FY2021 U.S. EPA BROWNFIELD CLEANUP GRANT APPLICATION
SUBMITTED BY 1601 MADISON LLC, MICHIGAN

1. Project Area Description and Plans for Revitalization

a. Target Area and Brownfields

i. Background and Description of Target Area: The target area for this grant is located in the City of Grand Rapids, which is the second largest city in Michigan. Grand Rapids, sometimes known as "furniture city", is located in the southwestern portion of Lower Michigan, approximately 30 miles east of Lake Michigan. Grand Rapids began developing in the late 1800s around the fur and lumber trades and power generated by the Grand River. Soon thereafter, the City became a center for furniture and fine wood products manufacturing. Manufacturing associated with the American automakers (automotive parts and supplies as well as vehicle assembly plants) soon followed. The furniture manufacturing industry shifted to southern states in the 1960s, and along with the rest of Michigan, Grand Rapids suffered due to the decline in domestic automobile production and the out-sourcing of manufacturing jobs in the 1990s and early 2000s. Since the 2008 recession, Grand Rapids as a whole has managed to start the process of reinventing itself but this revitalization has not reached all of its neighborhoods. There are areas in the City, including the **Madison/Cottage Grove** target area (see description below), where vacant industrial buildings and underutilized industrial/commercial sites dominate the landscape, and the surrounding residential neighborhoods struggle with disinvestment and ever decreasing property values. The City and its economic development groups are seeking to establish private/public partnerships to secure and deploy funding to reestablish economic and social stability in these disadvantaged areas.

1601 Madison LLC (1601 Madison), an LLC whose managing member is the nonprofit organization Amplify GR, intends to focus cleanup grant funds on a site located in the **Madison/Cottage Grove** target area. This 0.15 square-mile area is located in the south side of Grand Rapids along a railroad line. It is the heart of former manufacturing operations with over 50% of its land area developed with vacant/underutilized industrial buildings and former junkyards. Impoverished/minority residential neighborhoods form the southern portion of the target area and adjoin almost the entire perimeter of the target area. Amplify GR was formed to support the disadvantaged communities on the south side of Grand Rapids including those in the target area, and this project will support their goal of promoting social and economic justice.

ii. Description of the Brownfield Site: The targeted site (**Site**) is an approximately 10-acre parcel identified as 1601 Madison Avenue SE. The Site is currently developed with a 250,000 square-foot, vacant, industrial building and paved parking and access areas. The building is actually a collection of various sub-structures that were constructed and merged together over its 100 year life. Portions of the building were first constructed in 1916 for metal manufacturing operations, a leather company, paint/lacquer company, brass foundry, and other companies engaged in light manufacturing. These operations continued through 1953, when the buildings were incorporated into the Dexter facility. Dexter's operations included a foundry; machining; brass, nickel and chromium plating; parts degreasing; and warehousing. Dexter ceased operations on the **Site** in 1982. The building was used by automotive parts suppliers for manufacturing of vehicle components from 1985 through 1992. Portions of the building were leased by multiple commercial and light industrial companies (e.g., machining, auto repair, painting, and woodworking shops; storage/warehousing companies) from 1995 through 2016. The **Site** has remained vacant since 2016 because the existing building cannot be safely or effectively renovated for modern use and it is so large that the demolition costs are very high. The known impact at the **Site** is associated with the historical on-site operations including potential buried plating wastes, onsite releases of plating process wastewater, and exterior storage of caustic liquids, oils, and solvents. Numerous site investigations have been completed since the early 2000s and they have confirmed the presence volatile organic compounds (VOCs) including the chlorinated solvents trichloroethene, tetrachloroethene, and vinyl chloride; heavy metals including arsenic, hexavalent chromium, copper, lead, and nickel; and various polycyclic aromatic hydrocarbons (PAHs) in soil and groundwater across the **Site**. In addition, soil gas on the **Site** is impacted with numerous VOCs including benzene and trichloroethene.

b. Revitalization of the Target Area: The City of Grand Rapids has an ongoing city-wide planning process that seeks to guide public and private development efforts in a way that benefits all residents. Because of its size, the City has also worked to collaborate with the community to create area specific plans that empower residents and business owners in various areas of the City to guide and shape their own community planning. This includes the Southtown Business Area Specific Plan that identifies a plan/approach to direct growth into the **Madison/Cottage Grove** target area (and other nearby neighborhoods) in a manner that is consistent with values and character of the existing community. In order to form these plans, the City conducted focus groups and public workshops with local business owners and residents, held design charrettes, completed a retail/storefront analysis, and analyzed extensive data on existing conditions. Those involved noted that equity was an essential consideration for the future of the Southtown Business Area, and that the stability of the business corridors in the area were tied to the success and stability of the community. The planning process and the outcomes/goals are summarized in the 2000 Grand Rapids Master Plan (currently being updated) and the 2019 Southtown Business Area Specific Plan, which include similar goals of developing neighborhoods with a thriving and stable business community without displacement; promoting existing cultural and neighborhood assets, developing neighborhoods as vibrant places to work, shop, play, learn, and do business; and creating a safer environment for all. A key strategy referenced in these plans is encouraging business supportive reuse of underutilized properties like the **Site**.

i. Reuse Strategy and Alignment with Revitalization Plans: 1601 Madison's projected redevelopment for the **Site** is a campus for multiple (30,000 to 60,000 square-foot) high-tech/modern manufacturing buildings with surrounding parking and green spaces. The demolition of the existing building and removal of the highly impacted soil that is impeding the safe reuse of the **Site** will allow these high-tech companies to construct modern light-industrial buildings, add new jobs, and create an attractive and safe campus in this disadvantaged neighborhood. The first phase of the redevelopment includes the construction of a new building that will house a state-of-the-art device and data management company. It will also include streetscape improvements to beautify the **Site's** frontage along Madison Avenue SE. This proposed redevelopment aligns directly with the Future Use Plans included in the Grand Rapids Master Plan and Southtown Business Area Specific Plan that identify the **Site** as an industrial/industrial flex area and plan for a combination of light-industrial and commercial uses.

ii. Outcomes and Benefits of Reuse Strategy: The existing onsite building has prevented the redevelopment of the **Site**, and kept this key property from being revitalized. The **Site** is located in the heart of an impoverished neighborhood that has seen declining property values for the last 20 years and has been contributing to the general disinvestment in the target area. Following cleanup of the **Site**, 1601 Madison LLC will partner with Amplify GR to construct a new, approximately 60,000 square-foot light industrial building that will house a state-of-the-art device and data management company. This will include an investment of $12.5M which is expected to generate over $70,000 in annual tax revenue. The expansion will also provide needed employment opportunities for residents by retaining approximately 70 professional jobs and creating construction jobs and 26 new professional jobs with wages ranging from $17 to $38/hour. Following this initial redevelopment, the developer plans to construct additional modern industrial buildings that can be leased to other professional/high-tech companies. It is expected that once the existing building is demolished and this prominent **Site** is redeveloped with a modern looking functional building, it will spur interest and redevelopment/renovation of additional nonresidential properties located in the **Madison/Cottage Grove** target area. The improvement of this unsightly property will also spur additional investment in the nearby residential neighborhood.

The **Site** is located in an Opportunity Zone. The redevelopment of the **Site** and the revitalization of the target area that it will spur will result in the improvement of this disadvantaged south-side Grand Rapids neighborhood. This will directly benefit the Opportunity Zone by helping draw residents, visitors, and businesses back into this urban area and spur further economic development in the Opportunity Zone.

c. Strategy for Leveraging Resources

i. Resources Needed for Site Reuse: 1601 Madison has already leveraged $95,000 of its own funds to conduct additional assessment of the **Site** for cleanup planning. 1601 Madison has identified the following additional resources that can be used to support remediation and redevelopment of the **Site**. The table identifies the source/type, 1601 Madison's eligibility for the funding, the funding use in general, and the use on the **Site**.

Funding Source	Description	Eligibility	Funding Use
MI Department of Environment, Great Lakes and Energy (EGLE) grants and loans	Grants/loans of up to $1M for projects that promote economic development and reuse of brownfields	Local units of government can apply and pass the funds through to owners/developers	Additional **Site** assessment as needed for redevelopment and remedial action planning, design and installation of vapor mitigation systems for **Site** buildings.
Grand Rapids Brownfield Redevelopment Authority (GRBRA)* Tax Increment Financing	Reimbursement of eligible cleanup and redevelopment costs including building demolition, soil removal/disposal, construction of vapor mitigation systems, and site preparation.	**Site** owner/developer can enter into development agreement with the GRBRA	Reimbursement of asbestos abatement and demolition of existing building on the **Site**, **Site** preparation, and streetscape improvements along Madison Avenue SE.

The cleanup grant will stimulate the availability of these additional funds by supporting a portion of the cleanup of the **Site**, which must be done before site preparation and redevelopment can begin and most of the activities that will be supported by EGLE, GRBRA, and CIA funds can be completed.

*GRBRA funding source is secured; commitment letter is included in Attachment 2.

ii. Use of Existing Infrastructure: The **Madison/Cottage Grove** target area and the **Site** have been developed since the early 1900s, and contain the required public infrastructure (water, sewer, electricity, etc.) to support the planned redevelopment. Furthermore, the **Site** and surrounding area have a long history of commercial and industrial use, so the existing infrastructure (including roads and rails for access/transportation and high-speed fiber/other telecommunication) extends to the **Site** and will support the revitalization plans discussed in Section 1.b.i. By directing grant funds to the **Site**, 1601 Madison will be able to facilitate the use of this existing infrastructure. No infrastructure improvements are anticipated to be needed to support the proposed redevelopment.

