

**The State of New Hampshire
Before the
Public Utilities Commission**

**PETITION OF FREEDOM RING COMMUNICATIONS d/b/a BAYRING COMMUNICATIONS FOR
LICENSE TO CONSTRUCT AND MAINTAIN A UTILITY CABLE/CONDUIT OVER AND ACROSS THE
CONCORD AND MONTREAL RAILROAD BETWEEN UTILITY POLE CECO 13 AND UTILITY POLE
CECO 12.**

TO THE PUBLIC UTILITIES COMMISSION:

Freedom Ring Communications d/b/a BayRing Communications, a public utility engaged in the generation, transmission, distribution and sale of telecommunications in the State of New Hampshire, hereby petitions the Public Utilities Commission ("Commission"), pursuant to RSA 371:17, for a license to construct and maintain telecommunication lines over and across the Concord and Montreal Railroad in the City of Concord, New Hampshire, and in support of its petition states as follows:

1. In order to meet the reasonable requirements of service to the public, BayRing Communications is proposing to construct a new 216 fiber optic line. The new line will help to accommodate the growth in demand and to obtain a greater level of service reliability in the Concord area.
2. The new line will cross the C&M RR along the east side of West Portsmouth Street.
3. The location of the proposed crossing is shown on the attached location map.
4. The design and proposed construction of the crossing is shown on the attached Dewsnap Engineering Associates LLP. Profile drawing entitled "Existing Overhead Merrimack County, Near west Portsmouth Street, Concord, NH".
5. The proposed crossing will occur between two existing Utility poles set approximately 59 feet apart. The existing pole on the west side of the C&M RR, Utility Pole CECO 13 is approximately 45 feet tall. The existing pole on the east side of the C&M RR, Utility Pole CECO 12 is approximately 45 feet tall. The line will be made up of two materials; Conductor nominal diameter 5/16in 7-strand steel EHS and 1 non-supporting cable, added diameter = 0.750 in, weight = 0.124lb/F which contains 216 fiber optic. The Strand and non-supporting cable will be sagged using the Heavy Load condition (0° F, pounds psf wing loading and ½" radial ice) with a maximum tension of 2764 lbs under that load.

6. Using the above design criteria, the maximum sag of the non-supporting cable and minimum clearances for the crossing have been determined and designed as follows:
 - A. 0° F, Non-supporting cable – The maximum sag on the fiber optic cable under this condition is 0.41'. The minimum clearance to land is 32'.
 - B. 120° F, Non-supporting cable – The maximum sag on the fiber optic cable under this condition is 0.10'. The minimum clearance to land is 32'.
 - C. 50° F, Non-supporting cable – The maximum sag on the fiber optic cable under this condition is 0.07'. The minimum clearance to land is 32'.
7. There are no NHDES or NHDOT permits necessary specifically for the construction of this crossing.
8. The proposed crossing has been designed and will be constructed, maintained and operated by BayRing Communications, its affiliates and contractors.
9. BayRing Communications submits that the license petitioned for herein may be exercised without substantially affecting the rights of the public in the crossing of the Concord and Montreal Railroad. Minimum safe line clearances above the railroad will be maintained at all times. The use of the railroad will not be diminished in any material respect as a result of the overhead line crossing.

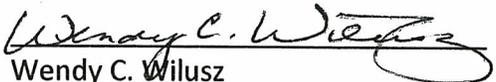
WHEREFORE, BAYRING COMMUNICATIONS respectfully requests that the Commission:

- a. Find that the license petitioned for herein may be exercised without substantially affecting the railroad which are the subject of this petition;
- b. Grant BayRing Communications a license to construct and maintain communication lines over and Concord and Montreal railroad in Concord, New Hampshire, as specified in the petition; and
- c. Issue an Order Nisi and orders for its publication.

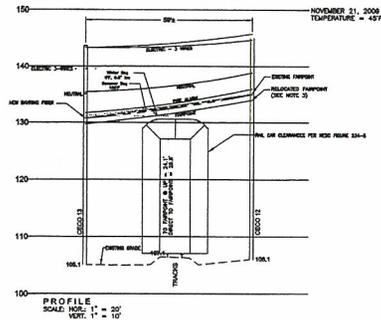
Dated at Portsmouth the 11th day of January, 2010.

Respectfully submitted,

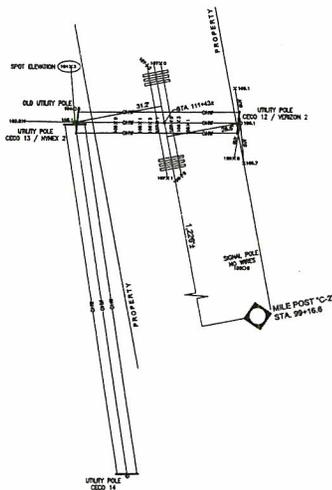
BAYRING COMMUNICATIONS
By Its Director of Operations


Wendy C. Wilusz
Director of Operations

BayRing Communications
359 Corporate Drive
Portsmouth, NH 03801
(603) 766-1000



PROFILE - OVERHEAD WIRE CROSSING
FORMER RR ROW



PLAN - OVERHEAD WIRE CROSSING
FORMER RR ROW

NOTES:

1. ALL PROPERTY LINE DATA TO BE CONSIDERED APPROXIMATE.
2. OHW - DENOTES OVERHEAD WIRE
3. MAINTAIN 12" SEPARATION BETWEEN FIRE ALARM AND BAYRING AND BETWEEN BAYRING AND FAIRPOINT AT POLES CEC012 & CEC013

LEGEND

- Summer Sag 120°F
- - - Winter Sag 0°F 0.5" Ice

Sag and Tension Data				1 Non-Supporting Cable(s) Added, Dia = 0.750 in.													
Conductor nominal Dia 5/16in 7-Strand Steel EHS				WT = 0.124Lb/F ± 0.000Lb/F													
Span = 60.00 Feet NESC Heavy Load Zone				Creep is NOT a Factor													
Temp °F	Ice Inch	Wind PSF	K	Weight Lb/FT	Final Sag Ft	Tension n Lb	Sag Ft	Initial Tens. Lb	Temp °F	Ice Inch	Wind PSF	K	Weight Lb/FT	Final Sag Ft	Tension n Lb	Sag Ft	Initial Tens. Lb
0	0.00	0.00	0.00	0.205	-	-	0.03	2772	-20	0.00	0.00	0.00	0.329	0.08	2774	0.05	2774
0	0.00	0.00	0.00	0.205	-	-	0.04	2594	0	0.00	0.00	0.00	0.329	0.06	2594	0.06	2594
30	0.00	0.00	0.00	0.205	-	-	0.04	2326	30	0.00	0.00	0.00	0.329	0.06	2300	0.06	2329
50	0.00	0.00	0.00	0.205	-	-	0.04	2237	50	0.00	0.00	0.00	0.329	0.07	2205	0.07	2240
60	0.00	0.00	0.00	0.205	-	-	0.04	2060	60	0.00	0.00	0.00	0.329	0.07	2016	0.07	2063
90	0.00	0.00	0.00	0.205	-	-	0.05	1795	90	0.00	0.00	0.00	0.329	0.08	1733	0.08	1799
120	0.00	0.00	0.00	0.205	-	-	0.06	1533	120	0.00	0.00	0.00	0.329	0.10	1451	0.10	1539
167	0.00	0.00	0.00	0.205	-	-	0.08	1134	167	0.00	0.00	0.00	0.329	0.15	1018	0.15	1144
212	0.00	0.00	0.00	0.205	-	-	0.12	769	212	0.00	0.00	0.00	0.329	0.24	626	0.19	789

Above: Initial Data Prior to Cable Installation

* Design Conditions



EXISTING OVERHEAD	
MERRIMACK COUNTY	
NEAR WEST PORTSMOUTH STREET	
CONCORD, NH	
Prepared For:	Prepared By:
BayFing Communications 350 Corporate Drive Portsmouth, NH 03801-6808	Dewarup Engineering Assoc. LLP 170 Lincoln Street - Seaport, NH 03906 Tel: (603) 233-0985
Date: November 30, 2009	Scale: As Shown
Wk. Plan: V.21 / 37	Benchmark: A S S U M E D
DOT No.:	FILE No.:
Field By: P.A.D. & S.F.D.	
Drawn By: S.F.D./Chk. By: P.A.D.	

CEG Consulting Engineers Group Inc.
ENGINEERS & CONSULTANTS
ONE CHARLESTON RD. HOPKINS, MASSACHUSETTS
WWW.CEGCONSULTING.COM
Add Proposed Communication line profiles and data table
12/22/09 TO/PT

Railroad Crossing Location

