

Worcester
Municipal
Research
Bureau

An Independent Voice For Responsible Government

FACILITATING THE CLEANUP AND DEVELOPMENT OF
WORCESTER'S BROWNFIELDS

*Report No. 97-6
November 19, 1997*

EXECUTIVE SUMMARY

Worcester, like many older industrial cities, contains "brownfields," that is, properties that are abandoned or underutilized due to environmental contamination. There are nearly 200 contaminated properties in Worcester and an additional 270 in Worcester County. Brownfields properties may present a health hazard to the residents of Worcester and contribute to the decline of neighborhoods. The cleanup and development of these properties would lead to an expansion of the City's property tax base and an increase in the number of jobs available.

There are, however, many obstacles to brownfields development. Perhaps the most significant is the legal liability that is imposed on parties connected with these sites. Under certain circumstances, developers, banks, contractors, and municipalities can be held liable for the entire cost of cleaning up a site even if they did not cause the contamination. This liability was imposed by the Superfund law at the Federal Level and Chapter 21E of the Massachusetts General Laws. In addition to legal liability, brownfields sites are often less desirable for development than suburban greenfields sites because of the cost of cleanup, the cost of demolition of unusable buildings, potential neighborhood opposition, and higher city taxes. To overcome these obstacles and to promote brownfields development, the Bureau makes a number of recommendations some of which are based on a survey of practices in other communities:

- The Worcester City Council should encourage the state legislative delegation to support the proposed reform of Massachusetts 21E. The legislation gives some liability relief to developers who clean up brownfields sites, and it appropriates \$75 million for several funds that may be used to facilitate brownfields development.
- Worcester's public officials should support efforts to strengthen the Central Massachusetts Economic Development Authority (CMEDA), a regional authority that can take property by eminent domain and break the chain of legal liability. They should support CMEDA's efforts to obtain funds for a revolving loan fund that could be used to assess and cleanup contaminated properties.
- Worcester's public officials should consider developing brownfields tax zones, similar to those established in Michigan, where businesses willing to cleanup and develop brownfields could have their cleanup and site preparation costs refunded by a reduction in their property taxes.
- The City Manager should reorganize the City's development agencies so that they report to one assistant city manager. The development of brownfields

would be facilitated by greater coordination of the efforts of City agencies with jurisdiction over brownfields.

- The Office of Planning and Community Development (OPCD) or another governmental should collect information on brownfields and brownfields programs in a central location. As there are 17 Federal agencies and many state agencies and private organizations that have programs for brownfields, the City could benefit from accurate and coordinated information on the subject.
- The City administration should clarify its policy on tax assessment of brownfields to ensure that assessments reflect market value. Because of the difficulty of determining the cost of environmental cleanup, the Assessor's Office may presently overvalue some properties. The increased tax burden on these properties is a deterrent to potential development.
- The City administration should encourage the development of capital funds dedicated to brownfields cleanup and development similar to the Clean Land Fund of Rhode Island, a non-profit agency which operates a revolving loan fund with funds solicited from foundations, government, and businesses.
- The City administration should identify local businesses that might be future tenants for brownfields sites. In addition, it should improve its relocation efforts so as to encourage displaced businesses to relocate on brownfields properties within the City.

INTRODUCTION

Like many older industrial cities, Worcester contains a large number of abandoned or underutilized, contaminated properties. In recent years, the name "brownfields" has been assigned to these properties in order to distinguish them from "greenfields," pristine, undeveloped suburban land. The objective of this report is to address how Worcester can best clean up and redevelop its brownfields. The report will provide the following:

- I. An explanation of the concept of brownfields;
- II. A review of Federal, state, and local laws, regulations and institutions relating to brownfields;
- III. A description of Worcester's most prominent brownfields;
- IV. Recommendations to provide the City with tools to develop brownfields and to improve the climate for brownfields development. The recommendations draw on examples from other cities and states.

I. WHAT ARE BROWNFIELDS?

The United States Environmental Protection Agency (EPA) defines brownfields as "abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination."¹ It is estimated that there are over 500,000 such sites nationwide.² The Massachusetts Department of Environmental Protection (DEP) has identified 7,700 sites in the state where oil or hazardous material is suspected to have been released.³ As of 1997, Massachusetts has designated as "urban brownground" nearly 200 sites in the City of Worcester and an additional 270 in Worcester County.⁴ EPA has compiled a National Priority List of over 1300 "superfund" sites, and it supervises their cleanup. These sites are the most significant contaminated sites and are placed on the list based on a combination of two factors: the level of contamination and the potential impact to human health and the environment. Worcester has no such sites. Brownfields are often less contaminated or pose a less direct threat to human health or the environment than sites on the National Priority List. They are more often subject to regulation by state environmental departments, although the specter of Federal liability may lie in the background. Brownfields sites range from abandoned gas stations or dry cleaners to large factory complexes.

Brownfields development is beneficial for many reasons. (1) Redeveloped brownfields increase the City's tax base. (2) The cleanup and development of brownfields sites can decrease the health risk to communities and improve their physical appearance. (3) Brownfields development creates jobs in often economically depressed neighborhoods. (4) Brownfields sites might attract businesses that desire access to infrastructure (roads, rail, sewer lines, etc.) and to a concentrated urban population. (5) Brownfields development may protect greenfields from development. In the best case scenario, brownfields development can be supported by industry and environmental groups, cities and suburbs, as well as residents living near the site.

¹ "Brownfields Glossary of Terms" United States Environmental Protection Agency, Bureau of Solid Waste. September 30, 1997. www.epa.gov/swerosps/bf/glossary.htm#brow (5 Nov. 1997).

² Charles Bartsch, Elizabeth Collaton, and Edith Pepper, *Coming Clean for Economic Development: A Resource Book on Environmental Cleanup and Economic Development Opportunities* (Northeast-Midwest Institute: Washington D.C., 1996), Chapter 1.

³ "Brownfields Legislation: Q&A" Executive Office of Environmental Affairs; Department of Economic Development, March 13, 1997, p. 2.

⁴ "Brownfields Pilot - Worcester," United States Environmental Protection Agency, Bureau of Solid Waste, Publication: EPA 500-F-97-041, www.epa.gov/swerosps/bf/html-doc/worcester.htm (5 Nov. 1997).

While the development of brownfields sites yields many benefits, there are significant obstacles to such development. Brownfields development often requires cleanup of land and renovation or demolition of existing buildings. More problematic than the cost of cleanup is the potential future environmental liability that hangs over the head of developers, lenders, and future site occupants. Federal and state superfund laws have defined liability very broadly, making any party who owns a site, occupies a site, participates in cleanup, or lends to the site owner potentially liable for all of the costs associated with cleanup whether they caused the contamination or not. Brownfields sites may also face several other problems not associated with greenfields: higher city taxes, the assembly of many small parcels of land, and potential neighborhood opposition.

II. BROWNFIELDS LEGISLATION, REGULATIONS, AND REFORM PROPOSALS

A. *The Federal Superfund Law (CERCLA)*

The history behind the brownfields development movement begins in 1980 with the passage of the Federal CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act), also known as the Superfund law. This act aimed at cleaning up the nation's most polluted tracts. While CERCLA allocated some government funds for cleanup, the great bulk of cleanup costs were to be borne by the polluters and owners of the contaminated sites. The government would spend its money to clean up sites only when it failed to recover sufficient funds from those who were responsible for the contamination, e.g., when the owner could not be located. Accordingly, a major provision of the bill was to extend liability to many parties, even those only tangentially related to the contamination. Liability was "strict, joint, several, and retroactive."⁵ In certain cases, liability for contamination could be assigned not only to the polluters themselves, but to subsequent owners (whether they polluted or not), downstream or downgradient property owners, banks or municipalities who foreclosed on property or participated in the management of a property, and contractors working to clean up the site.

After the passage of CERCLA, many states adopted their own superfund laws with similar liability provisions. The wide-ranging liability provisions of the Federal and state superfund laws succeeded in securing funds from polluters for clean-up, but they have had unintended consequences. A huge percentage of cleanup funds were consumed by legal fees, as government and liable parties sought to sue other parties to spread the costs of cleanup. More importantly, the fear of liability discouraged private developers from cleaning up sites. Financial rewards for developing brownfields sites were often outweighed by the potential cost of being held liable for

⁵Mark Reisch, *97025: Superfund Reauthorization Issues in the 105th Congress* (Congressional Research Service, Washington D.C., October 10, 1997).

the contamination caused by others. Banks were skeptical of lending for development of potentially contaminated sites, and they resisted foreclosing on old industrial properties.