2. Community Need and Community Engagement

a. Community Need

i. The Community's Need for Funding:

The **Madison/Cottage Grove** target area is very impoverished. The poverty rate is 31.4%, which is over two times higher than Michigan (15%) and the U.S. (14.1%) and 42.9% of the residents receive food stamps/SNAP benefits[1]. The median household income is $31,823[1], while the ALICE Household Survival Budget for the City overall is $64,788[2]. Furthermore, 81.9% of residents' spend over 35% of their household income on rent[1]. The COVID-19 pandemic has exacerbated the economic concerns in the target area. The overall unemployment rate in Grand Rapids peaked at 26.7% in April 2020 and had fallen to a still high 16% by June 2020[3]. While the overall City unemployment rate is slowly improving, it is nowhere near the pre-pandemic levels (3.3% in March 2020[3]) and residents in the City's most disadvantaged neighborhoods are disproportionately impacted. The primary business/employers in the target area are small service and food/bar

[1] American Community Survey 5-Year Estimate, 2018
[2] ALICE Household Survival Budget, 2017
[3] BLS, 2020

operations and residents are most likely to work at these types of service businesses. Between January 2020 and June 2020, employment in Grand Rapids in accommodation/food services, service providing, and leisure/hospitality fell by 19%, 10%, and 25%, respectively[4]. This means that already impoverished residents and businesses in the target area are struggling more in 2020 than ever before. They need employment opportunities to support the community, but they do not have the capital or resources to support brownfields remediation and redevelopment to help create vibrant/functional commercial and light industrial/high-tech districts. This grant will meet this need for remediation funding and allow one of the largest brownfields in the target area to be redeveloped with new, functioning businesses.

ii. Threats to Sensitive Populations: The **Site** is not the only known/suspected brownfield within the **Madison/Cottage Grove** target area. In fact, the target area is primarily brownfield sites. The nearby/adjoining properties were historically developed for industrial activities (historical auto parts manufacturing, machine shops, dry cleaners, automotive painting, and gas stations/auto repair shops) and other chemical intensive commercial operations (gasoline filling stations, auto repair, etc.). The majority of these brownfields are known to have impacted soil, groundwater, and likely soil gas with volatile organic compounds (VOCs) (including chlorinated-VOCs), polycyclic aromatic hydrocarbons (PAHs), metals, and/or polychlorinated biphenyls (PCBs).

(1) Health or Welfare of Sensitive Populations: The largest health and welfare concerns are the ongoing disinvestment in the target area and uncontrolled exposures to contaminated soil, groundwater, and soil gas. The southern half of this target area is an impoverished and minority filled residential neighborhood. The percentage of minorities in the target area is 65.5% (50% African American and 27.6% Hispanic), which is much higher than the City's minority percentage of 32.5%[1]. The target area also has high numbers of children (31.4% below the age of 18) and women of child-bearing age (13.5% between the ages of 20 and 44)[1]. These residents are also economically disadvantaged. The poverty rate in the target area is 31.4%, and the median household and per capita incomes ($31,823 and $13,447) are nearly half that of the U.S. ($60,293 and 32,621)[1]. The impoverished and sensitive populations in the target area bear the disproportionate impact of the numerous brownfields in this small target area.

Brownfield threats to the health and welfare of the sensitive populations that live near the **Site** will be reduced by removal of the highly impacted soil and development of the resulting area with a modern operation that incorporates engineering and/or institutional controls to further limit exposures. The removal of this source soil will also lessen the migration offsite in soil gas and groundwater. In addition to improving the health of residents (see (2) below), the redevelopment of the **Site** will reduce blight, thereby reducing the negative perception of the target area. This will draw residents and businesses back into this key southside target area, triggering additional redevelopment that will improve the health and welfare of the target area. Reinvestment in the **Site** and other properties in the target area will increase the value of the land and buildings and improve the tax base. This will benefit residents and the City of Grand Rapids, which depends on tax revenues to operate. The redevelopment of the **Site** with high-tech operations will also create new jobs in a stable industry, providing employment opportunities for those who are unemployed/underemployed.

(2) Greater Than Normal Incidence of Disease and Adverse Health Conditions: The **Site** and other brownfields in the target area are in close proximity to sensitive populations. Each of these former operations and the associated brownfields are negatively impacting residents, especially sensitive populations (impoverished residents, minorities, women, and children) by potentially exposing them to numerous contaminants via direct contact, ingestion, airborne particulate inhalation, and vapor intrusion pathways. The contaminants found on the **Site** (trichloroethene, tetrachloroethene, vinyl chloride, arsenic, hexavalent chromium, copper, lead, nickel, and PAHs) and other target area brownfields are known to cause cancer and respiratory problems and poor birth outcomes. In addition, research has found that exposure to air pollutants is linked to higher infant mortality and

[4] BLS, State and Area Employment, Hours, Earnings, Grand Rapids, 2020

other poor birth outcomes[5], illustrating additional adverse health impacts for women and children (sensitive populations). Relative to Michigan and in some cases the U.S., Kent County has a relatively healthy population. However, this does not capture many underlying health disparities related to race and income level. Exposures to the contaminants from the **Site** and other brownfields in the target area have likely resulted in elevated cancer, asthma, and poor birth outcomes for minority and impoverished residents in the County (see following table; city/target area statistics are presented where available) when compared to both Michigan and the U.S.

	U.S	Michigan	Kent County
Cancer Mortality Rate*	161[6]	170.4[6]	156 (*White – 132.1-185.5; AA – 154.3-225.7*)[7]
Adult Current Asthma Prevalence	9.3%[8]	10.9%[9]	*White* – 11.8%; *AA* – 13.5%[7]
Infant Mortality Rate**	4.9[10]	6.6[10]	5.5 (*white* in Grand Rapids– 4.3; *AA* in Grand Rapids -10.3)[10]
Low Birth Weight	8%[11]	8%[11]	8%[11] (*white* – 6.6%; *AA* – 14.4%; *Hispanic* – 7.5%)[7]

* rates per 100,000; ** rates per 1,000 live births; AA – African American

As shown in the table, cancer mortality, asthma and poor birth outcomes are substantially higher for African Americans. In addition, it has been found that adults and children living in low income areas are hospitalized for asthma 2.9 to 4.2 times more often than their counterparts who live in higher income areas, and African American children and adults are hospitalized for asthma more than five times more often than white children and adults[12]. It has also been found that African American infants in the County are 2.5 times more likely than white infants to die before the age one[7]. The minority (African American) and impoverished residents in the target area are disproportionately impacted. The 2018 Kent County Health Equity Assessment notes that African American residents in the County experience much higher rates of years of potential life lost (measure of premature mortality in a community expressed in years lost per 100,000 people) than the average for County residents (9,848.9 versus 5,767.9). This trend is also seen when comparing impoverished residents to those who are more affluent.

Potential exposures to the soil, groundwater, and soil gas contamination on the **Site** will be reduced by removing the most impacted soil and/or putting engineering exposure controls (e.g., vapor intrusion mitigation system) in place as part of the planned redevelopment. The remediation and redevelopment of the **Site** will reduce target area populations' exposures to contaminated soil, groundwater, and soil gas and limit migration of contaminated groundwater and soil gas onto nearby sites. As the exposures to brownfield contaminants on the **Site** are reduced, this will reduce the cumulative environmental exposure risks to residents/sensitive populations in the target area and lead to a reduction in cancer, respiratory disease, and poor birth outcomes and ideally improve life expectancy in the target area.

(3) Disproportionately Impacted Populations: As discussed above, health and welfare impacts from brownfields (including the **Site**) are greater for the sensitive populations (impoverished and minority residents, women, and children) who live near the brownfields in the target area. These residents continue to live in the target area because they cannot afford to leave. The target area has not seen the revitalization that some areas have in Grand Rapids, and it wasn't until recently that

[5] University of Michigan Environmental Health Policy Brief, Infant Mortality and Air Pollution, April 2014
[6] National Cancer Institute, State Cancer Profiles, 2012-2016
[7] 2018 Kent County Health Equity Assessment
[8] Michigan BRFSS Surveillance Brief, December 2018
[9] Michigan Asthma Atlas, February 2019
[10] Michigan Department of Community Health, 2016-2018; US data for 2016.
[11] County Health rankings
[12] Disparities in Michigan's Asthma Burden, 2016; Asthma by Race and Ethnicity, February 2020

efforts and funds are being directed into this struggling neighborhood. This illustrates the disproportionate cumulative impact of industrial operations and their subsequent brownfields and represents an ongoing environmental justice concern for target area residents. The U.S. EPA's Environmental Justice Screening and Mapping Tool (EJSCREEN) rates for the target area as worse than 87% to 96% of the country with respect to environmental indicators (air quality parameters, lead paint exposure, traffic proximity, proximity to superfund/hazardous waste sites). The sensitive populations in the target area are facing a disproportionate share of the negative environmental impacts associated with historical commercial/industrial operations. This has been exacerbated by difficult economic conditions that reached untenable levels in 2020.

