



October 15, 2010

Knoxville Community Development Corporation
901 Broadway NE
Knoxville, Tennessee 37917

Attention: Mr. David Cook

Subject: Community-Wide Assessment Grant Application

Downtown North I-275 Corridor Redevelopment and
Urban Renewal Area
S&ME Project No. 1434-10-319

Dear Mr. Cook:

Attached please find the Community-Wide Brownfield Assessment Grant Application along with the supporting inventory database and map for the Downtown North I-275 Corridor. The signed assessment grant application has been forwarded to the US Environmental Protection Agency (EPA) for their review and consideration.

Again, thank you for the opportunity to be of service to you on this project. If you should have any questions, or need further information, please do not hesitate to contact us.

Sincerely,
S&ME, Inc.

James R. Bruce, PG, CHMM
Project Manager

Eric M. Solt, PG
Environmental Services Manager

CC: Mr. Bob Whetsel, City of Knoxville

Attachments: Downtown North I-275 Assessment Grant Application
Downtown North I-275 Corridor Inventory Database
Downtown North I-275 Corridor GIS Map

DOWNTOWN NORTH I-275 CORRIDOR BROWNFIELD INVENTORY DATABASE-POTENTIAL HAZARDOUS CANDIDATE SITES

Facility Name/Property Type	Address	Potential COC	Information Source	Historical Property Use
PSC METALS, INC	6000 H07	Hazardous Materials	EDR Database	Metal Recycling
NEON SERVICE COMPANY INC	1007 MAY AVENUE	Hazardous Materials	EDR Database	Manufacturing
FRAZIER WELDING STEEL CO INC	917-923 COOPER ST	Hazardous Materials	EDR Database	Manufacturing
ARWOOD CAN MANUFACTURING CO	909 COOPER STREET	Hazardous Materials	EDR Database	Manufacturing
PRESTON BUSINESS MCHS CO INC	626 BERNARD AVENUE	Hazardous Materials	EDR Database	Manufacturing
TEC-FAB, INCORPORATED	P O BOX 102 614 VAN STREET	Hazardous Materials	EDR Database	Manufacturing
SERENE MANOR HOSPITAL INC	970 WRAY AVE	Hazardous Materials	EDR Database	Hospital
KNOXVILLE SHOWCASE MFG CO	217 DAMERON AVE	Hazardous Materials	EDR Database	Manufacturing
BRADEN'S WHOLESALE FURNITURE CO INC	115 RAMSEY STREET	Hazardous Materials	EDR Database	Retail
EAST TENNESSEE IRON AND METAL	180 RAMSEY ST.	Hazardous Materials	Sanborn '17/'50/'68	Scrap Metal Yard
SOUTHERN COAL AND COKE CO.	640 BLACKSTOCK AVE.	Hazardous Materials	Sanborn '50/'68	Coal Storage
HT HACKNEY CO	230 DALE AVE.	Hazardous Materials	Sanborn '50/'68	Coal Storage
FORMER DRUM AND BARREL CO.	608 VAN ST.	Hazardous Materials	Sanborn '68	Barrel Cleaning & Storage
SECURITY MILLS, INC.	938 VAN ST.	Hazardous Materials	Sanborn '50/'68	Textile Mill
PALM BEACH CO.	522 W. BAXTER	Hazardous Materials	Sanborn '50/'68	Textile Mill
KNOXVILLE BOILER WORKS	1049 LEE ST.	Hazardous Materials	Sanborn '50/'68	Boiler Manufacturing
FORMER COAL YARD	1031 LEE ST.	Hazardous Materials	Sanborn '50/'68	Coal Storage
SOUTHERN LINEN	1013 N. CENTRAL	Hazardous Materials	Sanborn '50	Laundry
FORMER AUTO PAINTING	1053 N. CENTRAL	Hazardous Materials	Sanborn '50/'68	Auto Painting
J.E. MORRIS FORGE	925 LEE ST.	Hazardous Materials	Sanborn '17/'50	Metals Forge
FORMER AUTO REPAIR	907 N. CENTRAL	Hazardous Materials	Sanborn '50/'68	Auto Repair
FRED'S ALIGNMENT AND SERVICE	1114 N. CENTRAL	Hazardous Materials	Site Observation	Auto Repair
SAM'S AUTOMOTIVE	701 COOPER ST.	Hazardous Materials	Site Observation	Auto Repair
KNOXVILLE PRTRS AND PUBLRS, INC	730 N. BROADWAY	Hazardous Materials	EDR Database	Printing
PARAMOUNT ULIKA CLEANERS	741 N. BROADWAY	Hazardous Materials	EDR Database	Dry Cleaner
PITTMAN PRINTING CO.	760 N. BROADWAY	Hazardous Materials	EDR Database	Printing
INDUSTRIAL BATTERY SERVICE , INC	149 JENNINGS AVE.	Hazardous Materials	EDR Database	Unknown
RICO MANUFACTURING CO., INC	620 N. BROADWAY	Hazardous Materials	EDR Database	Manufacturing
SCREENMASTERS	12 EMORY ST.	Hazardous Materials	EDR Database	Unknown
ESTATE OF JHONA. CLANCY	14-16 EMORY ST.	Hazardous Materials	EDR Database	Unknown
IRICK LITHO SERVICE, INC	937 N. BROADWAY	Hazardous Materials	EDR Database	Printing
SPEARS ENTERPRISES, INC	613 N. GAY ST.	Hazardous Materials	EDR Database	Unknown
KNOX CO. BOARD OF EDUCATION	101 E. FIFTH AVE	Hazardous Materials	EDR Database	Unknown
NDH BEARING SERVICE	511 KING ST.	Hazardous Materials	EDR Database	Auto Repair
JOE NEUBERT COLLISION REPAIR CENTER	525 W. FIFTH AVE	Hazardous Materials	EDR Database	Auto Repair
FLEEMING AND MOORE MACHINE AND WELDING	509-505 COOPER ST.	Hazardous Materials	EDR Database	Machine Shop
COLONIAL CLEANERS	109 W. ANDERSON AVE	Hazardous Materials	EDR Database	Dry Cleaners
SHERWIN WILLIAMS CO.	1206 N. CENTRAL	Hazardous Materials	EDR Database	Painting
EAST TENNESSEE AUTO CLUB	100 W FIFTH AVE	Hazardous Materials	Sanborn Map	Unknown
BURKHART TRUSTEE AND THE TRUST CO. KNOXVILLE	857 N CENTRAL	Hazardous Materials	Sanborn Map	Unknown
L AND M ORNAMENTAL IRON CO., INC	221 BERNARD AVE	Hazardous Materials	EDR Database	Unknown
KNOX TENN RENTALS	710 IRWIN ST	Hazardous Materials	EDR Database	Equipment Rental/Repair

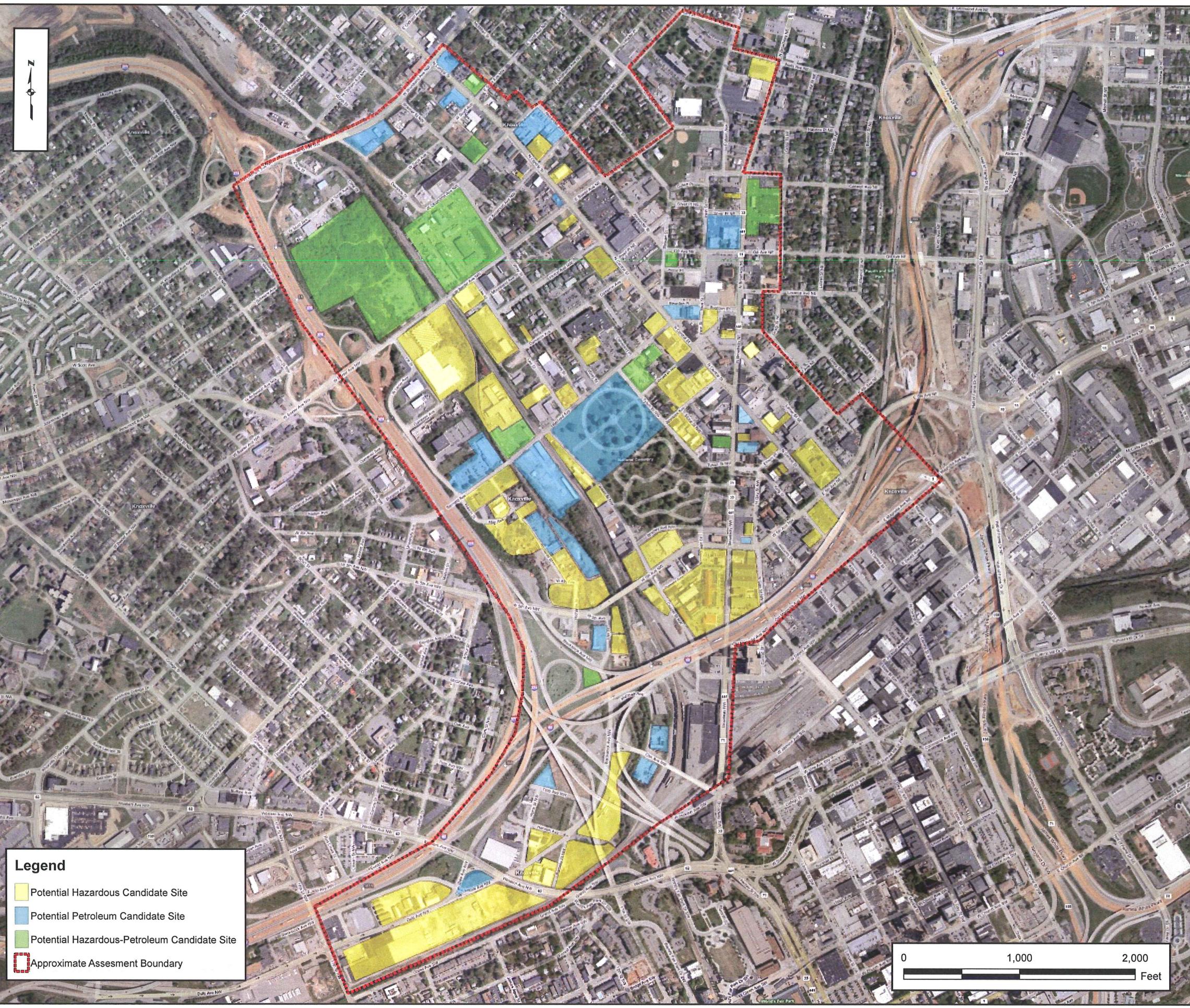
AUTO REPAIR	100 JENNINGS	Hazardous Materials	Sanborn Map	Auto Repair
MACHINE SHOP	622 N CENTRAL	Hazardous Materials	Sanborn Map	Machine Shop
AUTO REPAIR	1141 N BROADWAY	Hazardous Materials	Sanborn Map	Auto Repair
AUTO REPAIR	400 BROADWAY	Hazardous Materials	Sanborn Map	Auto Repair
AUTO REPAIR	200 AND 822 TYSON AVE	Hazardous Materials	Sanborn Map	Auto Repair
AUTO REPAIR	0-7 EMORY PLACE	Hazardous Materials	Sanborn Map	Auto Repair
AUTO PAINT	400 BROADWAY	Hazardous Materials	Sanborn Map	Auto Painting
WITT LUMBER	223 DALE AVE.	Hazardous Materials	Site Observation	Lumber Storage
AG HEINS	116 HEINS ST	Hazardous Materials	Site Observation	Lumber Storage