B. Massachusetts Superfund Law (Massachusetts General Laws Chapter 21E)

In 1983, the Massachusetts legislature adopted Chapter 21E of the Massachusetts General Laws, modeled on the Federal superfund law. Like CERCLA, the act established strict, joint, several, and retroactive liability for hazardous materials contamination. 21E, as it is commonly called, extended even further than CERCLA in that it covered petroleum contamination in addition to hazardous waste contamination. Like CERCLA, 21E held parties even loosely connected with contaminated land responsible for its cleanup. (For petroleum contamination, the liability did not extend to as many parties).⁶ 21E also followed CERCLA in holding lenders responsible as well, by making them liable for contamination of any site in which they participated in management.⁷

C. Subsequent Changes to Federal Superfund Regulations

Brownfields development has been encouraged by two changes in CERCLA. In 1995, EPA indicated its intention to grant "prospective purchaser agreements," sometimes known as covenants-not-to-sue, for companies that were willing to buy a contaminated site and clean it up. These agreements would protect developers against the threat of future EPA lawsuits. Despite the more favorable regulations allowing EPA to enter into covenants-not-to-sue, they are not frequently granted and obtaining them requires significant legal assistance.⁸ Along the same lines, EPA has also begun to issue "comfort letters" to companies who voluntarily clean up sites. While not giving absolute protection against future litigation, these letters indicate that EPA is unlikely to take action on a particular site. Also, one regional EPA office has given a memorandum of understanding to states that it will not interfere with parties

⁶Ned Abelson, William Seuch, and Maura McCaffery "Massachusetts" in *Brownfields: A Comprehensive Guide to Redeveloping Contaminated Property*, eds. Todd Davis and Kevin Margolis (Section of Natural Resources, Energy and Environmental Law, American Bar Association: Chicago, 1997), p. 444.

⁷ *Ibid.*, p. 446.

⁸Wendy Wagner "Overview of Federal and State Law Governing Brownfields Cleanups," in *Brownfields*, p. 25.

who participate in a state's voluntary clean up program.⁹ Other regions are seeking such agreements.

EPA has also initiated over 100 pilot programs to facilitate voluntary cleanups in localities around the nation. These pilots were awarded up to \$200,000 each for brownfields-related activities, including assessment but not actual cleanup. Worcester was awarded a \$200,000 pilot grant in 1995. This pilot is administered by the Central Massachusetts Economic Development Authority (CMEDA) and will be discussed in greater detail in a subsequent section of this report.

Most recently, as part of the Balanced Budget Act of 1997, Congress passed and the President signed into law a brownfields tax incentive. For qualified projects the full amount of cleanup is deductible in the year that the cleanup occurs.¹⁰

D. Subsequent Changes to Massachusetts 21E

While changes in Federal law have improved the climate for brownfields development, most brownfields sites are not on the National Priority List, and they fall primarily under state jurisdiction. Therefore, state reform has a more significant impact on the development of all but the most seriously contaminated sites. Massachusetts, after enacting a strict superfund law (Chapter 21E) in 1983, has been among the leaders in modifying its legislation so as to encourage development of brownfields. Chapter 21E was revised in 1992, the implementing regulations (Massachusetts Contingency Plan (MCP)) were revised in 1993, and financial incentives that may benefit brownfields were introduced in 1993. Four changes are significant:

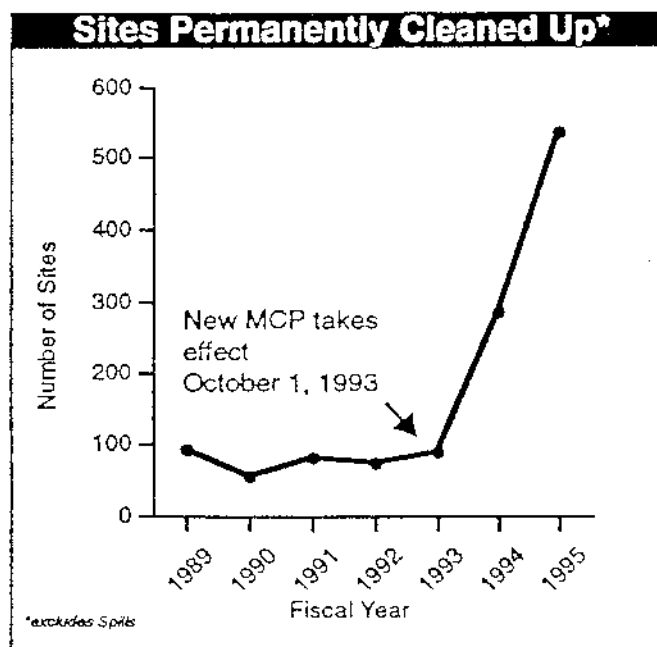
1. The Move to Private Cleanup -- Licensed Site Professionals (LSPs)

Under the original 21E regulations, all cleanup was supervised directly by the state. The statutory and regulatory changes in 1992-93 allowed private developers to hire private consultants to oversee site assessment and remediation. These private consultants are called Licensed Site Professionals (LSPs). They render "opinions" following Massachusetts laws and regulations on the extent and method of remediation appropriate for a site. To be designated an LSP, an individual must meet certain educational and experience requirements and pass a state-administered test. LSPs supervise site assessment and cleanup activities, and their professional judgments are considered to have the same status as decisions made by state officials, although they may be audited and disciplined by the state, and sued by

⁹Ibid., p. 26.

¹⁰"Brownfields Tax Incentive" United States Environmental Protection Agency, EPA 500-F-97-155 (August 1997), www.epa.gov/swerops/bf/html-doc/taxfs_2.htm (10 Nov. 1997).

private parties. The introduction of LSPs has greatly increased the number of contaminated sites cleaned up. Before 1993, developers were required to consult with the state on small, day-to-day decisions. The privatized cleanup program allowed development to occur more quickly and economically. According to DEP, after 1993, when the revised MCP regulations were put into effect, the number of contaminated properties permanently cleaned up increased dramatically.¹¹



2. Cleaning the Site to a Standard that Reflects Future Use

Massachusetts sought to make cleanup easier by simplifying the requirements for cleanup and gauging the level of cleanup required based on the future use of the site and its risk to human health and the environment. First, sites are classified according to their level of contamination, future site usage, potential risks to human health, and other risk factors. Tier I sites require permits or some DEP oversight. Tier II sites do not. Second, the future use of the site can be used to determine the amount of cleanup necessary. These flexible standards for cleanup are called "risk-based cleanup standards," which are determined by considering how the contamination on the site and the future use of the site affect human health and the environment. In ascertaining the potential risk to human health several factors may be considered, e.g., whether the site will be capped, whether the contamination affects drinking water, whether children will regularly be present on the site, and how many hours a day the site will be occupied by people. If, for example, the future use of a contaminated site is heavy industry where workers are present for limited and specified times and the

¹¹"Two Years Later: How the New 21E Program is Measuring Up," Commonwealth of Massachusetts, Department of Environmental Protection, 1996, p. 3.

industrial processes do not disturb the ground, then the site LSP might determine that the cleanup necessary to protect human health is minimal. On the other hand, if the future use of the site is residential, then the site LSP would likely determine that the cleanup necessary to reach human safety standards was significant. If the level of cleanup is determined based on the expected future use, that future use may be specified with an Activity and Use Limitation, a notice which is attached to the deed of the property. It restricts future use of the property to specified uses unless the property is further cleaned up.

3. Covenant-Not-to-Sue Program

In order to encourage private cleanup, DEP will enter into covenants-not-to-sue with parties willing to develop a contaminated site (providing the party is not the present owner or previous polluter). A private party agrees to assess and remediate contamination and, in return, it is exempted from future suits by the state for any additional contamination found from the spill cleaned up. This is important because even when the cleanup is completed, past contamination may not be discovered until later or the introduction of new technology may be able to detect even smaller amounts of contamination. This protection reduces the possibility that a buyer of a property will face a large future liability. The covenant-not-to-sue does not protect against private litigation. It also does not limit DEP from other regulatory or enforcement activities.

4. Economic Incentives for Brownfields Development

Massachusetts currently offers three financial incentives intended to stimulate development of economically depressed areas. These incentives may apply to brownfields, although they are not limited to brownfields.

- **5% State Investment Tax Credit** -- This credit is for 5% against state income taxes for businesses that develop in an economic opportunity area within an economic target area. Worcester is an economic target area and contains several economic opportunity areas. This tax credit can be used on brownfields development as well as other development within the economic opportunity area.
- **10% Abandoned Building Tax Deduction** -- This program is a 10% tax deduction for the rehabilitation of abandoned buildings within an economic opportunity area. As many brownfields have abandoned buildings on the premises, this program can help reduce the cost of development.
- **Tax Increment Financing (TIF)** -- A city may forgive a portion of future taxes that result from the increase in value of the property due to development. Also allowed are "special tax assessments" which allow the full assessment of the property to be phased in over 5 years: 1st year 0%, 2nd year 25 %, 3rd year 50%, 4th year 75%, 5th

year 100%.¹² The lower taxes resulting from the reduced assessments in the early years of a project offer an important incentive to developers.

