

EXHIBIT B
INSTITUTIONAL NETWORK ADDENDUM

Additional Data Channels Activation on
Upgraded HFC Institutional Network

Company shall activate an additional data channel on the Upgraded HFC Institutional Network for use of the City and/or the Saint Paul Public Schools within six months of a city request. Each additional data channel will actually require the use of a single channel in the forward path and a single channel in the reverse path on the distribution system segments along with 100 Mbps Connecting Links and Headend equipment and hardware as described further below.

The activated data channels must be available to all locations on the HFC Institutional Network, and must be connected to and operate in a manner consistent with the Connecting Link between the City Hall Annex and the Headend being provided under the Corrective Plan and shown as Attachment 2-A-8 in the Corrective Plan. This requires that the company provide an additional 100 Mbps link from the City Hall Annex to the Headend for the additional City Data Channel and a 100 Mbps link from the Saint Paul Public Schools Data Center to the Headend for the additional School Data Channel. The company shall provide and maintain all equipment and associated facilities needed for the Connecting Links including the Ethernet switches at the City Hall Annex and the Saint Paul Public Schools Data Center.

As provided in the Corrective Plan, the company shall provide and maintain all equipment and associated facilities needed at the Headend, for the Connecting Links, and throughout the distribution network to provide an operational system to the City and Saint Paul Public Schools demarcation points for each of the activated data channels. The company shall provide space at the Headend required for the additional equipment; it shall have the same obligation to provide space for such purposes as it has with respect to the HFC Institutional Network under the Corrective Plan.

The City and Saint Paul Public Schools shall provide modems for the users. Specific equipment needed at the Headend will depend upon the modems which the City and the Saint Paul Public Schools decide to use for these additional channels. The City shall inform the company of the make and model of the modems by the time of requesting activation.

The design shall be subject to the final approval of the City, which approval shall not be unreasonably withheld.

Fiber Institutional Network

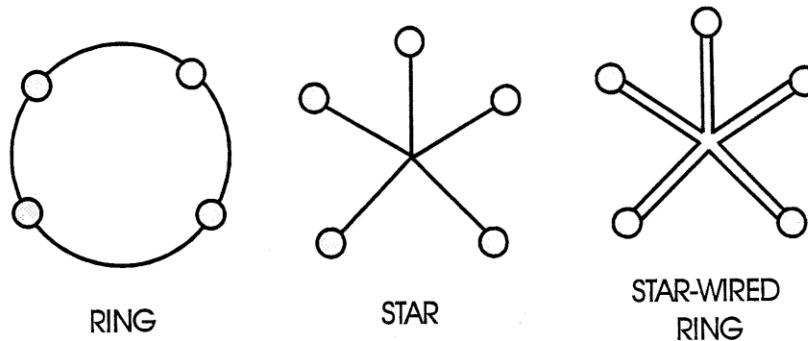
The company shall provide a Fiber Institutional Network to supplement the HFC Institutional Network to address the need for highly reliable transmission of data, voice, and television at increasing data rates. It is anticipated that the fiber would be equipped for transmission of signals at rates up to 2 Gbps (2,000,000,000 bits per second) and above and the company must ensure that, installing and maintaining the network, it does nothing inconsistent with such a use. Initially, the network will utilize twelve (12) Data Centers and nine (9) dedicated fiber optic links interconnecting to Data Centers.

The Data Centers would become the points of interconnection to the HFC portion of the Institutional Network and to dedicated links to other locations within and outside the City and as needed. The company shall provide "dark" fiber brought to a point within the Data Center, and terminated in the same manner that dark fiber is terminated under the Corrective Plan. The City would provide the necessary equipment to light the fiber.

The twelve (12) Data Centers shall be at the following locations within Saint Paul:

City Hall Annex	25 W. Fourth Street
City Hall Court House	15 W. Kellogg Boulevard
Public Works Maintenance Garage	981 N. Dale
Public Safety Annex	100 E. 10 th Street
Civic Center	143 W. Fourth Street
Juvenile Detention Center	480 Saint Peter Street
Ramsey County Government Center East	160 East Kellogg Boulevard
Ramsey County Government Center West	50 West Kellogg Boulevard
Adult Detention Center	14 West Kellogg Boulevard
Public Schools Administration Building	
Public Library Administration Building	
1 Center to be identified by City by 11/30/98	

The company shall provide and install the fiber optic cables for interconnecting the Data Centers by either the "Ring," "Star," or "Star-Wired Ring" topology, as typified in the following drawings.