DOWNTOWN NORTH I-275 CORRIDOR BROWNFIELD INVENTORY DATABASE-POTENTIAL PETROLEUM CANDIDATE SITES

Facility Name/Property Type	Address	Potential COC	Information Source	Historical Property Use
FORMER GAS STATION	625 N. CENTRAL	Petroleum	Sanborn '50/'68	Gasoline Sales
WOODLAND MARKET AND DELI	198 WEST WOODLAND AVENUE	Petroleum	EDR Database	Gasoline Sales
FORMER GAS STATION	1101 N. CENTRAL	Petroleum	Sanborn '50/'68	Gasoline Sales
KNOX COUNTY E-911 CENTER	605 BERNARD ST.	Petroleum	EDR Database	Emergency Services
KNOXVILLE UTILITIES BOARD	514 BERNARD ST.	Petroleum	EDR Database	Manufactured Gas
CHEROKEE OIL	NO ADDRESS - RR ROW	Petroleum	Sanborn '50/'68	Bulk Oil Storage
KNOX METALS CORP	822 RICHARDS ST.	Petroleum	EDR Database	Metal Recycling
LUNN REAL ESTATE INVESTMENTS	601 VAN ST. NORTHWEST	Petroleum	EDR Database	Unknown
FORMER BULK OIL PLANT	508 MCGHEE AVE.	Petroleum	Sanborn '50/'68	Bulk Oil Storage
SINCLAIR REFINING	600 OAK AVE.	Petroleum	Sanborn '17/'50/'68	Oil Storage
FORMER GAS STATION	NO ADDRESS - BENEATH INTERSTATE	Petroleum	Sanborn '68	Gasoline Sales
FORMER GAS STATION	NO ADDRESS	Petroleum	Sanborn '50/'68	Gasoline Sales
TIME OUT DELI	1428 N.CENTRAL	Petroleum	Site Observations	Gasoline Sales
KNOX-TENN RENTAL CO.	854 N. CENTRAL	Petroleum	EDR Database	Equipment Rental/Repair
KNOXVILLE NATIONAL CEMETERY	939 TYSON ST.	Petroleum	EDR Database	Unknown
MONDAY REALTY CO.	701 N. CENTRAL	Petroleum	EDR Database	Unknown
KCDC (CENTRAL STORES)	901 N. BROADWAY	Petroleum	EDR Database	Unknown
HARB'S RUG CLEANING CO.	608 N. BROADWAY	Petroleum	EDR Database	Unknown
MERITA BAKERY	1218 N. CENTRAL	Petroleum	EDR Database	Unknown
FORMER GAS STATION	615 N GAY ST.	Petroleum	Sanborn Map	Unknown

DOWNTOWN NORTH I-275 CORRIDOR BROWNFIELD INVENTORY DATABASE-POTENTIAL PETROLEUM-HAZARDOUS CANDIDATE SITES

Facility Name/Property Type	Address	Potential COC	Information Source	Historical Property Use
KNOX CO. HIGHWAY DEPT.	205 W. BAXTER AVE.	Petroleum/Haz Mats	Vehicle Maintenance	Sanborn '50/'68 and EDR
PETE'S ALIGNMENT SERVICE	123 W. OKLAHOMA AVE.	Petroleum/Haz Mats	Auto Repair	Sanborn '68
SOUTHERN BELL TELEPHONE	NO ADDRESS - BENEATH INTERSTATE	Petroleum/Haz Mats	Vehicle Maintenance	Sanborn '50/'68
BROADWAY CARPETS	930 N. BROADWAY	Petroleum/Haz Mats	Unknown	Site Observations
ACE TRANSMISSION AND KENJO MARKET	1404 N.BROWADWAY	Petroleum/Haz Mats	Unknown	Site Observations
FORMER KUB MANUFACTURED GAS PLANT	517 BERNARD AVE.	Petroleum/Haz Mats	Manufactured Gas	Sanborn '17/'50/'68
SANITARY LAUNDRY AND DRY CLEANING SERVICES	625 N. BROADWAY	Petroleum/Haz Mats	Unknown	EDR Database
SAFETY-KLEEN CORP.	826 STEWART ST.	Petroleum/Haz Mats	Unknown	EDR Database
BROOKSIDE MILLS	523 W. BAXTER AVE.	Petroleum/Haz Mats	Textile Mill	Sanborn '17/'50/'68
KNOX TENN RENTALS	126 BERNARD ST AVE	Petroleum/Haz Mats	Unknown	Site Observation



Potential Assessment Candidate Sites

Downtown I-275 North Central Corridor

Knoxville Tennessee

SI2010 Projects\319 Downtown I-275 North Central Corridor

DRAWN BY: Josh Rowe DATE: 10/07/10
CHECKED BY: JRB FILE: 1434-10-319

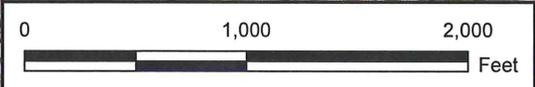
REVISIONS	
NO.	DATE COMMENTS

FIGURE NO:

1

Legend

- Potential Hazardous Candidate Site
- Potential Petroleum Candidate Site
- Potential Hazardous-Petroleum Candidate Site
- Approximate Assesment Boundary



**City of Knoxville
Tennessee**

**Proposal to the Environmental Protection Agency
for Brownfields Assessment Grant Funds**

for the

Downtown North Redevelopment Area

October, 2010



October 13, 2010

Environmental Protection Agency
Attn: Don West
8601 Georgia Avenue, Suite 500
Silver Springs, MD 20910

Dear Mr. West:

On behalf of the City of Knoxville, Tennessee, I respectfully submit this application to the Environmental Protection Agency (EPA) for assessment funding under the Brownfields Grant Program. Over the past several years, Knoxville has been active in dealing with the issues associated with economic decline in the neighborhoods both north and south of the downtown. The City is well into performing an inventory and environmental assessment of multiple properties in its South Waterfront Development Area, a project being funded with EPA Brownfields grant funds. The success of this ongoing project, as well as previous Brownfields assessment projects, including the now completed redevelopment of a major former railroad site, has lead the City to seek similar funds for the City's Downtown North Redevelopment District.

The City recently contracted with a consultant to perform an inventory of brownfield sites in Downtown North, and the resulting inventory shows that the area is littered with abandoned and/or under-utilized sites, many of which are believed to have underground storage tanks. Consequently, the City of Knoxville is applying to the EPA for both hazardous substance and petroleum funding under the Brownfields Grant Program. If our application is successful, we will use the funds to perform approximately ten to fourteen Phase I ESAs, and between four and eight Phase II ESAs, plus preliminary remedial planning on sites selected for Phase II ESAs.

The City of Knoxville was once described as "a scruffy little city on the banks of the Tennessee River" in the *Wall Street Journal*. That hurt! – but it was almost thirty years ago, and in 2008, Knoxville was named by *Forbes Magazine* among the Top 10 Metropolitan Hotspots in the United States. Visioning and planning have played a vital role in Knoxville's growth, and the vision for Downtown North is to create an integrated mixed use area with visual, pedestrian, vehicular and land use connections working together to capitalize on the revitalization of the downtown. Identifying, assessing, and redeveloping abandoned sites is critical to this vision. We hope you will look favorably upon our application, because with this grant from the EPA's Brownfields Program, the City can take the next step in the revitalization of Downtown North.

Sincerely,

A handwritten signature in black ink, appearing to read 'William Lyons'.