E. Central Massachusetts Economic Development Authority

Finally, one additional reform was passed that allows greater local control over the development of brownfields. In 1995, the state legislature established the Central Massachusetts Economic Development Authority, a regional authority which enables the cities and towns of Central Massachusetts to pool their resources and clean up their brownfields sites. CMEDA has the power of eminent domain to take contaminated properties within its member cities and towns. More significantly, it has the power to break the chain of environmental liability. For example, if CMEDA purchases a site, cleans it up, and sells it, the buyer will not be liable for any prior contamination that is found in later years.

The original idea for funding CMEDA was that, as a regional authority, it could pool the resources of the towns to support specific development projects, and it would reimburse the towns out of the increased tax revenues derived from development. This arrangement has been unworkable to date because it is difficult to convince a town to expend funds or give up a portion of its bonding capacity to clean up and remediate a site in another jurisdiction. Adding to the problem is the fact that many towns operate with an annual town-meeting appropriation process, making the coordination of funds difficult. Without this regional funding, CMEDA is short of money. It received a \$200,000 pilot grant from EPA, but this is not enough to finance serious site assessment or remediation.

A further limitation on CMEDA is that under the terms of its enabling legislation, CMEDA is allowed to select only three sites for cleanup and development. The first site selected was Fisherville Mill in Grafton. CMEDA assessed the site for a cost of \$100,000. The money was provided by several sources: \$20,000 from the Town of Grafton; \$40,000 from the MDFA (Massachusetts Development Finance Agency); \$10,000 from CMEDA. In addition, DEP provided \$30,000 worth of lab services for free. The current estimate for cleanup is \$1,700,000. CMEDA is petitioning the state legislature, DEP, and EPA for the cleanup funds. CMEDA is seeking a company interested in occupying the site in the future. Once CMEDA reaches an agreement with a company and once the financing for remediation is secured, CMEDA will take title to the property until the cleanup is completed. After the cleanup, CMEDA will either sell the property to the company or lease it on a long term basis. CMEDA prefers the lease option, as the lease arrangement will provide funds for debt service on state financing used for the cleanup and may contribute to the revolving loan fund CMEDA hopes to establish.

¹²Abelson, Seuch and McCaffrey, "Massachusetts," p. 455.

CMEDA is seriously considering selecting a second site, a 5-acre section of the South Worcester Industrial Park. This project will be detailed in the next section on Worcester's brownfields.

F. Federal Reform Proposals

Several Federal reform proposals affecting brownfields are currently pending. These reform bills address two subjects, the limitation of liability and the encouragement of brownfields development through financial incentives. Many of the proposed financial incentives for brownfields are noncontroversial. More controversial is reforming the superfund liability scheme. In general, Congressional Republicans prefer to include both liability reform and financial incentives for reform in the same bill, while Democrats support the financial incentives but oppose the liability reform. Thus, the passage of brownfields legislation is possible, but differences over superfund reform make its prospects uncertain.

Over ten bills have been proposed, and hearings to consider them are ongoing. Listed below are several proposals:

- EPA would agree that certified state voluntary cleanup programs would have the final say on cleanup requirements. Projects meeting state voluntary cleanup program requirements would not be subject to Federal liability.
- Money would be appropriated for grants for site assessment, cleanup and the establishment of revolving loan funds.
- The government could issue tax exempt bonds for brownfields cleanup or offer "brownfields IRAs."¹³

G. Massachusetts 21E Reform Proposals

As of the summer of 1997, there were three major brownfields bills before the Massachusetts State Legislature. The Administration and Representative Peter Larkin (D-Pittsfield) proposed comprehensive brownfields bills that limited liability for parties who did not cause the contamination on a property and were willing to clean it up. In addition, these bills appropriated funds to make brownfields development more attractive. Larkin's bill went one step further than the administration in proposing some additional liability protections for parties that caused the contamination. A third bill proposed by Attorney General Harshbarger and Charlotte Richie (D- Dorchester)

¹³ Charles Bartsch and Elizabeth Coilaton, "Federal Legislative Proposals to Promote Brownfield Cleanup and Redevelopment in the 105th Congress" (Northeast-Midwest Institute, Washington, D.C., September 29, 1997).

attempted to make brownfields development more attractive in certain economically distressed areas.

In October 1997, a new bill, House No. 5013, was passed out of the House Committee on Natural Resources and Agriculture. The new bill incorporated aspects of all three earlier approaches. The Administration and Attorney General support the bill. Larkin may propose amendments.

The bill has three features that will be significant to Worcester. First, it provides liability protection to innocent parties who clean up a brownfields site. Second, it provides funds to make the development of brownfields more attractive, especially within economic target areas. Third, it gives some liability protection to redevelopment authorities and community development corporations.

First, the bill allows certain "eligible persons" to be protected against future liability. Innocent current or future owners (those who did not cause the contamination) can be absolved of liability for a particular previous spill once a site is cleaned up. The "eligible person" becomes immune from suit by the state and private parties. Subsequent owners would also receive liability protection as long as they maintained any groundwater treatment systems on the property.

Second, the bill creates several funds and financial incentives for brownfields development. Two funds created by the bill are the "Redevelopment Access to Capital Program" and the "Brownfields Redevelopment Fund." The "Redevelopment Access to Capital Program" is a \$15 million fund that will provide loan guarantees and environmental insurance to encourage private lenders to make loans for brownfields projects. It will provide insurance for unanticipated cleanup costs, allowing the borrower to continue to pay its loans. The \$15 million of public funds will be matched by an equal amount provided by the lenders and borrowers of the loans to be guaranteed. The lender may lend up to \$500,000 for cleanup necessary for redevelopment.

The "Brownfields Redevelopment Fund" is a \$60 million fund to provide low interest loans to private parties for site assessment and cleanup in economically distressed areas. The fund will also make grants to municipalities and other entities to conduct site assessments in economically distressed areas. Priority is given to sites in economically distressed areas that have the highest unemployment and poverty rates. Loans and grants for assessment are limited to \$50,000. Loans and grants for cleanup are limited to \$500,000. Loans and grants amounts must be matched by the recipient although this requirement may be waived.

In addition, the legislation provides for a tax credit for "innocent individuals, partnerships and corporations who are willing to clean contaminated sites in economic

target areas." The credit can reduce state taxes up to 50% of the costs of cleanup. The amount of the credit is graduated depending on the level of cleanup.

Third, the bill provides for limiting the liability of municipalities, redevelopment authorities and community development corporations (CDCs). Under current law, cities and towns that foreclose on contaminated properties must sell the property within five years or they will be subject to liability. The proposed bill repeals the limit. The proposed bill also allows redevelopment authorities and CDCs to take title to brownfields properties without incurring liability as long as they did not cause, contribute or exacerbate the contamination, they take steps to protect people and the environment, and they try to divest themselves of the property. In addition, the bill provides liability protection to downstream and downgradient owners, tenants, and lenders.

This bill would provide Worcester with needed development tools. The Worcester Redevelopment Authority (WRA) and CDCs would receive liability protection. Under this bill, a CDC could cleanup a local, abandoned gas station without facing potential liability for the contamination.¹⁴ The provision would also strengthen the WRA, for it could broker a deal such as Medical City without taking on liability. In addition, the financial incentives and liability protections for parties that will clean up and develop brownfields will improve the climate for private brownfields development.

H. Two Private Components of Brownfields Development: Banking and Insurance

Prospects for brownfields cleanup and development are also influenced by the banking and insurance industries. Banks are reluctant to lend to owners of brownfields, for if they foreclose or participate in the management of such properties, they can be held liable for cleaning up the site. In addition to worrying about their own liability, banks are concerned with the liability of the property owners to whom they lend. Loan repayment can be endangered by a borrower's unforeseen environmental liability.

There have been recent efforts to limit and clarify lender liability, but they do not fully address the foregoing concerns. For brownfields development to occur, developers must have access to capital. In the final section of this report, the Research Bureau examines several options for improving the financing of brownfields projects, such as forming partnerships with non-profit brownfields lending funds, encouraging the use of Small Business Administration loans that may reduce banks' risk in lending to brownfields, and developing a model loan package to educate banks about the risks and rewards of brownfields lending.