The exposure threats associated with the **Site** are known, and the grant-funded cleanup and subsequent redevelopment of the **Site** will reduce the sensitive populations' exposures by removing one source of soil contamination from the target area. This will reduce their cumulative exposure risks and help lessen the disproportionate environmental impact historic industrial and commercial operations have had on these sensitive populations.

b. Community Engagement

i. and ii. Project Involvement and Project Partner Roles:

Partner Name	Point of Contact	Description
The Right Place	Tim Mroz, Senior Vice President 616-301-6791 mrozt@rightplace.org	Nonprofit corporation that provides business and economic development support services for Grand Rapids; it provides business attraction, site selection, workforce development, and incentive support.
Role: Engage the business community to identify/secure companies to occupy space in the redeveloped **Site**; provide workforce tools, training, and incentives to grow/sustain businesses at the **Site**.		
Center for Community Transformation	Dr. Justin Beene, Founder/Director 616-254-7739 jbeene@grcct.com	Partnership between businesses, churches, social enterprises, and non-profits that works to connect the community with work, education, and community development opportunities. Located in the target area.
Role: Engage with the project team, neighborhood residents, and local businesses to ensure redevelopment efforts at the **Site** align with community wants and needs. 1601 Madison LLC and the Center will work to create opportunities for community members to be involved in landscaping and potentially construction portions of the project post-remediation. Also planning a partnership on job-hiring with one of the potential future tenants at the **Site.**		

iii. Incorporating Community Input: Upon grant award, a press release will be issued in the local newspaper and posted on the Amplify GR and City of Grand Rapids' websites and Facebook and Twitter pages, which are interactive internet forums that update the community in real time. The Right Place (see Section 2b.i) will be notified and given information to distribute and place on its websites. News releases, web postings, and written materials will include a notice that Spanish-language versions are available and that translators will be available for public meetings, allowing Hispanic residents in the City of Grand Rapids (15.9%) and the target area (27.6%) to participate in the public process[1]. Specific stakeholders, such as residents adjacent to the **Site** and those within the target area, may also receive information via mail, phone, or email.

1601 Madison will host an initial public kick-off meeting to acquaint the community with the project and will ask the public to identify concerns they may have with the cleanup project and associated logistics. This step is imperative to ensure that the public's concerns are heard and incorporated into the project. This meeting will either be held in person at the Amplify GR office or, in the event that there are still social distancing/other restrictions due to COVID-19), will be held virtually using video conferencing software (e.g., Zoom or Microsoft Teams). At this meeting, 1601 Madison will reiterate the availability of the website and Facebook and Twitter pages, which

will allow the community to interact with them in real time. 1601 Madison will communicate progress of the cleanup activities through public meetings at major project milestones, including: 1) cleanup planning/approach selection; 2) cleanup completion; and 3) redevelopment planning. Public meetings will be held at readily identifiable and accessible public buildings in, or as close as possible to, the target area to receive and discuss stakeholder comments. As above, if COVID-19 restrictions or concerns are still applicable, the meetings will be held using video conferencing software. Summaries of the meetings will be placed on the Amplify GR website and Facebook page so those that could not attend meetings can follow the project progress and provide comment if desired. The combination of public meetings, social media, and written information will allow for information sharing and give resident/citizen groups a way to voice their concerns for the project. Once cleanup activities are initiated, project updates will be provided at the public Amplify GR meetings (either in person or virtually) and the primary information flow will be outward to the community, notifying stakeholders about cleanup and **Site** redevelopment progress, and summarizing the continual reduction of health and environmental impacts. At the close of the project, 1601 Madison will hold a final public meeting (either in person or virtually) to notify the community of the outcomes of the project. All presentation materials used throughout the project will be archived and hard copies will be available upon request.

3. Task Descriptions, Cost Estimates, and Measuring Progress

a. Proposed Cleanup Plan: The onsite building is slated for demolition in early 2021 using private funds. The cleanup plan includes the excavation and disposal of highly impacted soil and concrete present on the **Site**. For the grant-funded cleanup, the **Site** will first be secured with fencing to limit access to the area while cleanup activities are underway. Any remaining impacted pavement or foundation pieces will be demolished and taken off-site. Hot-spot delineation sampling will be completed to verify that the highest areas of soil impact are identified. The remediation contractor will then excavate areas of impacted soil from the **Site**. The impacted soil and concrete must be taken to a licensed landfill per Michigan's environmental remediation program[13] that requires that material impacted above residential cleanup criteria be disposed at a licensed facility. Prior to hauling the material to the licensed landfill, waste characterization samples will be collected and submitted for analysis as requested by the landfill. Once the landfill approves the material, hauling will begin. Following removal of the soil, soil verification samples will be collected from the excavation areas to determine what impact remains. The number of samples to be collected will be determined using Michigan's statistical guidance. The results of this sampling will be used to evaluate remaining potential vapor intrusion concerns for the future onsite buildings.

b. Description of Tasks/Activities and Outputs

Task 1 Programmatic and Outreach

i. Project Implementation:

- Work Plan will be prepared.
- Cooperative Agreement (CA) will be executed.
- A Qualified Environmental Professional(s) (QEP) will be retained in compliance with applicable federal procurement regulations.
- Quarterly reports will be submitted to the U.S. EPA; the Assessment, Cleanup, and Redevelopment Exchange System (ACRES) will be updated; and final project closeout documentation will be submitted.
- A project kick-off meeting will be hosted by 1601 Madison.
- Additional project milestone *[(1) cleanup planning/approach selection; (2) cleanup completion; (3) redevelopment planning*] meetings will be hosted by the 1601 Madison LLC.
- Ongoing outreach activities including notifying the impacted residents about cleanup and redevelopment progress will be conducted.

[13] Part 201 of the Michigan Natural Resources and Environmental Protection Act (NREPA), Public Act 451 of 1994, as amended (Part 201).

Task includes in-kind 1601 Madison staff time for website, Facebook, and Twitter updates and document preparation.

ii. Anticipated Project Schedule:

- Work Plan will be prepared within 1 month of receiving notification of the grant award.
- CA will be executed within 3 months of award.
- QEP will be retained within 3 months of award.
- Quarterly reports will be submitted within 30 days of the end of the quarterly reporting period and ACRES will be updated. ACRES will be updated with redevelopment information during and/or after the project. Final project closeout documentation will be submitted as required once the performance period ends.
- A project "kick-off" meeting will be held within 1 month of notification of grant award.
- Additional project milestone meetings will be held at the start of each milestone.
- Community outreach activities will continue throughout the performance period.

iii. Task/Activity Lead: 1601 Madison with support from the QEP, will lead the day-to-day programmatic oversight and outreach.

iv. Outputs: Work Plan, CA, quarterly reports (12); ACRES updates; final project closeout documentation; at least four public meetings; updated websites; and outreach materials.

Task 2 Cleanup Planning

i. Project Implementation:

- Quality Assurance Project Plan (QAPP) will be prepared.
- Analysis of Brownfields Cleanup Alternatives (ABCA) documents will be finalized, Community Involvement Plan (CIP) completed, and an administrative record established.
- Hot-spot delineation will be completed.
- Remediation Work Plan will be prepared for Michigan Department of Environment, Great Lakes, and Energy (EGLE) review and approval.
- Bid plans and specifications for the cleanup will be prepared for remediation contractor selection. Bids will be solicited and the lowest-cost, qualified contractor will be retained.

ii. Anticipated Schedule:

- QAPP submitted to the U.S. EPA for review and approval, finalized ABCA documents completed, and administrative record established within 3 months of selection of the QEP.
- Hot-spot delineation completed within 3 months of selection of the QEP.
- Remediation Work Plan submitted to EGLE within 1 month of the hot-spot delineation.
- Bid plans and specifications prepared and remediation contractor selected within 2 months of EGLE approval of Remediation Work Plan.

iii. Task/Activity Lead: The QEP will lead the cleanup planning activities. The QEP will be the lead of this task because they have the needed technical expertise.

iv. Outputs: One QAPP, one set of final ABCA documents, one CIP, administrative records compiled and available (document repository), one Remediation Work Plan that includes hot-spot delineation results, one set of bid plans and specifications, and selection of remediation contractor.

Task 3 Soil Removal

i. Project Implementation: Remaining impacted concrete will be transported for offsite disposal. Highly impacted soil will be excavated and transported for disposal at properly licensed facility. Clean off-site fill material may be placed. Costs associated with waste characterization, QEP monitoring removal activities for compliance with the Remediation Work Plan and applicable federal wage-rate policies, and additional hot-spot delineation costs will be paid with private funding.

ii. Anticipated Project Schedule: Concrete removal/soil excavation activities will begin within 1 month of selection of the remediation contractor. Weather conditions may delay soil excavation activities.

iii. Task/Activity Lead: The QEP will lead the task and the selected remediation contractor will complete the soil excavation activities. The QEP will be the lead of this task because they have the needed technical expertise.
iv. Outputs: Removal of approximately 18,000 tons of impacted soil and concrete, daily field notes documenting removal activities, and waste manifests.
Task 4 Remediation Verification and Reporting
i. Project Implementation: Following removal of the impacted soil, remediation verification soil samples will be collected. The frequency, spacing, and analysis parameters for the samples will be selected in accordance with published EGLE guidance for the Michigan Voluntary Cleanup Program (VCP). At the conclusion of the removal activities, the field activities, quantities of soil removed, and results of verification sampling will be documented in a cleanup completion report.
ii. Anticipated Project Schedule: Remediation verification samples will be collected immediately following completion of the soil excavation activities. The cleanup completion report will be completed with two months of receipt of the results of the verification samples.
iii. Task/Activity Lead: The QEP will lead the remediation verification and reporting task. The QEP will be the lead of this task because they have the needed technical expertise.
iv. Outputs: Cleanup completion report that documents "current" site conditions.

c. Cost Estimates

Task 1: Programmatic and Outreach contractual costs of $5,000 for assistance on quarterly reports, maintaining ACRES, and community involvement outreach meetings.

