Kwigillingok, Alaska
Rural Power System Upgrade
Issued for Construction
January 2017
## PILE LOCATION SCHEDULE (1 of 3)

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## PILE LOCATION SCHEDULE (2 of 3)

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## PILE LOCATION SCHEDULE (3 of 3)

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**NOTE TO BIDDER:**

PILE LOCATION SURVEY TO BE PERFORMED BY ENGINEER IN SUMMER OF 2017. PILE LOCATION INFORMATION WILL BE PROVIDED TO SUCCESSFUL BIDDER IN FALL OF 2017.
NOTES

1. DEMOLISH ALL EXISTING DISTRIBUTION CONDUCTORS, CROSSARM, HARDWARE, ANCHOR, ROPE, GUARD, LUGS, ETC., TAKEN OUT OF SERVICE AS A RESULT OF THIS PROJECT EXCEPT WHERE SPECIFICALLY INDICATED TO REMAIN. COORDINATE WITH OWNER TO MINIMIZE OUTAGES.

2. EXISTING POLES TO REMAIN EXCEPT WHERE SPECIFICALLY INDICATED TO BE REMOVED.

3. ALL EXISTING UNUSED PILES SHALL BE CUT-OFF 6" BELOW GROUND LEVEL.

4. REMOVE ALL EXISTING TRANSFORMERS AND RELOCATE TO A LOCATION DESIGNATED BY THE OWNER.

5. EXISTING TELEPHONE TO REMAIN IN SERVICE ON EXISTING POLES.

6. DISCONNECT EXISTING BATTERY BANK FROM DISTRIBUTION SYSTEM; REMOVE ALL POWER CONDUIT PROTECT BATTERY BANK FOR RECONNECTION.

7. REMOVE ALL PRIMARY CONDUCTORS BETWEEN THE SECTIONALIZING ENCLOSURE AND THE DISTRIBUTION POLE 1B-3.
NOTES:

1. DEMOLISH EXISTING POLE, SERVICE CONDUCTORS, HARDWARE, ANCHOR RINGS, GROOVE ETC. TAKEN OUT OF SERVICE AS A RESULT OF THIS PROJECT EXCEPT WHERE SPECIFICALLY INDICATED TO REMAIN.
   COORDINATE DEMO WORK TO MINIMIZE OUTAGES.

2. COORDINATE WORK WITH OWNER TO ENSURE PUMP STATION AND RESIDENCE OUTAGES ARE KEPT TO A MINIMUM. IF NECESSARY, PROVIDE A GENERATOR TO KEEP PUMP STATION OPERATIONAL.

3. SEE SHEET E3.3 FOR NEW WORK.

4. DISCONNECT EXISTING 480 VOLT METAL CLAD CABLE FROM TRANSFORMER. FILL CABLE OUT OF BUILDING. TAP EACH CONDUCTOR AND INSTALL HEAT SHRINK END SEAL OVER MULTI CONDUCTOR METAL CLAD CABLE SEAL HOLE IN BUILDING. WEATHERPROOF FILL VOID WITH INSULATION.

5. DISCONNECT TRANSFORMER FROM PANELBOARD. REMOVE TRANSFORMER AND MOVE TO A LOCATION DESIGNATED BY THE OWNER.

6. REMOVE EXISTING CONDUCTORS FROM CIRCUIT BREAKER IN PANELBOARD. REPLACE CIRCUIT BREAKER WITH NEW ONE.

7. REMOVE OVERHEAD TRIPLEX TO RESIDENCE.

8. REMOVE EXISTING 120/240 VOLT, 1PH, STEP-DOWN TRANSFORMER. NOTE 9

9. REPLACE TRANSFORMER WITH NEW ONE. NOTE 9

10. REPLACE EXISTING 480 VOLT, 1PH, METAL CLAD CABLE FROM PANELBOARD TO PUMP FEEDS. NOTE 9

PUMP HOUSE ENLARGED PLAN

Scale: 1/2" = 1'
1. DEMONSTRATE ALL EXISTING DISTRIBUTION, CONDUCTORS, CROSSING, WIRING, AND CONDUIT. EXISTING POLES, GUARD WALLS, ETC., TAKEN OUT OF SERVICE AS INDICATED IN PLAN. REFER TO NOTE 6 FOR SPECIFICALLY INDICATED TO REMAIN, COORDINATE SENDING WORK TO MINIMIZE OUTAGES.