¹⁴ In Chicago, CDCs are active in redeveloping brownfields. *Brownfields Forum: Recycling Land for Chicago's Future. Final Report and Action Plan*, City of Chicago, November, 1995, pp. 30-33.

Insurance companies are offering new environmental insurance products that may facilitate brownfields development. Insurance companies will write policies to protect against health and safety claims of workers who clean up a site, claims against LSPs for erroneous advice, and cleanup cost overruns. These products are relatively new, as it is only in the past few years that insurance companies have been able to adequately assess the risks involved with cleanup activities. The cost of this insurance was initially high, but rates have come down in the past five years.¹⁵ Two types of insurance products are relevant to brownfields development: Cleanup Cost Cap Insurance (CCC) and Pollution Legal Liability Select Insurance (PLL). In CCC, the insurer and the developer agree on a cleanup cost estimate based on site assessment. They establish a buffer above the cost estimate over which the insurance will cover cost overruns. In a real case study below, the cleanup cost estimate was \$1,170,000, and a minimum 10% buffer was established. In this case, if the costs of cleanup exceed \$1.3 million, the insurer will assume those costs up to an agreed upon limit of the policy.¹⁶

Property Redevelopment -- Worcester, MA
Cleanup Cost Coverage Insurance

Cleanup Estimate	\$1,170,000
Insurance begins at:	\$1,300,000
Insurance coverage up to:	\$3,300,000
Term	3 years
Cost of Premium	\$ 51,000 ¹⁷
25% Co-Insurance	

CCC may be combined with PLL insurance. PLL insurance covers other liability connected with future suits. It may cover the discovery of previously undetected contamination, bodily injury for cleanup workers, property damage, etc.

¹⁵William McElroy and Todd Davis "Environmental Insurance in the Brownfields Transaction," in *Brownfields* p. 150. In the past there had been some concern that insurance will only benefit higher end development. "Potential Insurance Products for Brownfields Cleanup and Redevelopment: Survey Results of Insurance Industry Products Available for Transference of Risk at Potentially Contaminated Property." EPA 500-R-96-001.

¹⁶Case study provided by AIG Environmental and Braley and Wellington.

¹⁷Karen O'Reilly, "How Environmental Insurance Facilitates Transactions in the Brownfields Arena" forthcoming in *A Partnership in Urban Redevelopment: Perspectives on Brownfields Development Projects*.

There are several other options for limiting risk. Some environmental consulting firms who are hired to supervise cleanup will often take a lump sum for cleanup. These firms will accept a fixed price for the cleanup because they have confidence in their ability to accurately estimate the cost of cleanup. If the firm is able to complete the cleanup for less than the estimate, they earn an additional profit, but if the cost of cleanup is greater than the estimate, then the firm assumes the added cost.¹⁸

Government may also provide some protection from cost overruns. It may buy private insurance, or it may set up a fund that acts as a pool for insurance, backing loans that might fail. For example, the City of Somerville is attempting an experimental project in providing short term insurance. For a small site that will be cleaned up in a 3-6 month time frame, Somerville is dedicating previously appropriated funds to serve as insurance for the cleanup. If an appropriation is not to be spent until the end of the year, there is a 6-9 month window during which the funds may serve as a backup or insurance against overruns in cleaning up small sites. If the funds are needed, then Somerville will have to appropriate additional money to cover the loss, but if the estimates are correct, the insurance will have been provided without any new appropriation. This experiment is new and potentially risky, but Worcester should closely watch Somerville's experiment.

III. WORCESTER'S MOST PROMINENT BROWNFIELDS SITES

A. South Worcester Industrial Park

Location: South Worcester Industrial Park is an 18-acre site divided into twelve parcels under multiple ownership. These properties are bordered by Canterbury and Southgate Streets to the west, Congdon Street and Conrail to the east, Hammond Street to the north, and Grand Street to the South. South Worcester Industrial Park is located less than 1-1/2 miles from City Hall. (See Exhibit A.)

Ownership: There are twelve parcels on the site, many of which have tax or bank liens attached to them. A number of owners have abandoned their property.

Former Uses: A large portion of the site was once occupied by the Standard Foundry complex. A scrap metal facility also occupied the property.

Access to the Site: The site is served by the Providence and Worcester Railroad. Road access to the site is limited because of low bridge underpasses on Southbridge

¹⁸One company that undertakes such agreements is GZA. See their 1997 marketing materials "Contract to Closure," pp. 1-2. For actual projects where these agreements have been employed, see "Norwood PCB" section 46; "Contract to Closure" section 63; "Cape Cod Air Force Station" section 6.

Street. Improved access will be provided by the Route 146 connector project. In addition, the City has secured a \$1 million PWED (Public Works Economic Development) grant from the Massachusetts Highway Department to redesign and rebuild roads in the area. The access from Canterbury Street is limited because the site is located in a residential area.

Utilities: Worcester must upgrade its sewer and water lines before the roads are reconstructed. The aforementioned \$1 million PWED grant for road construction cannot be used to pay for these utility upgrades.

New plans for 5 acres in South Worcester

On August 19, 1997, the City Council approved \$100,000 to conduct a site assessment of a 5-acre section of the South Worcester Industrial Park. After assessing the site and finding a developer, it is likely that CMEDA will select this property as its second project. An earlier study of the 18-acre property indicated that the contamination on the site might not be so severe as to require soil to be removed or treated. The \$100,000 appropriation is for additional testing. If the additional testing on the 5-acre site is consistent with this earlier study, the site might only require capping with a building, asphalt or a layer of soil.

B. Wyman-Gordon

Location: Wyman-Gordon is a 30-acre site located near the Green Island neighborhood, south of Union Station. This property is bordered by Madison Street to the north, Quinsigamond Ave to the south, Lamartine and Washington Streets to the east and the Penn Central RR to the West. Wyman-Gordon is less than 1/2 mile from City Hall and from Union Station. (See Exhibit B.)

Ownership: Wyman-Gordon Company owns the site but is actively marketing it.

Former Uses: foundry and associated uses

Structures on the Site: industrial buildings

Access: The site is bordered but not served by the Providence and Worcester Rail Line. The site has easy access to I-290, as it borders Quinsigamond Avenue which leads directly to I-290, and Quinsigamond Avenue is scheduled for an upgrade related to the Route 146 project. Madison Street, which also borders the site, leads directly to I-290.

Utilities: All utilities are available.

