide		FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-DE	Provide	1	FO-DE (FIBER OPTIC DEADEND)		
FO-DL-CLAMP	Provide	3	FO-DL-CLAMP (FO DOWN LEAD CLAMP)		
FO-STORAGE	Provide	1	FO-STORAGE (FIBER OPTIC STORAGE)		
			FO-COY/DFNDR (FO SPLICE ENCLOSURE/		
FO-COY/DFNDR	Provide	1	ENCLOSURE DEFENDER)		
FO-SPLICE	Provide	48	FO-SPLICE (FIBER OPTIC SPLICE)		
SPLIT-BOLT	Provide	1	SPLIT BOLT (SPLIT-BOLT)		
E1-5	Provide	1	E1-5 (DOWN GUY)		
E3-10	Provide	1	E3-10 (GUY MARKER)		
FO-UM52	Provide	1	FO-UM52 (RISER, FIBER OPTIC)		
UME290S4	Provide		UME290S4 (2" RSC 90 48" RADIUS)		

POLE AND ANCHOR TO BE PROVIDED UNDER DISTRIBUTION WORK ORDER.

INSTALL FO-DE AT 4" FROM POLE TOP. INSTALL SPLIT-BOLT AT 6" FROM POLE TOP. ATTACH GUY AT 9" FROM POLE TOP.

INSTALL SECOND GUY MARKER ABOVE FIRST ON GUY.

SECOND CALL-OUT OF FO-OH IS FOR STORAGE. INSTALL STORAGE RACK ON WEST SIDE OF POLE.

INSTALL STORAGE RACK WITH ITS OUTER UPPER COILS AT 19'-0" ABOVE GRADE.

Structure:	37. HANDHO				
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
FO-UG	Provide	18	FO-UG (FO-UG FIBER OPTIC CABLE)		
FO-UG	Provide	100	FO-UG (FO-UG FIBER OPTIC CABLE)		
<b>ГО-НН</b>	Provide	1	FO-HH (FIBER OPTIC HANDHOLE)		
FO-MARKER	Provide	1	FO-MARKER (FIBER OPTIC MARKER)		
HDPE2-ORNG	Provide	18	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
UR2-48	Provide	18	UR2-48 (TRENCH, 48" EMBEDMENT)		
	SECOND CALL-O		FOR STORAGE.		
Structure:	38. HANDHO	LE 4713	FOR STORAGE.  Unit Description	Complete	Oty
Remarks:  Structure:  Assembly Unit  FO-UG			Unit Description	Complete	Qty
Structure: Assembly Unit	38. HANDHO Activity	LE 4713  #Cond Qty		Complete	Qty
Structure: Assembly Unit FO-UG	38. HANDHO <u>Activity</u> Provide	LE 4713  #Cond Qty 255	Unit Description FO-UG (FO-UG FIBER OPTIC CABLE)	Complete	Qty
Structure:  Assembly Unit  FO-UG  FO-UG	38. HANDHO  Activity  Provide  Provide	#Cond Qty 255 100	Unit Description  FO-UG (FO-UG FIBER OPTIC CABLE)  FO-UG (FO-UG FIBER OPTIC CABLE)	Complete	Qty
Structure:  Assembly Unit  FO-UG  FO-UG  FO-HH	38. HANDHO  Activity  Provide  Provide  Provide	#Cond Oty 255 100	Unit Description  FO-UG (FO-UG FIBER OPTIC CABLE)  FO-UG (FO-UG FIBER OPTIC CABLE)  FO-HH (FIBER OPTIC HANDHOLE)	Complete	Qty
Structure:  Assembly Unit  FO-UG  FO-UG  FO-HH  FO-MARKER	38. HANDHO  Activity  Provide  Provide  Provide  Provide  Provide	#Cond Qty 255 100 1	Unit Description  FO-UG (FO-UG FIBER OPTIC CABLE)  FO-UG (FO-UG FIBER OPTIC CABLE)  FO-HH (FIBER OPTIC HANDHOLE)  FO-MARKER (FIBER OPTIC MARKER)	Complete	Qty

SECOND CALL-OUT OF FO-UG IS FOR STORAGE. Remarks:

PROVIDE SPARE HDPE2-ORNG.

Structure:	39. 22-8				
Assembly Unit	Activity	#Cond Qty	Unit Description	Complete	Qty
90/H4	Existing	2	90/H4 POLE		
CLVRT-FNDTN	Existing	2	CLVRT-FNDTN (CULVERT FOUNDATION)		
FO-OH	Existing	705	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-OH	Existing	-	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-OH	Existing	100	FO-OH (FO-OH FIBER OPTIC CABLE)		
FO-ENCLOSURE	Existing	1	FO-ENCLOSURE		
FO-DL-CLAMP	Existing	-	FO-DL-CLAMP (FO DOWN LEAD CLAMP)		
FO-STORAGE	Existing	1	FO-STORAGE (FIBER OPTIC STORAGE)		
FO-UG	Provide	30	FO-UG (FO-UG FIBER OPTIC CABLE)		
HDPE2-ORNG	Provide	30	HDPE2-ORNG (HDPE, 2", ORANGE COLOR)		
UME290S4	Provide	1	UME290S4 (2" RSC 90 48" RADIUS)		
OFFSET2	Provide	1	OFFSET2 (2" RGS OFFSET CONDUIT)		
FO-UM52	Provide	1	FO-UM52 (RISER, FIBER OPTIC)		
UR2-48	Provide	20	UR2-48 (TRENCH, 48" EMBEDMENT)		
UR2-48C	Provide	10	UR2-48 (TRENCH, 48" EMBED, COMPACTION)		
UM31A	Provide	5	UM31A (1 YARD, NSF FILL, COMPACTED)		
Remarks:	FO-OH STORAGE A	ND FO-ENCLO	SURE ARE TO BE EXISTING.		

UM31A: PROVIDE 5 UNITS OF 1 YARD OF NSF FILL TO BACKFILL THE LAST 10' OF TRENCH. THOROUGHLY COMPACT FILL IN TRENCH TO MAINTAIN STABILITY OF CULVERT FOUNDATION.

INSTALL THE UME290S4 FLUSH TO THE FOUNDATION CULVERT, OR SPACED NOT MORE THAN 1" OFF ITS FACE.

OFFSET2: FIELD BEND AT 2" RIGID GALVANIZED STEEL CONDUIT OFFSET TO TRANSITION FROM CONDUIT ELBOW OUTSIDE OF FOUNDATION CULVERT TO 6" TO 9" OFF THE EAST FACE OF THE POLE FOR THE CONTINUATION OF THE RISER INSTALLATION.

INSTALL RISER ON EAST FACE OF POLE.

CONNECT ITS SPECIFIED 2" RSC SECTION TO THE OFFSET2.

PROVIDE 8'-6" SPACING BETWEEN THE BOTTOM TWO STAND-OFF BRACKETS.

INSTALL THE BOTTOM STAND-OFF BRACKET LOW ON THE OFFSET2.

INSTALL THE SECOND 8'-6" ABOVE THE FIRST ON THE 2" STRAIGHT RGS CONDUIT SECTION. INSTALL ANOTHER STAND-OFF BRACKET NEAR THE TOP OF THE 2" STRAIGHT RGS SECTION.

EXTEND RISER TO 1' BELOW BOTTOM COILS OF FIBER STORAGE.