William Lyons, Senior Director
Department of Policy and Communications

Transmittal Letter page 1

Applicant Information

- a. Applicant Identification: City of Knoxville
400 Main Street
Knoxville, Tennessee 37902
- b. DUNS Number: 042453530
- c. Funding Requested: i) Assessment
ii) \$400,000
iii) Hazardous Substances - \$200,000
Petroleum - \$200,000
iv) Community-wide
- d. Location: City of Knoxville, Knox County, Tennessee
- e. Site Specific: N/A
- f. Contacts: i) Project Director:
Bob Whetsel, Director of Redevelopment
Tel: 865-215-2543
Fax: 865-215-3035
bwhetsel@cityofknoxville.org
Room 656 City County Building
400 Main Street, Knoxville, Tennessee 37902
- ii) Chief Executive:
Mayor Bill Haslam
Tel: 865-215-2040
Fax: 423-215-2085
mayor@cityofknoxville.org
400 Main Street, Knoxville, Tennessee 37902
- g. Date Submitted: October 13, 2010
- h. Project Period: Three years (2011 – 2014)
- i. Population: City of Knoxville – 185,106 (2009 est. US Census Bureau)

City of Knoxville Community-wide Brownfields Grant Proposal for Downtown North Redevelopment Area Narrative Proposal

The City of Knoxville is applying for a community-wide Brownfields assessment grant for \$400,000 -- \$200,000 for hazardous substance, and \$200,000 for petroleum contamination -- to perform Environmental Site Assessments (ESAs) and some preliminary remedial planning on various properties in the Downtown North Redevelopment Area.

Threshold Criteria for Assessment Grants

1. Applicant Eligibility

The City of Knoxville is eligible to be the grant recipient as a General Purpose Unit of Local Government.

2. Letter from the State or Tribal Environmental Authority

A letter from Andrew P. Shivas, Brownfields Coordinator, Division of Remediation, Tennessee Department of Environment and Conservation, is included as an Attachment to this narrative.

3. Site Eligibility

This application is community-wide and therefore no specific sites have yet been identified for assessment. Multiple sites suspected of having hazardous substance and/or petroleum contamination have been identified in the target area as a result of a recent inventory of brownfield sites, and these are currently being prioritized for assessment. Sites that are suspected of having petroleum contamination will undergo eligibility determination by the Tennessee Department of Environment and Conservation prior to assessment being performed.

Ranking Criteria for Assessment Grants

1. Community Need

a. **Health, Welfare, and Environment (10 Points)**

Here we describe the effect Brownfields currently have on our targeted community by providing statistical information on number of sites, sensitive populations and the impacts of Brownfields.

i) Environmental dangers can come in the form of biological, physical or chemical, and can be caused by site contaminants and their migration, groundwater impacts, surface runoff, or waste material dumped on site. These dangers adversely impact the health, welfare and environment of an area's residents and employees. The City of Knoxville recently performed an inventory of brownfield sites in the target community which spans approximately 541 acres. The inventory shows an estimated 80 brownfield properties, 51 of which are suspected

of being hazardous substance sites, 19 petroleum sites, and 10 hazardous and petroleum sites. These properties span 136 acres (approximately 25% of the target area), and range in size from small commercial parcels to 20-acre sites. The area is heavily populated with metals processing, textile mills, and auto dealerships and repair shops, many of which have been there for decades and occupy facilities that are run down and in need of renovation.

Knoxville's industrial growth sprang from its railroad connections – it was the region's busiest depot for freight and passengers. North Knoxville started to develop an industrial base around the railroad with textile mills, foundries, manufacturing and railroad maintenance facilities which provided employment to thousands. Tree-lined neighborhoods sprung up around this industrial area with a healthy mix of residents -- professionals and laborers, families and transients, black and white. The area was a major center of Knoxville's commerce. The downturn of the Great Depression started the economic decline of North Knoxville, and the movement of people to the suburbs led to the decline of the neighborhoods. Many of the once thriving industries became idle and abandoned. Jobs became scarce, commercial businesses had a hard time surviving, and houses fell into disrepair. Over the years, the level of poverty increased, as did crime rates and the homeless population. Abandoned, vandalized, and derelict structures in our target area pose a safety risk, not only because of their insecure condition, but their unrestricted access attracts vagrants with substance abuse problems, and makes them an attractive nuisance to curious children. This leads to exposure to potential contaminants and the associated health risks. The neighborhood is predominantly white, the minority population is on a par with the national level, but the education level is lower in the target area, with 66.9% high school graduates vs. 80.4% in the U.S., and 14.5% with a Bachelor degree or higher vs. 24.4% for the U.S. (2000 Census – latest available data down to tract level).

Knoxville is located in the heart of Appalachia, in the valley between the Cumberland Mountains and the Great Smoky Mountains. Although in a region of particular scenic beauty, it has poor air quality, limited transportation options, a poverty rate higher than the national average, and

serious health concerns including a high obesity rate, and a ranking of number 4 in the country on the list of the most challenging places to live with asthma (*Asthma and Allergy Foundation of America – 2010 report*). While poverty itself is not a cause of asthma, there is overwhelming evidence that poor sectors of society are more likely to live in adverse environmental conditions that expose them to asthma triggers such as urban air quality, indoor allergens, lack of patient education, and inadequate medical care. The EPA released health risk data on the national-scale air toxics assessment (NATA) in 2009, which scales down to the census tract level. Air toxics are pollutants known or suspected of causing cancer or other serious health problems such as birth defects. The tracts that make up our target area are shown to have an elevated risk for cancer, neurological risks and respiratory disease. NATA estimates risks from exposure to emissions from industries and mobile sources such as cars and trucks. The EPA, Environmental Justice, EJView shows that women of child-bearing age in these same census tracts are at an elevated risk for low birth weight infants (who go on to have a lifetime of increased risk of health problems), and for increased infant mortality. Since this is a low income neighborhood with older houses, there are problems with lead-based paint, leading to an increased risk for children living there. Based on a combination of age of housing and data on patients' elevated blood lead levels over the past several years, the Knox County Health Department determined that the Downtown North neighborhoods have the highest risk of elevated blood lead levels in Knoxville. Several streams in the Knoxville area are listed as impaired by the Tennessee Department of Environment and Conservation (TDEC), including Second Creek which runs through the target area. Second Creek is on TDEC's 303d list as a Category 5, and is posted for a water contact advisory.

b. Financial Need (10 Points)

Here we describe the economic impact of Brownfields on our targeted community by providing statistical information on poverty, income, unemployment, and fiscal constraints.

i) The economic impact of Brownfields on the targeted community is evidenced by the lack of a thriving commercial business community, and the obvious lack of upkeep to many of the homes in the surrounding neighborhoods. Downtown North is an older Knoxville neighborhood, but older doesn't necessarily translate into poorer. In fact there are several historic neighborhoods where homes have been bought by younger families

who are attempting to restore them. But the preponderance of homes around the more industrial parts of Downtown North suffers from a lack of maintenance. The fundamental reason for this is the lower incomes of most of the residents. While the following selected comparative data for the target area vs. the U.S. are 10 years old, it is assumed that 2010 census (tract) data will not show significant changes in the ratios.

Selected Income Data – Downtown North vs. U.S. Average		
	Target Area	U.S.
Median Household Income	\$23,807	\$41,994
Per Capita Income	\$15,051	\$21,587
Families Below Poverty Level	14.3%	9.2%
Individuals Below Poverty Level	20.9%	12.4%

Source: U.S. Census Bureau 2000, American FactFinder

Unemployment rates for Knoxville are reflective of the U.S. average, but the closure of local industries and their relocation to the urban fringes of the City in the past decade creates an additional problem related to transportation. Knoxville has limited transportation options, which means that to get to work, residents of the Downtown North neighborhoods in many cases, have to rely on automobiles, which increases their burden of costs and contributes to increased air pollution. They face a similar situation for shopping and other activities associated with normal daily activity. Too often the additional economic burden of transportation costs to reach the employment and commercial centers are more than a household income can tolerate. Additional income and poverty statistics from the American Community Survey, Population and Housing Narrative Profile 2006-2008 indicate that twenty-five percent of Knoxville households received Social Security at an average income of \$14,055, thirty percent of related children under 18 were below the poverty level compared with 12 percent of people 65 years old and over. Sixteen percent of all families and 42 percent of

families with a female householder and no husband present had incomes below the poverty level. Blight, crime, and lack of healthcare, along with reduced property values and an unconnected social network, all contribute to the economic problems brought on by Brownfields.

Money is tight for everyone right now, and potential developers who might be interested in acquiring a brownfield property and redeveloping it are unable to secure financing from banks, even if they have good credit. Added to that is the problem that banks generally are not going to lend money for acquisition without at least a Phase I ESA being performed, so developers are often unable to move forward because of these constraints. If the City can perform assessments with grant funding, it takes that burden off potential developers, and marketing the sites becomes a lot easier. The City has been successful in acquiring funds for infrastructure improvement projects and has invested heavily in downtown redevelopment but there is a limit on available funds as regular city services must be maintained despite fiscal constraints.

2. Project Description and Feasibility of Success

a. **Project Description (5 Points)**

Here we describe the proposed project, our approach, and feasibility of success.

i) The project proposed for funding under this grant is the assessment of multiple brownfield sites in the Downtown North Redevelopment Area of the City of Knoxville. The majority of the funds received will be used for Environmental Site Assessments (ESAs). The amount requested is \$400,000. \$200,000 will be used to assess properties suspected of having hazardous substance contamination, and \$200,000 will be used to assess properties suspected of having petroleum contamination. It is anticipated that Phase I ESAs will be performed on ten to fourteen sites in Downtown North, and Phase II ESAs will be performed on between four and eight sites depending on the potential extent of contamination. Preliminary remedial planning will be done for the Phase II ESA sites. The City's Brownfields task force will select the sites for assessment and work with the property owners to gain access to conduct the ESAs. It is anticipated that almost all of the funds will be used for environmental assessments and remedial planning, with a small amount reserved for community outreach and education. The City has already held eight public meetings in Downtown North to share its concept plans for the area, and to gather input from the business owners and residents. Every meeting has been well received with anywhere from 40 to 175 people in attendance. Very few negative comments were received and the plans for redevelopment of the area have been overwhelmingly approved by the public.

The redevelopment project was started in 2007 when the mayor of Knoxville appointed a task force to study the area after allocating funding to renovate a former historic motel that had fallen into complete disrepair, into apartments for homeless individuals. The work of the task force was the foundation for the creation of the district known as Downtown North and several planning

studies have been completed. Downtown North is the gateway to the downtown and includes the I-275 Corridor which has evolved over the years into an area that has experienced environmental degradation through the loss of viable industrial and commercial businesses. As a result of the planning studies and public support, the City has embarked on a plan to renovate Downtown North into an integrated mixed use area with visual, pedestrian, vehicular and land use connections working together to capitalize on the success of the revitalization of adjacent downtown Knoxville. Over the past three years, Downtown North has identified itself as a special place with a unique character, and local business owners and residents have embraced the idea that this area can be a thriving local community once again.

The feasibility of the success of this project is certain for three major reasons. Firstly, for the past twenty years, the City leadership has focused its attention on the redevelopment of downtown Knoxville which has led to a huge investment of public and private funding resulting in an eclectic mix of quaint and unique retail businesses, a variety of wonderful restaurants, arts venues, loft apartments, newly renovated historic buildings and tastefully converted old buildings. The pedestrian friendly environment and greenspace areas make it attractive and safe for people of all ages to gather and enjoy. Secondly, since the success of Downtown's redevelopment, the City leadership has turned its attention to the areas north and south of the downtown. To the south is the area known as the South Waterfront which itself has a significant number of brownfield properties. The City of Knoxville is currently conducting environmental site assessments on many of these properties using funding through the EPA's Brownfields Grant Program. This project is progressing well -- an inventory has been completed, sites have

been prioritized for assessment, and discussions with property owners are mostly positive. The City appointed a director whose sole responsibility is to oversee the redevelopment of South Waterfront and several projects are already underway. The third reason for the success of the Downtown North project is that planning has been done and plans are being implemented. The City has already invested significant funding into redevelopment projects

and private investment is real -- new retail businesses have located, and several existing business owners have made improvements to their properties. The most noticeable changes have come to the facades of over 30 buildings that combined, have seen over five million dollars of public and private money invested. And the swell of the local community support will carry this project forward.

b. Budget for EPA Funding and Leveraging Other Resources (10 Points)

Here we show the budget breakdown, narrative descriptions of the individual tasks, and additional sources of funding that could be leveraged.

i) The following two tables identify specific tasks associated with the proposed assessment project. Budget Table 1 relates to the \$200,000 for hazardous substance site assessments, and Budget Table 2 relates to the \$200,000 for petroleum site assessments. It should be noted that for two of the tasks – Community Outreach, and Program Development & Management - costs would be divided equally between hazardous funds and petroleum funds because both categories would be discussed at public meetings and task force meetings. However, costs associated with Phase I and Phase II Environmental Site Assessments, and Preliminary Remedial Planning would be applied specifically to either hazardous or petroleum.

Budget Table 1 – Budget for Hazardous Substance Assessments

Budget Categories	Project Tasks				Total
	Community Outreach	Program Development & Management	Phase I & II Assessments	Preliminary Remedial Planning	
Personnel					
Fringe Benefits					
Travel		\$3,000			\$3,000
Equipment					
Supplies	\$2,000				\$2,000
Contractual	\$6,000	\$3,000	\$170,000	\$16,000	\$195,000
Other					
Total	\$8,000	\$6,000	\$170,000	\$16,000	\$200,000

Budget Table 2 – Budget for Petroleum Assessments

Budget Categories	Project Tasks				Total
	Community Outreach	Program Development & Management	Phase I & II Assessments	Preliminary Remedial Planning	
Personnel					
Fringe Benefits					
Travel		\$3,000			\$3,000
Equipment					
Supplies	\$2,000				\$2,000
Contractual	\$6,000	\$3,000	\$170,000	\$16,000	\$195,000
Other					
Total	\$8,000	\$6,000	\$170,000	\$16,000	\$200,000

Community Outreach – This task includes publicity, meetings, and distribution of information to the public as the project progresses. Public/neighborhood meetings will be held at the start of the project and at critical milestones as the project warrants. Based on previous public/neighborhood meetings held to provide information on the redevelopment of the project area, we anticipate a significant number of attendees. Supplies would be needed, and the contractor would be required to attend to discuss project procedures and answer technical questions.

Program Development & Management – This task includes documenting guiding principles and procedures, establishing priorities for site ranking, education and training, and performance reporting. The travel costs included in this budget task would be used for attendance at regional Brownfields grantee workshops and the National Brownfields conference.

Phase I & II Environmental Site Assessments – Phase I ESAs will include a review of public records for the site and the immediate vicinity; a site reconnaissance to identify visual signs of environmental conditions on or adjoining the property; interviews with appropriate people to consider any local knowledge of hazardous substances or petroleum products; and a report documenting the findings. It is anticipated that 5-7 Phase I ESAs will be performed on hazardous sites, and 5-7 will be performed on petroleum sites at an average cost of \$5,000 each.

Phase II ESAs will be performed on properties considered as having the best redevelopment potential, and meet site-specific eligibility and Environmental Protection Agency approval. In the case of petroleum contaminated sites, assessment eligibility will be determined by the Tennessee Department of Environment and Conservation. Typically, a Phase II ESA includes summarizing documentation regarding environmental issues; evaluating the site for natural resource-related issues; collecting soil,

soil gas, surface water, sediment, and groundwater samples from potentially impacted areas as warranted; and a risk assessment to evaluate the data and potential exposure effects of identified contaminants on human health and the environment. Where appropriate, the Phase II ESAs would also include surveys of buildings to identify asbestos containing building materials or lead-based paint. The Phase II ESAs will also include preparation of generic and site specific Quality Assurance Project Plans (QAPP), and Site-Specific Health and Safety Plans (SSHSP). At the conclusion of the Phase II ESA, a report is generated that defines the contamination to the extent consistent with objectives established for a particular property, exposure pathways, an assessment of risk (if necessary), and recommendations for cleanup or other appropriate action with rough cost estimates. The cost of a Phase II ESA is hard to quantify prior to site identification, however the major portion of the grant funds will be spent on environmental assessments so it is anticipated that 2-4 Phase II ESAs will be performed on hazardous sites, and 2-4 Phase II ESAs will be performed on petroleum sites. Additional sites will be included for Phase I and/or Phase II ESAs if there is sufficient budget.

Preliminary Remedial Planning

This task includes an evaluation of soil, groundwater, and sediment analytical results to characterize the impacted media, type of contaminants, and the extent of contamination, such that preliminary remedial planning can be accomplished or data gaps identified. Also, if appropriate, the locations, type, condition, and quantity of asbestos containing building materials and lead-based paint can be defined so that management and abatement plans could be developed as part of the remedial planning process. Information on contaminant identification and cleanup options can be used for the future negotiation of Voluntary Brownfields Agreements with the appropriate regulatory agency to specify cleanup standards and land-use restrictions.

ii) Leveraging of funding can take different forms. If assessments determine that additional assessment or clean up work may be required, the City of Knoxville will consider using capital funds as well as seek additional funding through grant programs and private sources. Grant programs could include Targeted Brownfields Assessment funds from the Tennessee Department of Environment and Conservation, and other possible federal resources such as the Department of Housing and Urban Development (HUD), the Economic Development Administration (EDA), the Department of Transportation (DOT) and the Department of Health and Human Services (HHS), all of which offer grant opportunities that can relate to projects associated with sustainable community development even if those programs are not directly related to brownfields assessment or cleanup.

Once environmental assessments are complete, and properties emerge as strong candidates for redevelopment, the City anticipates submitting a grant application to EPA for clean-up funds under the Brownfields Grant Program. The City will also work with current owners of existing brownfield properties to encourage investment and facilitate clean up where appropriate. The following examples are typical of the kinds of funding the City will seek:

- The City appropriated \$800,000 towards revitalization of Downtown North and the funds were used for planning and infrastructure improvements in the area.

- \$2.5 million Department of Transportation, Surface Transportation Program funds will be used for a Transportation Improvement Plan for the area. The concept plan is in place and the first segment of the improvements will occur in 2011 with completion anticipated for 2012/2013. This funding will have a huge impact on Downtown North as the funding will be used to make major road improvements, bike lanes, and wider sidewalks.

- Recently the City submitted a Challenge Grant application to the Department of Housing and Urban Development for planning, zoning changes, and addressing environmental issues in the I-275 Industrial Corridor which bisects Downtown North. The City has committed \$100,000 in matching funds if this grant application is successful.

- Other potential tools that the City can consider to stimulate private investment are Tax Increment Financing -- using a special assessment to generate revenue used to finance property improvement, and Tax Incentives -- a tax credit or deferral of taxes paid on property or income.