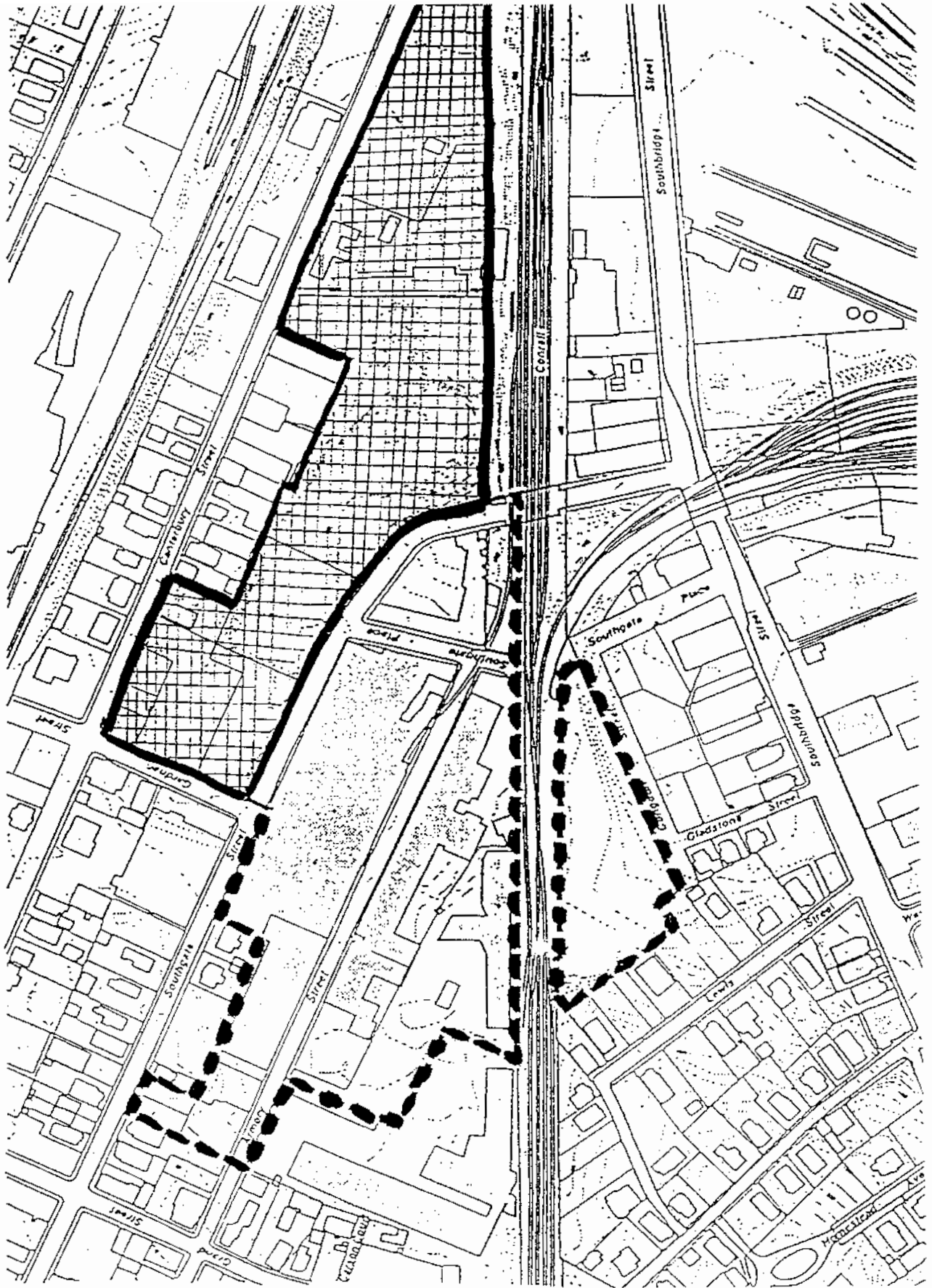



EXHIBIT A South Worcester Industrial Park

 Site under consideration by CMEDA

Source: City Manager's Office of Planning and Community Development

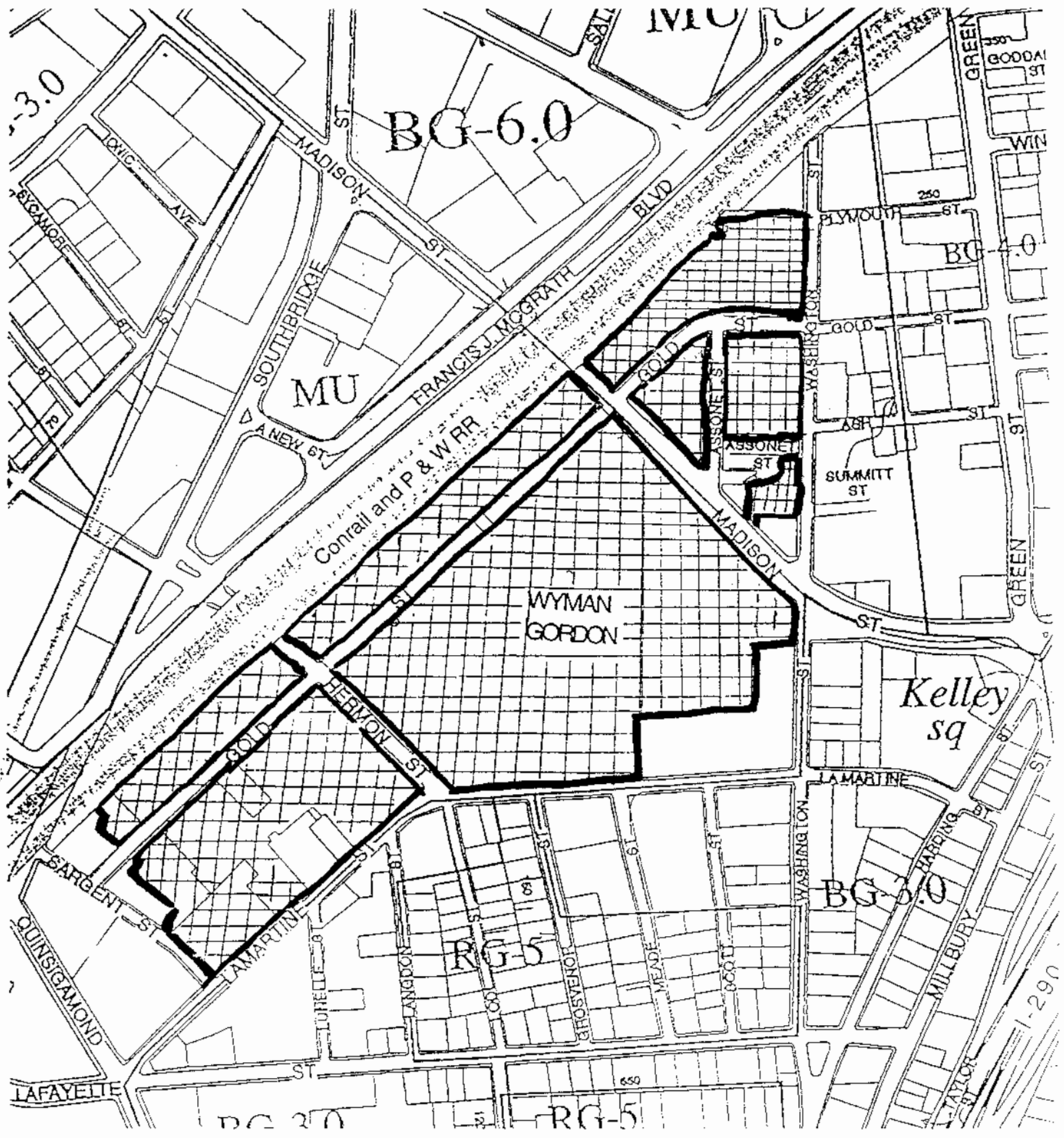


EXHIBIT B Wyman Gordon Site

Source: City Manager's Office of Planning and Community Development

C. Prescott Street

Location: The Prescott Street site is located east of Prescott Street and west of I-290 and the Providence and Worcester Rail Line. It is bordered to the north by Nashua Street and to the South by Lincoln Square. (See Exhibit C.)

Ownership: There are several owners on the site including Parker Metals, Coghlin Electric, Washburn-Garfield, and New England Oil.

Past Uses: Steel and wire manufacturing.

Structures on the Site: There are several structures on the site, including buildings used by Parker Metals, Coghlin Electric, and the Central Massachusetts Manufacturing Partnership.

Known Contamination: Historic contamination exists in soil and ground water from wire making processes. In addition, there was a large petroleum spill several years ago at 130 Prescott Street. Some remediation was undertaken on the petroleum spill.

Utilities: The site has excellent access to water, sewer, electricity and gas.

Access: The site has easy access to I-290, the Providence and Worcester railroad. P & W has a spur into the property, and the site is close to a bus line providing easy access for workers.

D. Other Significant Sites

In conjunction with the Route 146 Turnpike Connector Project, the City will market several brownfields sites for development. The exact parcels have not been determined, but they will probably include an 8-acre site in Hurley square, comprising part of the former Patriot Metals complex; a site in Kane Square (near the southern intersection of Millbury and Ballard streets); a 15-acre Commonwealth Gas property on Quinsigamond Ave.¹⁹ Another significant brownfield site is the Heald plant on New Bond Street off Route 12. Recently, the property was sold to Liberty Properties Corporation of Boston which intends to lease the property to industrial tenants.²⁰

¹⁹This site is not directly within the purview of the Route 146 project, but it sits at the end of the connector and I-290 and it will benefit from the gateway of Quinsigamond Ave.

²⁰Lisa Eckelbecker, "Ex-Heald Machine Property Bought," *Telegram and Gazette*, November 4, 1997, p. E1.