2. EXISTING POLES TO REMAIN EXCEPT WHERE SPECIFICALLY INDICATED TO BE REMOVED.

3. ALL EXISTING UNUSED H-PILES SHALL BE CUT-OFF 6" BELOW GROUND LEVEL.

4. REMOVE ALL EXISTING EXISTING TRANSFORMERS AND RELOCATE TO A LOCATION DESIGNATED BY THE OWNER.

5. EXISTING TELEPHONE TO REMAIN IN SERVICE ON EXISTING POLES.

6. REMOVE EXISTING POLES. SAVE H-PILES FOR REUSE. POLES TO BE TURNED OVER TO OWNER.

SEE E2.1 FOR MATCH LINE

SEE E2.6 FOR MATCH LINE
NOTES

1. DEMOLISH ALL EXISTING DISTRIBUTION CONDUCTORS, CROSSBARS, MODULAR, ANCHOR ROCKET SLOTS, LIGHTS, ETC. TAKEN OUT OF SERVICE AS A RESULT OF THIS PROJECT EXCEPT WHERE SPECIFICALLY INDICATED TO REMAIN. COORDINATE DEMO WORK TO MINIMIZE OUTAGES.

2. EXISTING POLES TO REMAIN EXCEPT WHERE SPECIFICALLY INDICATED TO BE REMOVED.

3. ALL EXISTING UNUSED H-PILES SHALL BE CUT-OFF 6" BELOW GROUND LEVEL.

4. REMOVE ALL EXISTING TRANSFORMERS AND RELOCATE TO A LOCATION DESIGNATED BY THE OWNER.

5. EXISTING TELEPHONE TO REMAIN IN SERVICE ON EXISTING POLES.

6. SEE SHEET E3.5 FOR NEW WORK.
1. DEMOLISH ALL EXISTING DISTRIBUTION CONDUCTORS, CROSSARMS, HARDWARE, ANCHOR RODS, GUARD LIGHTS, ETC. TAKEN OUT OF SERVICE AS A RESULT OF THIS PROJECT EXCEPT WHERE SPECIFICALLY INDICATED TO REMAIN, COORDINATE WITH WORK TO MINIMIZE OUTAGES.

2. EXISTING POLES TO REMAIN EXCEPT WHERE SPECIFICALLY INDICATED TO BE REMOVED.

3. ALL EXISTING UNUSED M-POLES SHALL BE CUT-OFF 8" BELOW GROUND LEVEL.

4. REMOVE ALL EXISTING EXISTING TRANSFORMERS AND RELOCATE TO A LOCATION DESIGNATED BY THE OWNER.

5. EXISTING TELEPHONE TO REMAIN IN SERVICE ON EXISTING POLES.
NOTES:

1. IDEALISM. ALL EXISTING DISTRIBUTION CONDUCTORS, CROSSARMS, HARDWARE, MINOR ROADS, CABLES, LIGHTS, ETC. TAKEN OUT OF SERVICE AS A RESULT OF THIS PROJECT EXCEPT WHERE SPECIFICALLY INDICATED TO REMAIN. COORDINATE DEMO WORK TO MINIMIZE OUTAGES.