In the Ring topology, the interconnections between the Data Centers would be based upon redundant dual rings. A minimum of six (6) single mode fibers shall be provided between the Data Centers. To provide for the greatest reliability in the event of a cable being physically damaged, cables would be routed so no interconnections between more than two Data Centers would be in the same cable path.

In the Star topology, the central core location where the cables come together could be one of the Data Centers. Although this topology would not be as reliable as the above Ring topology in the event of a cable being physically damaged, the cable company shall provide routing which will optimize reliability. A minimum of twelve (12) single mode fibers shall be provided between each of the outlying Data Centers and the Core location. If the Star topology is used, the Core location shall be at the City Hall Annex.

In the Star-Wired Ring topology, the central core location where the cables come together could also be one of the Data Centers. Although this topology would not be as reliable as the above Ring topology in the event of a cable being physically damaged, the cable company shall provide routing which will optimize reliability. A minimum of twelve (12) single mode fibers shall be provided between each of the outlying Data Centers and the Core location. If the Star-Wired Ring topology is used, the Core location shall be at the City Hall Annex.

Nine (9) locations shall be provided with dedicated fiber optic links to their nearest appropriate Data Center. Each of the links shall contain six (6) single mode fibers.

The nine (9) locations with dedicated fiber optic links to Data Centers shall be at the following locations within Saint Paul:

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Fire Equipment Services	1675 Energy Park Drive
Parks & Recreation Hamline Garage	1100 N. Hamline Avenue
Water Department Hamline Yard	277 N. Hamline Avenue
Health Department	555 Cedar Street
Commerce Building	8 E Fourth Street
4 Locations to be identified by City by 11/30/98	

By nine months following the effective date of this franchise, or within ninety days from the time the City identifies the additional Data Center and dedicated links, whichever is sooner, the cable company shall submit to the City the company's initial engineering design plans for providing "dark fiber" to the twelve (12) Data Centers and nine (9) dedicated links at the locations identified above. Selection of specific routing, building locations, and fiber termination details within the buildings will be done cooperatively between the cable company and the City. The City will have final approval of the design, which will not be unreasonably withheld.

By December 31, 2000, the cable company shall have completed the installation and have made available for use the above described "dark fiber" for the Data Centers and dedicated links.

The City shall be responsible for the installation, operation, and maintenance of terminal and other equipment used with these "dark" fibers located at User premises beyond the demarcation point.

The cable company shall provide these fibers and the use of the fibers at no cost to the City, except as the franchise otherwise provides. If needed, the company will provide space at the Headend for the equipment required for the use of the fibers; it shall have the same obligation to provide space for such purposes as it has with respect to the HFC Institutional Network under the Corrective Plan. Company will maintain all equipment at the Headend, except as the franchise otherwise provides. The company shall be responsible for the maintenance of the fiber to performance within manufacturer's specifications at all times.

In the event any fiber falls below manufacturer's specifications at any time, a condition of the routing results in detectable interference being introduced into the transmissions, or changing physical conditions may reduce the reliability of the transmission path, the cable company shall replace and/or transfer the affected fiber's operation to other fiber within four (4) hours of becoming aware of the problem.

For purposes of testing the dark fiber, the Company shall follow the same testing procedures for dark fiber provided under the Corrective Plan

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(for acceptance, for annual and for semi-annual testing). The Company will follow the same procedure for testing headend equipment that it maintains as applies to the link between the City Hall Annex and the Headend under the Corrective Plan.

The dark fiber and the equipment at the Headend that company is required to provide must satisfy the reliability standards set forth in the Corrective Plan.

The provisions of Attachment 2-F-1 (Service Call Processing and Tracking) shall also apply to the Fiber Institutional Network described herein, Attachment 2-F-2 (Reliability), and the standards set out on Attachment 2-F-6 (Connecting Link Data Oriented Testing) shall apply.