Task 2: Cleanup Planning includes $35,000 in contractual costs for completion of ABCA documents, CIP, document repository, hot-spot delineation, Remediation Work Plan, and bid plans and specifications.

Task 3: Cleanup includes $550,500 in contractual costs ($450,500 in grant funds) for removal and disposal of impacted soil and concrete. This includes $540,000 in excavation, transportation, and disposal of the concrete and soil (18,000 tons at $30/ton) and $10,000 in hot-spot delineation.

Task 4: Remediation Verification and Reporting includes contractual costs of $4,500 for collection of soil remediation verification samples (up to 30 samples at $150/sample) and $5,000 for preparation of a cleanup completion report.

Budget Categories*		Task - 1 Programmatic & Outreach	Task - 2 Cleanup Planning	Task -3 Cleanup	Task 4 - Remediation Verification& Reporting	Total Budget
Direct Costs	Personnel					
	Fringe Benefits					
	Travel					
	Equipment					
	Supplies					
	Contractual	$5,000	$35,000	$450,500	$9,500	**$500,000**
	Other					
Total Direct Costs		**$5,000**	**$35,000**	**$450,500**	**$9,500**	**$500,000**
Total Federal Funding		**$5,000**	**$35,000**	**$450,500**	**$9,500**	**$500,000**
Cost Share				**$100,000**		**$100,000**
Total Budget		**$5,000**	**$35,000**	**$550,500**	**$9,500**	**$600,000**

* No indirect costs will be incurred.

c. Measuring Environmental Results: 1601 Madison will track, measure, and report on the success of the project utilizing ACRES to track the following outputs: ABCAs and Remediation Work Plans completed, bid plans and specifications completed, and tons of soil removed and

properly disposed. The actual outputs and their timing will be compared to the outputs and anticipated schedule listed in Section 3.b. 1601 Madison will track, measure, and report the following outcomes in ACRES: acres of land remediated and redeveloped; acres of parks and greenspace preserved or created; number of jobs created or retained; tax revenue generated; redevelopment investment value; and other funding leveraged. 1601 Madison will report outcomes/outputs that cannot be easily entered into ACRES (i.e., website updates and community outreach/meetings) in quarterly reports. 1601 Madison will also evaluate the extent to which the cleanup activities and future redevelopment result in the protection of human health and the environment. 1601 Madison will evaluate the project progress semi-annually against the goals and schedules in Section 3.b and, if goals are not being met or are off-schedule, meet with local stakeholders and the environmental consultant to discuss the shortcomings and adjust the project approach and schedule, as needed.

4. Programmatic Capability and Past Performance

a. Programmatic Capability:

i. and ii. Organizational Structure and Description of Key Staff: The 1601 Madison project team has extensive brownfields redevelopment, community engagement, and financial management experience. The project team includes 1601 Madison's vice president of real estate development (Jeff Edwards), Amplify GR's executive director (Jon Ippel), 1601 Madison's accounting manager (David Milligan), and an environmental consultant (see 4.a.iii). Mr. Edwards will lead the project team. He has 20 years of experience in acquisition, planning, remediation, and redevelopment of brownfield sites. Mr. Edwards will be responsible for all grant operations and management of the environmental consultant. Mr. Edwards has a close working relationship with the City and EGLE and previously managed numerous EPA grants as a qualified environmental consultant. Mr. Edwards will ensure that this grant is successful, and he and Mr. Milligan will be responsible for establishing and managing the program's financial accounts and payment requests and transfers. Mr. Milligan has over 10 years of experience in financial management. Mr. Ippel will serve as the community involvement manager and assistant Project Manager. He will be involved in the daily grant operations and will become the Project Manager if Mr. Edwards leaves the project. This small and experienced project team will be able to quickly and effectively complete all administrative and financial requirements for the grant to ensure the project is successfully completed within the 3-year period.

iii. Acquiring Additional Resources: 1601 Madison will retain an environmental consultant (QEP) to assist with Cleanup Grant activities and monitor the cleanup when it is conducted. 1601 Madison will use a procurement process that complies with federal procurement regulations (40 CFR §31.36) and includes guidance to attract and utilize minority- and women-owned businesses, as possible. Within one month of securing the grant Cooperative Agreement, 1601 Madison will prepare the project Request for Qualifications and will direct and oversee the procurement process and will select a consultant within three months of award. The selected consultant(s) will have managed U.S. EPA Cleanup Grant projects and be familiar with all programmatic requirements. 1601 Madison will use the same process to procure a remediation contractor to complete the actual cleanup work.

b. Past Performance and Accomplishments

(iii) 1601 Madison has never received a federal or non-federal assistance agreement.

ATTACHMENT 1
THRESHOLD CRITERIA RESPONSE

THRESHOLD CRITERIA

1601 MADISON LLC
FY 2021 U.S. EPA BROWNFIELD CLEANUP GRANT APPLICATION

THRESHOLD CRITERIA

1. **Applicant Eligibility**: 1601 Madison LLC is a limited liability corporation whose sole managing member (Amplify GR) is a 501(c)(3). Documentation of the sole managing member of 1601 Madison LLC and Amplify GR's 501(c)(3) status is included as Attachment A.

2. **Previously Awarded Cleanup Grants:** The 1601 Madison Avenue SE site (the Site) has not received funding from a previously awarded EPA Brownfields Cleanup Grant.

3. **Site Ownership:** 1601 Madison LLC is the sole owner of the Site. 1601 Madison LLC acquired the Site on June 9, 2016.

4. **Basic Site Information:** The Site is located at 1601 Madison Avenue SE, Grand Rapids, Kent County, Michigan 49506.

5. **Status and History of Contamination at the Site:** The Site is contaminated with hazardous substances (see following paragraphs). Portions of the existing building on the Site were first constructed in 1916 for metal manufacturing operations, a leather company, a paint/lacquer company, a brass foundry, and other companies engaged in light manufacturing. These operations continued through 1953, when the buildings were incorporated into the Dexter facility. Dexter's operations included a foundry; machining; brass, nickel and chromium plating; parts degreasing; and warehousing. Dexter ceased operations on the Site in 1982. The building was used by automotive parts suppliers for manufacturing of vehicle components from 1985 through 1992. Portions of the building were leased by multiple commercial and light industrial companies (e.g., machining, auto repair, painting, and woodworking shops; storage/warehousing companies) from 1995 through 2016. The building on the Site has remained vacant since 2016, and the parking areas have been used for exterior storage.

   The environmental concerns at the Site are the documented on-site impact (see following paragraph); the potential for additional impact associated with historical on-site manufacturing and auto repair operations (e.g., metal plating, painting, degreasing, and storage and use of various lubricating, cutting, hydraulic, and other process chemicals); and potential migration of impact from nearby junk yards, auto repair operations, gasoline filling stations, dry cleaners, painting, machine shops, and manufacturing operations.

   The known impact at the Site is likely associated with the historical on-site operations including potential buried plating wastes, on-site releases of plating process wastewater, and exterior storage of caustic liquids, oils, and solvents. Multiple site investigations have been completed since the early 2000s and they have confirmed the presence of volatile organic compounds (VOCs) including the chlorinated solvents trichloroethene, tetrachloroethene, and vinyl chloride; heavy metals including arsenic, hexavalent chromium, copper, lead, and nickel; and various polycyclic aromatic hydrocarbons (PAHs) in soil and groundwater across the Site. Non-aqueous phase liquid (NAPL) was also

identified west of the on-site building. In addition, soil gas on the Site is impacted with numerous VOCs including benzene and trichloroethene.

6. **Brownfields Site Definition:** The Site meets the definition of a brownfield under CERCLA §101(39) as described under CERCLA §104(k). The Site is not listed or proposed for listing on the National Priorities List; is not subject to unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees issued to or entered into by parties under CERCLA; and is not subject to the jurisdiction, custody, or control of the United States government.

7. **Environmental Assessment Required for Clean Grant Applications:** The Site was assessed in 2001. This assessment included the collection of soil and groundwater samples. The assessment was documented in a January 12, 2001 Baseline Environmental Assessment. The Site was also assessed in 2015 and documented in a Phase II ESA report dated July 10, 2015. This assessment included the completion of 20 soil borings and the collection of soil,groundwater, and soil gas samples. The cumulative results of these assessments are discussed in Item 5.

8. **Enforcement or Other Actions:** No ongoing or anticipated environmental enforcement actions or other actions related to the Site are known.

9. **Sites Requiring a Property-Specific Determination:** The Site does not require a Property-Specific Determination.

10. **Threshold Criteria Related to CERCLA/Petroleum Liability**
a. Property Ownership - Hazardous Substances

i. Exemptions to CERCLA Lability – Not Applicable

ii. Exemptions to Meeting the Requirements For Asserting an Affirmative Defense to CERCLA Liability – Not Applicable

iii. Landowner Protections from CERCLA Liability

(1) Bona Fide Prospective Purchaser Liability Protection

(a) *Information on Property Acquisition*: 1601 Madison LLC purchased the Site from GRL Properties LLC on June 9, 2016 via warranty deed. To the best of their knowledge, 1601 Madison LLC has no familial, contractual, corporate, or financial relationships or affiliations with the prior owners or operators of the Site.