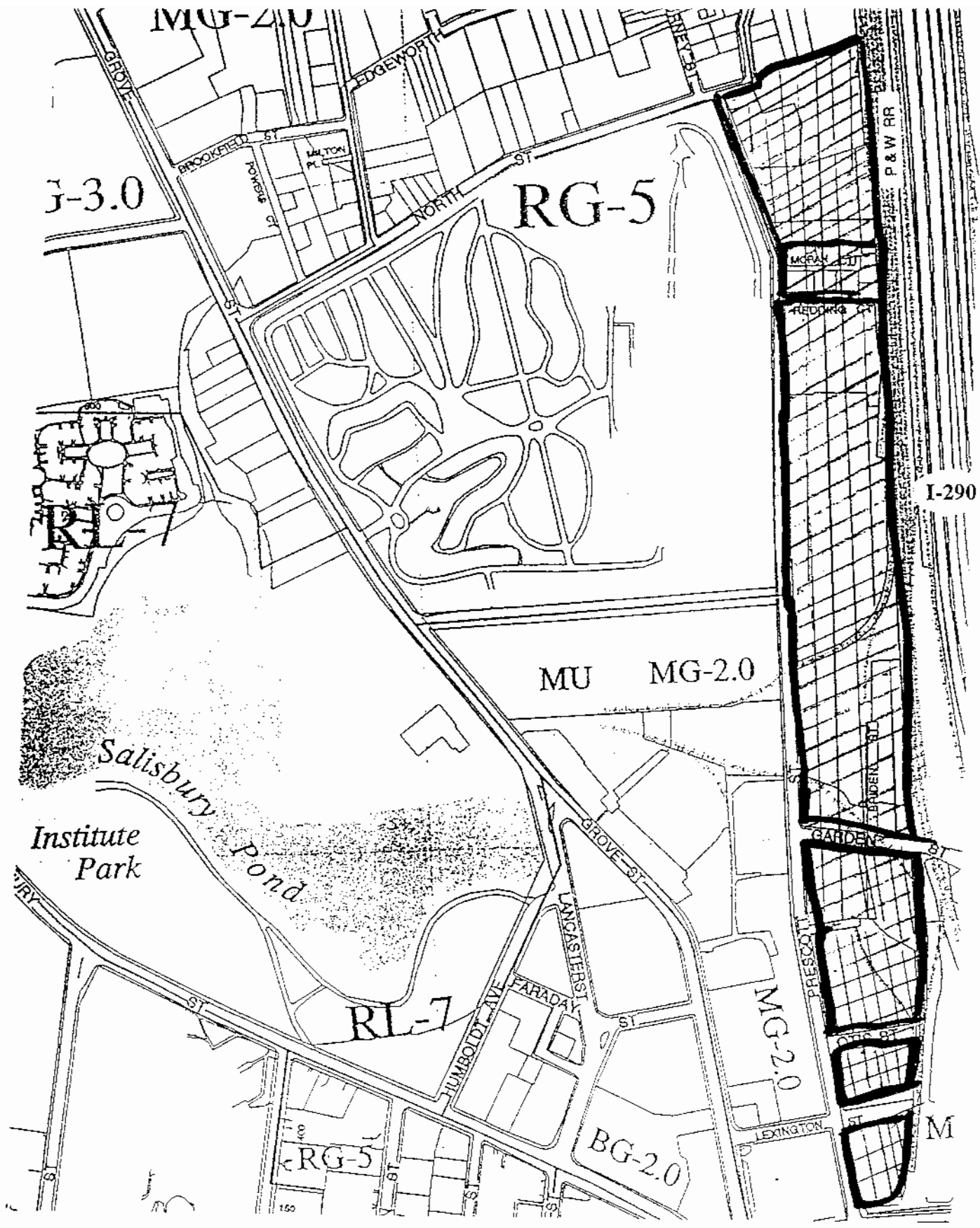


EXHIBIT C

Prescott Street Site

Source: City Manager's Office of Planning and Community Development

As noted earlier, there are over 200 contaminated properties in the City. CMEDA has begun compiling profiles of these sites. Currently, the list contains over 100 properties.

E. The Example of Medical City

Medical City is a \$215 million project in downtown Worcester on a former brownfield area. The end result will be a 299-bed hospital and medical office complex directly across from Worcester's Centrum Centre and Worcester Common Outlets. When completed in 2000, it is hoped that the site will generate other downtown development.

Medical City has been a complex project. It required the assembly of 24 acres divided into 32 parcels with many owners. The WRA placed these parcels within an Urban Renewal Area in 1967. Some of the parcels were left intact and were assisted only through infrastructure improvements. In 1993, the urban renewal area agreement was amended to fund the Medical City project. The assembled site required cleanup of contamination, building demolition, and other site improvements. The WRA projects that it will spend \$42 million to prepare the site. The budget includes site cleanup, building demolition and site preparation (moving roads, railroads and sewers, and relocating tenants, etc.) The most recent budget for Medical City indicates that the project as a whole is on budget, with site cleanup costing significantly less than originally anticipated, while site preparation costs are over budget. (See Exhibit D.)²¹

F. Lessons Learned from Medical City

1. The Need for Coordination between Public Agencies and Private Developers

Medical City illustrates the importance of bringing in a developer from the beginning. In most cases, it does not make sense for the City to clean up a site before the future use of the site is determined. First, the level of cleanup may vary depending on the future use. Second, a project can move more quickly if the private developer and public agency coordinate their efforts. In Medical City, while the site was being cleaned up, the City was also able to relocate sewers. While one part of the site was being developed another could be remediated. This work allowed the site to be completed more quickly and cheaply, and it allowed the site to be prepared in a way more compatible with the needs of the future user.

²¹Not reflected in the budget above is \$6.4 million that OrNda paid to the city to acquire the land. In addition, the state is reimbursing 1/2 of the net cost of the project.

EXHIBIT D

MEDICAL CITY BUDGET STATUS REPORT
AS OF AUGUST 31, 1997 *

	(A) Original Project Budget	(B) Adjustments to Original Budget	(C) WRA Projection of Final Costs	(D) Actual Expenditures to date as of 8/31/97	(A+B-C) Projected Budget Variances
PROPERTY ACQUISITION	15,000,000.00	0.00	14,882,781.53	13,497,672.15	117,218.47
Acquisition	15,000,000.00	(1,615,000.00)	13,267,781.53	11,882,672.15	
Parking garage parcel	0.00	1,615,000.00	1,615,000.00	1,615,000.00	
BUSINESS RELOCATION	1,750,000.00	0.00	3,126,507.11	2,986,291.93	(1,376,507.11)
Consultant	200,000.00	0.00	181,045.59	181,045.59	
Relocation Costs	1,550,000.00	(248,277.00)	2,698,184.52	2,556,969.34	
parking garage parcel	0.00	248,277.00	248,277.00	248,277.00	
DEMOLITION & ASBESTOS	2,000,000.00	0.00	1,419,980.89	1,419,980.89	580,019.11
Engineering	220,000.00	0.00	83,000.00	83,000.00	
Demolition	1,780,000.00	(123,000.00)	1,213,980.89	1,213,980.89	
Parking garage parcel	0.00	123,000.00	123,000.00	123,000.00	
21E ASSESSMT/REMEDIATION	9,500,000.00	0.00	4,985,397.88	4,766,271.44	4,516,602.12
Assessment	1,232,000.00	0.00	1,385,397.88	1,385,397.88	
Remediation	8,268,000.00	(50,000.00)	3,550,000.00	3,330,873.56	
Owner Participation	0.00	0.00	0.00	0.00	
Parking garage parcel	0.00	50,000.00	50,000.00	50,000.00	
SITE IMPROVEMENTS	8,400,000.00	2,000,000.00	13,606,552.44	10,245,244.25	(3,206,552.44)
Millbrook Sewer/Utilities	5,100,000.00	0.00	5,743,424.22	5,380,902.20	
Railroad Enclosure	2,800,000.00	(2,800,000.00)	0.00	0.00	
P & W Force Account Work	0.00	0.00	547,102.71	510,559.84	
Railroad	0.00	2,654,430.00	2,995,700.00	709,144.34	
Temporary RR & Site Improvement	0.00	2,145,570.00	2,433,327.94	2,433,327.94	
Engineering	500,000.00	0.00	936,400.00	904,471.20	
Parking Garage	0.00	0.00	850,597.57	297,435.79	
Mission Chapel renovations	0.00	0.00	100,000.00	9,402.85	
PROJECT MANAGEMENT	1,550,000.00	0.00	2,317,536.08	2,206,495.94	(767,536.08)
WRA Direct Labor	0.00	0.00	883,713.33	851,869.22	
Consultants	0.00	0.00	458,822.75	425,859.02	
Overhead/Insurance	0.00	0.00	975,000.00	928,767.70	
FINANCING COSTS	1,800,000.00	0.00	1,661,244.07	1,661,244.07	138,755.93
Construction Interest	1,800,000.00	0.00	1,440,000.00	1,440,000.00	
Cost of Insurance	0.00	0.00	221,244.07	221,244.07	
CONTINGENCY FUNDS AVAILABLE	2,000,000.00	(2,000,000.00)	0.00	0.00	0.00
(actual and projected uses are reflected in individual line items.)					
TOTAL PROJECT COST	42,000,000.00	0.00	42,000,000.00	36,793,200.87	0.00

* Not reflected in the budget above is \$6.4 million that OrNda paid to the City to acquire the land.

In addition, the state is reimbursing 1/2 of the net cost of the project.