2. EXISTING POLES TO REMAIN EXCEPT WHERE SPECIFICALLY INDICATED TO BE REMOVED.

3. ALL EXISTING UNUSED H-POLES SHALL BE CUT-OFF 6" BELOW GROUND LEVEL.

4. REMOVE ALL EXISTING TRANSFORMERS AND RELOCATE TO A LOCATION DESIGNATED BY THE OWNER.

5. EXISTING TELEPHONE TO REMAIN IN SERVICE ON EXISTING POLES.

SEE E2.9 FOR MATCH LINE
NOTES

1. DEMOLISH ALL EXISTING DISTRIBUTION CONDUCTORS, CROSSARMS, HARDWARE, ANCHOR RODS, GUARD LIGHTS, ETC. TAKEN OUT OF SERVICE AS A RESULT OF THIS PROJECT EXCEPT WHERE SPECIFICALLY INDICATED TO REMAIN. COORDINATE DEMO WORK TO MINIMIZE OUTAGES.

2. EXISTING POLES TO REMAIN EXCEPT WHERE SPECIFICALLY INDICATED TO BE REMOVED.

3. ALL EXISTING UNUSED HP-POLES SHALL BE CUT-OFF 6" BELOW GROUND LEVEL.

4. REMOVE ALL EXISTING EXISTING TRANSFORMERS AND RELOCATE TO A LOCATION DESIGNATED BY THE OWNER.

5. EXISTING TELEPHONE TO REMAIN IN SERVICE ON EXISTING POLES.
NOTES:

1. DEFLUSH ALL EXISTING DISTRIBUTION CONDUCTORS, CROSS-Arms, HARDWARE, ANCHOR RINGS, GUYED LINES, ETC. TAKEN OUT OF SERVICE AS A RESULT OF THIS PROJECT EXCEPT WHERE SPECIFICALLY INDICATED TO REMAIN. COORDINATE DEMO WORK TO MINIMIZE OUTAGES.

2. EXISTING POLES TO REMAIN EXCEPT WHERE SPECIFICALLY INDICATED TO BE REMOVED.

3. ALL EXISTING UNUSED H-FILES SHALL BE CUT-OFF 6" BELOW GROUND LEVEL.

4. REMOVE ALL EXISTING TRANSFORMERS AND RELOCATE TO A LOCATION DESIGNATED BY THE OWNER.

5. EXISTING TELEPHONE TO REMAIN IN SERVICE ON EXISTING POLES.

SEE E2.9 FOR MATCH LINE
1. SEE SHEET E3.3 FOR MODIFICATIONS TO PUMP HOUSE, INSTALL NEW METER BASE AND METER.

2. INSTALL NEW METER BASE AND METER ON EXISTING BUILDING, USE EXISTING SUPPORTS AND INSTALL 2" RISER WITH HEAT AND AIR 2" C TO EXISTING PANEL. PANEL BREAKER SEAL PENETRATION WEATHERPROOF METER TO BE PROVIDED BY OWNER.

3. ALL WORK ON THIS SHEET IS INCLUDED IN THE BASE BID.
1. New Distribution Line crosses the existing line at this location. See Sheet E3.3 for coordination requirements.

2. All work on this sheet is included in the base bid.

NOTE 1

PROVIDE TEMPORARY BYPASS AROUND EXISTING CIRCUIT AS REQUIRED. MAINTAIN POWER TO NEW AND EXISTING SERVICES DURING CONSTRUCTION.

SEE E3.6 FOR MATCH LINE

SEE E3.1 FOR MATCH LINE
NOTES:
1. NEW DISTRIBUTION LINE CROSSES THE EXISTING LINE AT THIS LOCATION. SEE SHEET E3.3 FOR CoORDINATION REQUIREMENTS.
2. ALL WORK ON THIS SHEET IS INCLUDED IN THE BASE BID, UNLESS OTHERWISE NOTED.

BASE IS SHOWN. SEE PLAN FOR ADDITIVE ALTERNATIVE #1 FOR THIS SHEET

CONDUCTORS SOUTH OF NEW POLE IS PART OF ADDITIVE ALTERNATIVE #1

NOTES:

SEE E3.8 FOR MATCH LINE
NOTES:
1. NEW DISTRIBUTION LINE CROSSES THE EXISTING LINE AT THIS LOCATION. SEE SHEET E.3.3 FOR COORDINATION REQUIREMENTS.
2. PROVIDE ALL MATERIAL AND CONDUCTORS AS REQUIRED.