(b) *Pre-Purchase Inquiry*: A Phase I ESA (ASTM E1527-13) dated March 3, 2016, was prepared by SME for 1601 Madison LLC. The Environmental Professional (EP) for the Phase I ESA was Mr. Casey Smith. At the time of completion of the Phase I ESA, Mr. Smith had over 12 years of experience providing due diligence services and had conducted Phase I ESAs at over 100 sites. The required components of the Phase I ESA were completed within 180 days of the date on which 1601 Madison LLC acquired the Site.

(c) *Timing and/or Contribution Toward Hazardous Substances Disposal*: The disposal of hazardous substances at the Site occurred prior to 1601 Madison LLC acquiring the Site on June 9, 2016, and 1601 Madison LLC affirms that they have not, at any time, arranged for the disposal of hazardous substances at the Site or transported hazardous substances to the Site.

(d) Post-Acquisition Uses: Since 1601 Madison LLC acquired the Site on June 9, 2016, the following companies have leased portions of the exterior parking areas for the identified operations:

- Walsh (June 2016 through present) – storage of empty dumpsters
- Building Bridges (March 2017 through present) – storage of landscape materials
- Pitsch (July 2020 through present) – storage of empty dumpsters

1601 Madison LLC has no relationship with Walsh, Building Bridges, or Pitsch other than being their landlord.

(e) Continuing Obligations

(i) *Stop continuing releases* - Prior to 1601 Madison LLC acquiring the Site, they verified that the former building occupants had removed chemicals used in their operations, removed waste materials generated by their operations, and decommissioned and removed aboveground storage tanks (ASTs) that had been present on the Site. When 1601 Madison LLC acquired the Site, the previous tenants were no longer conducting operations at the Site and the Site and the building were vacant.

(ii) *Prevent any threatened future release* – No operations using chemicals or generating wastes have occurred at the Site since 1601 Madison LLC acquired it. Upon acquisition, 1601 Madison LLC locked the on-site building and limited access to only approved 1601 Madison LLC employees performing building security monitoring/maintenance. This prevents unauthorized access to the building and activities causing releases. The building itself and a chain link fence with a locked gate form the northern, eastern, and southern Site boundaries preventing unauthorized parties from accessing these portions of the Site and causing releases. The western side of the Site is a paved parking area that is fenced except for an entrance drive that is not gated. While this portion of the Site can be accessed from the access drive, the area is covered with pavement and if illicit materials/substances are dumped here, 1601 Madison LLC building maintenance staff would notice and remove immediately. It should be noted that no illicit dumping has occurred on Site since 1601 Madison LLC acquired the Site.

(iii) *Prevent or limit exposure to any previously released hazardous substance* – As indicated in (ii) above, access to the existing building has been limited. This limits potential human exposures to vapors that may be entering the building. The Site is covered by pavement and the building itself, which limits the potential dermal exposure to impacted soil and groundwater that is present below these impervious surfaces. Furthermore, access to the Site is limited and that further limits general public access to the Site.

Commitments:1601 Madison LLC confirms that they will:

(i) Comply with all land use restrictions associated with the Site and will not impede the effectiveness or integrity of any institutional controls.
(ii) Assist and cooperate with those performing Site cleanup and will provide access to the Site as necessary to facilitate cleanup and Site revitalization activities.
(iii) Comply with any information request and administrative subpoenas that have or may be issued in connection with the Site.
(iv) Provide all legally required notices.

11. Cleanup Authority and Oversite Structure:

a. Cleanup Oversight The Michigan Voluntary Cleanup Program (VCP) is designed for self-managed cleanups, with no formal "enrollment." Therefore, 1601 Madison LLC will ensure that cleanup of the Site is consistent with the Michigan Part 201 VCP by enlisting the involvement of the Michigan Department of Environment, Great Lakes and Energy (EGLE) in cleanup decisions and retaining a qualified environmental consultant to design and oversee all environmental response actions. The 1601 Madison LLC project team has been directly involved in assessment and redevelopment of multiple brownfields for over ten years. The project team understands the strategies, systems, and procedures needed to manage the cleanup. 1601 Madison LLC will insist on, and rely upon its retained consultant to ensure compliance with the rules and published guidance for compliance with Michigan VCP requirements for remediation design, establishment of cleanup criteria for target contaminants, remediation verification, quality assurance/quality control, and reporting. 1601 Madison LLC will select a qualified environmental consultant using a qualifications-based competitive solicitation in accordance with applicable procurement regulations. The required qualifications will include experience in the following areas: designing environmental remediation using diverse technologies; developing remediation specifications and bid documents; identifying, evaluating, selecting and monitoring contractors; overseeing site remediation projects; complying with Michigan VCP rules and guidance; successful brownfields cleanup and redevelopment; and managing U.S. EPA brownfields grants. Consultant selection, including preparation and issuance of a Request for Qualifications, submissions review, candidate interviews, and consultant selection, will commence after completion of a Cooperative Agreement and will be completed prior to initiation of remedial design and specification activities. EGLE will be asked to review and comment on the Site remediation approaches selection and remedial action plan to verify compliance with the Michigan VCP.

b. Off-Site Access: No cleanup work is planned for the adjacent properties; therefore, no additional access is needed at this time.

12. Community Notification: An advertisement announcing 1601 Madison LLC's intent to apply for this Brownfield Cleanup Grant was announced on October 14, 2020, by XXXX. Public meetings to discuss the draft proposal and associated draft Analysis of Brownfields Cleanup Alternatives (ABCA) and consider public comments were held on October 20 and 21, 2020, at a public Madison Square Business Association meeting and a Madison Square Community Partners meeting, respectively. A copy of the draft ABCA, advertisement, meeting sign-in sheet, and meeting notes are included in Attachment 2. No public comments were received either before or during the public meetings (TO BE UPDATED AS APPROPRIATE FOLLOWING MEETINGS).

13. Statutory Cost Share

a. Cost Share: The expected cost needed to clean up the Site is expected to exceed the Cleanup Grant funds being requested. 1601 Madison LLC will meet their cost share of $100,000 using their own funds (cash).

b. Hardship Waiver: Not Applicable

ATTACHMENT 1 – 1601 MADISON LLC DETAILS AND PROOF OF 501(C)(3) STATUS

INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date: AUG 0 1 2019

AMPLIFY GR
C/O VARNUM LLP
DALE R RIETBERG
333 BRIDGE ST NW
GRAND RAPIDS, MI 49504

Employer Identification Number:
82-4122848
DLN:
17053304321018
Contact Person:
SHERRY Q WAN ID# 31052
Contact Telephone Number:
(877) 829-5500
Accounting Period Ending:
December 31
Public Charity Status:
170(b)(1)(A)(vi)
Form 990/990-EZ/990-N Required:
Yes
Effective Date of Exemption:
January 10, 2018
Contribution Deductibility:
Yes
Addendum Applies:
No

Dear Applicant:

We're pleased to tell you we determined you're exempt from federal income tax under Internal Revenue Code (IRC) Section 501(c)(3). Donors can deduct contributions they make to you under IRC Section 170. You're also qualified to receive tax deductible bequests, devises, transfers or gifts under Section 2055, 2106, or 2522. This letter could help resolve questions on your exempt status. Please keep it for your records.

Organizations exempt under IRC Section 501(c)(3) are further classified as either public charities or private foundations. We determined you're a public charity under the IRC Section listed at the top of this letter.

If we indicated at the top of this letter that you're required to file Form 990/990-EZ/990-N, our records show you're required to file an annual information return (Form 990 or Form 990-EZ) or electronic notice (Form 990-N, the e-Postcard). If you don't file a required return or notice for three consecutive years, your exempt status will be automatically revoked.

If we indicated at the top of this letter that an addendum applies, the enclosed addendum is an integral part of this letter.

For important information about your responsibilities as a tax-exempt organization, go to www.irs.gov/charities. Enter "4221-PC" in the search bar to view Publication 4221-PC, Compliance Guide for 501(c)(3) Public Charities, which describes your recordkeeping, reporting, and disclosure requirements.

AMPLIFY GR

We sent a copy of this letter to your representative as indicated in your power of attorney.

Sincerely,

Stephen A. Martin

Director, Exempt Organizations
Rulings and Agreements

ATTACHMENT 2 – ABCA AND PUBLIC NOTIFICATION AND MEETING INFORMATION

ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES (ABCA) FOR ENVIRONMENTAL RESPONSE ACTIONS

US EPA BROWNFIELDS CLEANUP GRANT PROGRAM
1601 MADISON AVENUE SE
CITY OF GRAND RAPIDS, KENT COUNTY, MICHIGAN

1.0 INTRODUCTION

This Analysis of Brownfield Cleanup Alternatives (ABCA) documents 1601 Madison LLC's evaluation of environmental response action alternatives considered to mitigate exposures to contaminated soil, groundwater, and soil gas present on the parcel identified as 1601 Madison Avenue (the Site) in the City of Grand Rapids, Kent County, Michigan. These response actions are needed to safely redevelop this brownfield as a commercial/light industrial site.

The environmental response actions will be funded by a grant from the United States Environmental Protection Agency (U.S. EPA) Brownfields Cleanup Grant awarded to 1601 Madison LLC in XXXX. The U.S. EPA confirmed the eligibility of the Site and grantee on XXXX.