Source: Worcester Redevelopment Authority

2. Relocation of Businesses Must be a High Priority

Despite the success of many aspects of the Medical City project, the relocation of businesses formerly occupying the site could have been more successful. Several relocatees were not pleased with the relocation options they were given. Several are engaged in litigation with the WRA over the price they received for their properties.²² More troubling than the controversies over compensation for property was the inability to relocate these businesses in Worcester. For example, Coghlin Electric was willing to relocate in Worcester on a Prescott Street site. But DEP regulations at the time would not allow Coghlin to occupy the site without an expensive cleanup. Coghlin found the deal economically unfeasible. While many of the operations of Coghlin remain in the City, some of its operations were moved to Westboro because of the failure to come to an agreement on the Prescott Street site.

3. TIFs May Be Needed to Attract Private Development of Brownfields

Brownfields sites like Medical City face costs not associated with clean, greenfields sites outside the City. Medical City, for example, required millions of dollars from the City to clean up, demolish buildings and relocate roads, rail lines and utilities. The City negotiated a TIF with OrNda, a private company, in order to encourage the completion of the City's original agreement with Fallon Healthcare, a non-profit organization. Fallon, as a non-profit, would not have paid property taxes on Medical City, although it promised a payment in lieu of taxes. The economics of the deal were not as favorable to OrNda, as the company would have had to pay over \$80 million in property taxes over an 18-year period. It is at this point that a TIF was negotiated in order to continue the deal. Without some level of TIF, the deal might not have proceeded. Even after granting the TIF, the City expects to recover \$40.5 million more in taxes than it would have had Medical City remained underutilized or abandoned property.

In addition to these lessons that might be learned from Medical City, there was one peculiarity to the project that might distinguish it from other brownfields development projects. Medical City is located in a downtown location. It was able to support a high-density, high-value use. The cleanup, demolition and other site improvement costs totalled \$42 million. This high cost was bearable as part of a \$215 million project, but a lower value project might not have been able to absorb the costs of cleanup. In smaller projects, it is not as clear that the development will increase the value of the property more than the costs of cleanup, demolition and site preparation. In other words, there are some projects where the economics do not favor private development.

²²The appraisals were carried out using a state mandated process which requires the opinions of two independent appraisers and a third review appraiser.

IV. RECOMMENDATIONS

Brownfields cleanup and development is a complex subject that requires incentives for the private sector, improved tools for government, and increased cooperation among the various parties involved. Accordingly, the Research Bureau makes a range of suggestions to encourage private development of brownfields, increase the City's ability to undertake public projects or public-private projects, and encourage cooperation among the many parties involved.

1. The Worcester City Council Should Support Massachusetts Brownfields Reform Legislation

The Worcester City Council should encourage the state legislative delegation to support brownfields reform legislation. First, the bill allows innocent purchasers (those who did not cause the contamination) who clean up sites in accordance with state guidelines to limit their liability for past contamination. Second, it exempts redevelopment authorities and CDCs from liability (if they did not cause the pollution), thereby allowing these organizations to play a larger role in cleaning up and developing Worcester's brownfields. Finally, it provides incentives to encourage private parties to clean up sites, such as a tax credit for cleanup costs, a fund to provide cleanup cost insurance, and a revolving loan fund to finance the clean-up of sites.

2. CMEDA Should be Strengthened

CMEDA should be an important player in brownfields development. CMEDA's most important feature is that it can take property by eminent domain and end the chain of environmental liability. CMEDA may sell a property to a new owner, who will not have to face liability for cleanup of past contamination. CMEDA's great weakness, however, is that it has no significant funding source. CMEDA now hopes to acquire \$10 million to start a revolving loan fund. This fund would acquire, assess, and cleanup properties and sell them to private parties, replenishing the fund with the proceeds from the sale. The Research Bureau supports CMEDA's attempts to obtain \$10 million to start a revolving loan fund, but also notes that obtaining these funds from state or Federal sources will be difficult. CMEDA should continue its efforts to seek this funding and should petition EPA, DEP, Congress, the state legislature, and private foundations for money to start the revolving loan fund. In particular, CMEDA should apply for the new EPA pilot grant for establishing a revolving loan fund. This grant would provide up to \$350,000.²³ Worcester would also benefit from receiving showcase community status

²³"The Brownfields Economic Redevelopment Initiative: Proposal Guidelines for Brownfields Cleanup Revolving Loan Fund Demonstration Pilots" United States Environmental Protection Agency, Office of Solid Waste and Emergency Response April 30, 1997, www.epa.gov/swerosps/bf/html-doc/rifguide.htm (5 Nov. 1997).

from EPA. The City was one of 231 communities to apply for this program, and it has recently been selected as one of forty finalists. December 10, 1997 is the deadline for these forty communities to file an application to become one of the ten showcase communities. Achievement of this status would give the City access to technical assistance from a variety of Federal agencies.²⁴ In addition, CMEDA should petition private foundations to provide at least the seed money for a revolving loan fund. Nonprofit groups like the Clean Land Fund in Rhode Island have secured foundation grants to set up a revolving loan fund for brownfields development. CMEDA should follow their example or consider setting up a partnership with such non-profit funds. Finally, CMEDA should encourage local groups of bankers and foundations to create local lending pools of money for brownfields.

3. The City Manager and the City Council Should Establish Brownfields Redevelopment

In order to level the playing field between greenfields and brownfields, the Research Bureau proposes the establishment of brownfields redevelopment zones. This idea stems from a successful program in Michigan and an experiment in Chelsea, Massachusetts.

a. Michigan's Brownfields Authorities

In July 1996, Michigan passed the "Brownfield Redevelopment Financing Act," which enabled municipalities to establish Brownfields Redevelopment Authorities. These authorities are TIF districts (usually an entire municipality). In these districts, the municipality designates certain properties that are eligible for TIFs. The money raised from the TIF must be used for "demolition or cleanup activities necessary to prepare the site for development." Officials from Michigan believe that the brownfields authorities were less controversial than regular TIFs, as they were limited to particular properties, and the amount of the TIF was limited to the costs of cleanup, demolition and site preparation.²⁵ In Michigan, the costs of cleanup, demolition, and site preparation can be paid for out of the future property taxes up to five years after the completion of such activities.

²⁴"Solicitation of Statements of Interest from Communities Interested in Being Designated as Brownfields Showcase Communities," United States Environmental Protection Agency, Office of Solid Waste and Emergency Response. August 19, 1997, www.epa.gov/swerosps/bf/html-doc/showcase.htm (5 Nov. 1997).

²⁵Kellee Van Keuren, "Detroit Drives toward Redevelopment," *Brownfields News*, September 1997, p. 19.

b. Chelsea

In Massachusetts, there are no pre-approved TIFs. Each TIF must be negotiated on a case-by-case basis and approved by the municipal government and the state. In Chelsea, however, a recent agreement allowed for the establishment of a zone within which businesses that create jobs could be automatically approved for a TIF. Although the amount of the TIF still must be approved by the state and municipality, the qualification for the TIF may be done in advance.

The City Manager and the City Council should consider establishing brownfields zones in which they promise a TIF for the amount a private developer spends on cleanup and building demolition. In addition, Massachusetts should consider following Michigan's example, but short of new state legislation, Worcester's officials should indicate a willingness to establish brownfields zones like Chelsea's where businesses automatically qualify for a TIF. It should also make a general commitment that it will reimburse cleanup costs and site preparation costs within these zones, even though the actual TIF amount will still have to be approved on a case-by-case basis.

If Worcester sets up such zones, it should consider providing other benefits in addition to the tax benefits. For example, the City should also seek to coordinate these zones with CMEDA. CMEDA can protect the future owners of the site from liability for past contamination. The City could consider buying environmental insurance to cap the cleanup costs or providing insurance itself. In addition, Worcester could follow the example of New Bedford which has discounted sewer rates for certain brownfields projects. On certain brownfields projects where there is contamination of ground water, one remediation solution is to use a ground water treatment system where ground water is cleaned by pumping water out of the ground and removing contaminants. The ground water is cleaned over a period of many years. The treated water goes into the sewer system. In these cases, a future owner of a brownfields site might face high water and sewer bills to carry out the treatment. New Bedford discounted water and sewer rates on one project to make the cleanup more affordable. Worcester could promise to cut sewer rates for any property in a brownfields zone that uses a ground water treatment system.

4. The City Manager Should Reorganize the City's Economic Development Agencies

In the past, the Research Bureau has recommended revamping the City's planning and development agencies to encourage development in general and brownfields development in particular. As it stands now, a brownfields site might be under the jurisdiction of the WRA, CMEDA or the Office of Planning and Community Development (OPCD). In addition, the development authorities must deal with many state and Federal Agencies such as DEP, Massachusetts Office of Business Development (MOBD), EPA, the Federal Department of Transportation (DOT), etc.

