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Project Name: FIT Equipment Purchase
Project Number: 2006-114

FINAL ENVIRONMENTAL ASSESSMENT

FIBER INNOVATION TECHNOLOGY EQUIPMENT PURCHASE JOHNSON CITY, WASHINGTON COUNTY, TENNESSEE

TENNESSEE VALLEY AUTHORITY
AUGUST 2006

The Proposed Purpose and Need

The Tennessee Valley Authority (TVA) proposes to participate with First Tennessee Bank in making a loan to Fiber Innovation Technology, Inc. (FIT). The company makes specialized bi-component fiber used in high technology applications in the medical, automotive, and footwear industries. With the loan the company would buy manufacturing equipment to be used in the company's existing facility. The company now has 100 employees, and the new equipment would enable about 30 percent more production and hiring of 8 new employees. TVA's participation would be approximately 30 percent of the cost of the equipment. In 1997 TVA also provided funding to help the company buy smaller-scale equipment to be used on a pilot basis.

FIT's last North American competitor recently shut down its facility. This leaves FIT as the only domestic producer of bi-component fiber. FIT's present production is at capacity due to growth of existing orders. FIT is seeking a quick way to expand capacity to capture the new business available due to the closure of the competitor and has identified equipment that can be installed and operational in 3-4 months. This would allow FIT to position itself in a highly profitable position for the future.

FIT produces bi-component fiber by purchasing raw material in the form of solid plastic pellets. These pellets are then dried to remove any surface water which might chemically react with the plastic. The pellets are then heated into a molten state and transported by a rotating screw to pumps which meter the molten plastic through perforated stainless steel plates at very high pressure. As the molten plastic passes through the plates, cold air is blown on it to form solid filaments. These filaments pass over a series of rolls and are collected in large stainless steel cans for further processing within the facility.

The existing building that FIT occupies is located in the Buffalo Mountain Industrial Park at 398 Innovation Drive, Johnson City, Washington County, Tennessee, as shown in the attached location maps and aerial photograph.

Alternatives and Comparison

There are two feasible alternatives, i.e., the Action Alternative and the No Action Alternative. Under the Action Alternative, TVA would help fund purchase of the new manufacturing equipment. Under the No Action Alternative, TVA would not make these funds available. In this event, the company either would seek alternative funding or, continue operations at the current level. If the company obtained alternative funding, overall environmental consequences under either alternative would be similar. If the company continued operations at the current level, there would no change in the minor local solid wastes and traffic generation, but the economic benefits of the new business would not occur, and the eight local jobs would not be created. Given that the company management thinks there is adequate demand for their product due to closure of the

competition, it is likely that the minor impacts of increased production would occur at an existing overseas facility or possibly at a new facility elsewhere in the United States. Expansion of production at an existing facility would most likely have similar and insignificant impacts, but the impacts of building a new facility for new production cannot be reasonably foreseen.

Affected Environment and Evaluation of Impacts

TVA staff review of the proposed expansion has determined that it would be minor in scope and have little or no potential to have adverse impacts on natural resources and the community. Based on TVA's review, impacts from the financial assistance for the new equipment are expected to be minor and insignificant.

Company staff provided information about the impacts of operation. The extruder uses water for cooling, but it is recycled through a heat exchanger and is never discharged. An Air Permit is not required for the manufacturing process. Also, the process does not use hazardous materials or produce any hazardous waste. The waste stream produced at the plant is scrap plastic fiber and ordinary office waste such as paper. The office waste is discarded in dumpsters and picked up by a licensed waste management company. The plastic scrap waste is recycled back into the process, sold to a licensed recycler, or placed in dumpsters with the ordinary daily waste and picked up by the waste management company. The facility is about a mile from I-26 via adequate streets, and a rail line is adjacent to the facility. Some of the raw material for the process arrives by this rail line. The rest and the fiber product are carried by trucks. At current production there is about one tractor-trailer trip in and out per day, and the increase would be less than one additional trip each day, so traffic impacts are not an issue.

The facility does not lie in a 100-year floodplain, as shown in the attached FIRM.

Cumulative Impacts

Due to the small size of the expansion and lack of potential significant impact on the environment, TVA has concluded that the incremental effect of this project, when added to other past, present and reasonably foreseeable future actions (particularly the current fiber production at the existing facility), would have insignificant cumulative impacts.

Mitigation Measures

There would be only insignificant environmental effects; thus, no mitigation measures are needed.

Preferred Alternative

TVA's preferred alternative is the Action Alternative.

TVA Preparers

This EA was prepared by Peter K. Scheffler, Senior NEPA Specialist.