ALL WORK IN THIS AREA IS INCLUDED IN ADDITIVE ALTERNATIVE #2. SEE SHEET E.3.10 FOR ADDITIVE ALTERNATIVE #2.

NOTE 1

CONNECT TO EXISTING SYSTEM IF ADDITIVE ALTERNATIVE #2 IS NOT AWARDED. NOTE 1.

CONNECT TO EXISTING SYSTEM IF ADDITIVE ALTERNATIVE #2 IS NOT AWARDED. NOTE 1.

NOTE 1

ENGINEERED BY CRW

PHILADELPHIA, ALASKA

REAL POWER SYSTEM UPGRADES

NEW DISTRIBUTION LINE

SHEET 4 OF 5

SCALE IN FEET

SEE E3.10/E3.10A FOR MATCH LINE
NOTES:
1. NEW DISTRIBUTION LINE CROSSES THE EXISTING LINE AT THIS LOCATION. SEE SHEET E.3 FOR COORDINATION REQUIREMENTS.
2. ALL WORK ON THIS SHEET IS INCLUDED IN ADDITIVE ALTERNATIVE #2, UNLESS OTHERWISE NOTED.

NOTE 1

ALL WORK IN THIS AREA IS INCLUDED IN ADDITIVE ALTERNATIVE #2.

PROVIDE ANCHOR #2
ADDITIVE ALTERNATIVE #2 IS NOT AWARDED.

SEE E3.10/E3.10A FOR MATCH LINE
NOTES:

1. NEW DISTRIBUTION LINE CROSSES THE EXISTING LINE AT THIS LOCATION. SEE SHEET E.3 FOR COORDINATION REQUIREMENTS.

2. ALL WORK ON THIS SHEET IS INCLUDED IN ADDITIVE ALTERNATIVE #1, UNLESS OTHERWISE NOTED.

SEE E.3.8 FOR MATCH LINE

SEE E.3.10/E.3.10A FOR MATCH LINE

ALL WORK IN THIS AREA IS INCLUDED IN ADDITIVE ALTERNATIVE #1.

WORK IN THIS AREA IS INCLUDED IN ADDITIVE ALTERNATIVE #1.
NOTES

1. NEW DISTRIBUTION LINE CROSSES THE EXISTING LINE AT THIS LOCATION. SEE SHEET E3.1 FOR COORDINATION REQUIREMENTS.

2. PROVIDE ALL MATERIALS AND CONDUCTORS AS REQUISITED.

SEE E3.9/E3.9A/E3.9B FOR MATCH LINE

ALL WORK IN THIS AREA IS INCLUDED IN ADDITIVE ALTERNATIVES D. SEE SHEET E3.1A FOR ADDITIVE ALTERNATIVE D.

NOT REQUIRED IF ADDITIVE ALTERNATIVE D IS AWAVERED.

CONNECT TO EXISTING SYSTEM IF ADDITIVE ALTERNATIVE D IS NOT AWAVERED. NOTE 2.

FINISHES SUPPORT CENTER
NOTES

1. NEW DISTRIBUTION LINE CROSSES THE EXISTING LINE AT THIS LOCATION. SEE SHEET E3.3 FOR COORDINATION REQUIREMENTS.

2. ALL WORK ON THIS SHEET IS INCLUDED IN ADDITIVE ALTERNATIVE #3. UNLESS OTHERWISE NOTED.
1. Install Cooper Power System Rotatable Feeder thru insert box in existing bushing well. Catalog No. LE120. Connect the existing and new load break elbows to the inserts.

2. Provide schedule 80 PVC for below grade and up to the transformer, PVC at the pole.

3. Bury conduit minimum 3' - 0".

4. Remove existing boardwalk as required to install new cable and conduit. Return boardwalk to existing condition after conduit has been installed.

5. Transition to PVC for below grade. See Unit LGA.