Local CDCs may also be involved. The resulting confusion of a several-headed development structure may hinder the development of brownfields sites. One example of the potential confusion over the development structure relates to the Wyman-Gordon property located within the Union Station Urban Revitalization Project zone (USURP). WRA is proceeding with plans to develop the Union Station portion of the zone, but it has no firm plans for the remaining areas of the zone, including the Wyman-Gordon site. WRA has indicated that it would welcome and assist a private developer that expressed interest in developing the site. Some in other City departments, however, worry that Wyman-Gordon will suffer the same fate as the Medical City site previously did, and will remain without a plan and money to develop it. They also worry that private developers will be frightened off because they do not want to own property in the WRA's urban renewal area, property that could be taken as part of another of the WRA's projects. Several tenants who are being relocated as a result of the Route 146 connector project were reluctant to locate within the USURP zone because of the uncertain future plans.

Whatever the merits of these positions, it is clear that there needs to be a central office to coordinate the various development agencies, so that issues like the future of the Wyman-Gordon property can be resolved. The Research Bureau continues to support the creation of an Assistant City Manager for Planning and Development who is also the Executive Director of the WRA and has jurisdiction over OPCD. (See Research Bureau Reports #88-1 and #95-1.) The Assistant City Manager should also work closely with CMEDA, a regional organization that cannot be directly under Worcester municipal government, although it shares staff with the City.

5. The City Administration Should Collect and Organize Brownfields Information

One obstacle to brownfields development is a lack of information about the great variety of state, Federal and private programs for brownfields and about the brownfields sites themselves. The City should have a central resource location to provide information on the various programs for brownfields development. At least 17 Federal agencies have some jurisdiction over brownfields.²⁶ In addition there are Federal tax incentives and a mass of regulations regarding such development. On the state level, a developer might have to deal with DEP, MOBD, Mass Highway Department, etc. A developer should also be aware of non-profit funds for brownfields cleanup, private environmental consultants, insurance products, etc.

²⁶ "EPA Federal Interagency Working Group on Brownfields," United States Environmental Protection Agency Office of Solid Waste and Emergency Response, EPA 500-F-97-102, April 1997. www.epa.gov/swerosps/bf/html-doc/intragwg.htm (5 Nov. 1997).

Wisconsin has put together a brochure with a list of programs relating to brownfields. The book provides a description of the various programs and identifies contact people with phone numbers and addresses.²⁷ Worcester should develop a similar booklet and should have at least one resource person dedicated to helping developers get the brownfields assistance they need. This information could be organized by OPCD, CMEDA, or the WRA.

In addition, Worcester needs better information about its brownfields. Accurate information, however, is often difficult to obtain. If a site is not owned by the City, then site assessment may require the permission of the owner. In addition, a detailed assessment involving subsurface testing may be costly and should not be undertaken until the City formulates specific plans about the reuse of the site. The Research Bureau recommends several steps to gain further information about its brownfields. On properties that are in the City's hands or are in the hands of absent or uncooperative owners, the City could perform a **file review**. A file review will not yield as accurate an estimate for remediation as an assessment that undertakes subsurface testing, but this review can be done quickly, cheaply, and without having to enter the property in question. The file review consists of a review of past uses of the site, an examination of all files about spills reported to DEP, and may involve a review of old fire insurance records and aerial maps. The file review can usually be completed by an LSP in a few weeks for less than \$2,000. On properties where the owner is cooperative with the City, the City should consult with the company about information it has on potential contamination.

The City should also consider doing more serious site assessment when there are more firm plans for a site and where access is not a problem. If the City can gain access to the South Worcester site, it will use the \$100,000 appropriation to undertake site assessment. The City should consider making a similar amount of money available each year for site assessments of other properties.

Worcester could also benefit from more sophisticated mapping tools and better integration of environmental data with planning data. Louisville has an elaborate mapping system which allows a user to bring up any property on a computer screen. If a developer approaches Louisville asking for an acre site that has only minimal contamination, the system can provide information on all such sites in the city.

6. The Assessor's Office Should Clarify its Method of Assessing Brownfields Properties

It is difficult for any city to assess brownfields properties at their market value. Often the level of contamination is not known. Sometimes the owner of the property is not

²⁷*Financial Resource Guide to Redevelopment*, State of Wisconsin, Department of Natural Resources, 1997.

eager to find out how much contamination is on site for fear of incurring liability for cleanup. The City does take several steps to insure that these properties are fairly valued. First, the City Assessor employs an income based method of assessment. In other words, in determining the value of a commercial property, the City considers the income generated by a site. The more income a site generates, the higher its assessment. Brownfields properties are often abandoned or underutilized. To the extent that they generate less income, the assessed value of brownfields sites goes down. For example, one of the properties in the South Worcester Industrial Park, 17 Southgate Place, had a 1990 value of \$249,000 and a 1997 value of \$39,200, an 84.27% decline.²⁸ As the income of the property has dropped, the assessment has also dropped. Second, the City has a tax abatement procedure under which business owners who believe that their properties are overvalued may apply for a reduction in their assessment. If a business provides evidence that environmental contamination made the property less valuable, the Assessor's Office will consider lowering the assessment.

Despite these safeguards, there is still the danger of overvaluing brownfields properties. For example, a property valued at the clean value of \$1 million, which requires a \$2 million cleanup, is overvalued. If the City has firm cleanup estimates, it should consider reducing the value of the property accordingly. This would have two beneficial effects. First, a new developer would pay less in taxes in the first year of ownership, making development of a brownfield site more feasible. Second, the City could grant larger TIFs to encourage development. As the City is allowed to grant TIFs only on the increased value of a property, an unreasonably high initial assessment could lower the value of the incentive. Courts have previously allowed municipalities to ignore contamination as a factor in valuing property, but recent cases indicate that they may not maintain this position.²⁹ It is hard to fault the City for assessing properties without taking into account environmental contamination, as accurate cleanup cost information is rarely available before the site is cleaned up. But once the level of contamination is known, the City should adjust its assessment to reflect market value.

7. The City Administration Should Encourage the Establishment of Capital Funds Dedicated to Brownfields Development

In addition to the establishment of a revolving loan fund for CMEDA, the City should encourage the establishment of other funding sources. One example of a funding source is the Clean Lands Fund of Rhode Island, a non-profit organization that raises money from foundations, government, business and private contributions. It operates

²⁸June 10, 1997 memo from the City Manager to the Worcester City Council.

²⁹ "Lender Developer Incentives Mark Recent Brownfields Filing," Richard A. Nysten, Jr. and John M. Lynch, *Banker and Tradesman*, May 26 1997, p. B4.

a revolving loan fund, lending money for the redevelopment of brownfields projects (not limited to Rhode Island) and replenishing the fund with the repayment of past loans. In addition, the fund forms partnerships with municipalities to undertake brownfields projects. The City could contact the fund for assistance on projects. It might also encourage the start-up of a similar fund in Worcester.

Another tool that encourages lending for brownfields projects is a public/private program offered by the Small Business Administration (SBA) which uses public funds to attract private loans. The developer puts down 10% of project cost. A private bank makes 50% of the loan. The remaining 40% is a 20-year, fixed-rate, below market SBA 504 loan guaranteed by SBA. If the loan fails, the bank has first claim to the assets of the company ahead of SBA. This loan is available for a wide range of projects, but it has been used on brownfields projects to encourage private loans to supplement public loans.³⁰

Finally, Worcester banks should follow Chicago's idea of establishing model loan formats for brownfields lending. Banks in Chicago developed this format to provide many different lending institutions with the tools to evaluate loans for brownfields properties. A similar cooperation among Massachusetts banks could give banks more confidence in choosing brownfields projects to support with loans.³¹

8. The City Administration Should Identify Local Businesses as Future Users of Brownfields Sites

While Worcester should market its brownfields sites across the country, the most likely users of the sites are local users. For example, an expanding oil delivery company might readily accept a site that is not perfectly clean. A dry cleaner might want to move to a larger site within the City. The City should actively contact these local users who might want to expand to a local brownfields site. Part of this process of identifying potential local tenants should occur as part of the City's relocation efforts. The Medical City project would have benefitted from more pre-planning in relocating some of the prior tenants in the City of Worcester. The 146 Relocation Project has attempted to improve the relocation process, and it has enjoyed some initial success.³²

³⁰ "Certified Development Company (504) Loan Program," Small Business Administration: Financing Your Business (October 25, 1997) www.sbaonline.sba.gov/financing/cert.html (10 Nov 1997) See also *Brownfields Forum*, p. 51.

³¹ *Brownfields Forum*, p. 48.

³² An October 9, 1997 Status Report from the 146 Relocation Project indicates that all nine of the completed commercial relocations have been to sites within the City.