2.0 SITE BACKGROUND AND CONDITIONS

A. SITE LOCATION AND DESCRIPTION

The Site is an approximately 10-acre parcel identified as 1601 Madison Avenue SE, and is currently developed with a 250,000 square-foot, vacant, industrial building and paved parking and access areas. The building is comprised of a collection of various sub-structures that were constructed and merged together over its 100-year life. The Site is located west of Madison Avenue SE in the southeastern portion of Grand Rapids. The Site location is shown on Figure 1, and the existing Site features are shown on Figure 2. The Site is adjoined by commercial/industrial sites, residences, a junk yard, and a storm water detention basin. The Site is owned by 1601 Madison LLC, and following cleanup activities, it will be leased to various commercial/light industrial tenants.

B. SITE HISTORY AND USES

Portions of the onsite building were first constructed in 1916 for metal manufacturing operations, a leather company, a paint/lacquer company, a brass foundry, and other companies engaged in light manufacturing. These operations continued through 1953, when the buildings were incorporated into the Dexter facility. Dexter's operations included a foundry; machining; brass, nickel and chromium plating; parts degreasing; and warehousing. Dexter ceased operations on the Site in 1982. The building was used by automotive parts suppliers for manufacturing of vehicle components from 1985 through 1992. Portions of the building were leased by multiple commercial and light industrial companies (e.g., machining, auto repair, painting, and woodworking shops; storage/warehousing companies) from 1995 through 2016. The building on the Site has remained vacant since 2016, and the parking areas have been used for exterior storage.

C. SITE ENVIRONMENTAL CONDITIONS

The known impact at the Site is associated with the historical on-site operations, including potential buried plating wastes, onsite releases of plating process wastewater, and exterior storage of caustic liquids and

solvents. Numerous site investigations have been completed since the early 2000s and they have confirmed the presence volatile organic compounds (VOCs) including the chlorinated solvents trichloroethene, tetrachloroethene, and vinyl chloride; heavy metals including arsenic, hexavalent chromium, copper, lead, and nickel; and various polycyclic aromatic hydrocarbons (PAHs) in soil and groundwater across the Site. These compounds are present in soil and groundwater at concentrations above Michigan's Voluntary Cleanup Program's generic cleanup criteria. In addition, soil gas on the Site is impacted with numerous VOCs including benzene and trichloroethene.

Environmental conditions on the Site were determined from information and data contained in the following documents:

- SME, *Phase I ESA, 1601 Madison Avenue SE, Grand Rapids, Michigan*, March 3, 2016.
- SME, *Phase II ESA, 1601 Madison Avenue SE, Grand Rapids, Michigan*, July 10, 2015.
- SME, *Baseline Environmental Assessment, 1601 Madison Avenue SE, Grand Rapids, Michigan*, March 17, 2016.

These documents are available at the project repository located at the following location:

Amplify GR
1480 Kalamazoo Avenue SE
Grand Rapids, Michigan
Telephone: (616) 279-3936
Contact: Mr. Jon Ippel
E-mail: jon@amplifygr.org

D. OBSERVED OR FORECASTED CLIMATE CHANGE RISKS IN THE SITE AREA

Based on a review of the U.S. EPA Checklist: How to Address Changing Climate Concerns in an ABCA and a review of the State Climate Summary for Michigan[1], the potential future climate change risks relate to an increase in temperature, an increase in the frequency of extreme precipitation events, and an increase in summer droughts. The Site is located over 1 mile from any water bodies; therefore, it is unlikely that extreme precipitation events that lead to flooding will pose a risk to the selected environmental response action. In addition, increases in temperature and increased summer droughts will also pose a minimal threat to the selected environmental response action based on the urban location of the Site and the proposed redevelopment of the Site with a commercial/light-industrial operation.

E. PROJECT GOALS AND OBJECTIVES

1601 Madison LLC will use private funds (non-EPA grant funds) to demolish the existing 250,000 square foot building. Once that demolition is completed, onsite cleanup activities can begin. Following completion of cleanup activities, a local developer will partner with 1601 Madison LLC to construct a new, approximately 60,000 square-foot light industrial building that will house a state-of-the-art device and data management company. It will also include streetscape improvements to beautify the Site's frontage along Madison Avenue SE. This will include an investment of $12.5M which is expected to generate over $70,000 in annual tax revenue. The expansion will also provide needed employment opportunities for residents by retaining approximately 70 professional jobs and creating construction jobs and 26 new professional jobs, with wages ranging from $17 to $38/hour. Following this initial redevelopment, the developer may construct additional modern industrial buildings that can be leased to other professional/high-tech companies.

[1] Scenarios for the National Climate Assessment (scenarios.globalchange.gov)

The City of Grand Rapids has an ongoing city-wide planning process that seeks to guide public and private development efforts in a way that benefits all residents. Because of its size, the City has also worked to collaborate with the community to create area specific plans that empower residents and business owners in various areas of the City to guide and shape their own community planning. This includes the Southtown Business Area Specific Plan that identifies a plan/approach to direct growth into the area of the Site in a manner that is consistent with values and character of the existing community. This proposed redevelopment aligns directly with the Future Use Plans included in the Grand Rapids Master Plan and Southtown Business Area Specific Plan that identify the Site as an industrial/industrial flex area and plan for a combination of light-industrial and commercial uses. It is expected that once the existing building is demolished and this prominent Site is redeveloped with a modern looking functional building, it will spur additional interest in and redevelopment/renovation of additional nonresidential properties located in the area. The improvement of this unsightly property will also spur additional investment in the nearby residential neighborhood.

In order to safely redevelop the Site, the impacted concrete and highly VOC-impacted soil that will remain following the building demolition must be removed and the resulting excavation area(s) must be backfilled to reach a usable grade and prevent dermal contact exposures with remaining impacted soil in the areas of the Site that will not be covered by buildings or pavement. In addition, an active vapor mitigation system will need to be installed below the proposed 60,000 square-foot data management company building to prevent potential exposures for future building users. It is anticipated that the installation of the vapor mitigation system will be funded with non-U.S. EPA grant dollars; however, the installation of the system is included in this ABCA as it is a key component of the redevelopment of the Site.

3.0 THREATS TO HUMAN HEALTH AND THE ENVIRONMENT

The potential for human dermal contact with impacted soil and potential vapor intrusion into the proposed 60,000 square-foot data management company building are the exposure pathways of concern. These exposure pathways will be addressed by removing highly impacted concrete and soil, backfilling/covering the remaining impacted soil to prevent human contact, and installing an active vapor mitigation system to prevent the migration of vapor phase contaminants into the future building. The removal of the highly impacted source soil is also expected to help limit off-site migration of impacted soil gas.

4.0 APPLICABLE REGULATIONS AND CLEANUP STANDARDS

A. CLEANUP OVERSIGHT ROLES AND RESPONSIBILITY

1601 Madison LLC will oversee the grant-funded activities. Regulatory oversight and technical assistance for the project will be provided by the Michigan Department of Environment, Great Lakes and Energy (EGLE). Generally, EGLE provides financial, technical, legal, and educational assistance, and works in partnership with the U.S. EPA and other Michigan agencies to assist communities in making productive use of their brownfield properties. For this project, EGLE will review and approve a work plan that describes the response actions and proposed redevelopment project. This review and approval will serve as EGLE's involvement in the project. The response actions will be conducted in general accordance with applicable U.S. EPA, EGLE, Occupational Safety and Health Administration (OSHA), and Michigan OSHA (MIOSHA) rules and guidance.

B. CLEANUP STANDARDS

Part 201 of the Michigan Natural Resources and Environmental Protection Act (NREPA), Public Act 451 of 1994, as amended (Part 201), defines the environmental remediation program for sites impacted with contaminated soil, sediment, groundwater, soil gas, and other environmental media within the State of Michigan. Cleanup standards for environmental response actions addressing contaminated soil on the Site will be as defined by Part 201. Part 201 describes selected approaches and cleanup standards for

investigation and risk-based closure of contaminated or potentially contaminated sites in Michigan. Part 201 standards for nonresidential use will be used for this cleanup.

C. APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)

This project is a brownfield redevelopment that is consistent with the operational requirements of the *1996 Addendum 1: Brownfields Redevelopment* to the *Superfund Memorandum of Agreement* between the State of Michigan and the U.S. EPA Region 5. In addition to the statutes and rules governing cleanup oversight and standards described above, the following ARARs have been identified for the project:

- Environmental response actions
    - Waste management
        - 40 CFR 261 – 265: Hazardous waste
        - NREPA, Part 111 Hazardous Waste Management
        - NREPA, Part 115 Solid Waste Management
    - Transportation of wastes
        - 40 CFR 262: Hazardous wastes (EPA)
        - 49 CFR 172: Hazardous materials (DOT)
    - Health and safety
        - 29 CFR 1910.120 (HAZWOPER)
- Storm water management
    - NREPA, Part 31 Water Resources Protection

5.0 ENVIRONMENTAL RESPONSE ACTION ALTERNATIVES

To support the redevelopment of the Site, response actions are necessary for protection of human health and the environment. The following response action alternatives were considered. Please note, alternatives 2 through 4 assume the building has been demolished using private funds.

- **Alternative 1** – No environmental response actions are completed on the Site (the "no action" alternative), and the building and impacted concrete and soil remain.
- **Alternative 2** – Fence the perimeter of the Site and prohibit public access to the Site to prevent human contact exposures.
- **Alternative 3** - Remove areas of highly impacted soil and concrete and dispose off-site. Backfill the resulting excavation area(s) with clean fill material to bring the ground surface elevation to an acceptable grade for future redevelopment. In areas with paved parking and buildings, this clean fill material will serve as a dermal contact barrier to prevent human contact exposures by future site occupants and visitors. Install an active vapor mitigation system below the proposed 60,000 square-foot data management company building.
- **Alternative 4** – Remove all the VOC-impacted concrete and soil and dispose off-site to remove the source of the dermal contact and vapor risks. Backfill the resulting excavation with clean backfill.