In addition to these monetary sources, the City benefits from the resources of other public and local non-profit organizations that have assisted in the planning, design, and implementation of projects in the target area that support its revitalization. Quite clearly, the City of Knoxville has demonstrated that it is committed to the revitalization and redevelopment of Downtown North and will continue to pursue financial and other relevant resources to ensure its success.

c. Programmatic Capability and Past Performance (20 Points)

Here we describe the management system we have in place to direct activities, and how we will secure additional expertise. Also, we describe current and previous EPA Brownfields Grants that were awarded to the City of Knoxville to perform environmental site assessments.

i) Programmatic Capability - The management system in place to direct activities under the grant is the same management system that is directing other redevelopment activities in the project area. The City of Knoxville employs a full-time Director of Redevelopment who is also the project

manager for this Brownfields assessment project, and who reports directly to the Senior Director of the Policy and Communications Department. The Department's policy mission is to enhance the climate for quality growth through the strategic development of incentives and the involvement of

appropriate organizations, individuals, and the public in the policymaking process. To support this mission, the Department facilitates activities related to administration -- council relations, historic preservation, major capital investment projects, and public input processes for city projects and services, especially in the downtown area and adjacent neighborhoods. The Department works closely with other city departments and with local community development organizations to facilitate the enhancement of the Knoxville community. To this end, the Department aggressively pursues creative methods to leverage city economic resources to help realize this commitment to quality growth.

The Redevelopment Director is supported by a staff experienced in managing community improvement projects. Project examples include: the Cumberland Ave Corridor -- designed to take a currently semi-suburban, auto-oriented corridor, frequently used as a pass through, and make it into an urban, multi-modal corridor providing safe and attractive transportation for pedestrians, bicyclists, transit, and cars; the Downtown Wayfinding Signage -- to make it easy for visitors to navigate around downtown Knoxville as well as highlighting its attractions and offerings in an appealing and informative manner; the Gay Street 100 Block Construction -- a major street reconstruction to build large underground vaults for electrical equipment, replace the street, and make major streetscape improvements including wider sidewalks and added features like trees, bike racks, and street furniture. These are just a few examples of the many projects managed by individual staff members of the Policy and Communications Department. The entire department staff becomes involved in the various projects so that each is familiar with the project goals and milestones. If employee turnover should occur, another staff member will be knowledgeable enough to fill in until a replacement can be found. Because the Department works so closely with the City's other community development

departments, expertise in managing this type of project is easily found. While the project manager will manage the overall assessment project, the Phase I and II Environmental Site Assessments and Preliminary Remedial Planning will be contracted out to a qualified environmental consultant. The City went through a similar process to contract with consultants on two previous environmental assessment projects and has a standard procurement process in place through the City's Purchasing Department to hire the best qualified environmental consultant. The procurement includes a Request for Qualifications published in the local newspaper and on the Purchasing Department's website, a thorough panel review of all submitted qualifications packets, candidate firm interviews if appropriate and subsequent contract negotiations.

ii) Past Performance - EPA selected the City of Knoxville for a Brownfields Pilot in 1995. Funds were used to evaluate the feasibility of alternatives for the redevelopment of Knoxville's Center City Business Park. Citizens, businesses and community groups, local and state economic development organizations, and academic institutions assisted in the formulation and development of the Knoxville Center City Business Park Brownfields Redevelopment Initiative. Approximately 150 acres were identified as potentially suitable for redevelopment, and the subsequent successful redevelopment now includes the corporate offices of the Knoxville News Sentinel and Cherokee Health Systems, plus a large supermarket. Design and permitting for a distribution facility has just been completed and construction will start soon. All funds were drawn down and the City was in compliance with all grant requirements -- the City's Department of Finance maintains strict adherence to grant compliance procedures. There were no adverse audit findings.

In 2009, EPA selected the City of Knoxville for community-wide hazardous substances and

petroleum grant funds which are being used to inventory brownfield sites and conduct Phase I and II ESAs in the Knoxville South Waterfront Redevelopment Area. Grant funds are also being used to conduct preliminary cleanup planning, and support community outreach activities. This ongoing project is progressing well – the area inventory has been completed and evaluated to identify potential candidate sites for Phase I assessment. Potential candidate sites were

compiled under separate categories for both hazardous and petroleum consideration. Access agreements being negotiated with several property owners and Phase I ESAs are about to begin. All EPA required reporting has been completed and submitted on schedule, and the ACRES registration has been set up and ready to input property profile information as Phase I ESAs are performed.

3. Community Engagement and Partnerships

a. **Involving the affected community (5 Points)**

Here we describe our plan for involving the affected community (neighborhood organizations, citizens' groups, developers and others) in site selection for assessments, cleanup decisions, or reuse planning, including activities that have already occurred. We also discuss communicating progress to citizens, including in other languages, and local job training programs.

The City of Knoxville makes every effort to encourage community participation from the citizenry, and in particular, to engage local neighborhoods in plans for projects in their communities. The Department of Policy and Communications' mission is to provide accurate information to citizens and the press in a timely manner. It is crucial that the City make full use of its citizens' ideas and opinions in considering such investment of the public's funds. The Department actively involves the public through design and public input, and through appropriately transparent decision-making processes.

Regarding North Knoxville, a task force was appointed by Knoxville's mayor in 2006 to study the area, and the committee met monthly to discuss issues ranging from neighborhood safety to the design of new buildings. The task force (called the Fifth & Broadway Committee) comprised of representatives from city/county departments, City Council, the Knoxville Police Department, Knoxville's Community Development Corporation, the Metropolitan Planning Commission, local neighborhood organizations, local business concerns and local ministries and missions. The area known as

Downtown North evolved as an outcome of the Fifth & Broadway task force and the first Downtown North redevelopment meetings were held in 2008. The meetings were publicized in the local newspaper, health department, and on the City of Knoxville's website, and were well attended with more than 150 people at the first meeting. Since then, another seven meetings have been held to inform the public of proposed redevelopment projects in the area, and to gain input from local citizens and other interested parties. Comments from the meetings have been published on the City's web site and it is evident that there is overwhelming support for the efforts to enhance the quality of life in Downtown North through community improvement projects. The Central Street Urban Corridor project (Central Street is one of the two main roads that run through the target area) was implemented at the request of the community to make it a multi-modal corridor: friendly to pedestrians, bicyclists, and transit users, as well as automobiles. The change created shorter cross walks, bike lanes, and on-street parking along the corridor; it also set the stage for the comprehensive Downtown North Streetscapes Plan that started in 2009. This City funded design project produced a schematic design for the major street corridors

within Downtown North, and included public participation, site analysis, engineering design, and environmental and cultural resources review.

Because of the industrial history and present industrial operations in Downtown North, Brownfields and their associated negative impacts on the neighborhoods have been a subject of discussion in public meetings. The City took on the challenge of assessing brownfield properties in its southern boundary area which is being accomplished with the aid of EPA Brownfields grant funding, and the Downtown North neighborhoods have the same desire for the northern boundary. Residents and business owners understand that adverse environmental issues have a detrimental effect on not only their individual health, but also on the economic health of the neighborhoods. They have expressed their concerns in meetings and the City is responding. The City has already done an inventory of brownfield sites in Downtown North, and needs to move forward with site assessments and subsequent cleanup and redevelopment.

The primary language in the area is English, therefore all communications have so far been in English and the City has not been requested to communicate in another language. However, should that need arise there are available resources at the University of Tennessee, Knoxville which houses the Center for International Education, and also the Hispanic Chamber of Commerce, located in Knoxville. The progress of the project will continue to be communicated through the City's web site, local media, and community meetings.

Job training programs are always valuable, but even more so during these times of high

unemployment. Knoxville-Knox County's Community Action Committee (CAC) provides job training through its Workforce Connections, which is responsible for the development and operation of a variety of programs focused on employment assistance and related training and support services. Of note, are two programs focused on environmental training. Eight unemployed workers were trained for 'green' jobs as weatherization auditors where their role is to perform energy audits of homes to see where the homes are deficient, and correct those deficiencies e.g. by sealing leaks around windows and doors etc. Of the eight that were trained, five found permanent employment and two started their own businesses providing energy audits. The average wage for the employees is \$12.50 per hr. The second training of note relates to the environmental cleanup of contaminated sites at the Department of Energy facilities in Oak Ridge, Tennessee, located 20 miles from Knoxville. Through the Workforce Investment Act, Workforce Connections received funding and developed a program to train environmental technicians. The training was conducted by the International Chemical Workers Union and covered hazardous materials handling, Hazardous Waste Operator Training and Emergency Response (HAZWOPER) certification, and Occupational Safety and Health Administration (OSHA) construction certification in asbestos, mold and lead. Twenty-three trainees went through the program in 2009 and as of a month ago, 14 had found full-time employment at an average wage of \$15 per hr. CAC is located in our target area and therefore well positioned to provide training to the underserved citizens of the Downtown North neighborhoods.

b. Developing partnerships with local agencies (5 Points)

Here we describe our plans to develop partnerships with local/state environmental and health agencies and other relevant governmental agencies.

Because of previous brownfield projects in which Knoxville has been involved, we have worked

closely with the Tennessee Department of Environment and Conservation (TDEC). A major

Brownfields redevelopment project in the vicinity of the Downtown North target area turned a former railroad repair facility into the site for the 250,000 sq. ft. Sysco food distribution center that employs more than 250 people. The redevelopment presented challenges and was accomplished through the cooperation of TDEC, the City, the Chamber of Commerce, the Development Corporation, Sysco, and others. TDEC is also a strategic partner in the ongoing Brownfields assessment of the Knoxville South Waterfront. TDEC's Brownfields Coordinator, and local field office personnel, have attended public meetings and committee meetings and are included in all correspondence related to the assessment project.

An important partner in the Downtown North redevelopment is the Knox County Health

Department which is physically located in the target area and provides health services to a significant portion of the neighborhood residents. The Health Department has played an active role in this project, and in fact the first few public meetings to engage the community were hosted by the Health Department. Because the Health Department is located in the Downtown North district, staff members are well aware of the increased health problems exacerbated by the generally lower standard of living of the neighborhood residents -- they see it daily, and therefore are very interested in seeing the standard of living raised through quality of life improvements, including returning vacant industrial and commercial properties to public benefit use.

c. Description of the roles of key partners (10 Points)

Here we describe the roles of key community-based organizations involved in the project.

While there are several community-based organizations that support the project, there are three organizations that have already played a noteworthy role, and have committed to continuing their active involvement.

Knoxville's Community Development Corporation (KCDC) is the housing and redevelopment agency for the City. For nearly 70 years, KCDC has been enhancing the quality of life for the citizens of Knoxville by providing safe, decent and affordable housing, advancing redevelopment initiatives, fostering self-sufficiency and improving neighborhoods and communities. The agency has expanded its role over the years to include economic development, and has been instrumental in the completion of notable projects such as: TVA's Twin Towers Office Complex; Howard H. Baker Jr. U.S. Courthouse; Waterfront Redevelopment/Volunteer Landing; Downtown Market Square Residential and Retail Redevelopment; Hope VI/Mechanicsville Housing Redevelopment; Five Points Residential and

Retail Redevelopment; and Market Square Parking Garage. KCDC administers more than \$6 million annually in redevelopment and community and neighborhood revitalization, and is responsible for numerous neighborhood improvement projects including developing two new grocery stores, medical office complexes and more than 100 new housing units. Working in conjunction with the Metropolitan Planning Commission (MPC), KCDC produced the Downtown North/I-275 Corridor Redevelopment and Urban Renewal Plan. The Plan addresses critical issues affecting Downtown North including: economic development, particularly on the older, often vacant, industrial properties; conservation of historic resources, especially the historic properties in the Downtown North neighborhoods; improving multi-modal transportation including a new access road along I-275, plus sidewalks and bicycle facilities; new land use opportunities on underutilized and vacant properties offering mixed use development; and enhancement of environmental and recreational systems including

the Second Creek greenway that runs through the area. KCDC was represented on the original Fifth & Broadway task force, and is a co-sponsor of the Downtown North public meetings along with the City and the MPC.

The Development Corporation of Knox County (TDC) is a non-profit organization committed to promoting and nurturing the long-term, quality growth of the region's business environment. As the property owner and manager of six business parks located throughout Knox County, TDC is focused on maintaining a sufficient inventory and diversity of business park properties to meet the needs of new and expanding businesses. Through its staff services to the City and County Industrial Boards, TDC facilitates tax incentives in order to promote job creation and community development that would not, or could not otherwise happen. TDC is also engaged in the support of entrepreneurial growth through its management of Knox County's business incubator. In 2004, TDC applied for, and received, an EPA Brownfields Assessment grant on behalf of Knox County to assess property in the I-275 industrial corridor that borders Downtown North. The grant funded the assessment of a 19.4 acre abandoned property that was the former Brookside Knitting Mill. All the buildings on this site were demolished in 1996, and the property became an attraction for indigent people, and presented a safety hazard in the community. EPA Brownfields funds were used to assess Brookside Mills, local government funds were used to clean up the property, and a Brownfields Voluntary Agreement with the Tennessee Department of Environment and Conservation was enacted in 2007. The site is being actively marketed through various economic development websites, and there has been some interest shown, but due to the current economic conditions nationally, there is very little movement of companies towards expansion or relocation. However, it is anticipated that when the economy improves to the point that companies are ready again to expand, the Brookside Mills site will be attractive because of

its proximity to the interstate and adjacent rail line. TDC understands the role of Brownfields in industrial development and because the Downtown North area is in a major industrial corridor, TDC actively promotes job creation opportunities for the area and partners with the City and Chamber of Commerce to market industrial properties. TDC's hands-on experience with the EPA Brownfields Grant Program will be a valuable asset to the City. TDC's Executive Vice President serves on the Knoxville South Waterfront Brownfields Committee and has helped to guide the City in the prioritization of brownfield sites for redevelopment. It is anticipated that he will perform a similar role for the Downtown North project.

The East Tennessee Community Design Center (ETCDC) is a non-profit organization that works with community groups in urban and rural East Tennessee, and organizes people, ideas and resources to facilitate positive change in economically distressed and isolated communities in the region. ETCDC's services are offered through the pro bono contributions of area architects, landscape architects, planners, and other professionals. This network of community volunteers donates over 2,000 volunteer hours annually. These hours leverage five times their value in improvements and services. Services offered include organizational planning, and schematic design of physical structures including land use planning and landscape design, blight removal, and visual enhancement programs. Sample projects include neighborhood stabilization projects such as parks, community centers, housing rehabilitation planning, blighted property identification, making facilities accessible to persons with disabilities, crime reduction & prevention through improving physical conditions that harbor criminal activities, creating opportunities for homeownership through the development of innovative and creative ideas for housing the underserved population, job creation through development of renovation and construction projects, adaptive reuse of historic properties, and facilitation of public and

community input visioning to stimulate quality economic and community development.

The ETCDC's work is a direct parallel to the goals and objectives of the City. During FY2005 the Design Center leveraged \$106,000 in donated volunteer professional services. The ETCDC formed alliances with the University of Tennessee for creation of inner city housing; with Knox Heritage Inc. to assist in historic preservation of homes with architectural or historic significance; and with Habitat for Humanity to create a façade design of a new home to be consistent with the community. All of these projects help create community pride and raise property values. Specific to the Downtown North project area, the ETCDC partnered with the City in the creation and implementation of an Empowerment Zone façade improvement program. This program provides incentives to business owners to encourage them to renovate their building facades. The ETCDC provided conceptual drawings showing renovated facades following the City's Façade Improvement Guidelines for Knoxville's Early Commercial Districts. This assisted property owners with the application process to qualify for a 5-year forgivable loan of 80% of the façade improvement cost up to \$50,000 per building. All of these projects were collaborative efforts between ETCDC student interns from the University of Tennessee, College of Architecture and Design, and volunteer professional designers.

The ETCDC partnered with the City on another project in Downtown North -- a study for the adaptive reuse of Oakwood Elementary School which ceased as an educational facility in 1996 and fell into disrepair. The 1914 building contains environmental hazards and is blighted, abandoned, and left to deteriorate through

neglect. ETCDC developed a public involvement process and assembled a stakeholder steering committee and a team of volunteer professional advisors to assist in the study. After notice to the public through email lists, posters printed and placed in the windows of local businesses, and flyers disbursed through the community, a public meeting was held to gather input from the neighborhood regarding their perceived appropriate and non-appropriate uses of the land and facility. As a result of the study and input from the community, the ETCDC recommended that the city and county engage in a collaborative effort to save and revitalize this site, reduce building deterioration, eliminate environmental hazards, and solicit proposals from interested parties for redevelopment of the building and site.

All three of these organizations have played a vital role in the redevelopment activities that have already taken place in this center city district of Downtown North, and all three will continue to actively support the City within their respective areas of expertise to see the successful revitalization of this critical sector of the Knoxville community. That commitment is demonstrated by the letters of support included as Attachments to this proposal. In addition to these three organizations that have invested their resources and staff time to Downtown North projects, there is support from neighborhood and business associations, and local social service organizations as has been evident in their attendance at all meetings that the City has conducted and their representation on various task force study groups. These include: Old North Knoxville Neighborhood, Fort Sanders Neighborhood, 4th & Gill Neighborhood, Park Ridge Neighborhood, Emory Place, City People, Downtown Business Association, Happy Hollow, Salvation Army, Knox Area Rescue Ministries, and Volunteer Ministry, among others.

4. Project Benefits

a. Welfare and/or Public Health (10 Points)

Here we describe the environmental, social, and public health benefits anticipated from the redevelopment of sites assessed under this grant, including how nearby and sensitive populations will be protected from contaminants during assessment work conducted on brownfield sites.

Although not exclusively industrial or commercial, brownfield sites, particularly within cities, typically have a historical use that involves some kind of manufacturing process or service. This is true for Downtown North with its history of railroad related work, textile mills, scrapyards, metals recycling, auto repair shops, and multiple other activities that contribute to adverse environmental conditions. From the inventory that was recently completed, we can make the strong assumption that contaminants such as petroleum hydrocarbons including gasoline and diesel fuel, polychlorinated biphenyls (PCBs), polynuclear aromatic hydrocarbons (PAHs), lead based paint, asbestos containing building materials, industrial chemicals including chlorinated solvents, creosote, and various priority pollutant metals may be present. By performing Phase I ESAs in the target area, we can determine the potential for specific contaminants, and can select the best candidate sites to perform Phase II ESAs. These sites will be the ones that have the best opportunity for redevelopment. The environmental benefit from redevelopment will also likely improve the surface water quality of the nearby Second Creek through the potential reduction or elimination of industrial and commercial impacts conveyed through urban runoff.

The social toll on neglected areas weighs heavily, and redevelopment of these areas has a distinctly positive effect on the social environment. The City has already recognized the negative impacts associated with the growing number of homeless individuals who have taken up "residence" in the neighborhood. To address the problem, in 2005 the City adopted the Ten Year Plan to End Chronic Homelessness in Knoxville. The Downtown North area is where

most of the social service organizations are headquartered and therefore is where most of the homeless congregate. The plan established strategies and goals, and recommends several action items including moving people into housing, strengthening partnerships with faith-based organizations, and increasing economic opportunities. The redevelopment of brownfield sites in Downtown North plays an important role in this plan. Already, a former brownfield property in the area, that was an old abandoned motel, has been converted into apartments for homeless individuals, and this was the catalyst for the whole Downtown North redevelopment project. Faith-based organizations have been represented on various project committees and at neighborhood meetings on redevelopment planning, and as the brownfield properties are brought back into productive use, there will be employment opportunities for many of the homeless people whose only reason for being on the street is because they lost their jobs and were evicted from their homes due to lack of income. Of course there are other causes of homelessness -- alcohol and drug abuse, health and mental illness, abuse and divorce, youth offenders -- and this can present a safety concern for themselves and for others. Social services, including health care services are stretched thinly, but if some of these individuals can find stability through new employment opportunities, the social networks and faith based organizations can concentrate their resources on the population most in need and deliver their services more effectively and efficiently.

Redevelopment with a focus on public health and safety will increase the creation of recreational space and encourage physical activity. Adding accessible and affordable grocery stores and

other retail services will allow pedestrian activity, as well as serving a community need. Increased physical activity can lead to a decrease in obesity. From a public health perspective, it is well understood and documented that the suspected contaminants mentioned can have a detrimental effect on an individual's health. Exposure pathways may be through air pollution, water pollution and hazardous materials. Contaminants may be located in buildings, surface and subsurface soils, groundwater, aquifers, and above ground or underground storage tanks. Cleaning up sites such as these will eliminate the exposure and consequently reduce the health risk impact on the local population, particularly on children who are the most vulnerable to the negative impacts of environmental exposure. Because of their small size, children receive proportionately larger doses of environmental toxicants than adults. Studies by the National Institute of Environmental

Health Sciences have also determined that exposure to air pollutants on pre-natal women adversely affected the cognitive development of their children. During Phase II ESA activities, precautions will be taken to minimize dust resulting from the disturbance to site soils during the investigation by using good fieldwork practices and dust suppression techniques. If appropriate, air monitoring may be performed to ensure worker and public protection during implementation of field activities. Precautions will also be taken to secure the project site during and after implementation of invasive soil and groundwater investigations. Site access will be restricted during site investigations only to qualified and trained workers in assessment areas. In addition, following implementation of assessment activities, the site will be restored to pre-existing conditions to ensure that impacted media is adequately covered.

b. Economic Benefits and/or Greenspace (5 Points)

Here we describe how the grant will produce economic benefits and non-economic benefits related to not-for-profit activities.

i) Economic benefits are already being realized from new retail establishments including a soon to be opened, food co-op which is a 3 million dollar investment in a former closed and abandoned facility in the neighborhood. Those benefits will increase considerably when the brownfield sites are assessed, cleaned up, and become once again productive properties. One of the obvious benefits is the increased tax base for the City of Knoxville. Downtown North was heavily populated with industrial and commercial properties. Closure of these productive facilities meant a large decrease in tax revenue, both from the standpoint of property taxes (if the property is abandoned with no evident owner) and sales tax revenue. Very few municipalities can sustain comprehensive services with less income. The vision for Downtown North is a mixed use community including, light manufacturing, office, commercial, cultural and residential use. Parcels will be combined and re-platted to make them

more marketable. A report titled Reclamation and Economic Regeneration of Brownfields, compiled by E.P. Systems Group, cites a Council for Urban Economic Development study of brownfield project economic features. By examining 107 very diverse types of completed projects, they found that cleanup costs averaged only 8 percent of total project costs, and every \$1 of public sector financing invested leveraged an additional \$2.48 in private dollars. On the Knoxville local level, a former brownfield site adjacent to the target area became the home of Sysco Corporation, a 250,000 sq. ft. food distribution facility. A 2008 article in the Knoxville New Sentinel noted that "Sysco's \$50 million capital investment was shown to yield an economic impact in Knoxville of \$91 million via the various businesses involved in building the project." The Sysco site is approximately 44 acres. The Development Corporation of Knox County estimates the property tax revenue from Sysco to

be approximately \$15,000 per acre, per year. TDC also estimates that 5-10 new jobs are created per acre of industrial property developed. The estimated 136 acres of developable brownfield properties in Downtown North, could lead to as many as 1,000 new opportunities for employment for local citizens. An increase in employment generates an increase in spending. It means houses will be maintained which leads to money spent on supplies needed to make the improvements. It means disposable income to spend in retail establishments and restaurants in the neighborhood. It leads to neighborhood stability which is desperately needed in the Downtown North neighborhoods.

ii) Non-economic benefits are plentiful. The Downtown North redevelopment plan set specific goals. As well as mixed use development, the plan's goals include: protect the unique architectural and historic character of the district; provide adequate parking and promote vehicular, bicycle and pedestrian circulation and connect to surrounding areas; create a more pedestrian and bicycle friendly street with wider sidewalks and landscaping; foster infill housing; improve the alleys by providing more consistent lighting, and removing overgrown vegetation and abandoned vehicles; issue cleanup notices to owners of blighted properties; establish a green buffer to protect the neighborhood from the proposed new industrial access road; provide façade improvement grants to business owners; and create a greenway and trail along Second Creek, enhancing water quality, and connecting the neighborhoods to downtown Knoxville and the Tennessee River waterfront. The Second Creek drainage basin includes the industrial corridor and adjacent neighborhoods. Due to its proximity to the rail line and century-old industrial operations, the natural environment near the creek has largely been destroyed. Redevelopment of underutilized properties offers the potential to create streamside natural areas that can absorb and filter storm runoff and enhance water quality. The plan for Second Creek is to develop a greenway trail for both

recreational and transportation purposes, providing connections from neighborhoods to new businesses. An unused rail line is planned as part of the greenway trail to downtown Knoxville. The greenway system is being developed in conjunction with storm water control programs. The development plan also calls for a form based code for Downtown North. Form based codes are an alternative to conventional zoning and address the relationship between building facades and the public realm. A form based code would typically include: a regulating plan designating the locations where different form standards apply, based on clear community intentions; public space standards e.g. sidewalks, travel lanes, on-street parking, street trees, street furniture etc; building form standards that control the features of buildings; architectural standards to control external material and quality; landscaping standards to regulate landscape design and plant materials on private property; signage standards that regulate size, materials, illumination and placement; and environmental resource standards that regulate storm water drainage and infiltration, slope development, tree protection etc. Form based codes have already been adopted for the South Waterfront redevelopment area of Knoxville, and a form based code has been drafted for Downtown North.

Other not-for-profit activities that operate in the target area and will continue include the previously mentioned façade improvement program of the East Tennessee Community Design Center, historic preservation of old North Knoxville neighborhood structures by Knox Heritage, charitable work of the faith-based organizations, social outreach by organizations such as Knox Area Rescue Ministries, and the Salvation Army, and several city boards and commissions that work to improve the quality of life for Knoxville's citizens and visitors. All of these community organizations are committed partners in the pursuit of reuse activities that will benefit the public in the best way possible with a healthy mix of uses.

c. Environmental Benefits from Infrastructure Reuse/Sustainable Reuse (5 Points)

Here we describe the anticipated environmental benefits associated with the sustainable redevelopment of sites assessed under this grant.

The City has embraced the concept of sustainable development and the six livability principles established by The Partnership for Sustainable Communities. Downtown North has full access to all public utilities and wherever possible, these existing utilities will serve new facilities, however some utility improvements may be required in order to meet the demands of the renovated or newly developed structures. Transportation improvements in the I-275 Corridor include a new access road from the interstate, and \$2.5 million in DOT funding for improvements to local streets, which includes reduced travel lanes on the main street through Downtown North to allow increased public parking and slower traffic movement that would be friendlier to pedestrians and bicycle riders. Connecting currently disconnected streets in the target area and enabling pedestrian, cycling and public transit options for access to employment, schools, and shopping will decrease vehicular

miles traveled thereby reducing greenhouse gas emissions and benefiting the public health. Conserving resources and saving energy makes basic financial sense. In 2007, Knoxville's mayor called together an Energy & Sustainability Task Force, to develop strategies to reduce the City's energy usage, costs, and emissions, and increase Knoxville's overall sustainability. The City is currently implementing several of those strategies such as: the Solar America Cities Program; obtaining Leadership in Energy and Environmental Design (LEED) certification for the new Downtown Transit Center; institutionalizing energy efficient building practices for low-income housing programs, and more. As derelict buildings in Downtown North are demolished, the practice will be to recycle demolition materials whenever possible -- as has been done on other brownfield demolition sites where useable materials have been recovered rather than transported to a demolition landfill.

d. Tracking and Measuring Progress (5 Points)

Here we describe our plan to track and measure our progress towards achieving expected short and long term project outputs and outcomes.

The expected outputs for this project include site characterizations through Phase I and II Environmental Site Assessments on selected sites, evaluation of cleanup alternatives for Phase II assessed sites, a public involvement plan, community meetings, and possibly additional outputs as the project progresses. Previous experience has taught the City to set realistic goals for the number of sites assessed. With that in mind, the City intends to perform Phase I ESAs on ten to fourteen sites identified through the recently completed Brownfields inventory, and four to eight Phase II ESAs on the sites considered as having the best redevelopment potential. All of these activities will be tracked via detailed quarterly reporting, and property profile reporting using the ACRES

system where sites will be entered into the system electronically as they are identified for assessment, and a profile built on each site as assessment progresses.

The expected outcomes for this project include new job creation, increased tax revenue, reduction in crime, increased recreation space, and a healthier population. As mentioned, the City can anticipate up to 1,000 new jobs created as a result of redeveloping its brownfield properties in Downtown North. The City would anticipate a capital investment of around \$1 million per acre and, based on the recent Sysco location, combined city and county taxes (both real and personal) of approximately \$15,000 per acre based on a similar type operation.

Conclusion

Knoxville is in a good location for growth. Two major interstates -- I-75 North-South, and I-40 East-West intersect in Knoxville, and the City is within a day's drive of 75% of the U.S. population. It's proximity to the Smoky Mountains and the abundance of outdoor recreational opportunities afforded by the lakes and rivers and wildlife areas in the region, make it an appealing place. But within the City there is virtually no developable land remaining except for the brownfield properties within its jurisdiction. Knoxville is not unique in the challenges it faces during these difficult economic times. The City is requesting funding assistance through the EPA Brownfields grant because City resources are already under pressure. Redevelopment of Downtown North is a project that has already gained momentum -- it is happening, and assessing brownfield properties within the target area will keep the City, the neighborhoods, the existing business owners, and all of the supporting organizations energized. This is a project that can be completed, and the result will be the vision that is stated in the Downtown North Urban Renewal Plan ----

“The year is 2015 and the redevelopment of the old I-275 industrial district is virtually complete. The Sysco Corporation, which became the pioneer in revitalizing the old rail yards, continues to serve the Southern Appalachian region. Additional firms have been attracted to the corridor because of its economic advantages: improved interstate access, availability of rail, high visibility, and a pool of talented employees. The corridor, once a blighted hodge-podge of under-utilized land – has been transformed into one of Knoxville’s most successful business parks. Residents in the adjoining neighborhoods find the Second Creek Greenway a good place to jog and bike. Aquatic life thrives in Second Creek again because the City’s water quality programs have proven to be very effective. Economic development has stimulated improvements in nearby neighborhoods, and neighborhood folks frequent local restaurants and shops. Private investment has surpassed several hundred million dollars. The transformation of the once obsolete industrial area and commercial strips is acclaimed to be remarkable.”

List of Required Attachments

- i) Letter from state authority – a letter of support for this project from Andy Shivas, Brownfields Coordinator, Division of Remediation, Tennessee Department of Environment and Conservation is attached.

- ii) Documentation of applicant eligibility – the City of Knoxville, Tennessee is a municipality in the state of Tennessee, and is eligible as a General Purpose Unit of Local Government

- iii) Letters of support from community-based organizations – letters of support from three community-based organizations that will play a significant role in the project are attached. The three organizations are:
 - Knoxville's Community Development Corporation (KCDC)
 - The Development Corporation of Knox County (TDC)
 - East Tennessee Community Design Center (ETCDC)

- iv) Waiver justification – N/A

- v) Property-specific determination – N/A

- vi) Assessment coalition members – N/A

- vii) Petroleum eligibility determination – Preliminary research of the petroleum sites in the project area indicates approximately 19 sites with underground storage tanks. As a task of the community-wide assessment, specific sites will be identified and referred to the state regulatory authority to make the eligibility determination at that time.



TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION
DIVISION OF REMEDIATION
401 CHURCH STREET
4th FLOOR L & C ANNEX
NASHVILLE, TENNESSEE 37243

September 30, 2010

Environmental Protection Agency
Attn: Don West
8601 Georgia Avenue, Suite 500
Silver Springs, MD 20910

Re: Brownfields Grant Application for the City of Knoxville, Tennessee

Dear Mr. West:

The City of Knoxville has actively pursued the redevelopment of Brownfields sites in the community. Knoxville received an EPA Brownfields Pilot Grant several years ago to assess contaminated properties. Since then, Knoxville has re-developed a major, former brownfield site, located in the depressed North Central area. Knoxville also received an EPA Brownfields (site-specific) grant to assess the adjacent, former Brookside Mill property, which is now ready for development. In this ongoing effort to spur redevelopment, the City has recently contracted with a consultant to conduct an inventory of Brownfields in North Central. The inventory will be completed by the end of this month, and the City intends to submit a community-wide grant application to the Environmental Protection Agency, for funding to perform Phase I and Phase II ESAs on sites in North Central that will be identified by this inventory.

In 2009 Knoxville was awarded a Brownfields grant to perform an inventory and environmental assessments on brownfield sites in the South Waterfront Redevelopment Area. That project is progressing well and Knoxville has demonstrated its commitment to redeveloping its brownfield sites. TDEC has been closely involved with the City and its consultant throughout the South Waterfront project and believes that the City of Knoxville is fully capable of managing Brownfields projects and will use the EPA grant funding wisely.

Sincerely,

Andrew P. Shivas
Brownfields Coordinator
Division of Remediation
Tennessee Department of Environment and Conservation



P.O. Box 3550 • Knoxville, TN 37927-3550
(865) 403-1100 • Fax (865) 403-1101

Alvin J. Nance, President/CEO

October 13, 2010

Environmental Protection Agency
Attn: Don West
8601 Georgia Avenue, Suite 500
Silver Springs, MD 20910

Dear Mr. West:

The Knoxville Community Development Corporation (KCDC) is the housing and redevelopment agency for Knoxville and Knox County. Since 1936, KCDC has been dedicated to improving the quality of life for the citizens of Knoxville by creating opportunities for better housing, jobs, and community revitalization.

On behalf of the City of Knoxville, KCDC has accomplished several redevelopment projects and numerous neighborhood improvement projects in downtown Knoxville over the past decade. To date, KCDC has developed over twenty-one redevelopment and urban renewal plans and also executed sixteen Tax Increment Financing notes for the rehabilitation of several downtown buildings. KCDC has also successfully completed a \$40 million HOPE VI Project which was a federally funded program through the Department of Housing and Urban Development.

In 2007, working with the Metropolitan Planning Commission, KCDC developed the Downtown North I-275 Corridor Redevelopment and Urban Renewal Plan which created a vision to turn this old industrial area into a thriving business district that provides economic opportunities and neighborhood stability. The City of Knoxville has implemented several revitalization projects stemming from the Plan, and Downtown North has begun to benefit from these improvements.

KCDC understands the need to perform environmental site assessments on vacant and abandoned properties in Downtown North so that these properties can be readied for redevelopment. Our agency supports the City in this effort and we will continue to work closely with the City as this project moves forward. We are excited about the opportunity to redevelop this area and committed to conducting environmental assessment to ensure that residents and visitors to the Downtown North neighborhoods will enjoy living, work and relax in a safe and healthy environment.

Sincerely,

Alvin J. Nance
Executive Director / CEO

The
**DEVELOPMENT
CORPORATION**
of Knox County

October 8, 2010

Environmental Protection Agency
Attn: Don West
8601 Georgia Avenue, Suite 500
Silver Springs, MD 20910

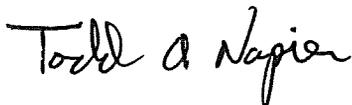
Dear Mr. West:

The Development Corporation of Knox County (TDC) has been pleased to have worked closely with the City of Knoxville for many years to promote economic development. TDC has been closely involved in Brownfields assessment projects in the Downtown North area and was the managing agency for a 2004 EPA Brownfields Assessment grant awarded to Knox County, Tennessee. TDC, the Knoxville Chamber of Commerce, and the City worked together to redevelop a former brownfield site in the Downtown North area which, resulted in the location of a major food distribution facility and initiated revitalization of the area.

Through visioning and planning over the past three years, the City of Knoxville has demonstrated its commitment to revitalizing the economically-depressed area north of its downtown, and our organization has played, and will continue to play, an active role in this effort. TDC supports the business environment in the area to encourage the creation of jobs, and we see the City's intention to perform environmental assessments, and subsequent remedial planning on brownfield sites, as a much needed step towards creating a healthy economy in this area.

The Development Corporation fully supports the City in its effort to secure EPA Brownfields funding to perform environmental site assessments in the Downtown North area. TDC will continue to work with the City towards the success of this community development project and the anticipated economic benefit it will bring to the area's residents and to the entire region.

Sincerely,



Todd A. Napier
Executive Vice President

cc: Mr. Bob Whetsel, City of Knoxville

East Tennessee
Community Design Center

1300 N. Broadway
Knoxville, TN 37917

Telephone (865) 525-9945
Facsimile (865) 523-0938

www.ETCDC.org

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Architecture and Design

David M. Watson
Executive Director

**Our Mission: To make
East Tennessee a better
place to live and work
by bringing design and
planning assistance to
communities lacking
resources.**

October 13, 2010

Environmental Protection Agency
Attn: Don West
8601 Georgia Avenue, Suite 500
Silver Springs, MD 20910

Dear Mr. West:

The East Tennessee Community Design Center (ETCDC) is a 501(c)(3) non-profit organization that provides planning and design services to community development groups, through the volunteer time of local professional architects, planners, landscape architects, interior designers and others in the design community. We have been providing these services for the past 40 years to facilitate community development projects in the inner city of Knoxville and the surrounding rural communities. During any given year, we average seventy projects and two thousand volunteer hours. The ETCDC is always alert for ways to work with other respected agencies and organizations in neighborhood improvement projects that create community pride, and raise property values. By partnering with other agencies, the ETCDC has helped to create new methods for providing inner-city housing, and reducing the level of blighted property. In some instances the ETCDC has assisted governments and municipalities with design and planning services. Those services, even though provided at the request of a governmental agency, are provided as a method of protecting the public domain.

In the Downtown North area of Knoxville, the ETCDC has recently assisted the City of Knoxville's revitalization and redevelopment effort with two significant projects - façade improvements of commercial businesses on the main thoroughfare through Downtown North, and the adaptive reuse design for the former Oakwood Elementary School, a building that ceased to be a teaching facility more than ten years ago, and is considered an environmental hazard in the neighborhood.

The ETCDC supports the City's efforts to redevelop this vital part of the Knoxville community. We believe that assessing the environmental conditions of the many former industrial and commercial properties will encourage new ownership and stimulate growth, and we will continue to provide our services where appropriate, to promote sustainable community development in historic Downtown North.

Sincerely,



David Watson
Executive Director