Agencies/persons consulted:

Philip S. McMullan, Project Manager, Economic Development
Company staff

Attachments:

Location maps, aerial photograph, and Flood Insurance Rate Map

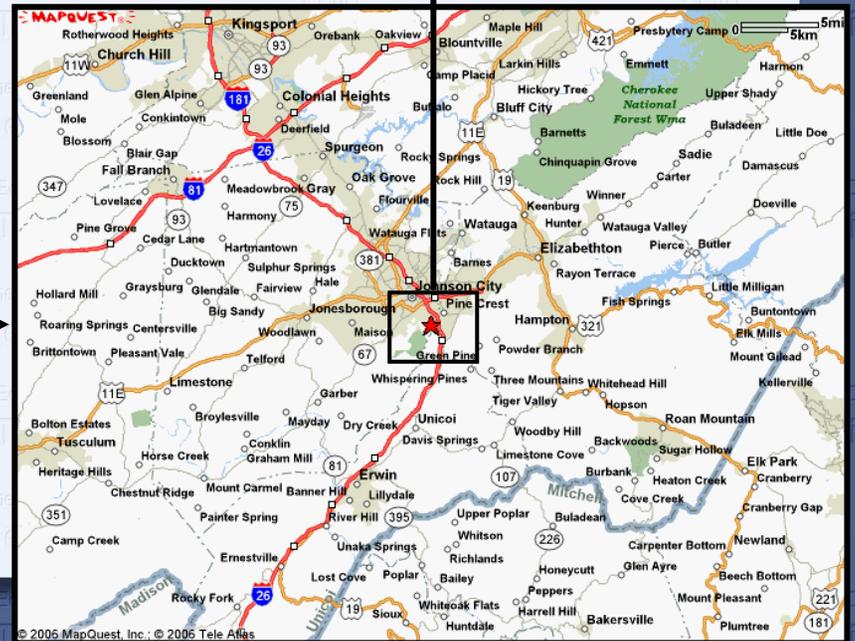
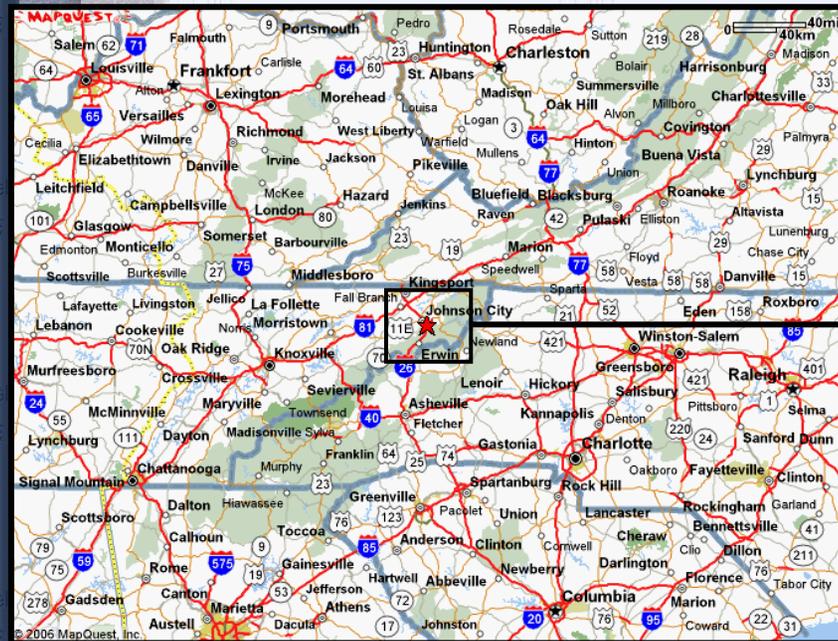
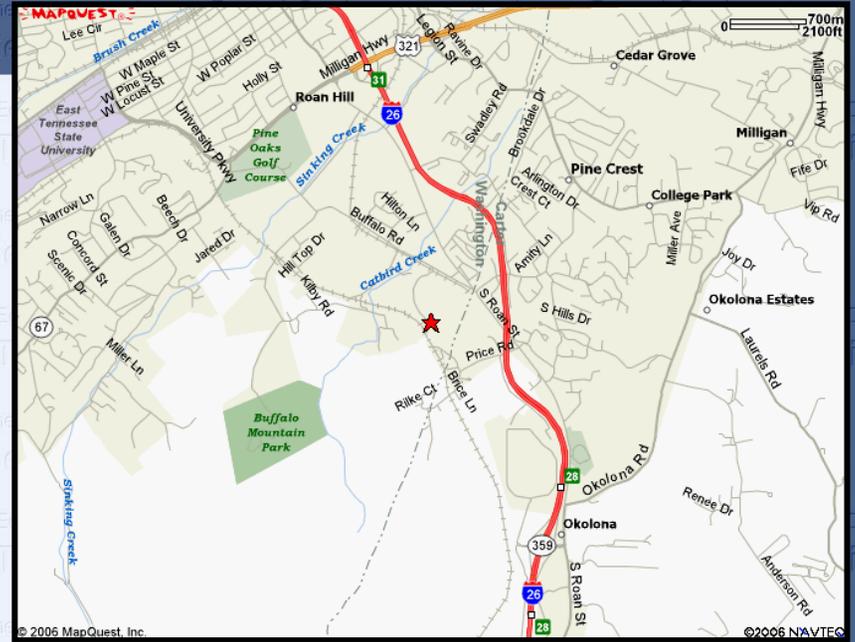