These response action alternatives were evaluated using the following criteria:

- *Effectiveness* – 1) the degree to which toxicity, mobility and volume of contamination is reduced, 2) the degree of protection for public health, safety and welfare and for the environment, and 3) the extent of adverse effects on public health, safety and welfare and on the environment during response action implementation.
- *Implementability* – 1) technical feasibility, 2) availability of needed technologies, materials, equipment, and services needed to conduct the response action, and 3) administrative and permitting feasibility; presence of endangered species or historical structures; technical feasibility of ancillary functions and issues, such as engineering controls, natural attenuation of contaminant concentrations, recycling of materials, and waste treatment or disposal; and project schedule.
- *Cost* – 1) direct and indirect capital, labor and services costs, including costs of design and testing and 2) annual operation and maintenance costs.
- *Impact of changing climate conditions* – impact identified climate change conditions and risk factors could have on effectiveness of the alternative.

A. ALTERNATIVE 1 – NO-ACTION

The Site would remain as-is with a large vacant building and paved parking areas. 1601 Madison LLC would maintain the building as needed to prevent unauthorized entry and fire hazards. The costs associated with Alternative 1 are summarized below:

RESPONSE ACTIVITY	UNIT COST	QUANTITY	COST
Building monitoring and fire system inspections	$200,000/yr.	20	$4,000,000
TOTAL			**$4,000,000**

This alternative was evaluated against the three key criteria as follows:

- *Effectiveness* – Low: Current and future dermal contact and vapor intrusion risks are not mitigated or reduced.
- *Implementability* – High.
- *Cost* – High.
- *Impact of changing climate conditions* – Low: Increased intensity precipitation events will have limited impact on material that is below buildings or pavement. Increased temperature and summer droughts not likely to impact the efficacy of the alternative.

The no-action alternative is an implementable alternative but it will provide no reduction/mitigation in the dermal contact or vapor intrusion risks present at the Site and it is expensive. In addition, the Site will remain unused and an eyesore.

B. ALTERNATIVE 2 – FENCE THE PERIMETER OF THE SITE AND PROHIBIT PUBLIC USE

Following building demolition, the Site would be left developed with areas of pavement and remaining concrete foundations/floor slabs. Access to the Site would be prevented by the installation of secure fencing (eight-foot high, chain link or ornamental metal design fence, with gates secured by padlocks). An operations and maintenance (O&M) program would be implemented to maintain the integrity and effectiveness of the public access barrier. The O&M program would consist of an inspection and repair program for the fence to identify deficiencies in the fence that compromise its integrity or effectiveness as an access barrier and repairing the deficiencies quickly and effectively. Due care procedures including controlled employee access and development of low impact/disturbance maintenance procedures would be designed and implemented to protect the health of persons employed or contracted to implement the O&M program for the Site. Land use restrictions on the Site would be filed as a restrictive covenant on the Site deed.

The costs associated with Alternative 2 are summarized below:

RESPONSE ACTIVITY	UNIT COST	QUANTITY	COST
Engineering design	$15,000 lump sum	1	$15,000
Construction of chain link perimeter fence	$30/lf	3,300	$99,000
O&M and site inspections	$5,000 (year 1) $2,500/year (years 2 -10)	10	$27,500
TOTAL			**$141,500**

This alternative was evaluated against the three key criteria as follows:

- *Effectiveness* – Medium to high: Current and future dermal contact risks will be mitigated. No onsite buildings will be constructed; therefore, vapor mitigation systems will not be needed.
- *Implementability* – High: The Site can be fenced.
- *Cost* – Low.
- *Impact of changing climate conditions* – Medium: Increased intensity precipitation events could result in erosion of the Site and spread of impacted material (fencing will not prevent this). Increased temperature and summer droughts not likely to impact the efficacy of the alternative.

Fencing the perimeter of the Site would be an effective alternative that could be implemented using readily available techniques and technologies. Human dermal contact exposures to near-surface soil would be mitigated by restricting public access to the area and by implementing due care procedures to protect maintenance workers. Although this alternative is technically and economically feasible, it would not achieve the project objectives of redeveloping the Site. It would also ensure that this key Site remains unused.

C. ALTERNATIVE 3 - REMOVE HIGHLY IMPACTED SOIL AND CONCRETE, INSTALL CLEAN BACKFILL/DERMAL CONTACT BARRIER, AND INSTALL ACTIVE VAPOR MITIGATION SYSTEM BELOW THE PROPOSED BUILDING

Following demolition of the onsite building, areas of visibly stained/impacted remaining concrete and areas of highly impacted soil below the northern portion of the building will be excavated and transported for disposal at a licensed disposal facility. This will involve the completion of select hot-spot verification sampling to confirm that the areas with the highest concentrations of VOC-impacted concrete and soil are removed. It is estimated that approximately 11,500 yards (15,000 tons) of soil and 3,000 tons of concrete would be removed and disposed. The resulting excavation area(s) will be backfilled with clean offsite material and compacted to reach the proposed rough grade for the development. This clean fill material will also act as a dermal contact barrier for the areas of the Site that are not redeveloped with buildings or pavement. An active vapor mitigation system will be installed below the floor slab of the proposed data management company building.

The costs associated with Alternative 3 are summarized below:

RESPONSE ACTIVITY	UNIT COST	QUANTITY	COST
Secure site during response actions	$5,000 lump sum	1	$5,000
Select hot-spot delineation sampling (concrete and soil)	$20,000 lump sum	1	$20,000
Waste characterization for concrete and soil disposal	$5,000 lump sum	1	$5,000
Excavation, transportation and disposal of concrete and soil.	$30/ton	18,000	$540,000
Monitoring of activities and collection of remediation verification soil samples	$20,000 lump sum	1	$20,000
Acquisition, transport, and placement of clean backfill	$12/ton	10,000	$120,000
Installation of active vapor mitigation system	$480,000 lump sum	1	$480,000
TOTAL			**$1,190,000**

This alternative was evaluated against the three key criteria as follows:

- *Effectiveness* – High: Current and future direct contact risks will be mitigated.
- *Implementability* – High: The Site is vacant and accessible allowing for this approach to proceed.
- *Cost* – High.
- *Impact of changing climate conditions* – Low: Increased intensity precipitation events will have limited impact on material that is generally at grade with no slopes. Increased temperature and summer droughts not likely to impact the efficacy of the alternative.

Removal of highly impacted concrete and soil and subsequent backfilling with clean fill material would be an effective alternative that could be implemented using readily available techniques and technologies. Human direct contact exposures to impacted soil would be eliminated, and the installation of a vapor mitigation system would allow for safe use of the future building (limit vapor intrusion risk). This

alternative would allow the Site to be safely redeveloped and is more economically feasible and predictable than Alternative 4 (see below).

D. ALTERNATIVE 4 – REMOVAL OF ALL VOC-IMPACTED CONCRETE AND SOIL AND PLACEMENT OF CLEAN BACKFILL

All VOC-impacted concrete and soil would be excavated and transported off-site for disposal at a licensed disposal facility. It is estimated that approximately 35,000 yards (45,500 tons) of soil and 3,000 tons of concrete would be removed and disposed. Upon removal of the impacted materials, clean fill material would be placed in the resulting excavation area. Because the dermal contact risk and vapor intrusion risks would be eliminated, no additional response actions would be needed to safely redevelop the Site.

The costs associated with Alternative 4 are summarized below:

RESPONSE ACTIVITY	UNIT COST	QUANTITY	COST
Secure site during response actions	$5,000 lump sum	1	$5,000
Waste characterization for concrete and soil disposal	$5,000 lump sum	1	$5,000
Excavation, transportation and disposal of concrete and soil.	$30/ton	48,500	$1,455,000
Monitoring of activities and collection of remediation verification soil samples	$20,000 lump sum	1	$20,000
Acquisition, transport, and placement of clean backfill	$12/ton	60,000	$720,000
TOTAL			**$2,205,000**

This alternative was evaluated against the three key criteria as follows:

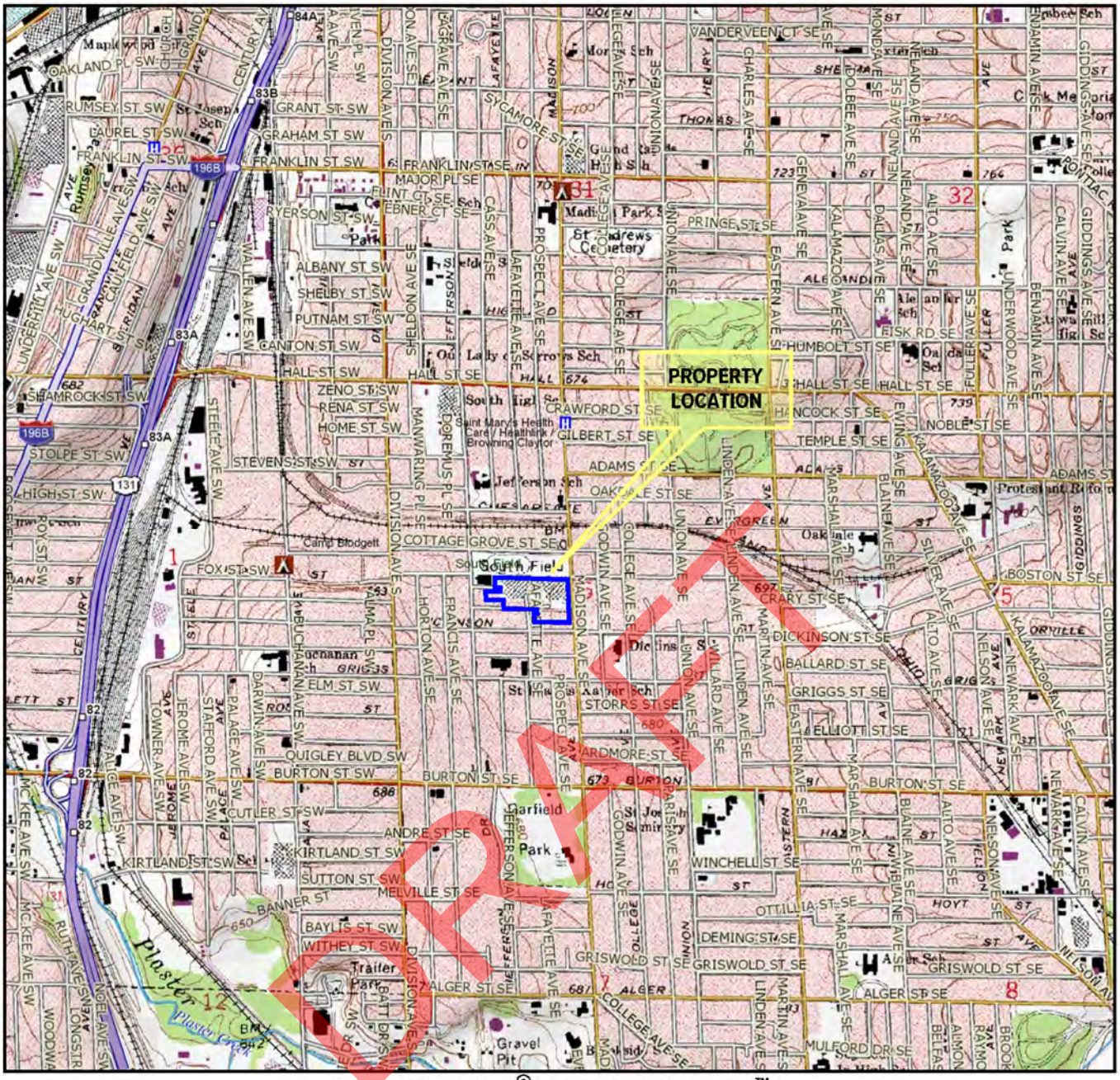
- *Effectiveness* – High: Current and future direct contact and vapor intrusion risks will be mitigated.
- *Implementability* – High: The Site is vacant and accessible allowing for this approach to proceed.
- *Cost* – High.
- *Impact of changing climate conditions* – Low: Increased intensity precipitation events will have limited impact on clean backfill that is generally at grade with no slopes. Increased temperature and summer droughts not likely to impact the efficacy of the alternative.

Removal of all impacted concrete and soil and subsequent backfill would be an effective alternative that could be implemented using readily available techniques and technologies. Human dermal contact exposures to the impacted soil would be eliminated and one of the sources of the vapor intrusion risk would be removed. This alternative would allow the Site to be safely redeveloped; however, impacted groundwater would remain onsite necessitating further evaluation of the vapor intrusion risk. In addition, the costs are unpredictable and could end up being very high making the alternative not economically feasible.

6.0 RECOMMENDED ALTERNATIVE

Alternative 3 is recommended for the Site because it is the evaluated alternative that will best achieve the project objectives and be economically feasible. Alternatives 1 and 2 were rejected because they would fail to meet the project objectives of preparing the Site for much needed redevelopment. Alternative 4 was rejected because the costs cannot accurately be predicted and would likely be very high.

FIGURES



Base map obtained from ©DeLorme Topo North America ™10.

LEGEND

APPROXIMATE PROPERTY LOCATION

USGS QUADRANGLE(s) REFERENCED
GRAND RAPIDS WEST (MI) - 1981

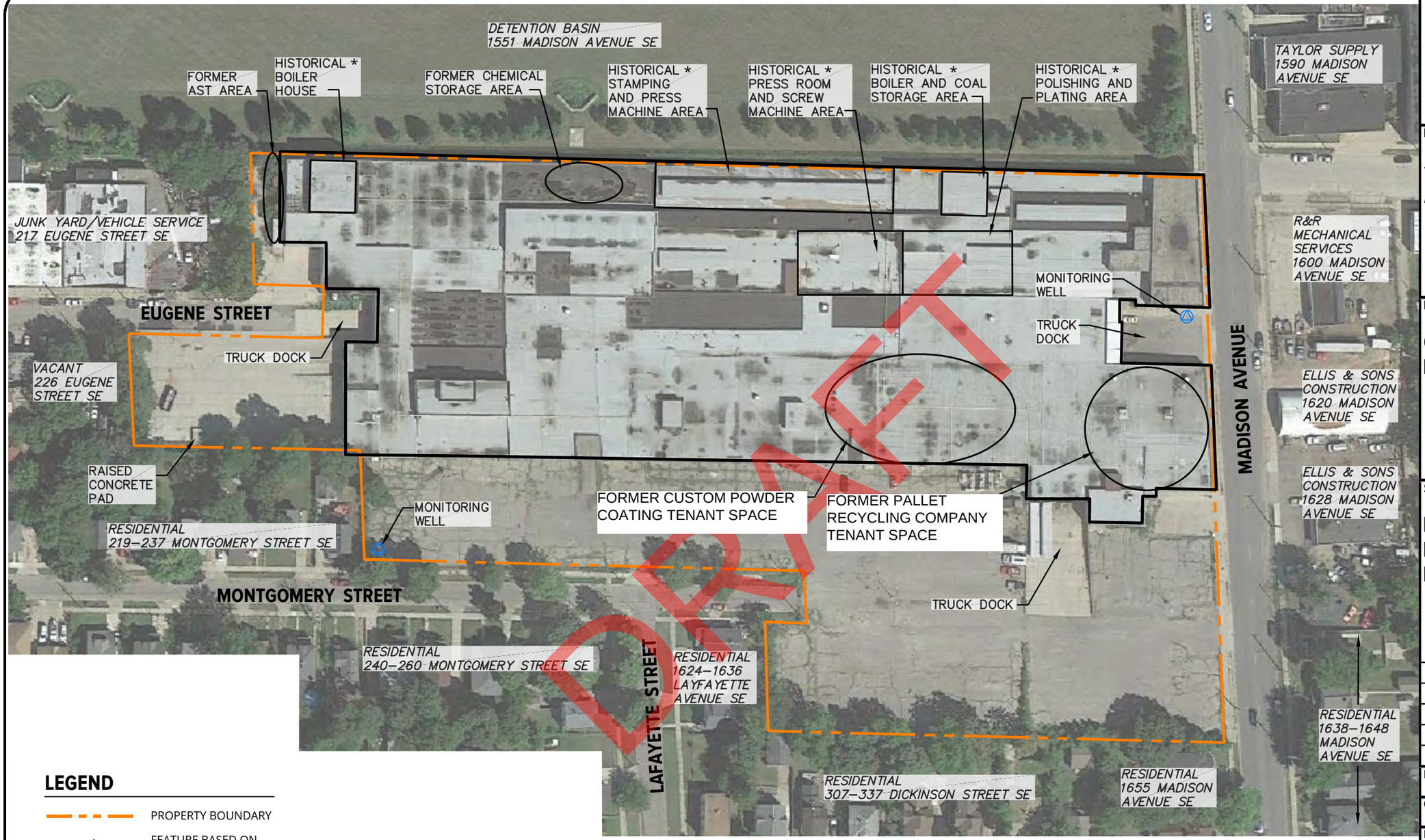
No.	Revision Date		
		Date	05-22-15
		Drawn By	GM
		Designed By	JWH
		Scale	1" = 2000'

PROPERTY LOCATION MAP
1601 MADISON AVENUE SE
GRAND RAPIDS, MICHIGAN

SME
www.sme-usa.com

Figure No. 1

May 22, 2015 - 11:03am - MANDRILA \\Smefile\work in progress\071667.02\CAD\DWGS\rev0\071667.02-01.dwg



LEGEND

PROPERTY BOUNDARY

* FEATURE BASED ON HISTORICAL SANBORN FIRE INSURANCE MAPS.

NOTE:
DRAWING INFORMATION TAKEN FROM GOOGLE EARTH PRO WITH IMAGE DATE 8-23-2013 AND A BOUNDARY/MORTGAGE SURVEY DATED 12-27-2000, PREPARED BY JCK & ASSOCIATES, INC.

NORTH

0' 100' 200'

GRAPHIC SCALE: 1" = 100'

SME
www.sme-usa.com

Project
1601 MADISON AVENUE SE

Project Location
GRAND RAPIDS, MICHIGAN

Sheet Name
PROPERTY FEATURES DIAGRAM

No.	Revision Date

Date 1-15-16
CADD JAB
Designer AJL
Scale 1" = 100'
Figure No. 2

PLOT DATE: Feb 05, 2016 - 2:26pm - jblake
FILE LOCATION: \\sme-inc\px1\WIP\071667.02\CAD\DWGS\rev0\071667.02-PF.dwg

ATTACHMENT 2
LEVERAGING SUPPORT LETTERS