Fiber Innovation Technology

398 Innovation Drive

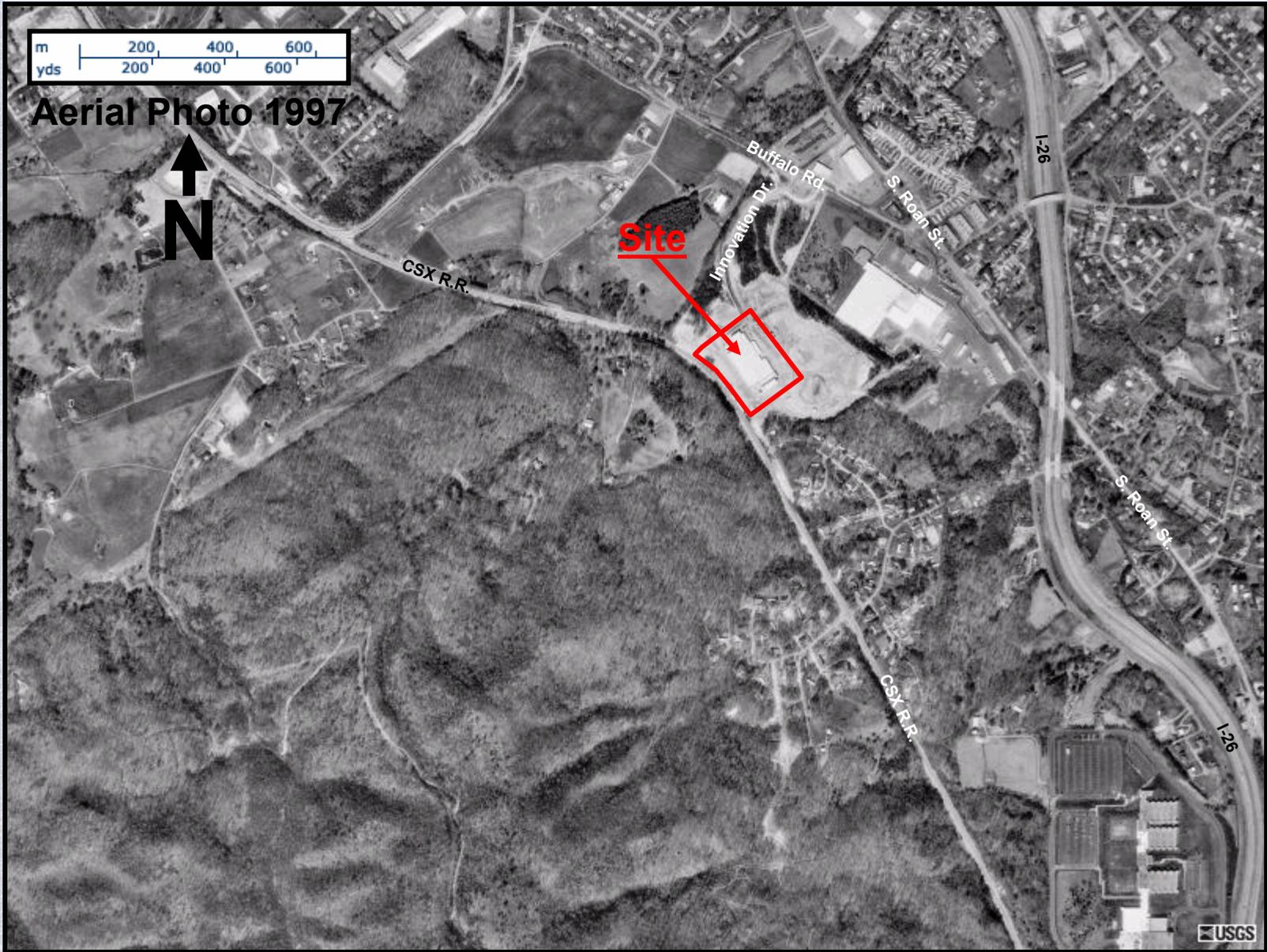
Johnson City, Washington County

Tennessee



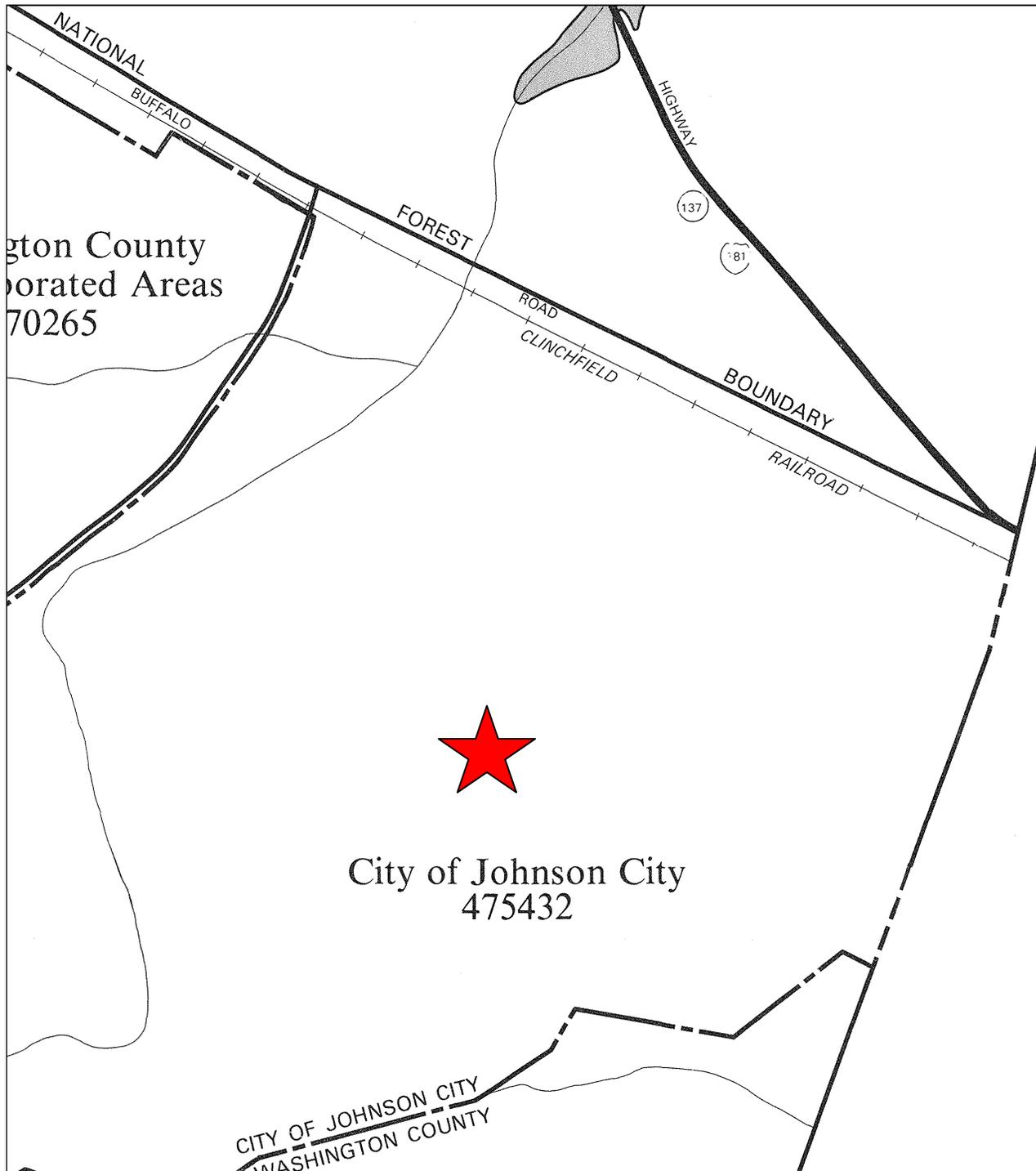


Aerial Photo 1997

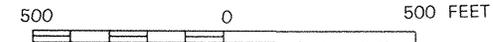


Site





APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

**FIRM
FLOOD INSURANCE RATE MAP
WASHINGTON COUNTY,
TENNESSEE AND
INCORPORATED AREAS**

PANEL 81 OF 125

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

<u>COMMUNITY</u>	<u>NUMBER</u>	<u>PANEL</u>	<u>SUFFIX</u>
JOHNSON CITY, CITY OF	475432	0081	C
UNINCORPORATED AREAS	470265	0081	C

Notice To User: The MAP NUMBER shown below should be used when placing map orders; the COMMUNITY NUMBER shown above should be used on insurance applications for the subject community.

**MAP NUMBER
47179C0081 C**

**EFFECTIVE DATE:
OCTOBER 16, 1996**



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov