



February 18, 2016

Emily Patchen, Compliance Coordinator  
Ohio Environmental Protection Agency  
Division of Environmental Response and Revitalization  
Assessment, Cleanup, & Reuse (ACRE) Section  
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P.O. Box 1049  
Columbus, OH 43216

AND

Madelyn Adams  
Ohio Environmental Protection Agency  
Division of Environmental Response and Revitalization  
401 East Fifth Street  
Dayton, Ohio 45402

RE: Operation and Maintenance Plan Version 4 for the Oakley North Redevelopment Property (13NFA540) located at 4701 Marburg Avenue, Cincinnati, Hamilton County, Ohio; Hull document No. MLY004.200.0008.

Dear Ms. Patchen and Ms. Adams:

In accordance with the conditions outlined in the Environmental Covenant and the Operations and Maintenance (O&M) agreement that support the covenant not to sue for 13NFA540, please find a copy of the *Oakley North Redevelopment Property O&M Plan Version 4 (13NFA540)* for your use. Per the recommendations contained within the August 28, 2015 approval letter for *Oakley North Redevelopment Property O&M Plan Version 3*, this O&M Plan (Plan) has been reformatted to facilitate easier review and approval of information that amends the Plan, specifically associated with the required VMS systems of each structure erected as part of the Property redevelopment.

The new Plan format provides a means for submittal of VMS Certification Reports as each new structure is completed, providing the required documentation demonstrating that a VMS has been installed per O&M Agreement and Environmental Covenant prior to building occupancy. This process allows for the review and approval of the building-specific VMS Certification Report as opposed to re-submitting the entire O&M Plan as new structures are completed on the Property.

The revised Plan is being submitted under a CP Affidavit provided as Attachment 1 of this letter; the revised O&M Plan is provided as Attachment 2.

Sincerely,

A handwritten signature in cursive script, appearing to read "Tracy L. Edwards".

Tracy L. Edwards  
Certified Professional #CP 358

Attachments

cc: Steve Dragon, USS Reality, LLC (1 copy)  
Eric Meister, USS Reality, LLC (1 copy)



**ATTACHMENT 1**

CP Affidavit for the Revised O&M Plan

**Affidavit by Certified Professional Pursuant to OAC 3745-300-13(O)**

*[for submissions under OAC 3745-300-13(O): CP providing information for conducting or completing a voluntary action, not for the submittal of an NFA letter or an addendum to an NFA letter]*

State of Ohio )  
County of Warren )

ss:

I, Tracy L. Edwards, being first duly sworn according to law, state that, to the best of my knowledge, information and belief:

1. I am an adult over the age of eighteen (18) years old and competent to testify herein.
2. I am a Certified Professional, CP No. 358, in good standing under Ohio Revised Code (ORC) Chapter 3746 and Ohio Administrative Code (OAC) Chapter 3745-300.
3. A voluntary action was conducted at the Oakley North Redevelopment Project Property located at 4701 Marburg Avenue, Cincinnati, Ohio (the "Property").
4. Brad White, then CP 146, submitted a No Further Action Letter for the Property on behalf of the City of Cincinnati and USS Reality (the Volunteers) on December 16, 2013, resulting in 13NFA540.
5. Ohio EPA issued a VAP Covenant Not to Sue (CNS) for the Property on December 1, 2014.
6. The purpose of this submission is to provide a revised O&M Plan in accordance with the terms outlined in the Environmental Covenant and O&M Agreement recorded on the Property; the revised plan is required prior to occupancy of any on-Property buildings.
7. The following information, data, documents or reports are submitted under this affidavit:  
*a.) Operations & Maintenance Plan, Version 4, February 2016 for the Oakley North Redevelopment Property.*
8. The work indicated by this submission was conducted in compliance with all applicable local, state and federal law and regulations.
9. The information, data, documents, and reports identified in this affidavit are true, accurate and complete.

Further affiant sayeth naught.

Tracy L. Edwards  
Signature of Affiant

Sworn to before me and subscribed in my presence this 18<sup>th</sup> day of February, 2014.

Kristie Fox  
Notary Public



**Kristie Fox**  
Notary Public, State of Ohio  
My Commission Expires April 20, 2020

**ATTACHMENT 2**

Oakley North Redevelopment Plan O&M Plan Version 4 13NFA540  
February 2016

# **OPERATION AND MAINTENANCE PLAN VERSION 4**

**FOR THE:  
OAKLEY NORTH REDEVELOPMENT PROPERTY  
(NFA Number 13NFA540)**

**PREPARED FOR:**

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**PREPARED BY:  
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**FEBRUARY 2016**



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Appendix B	Legal Descriptions for Exposure Unit 1 (EU-1) and Exposure Unit 2 (EU-2)
Appendix C	Legal Description for the EA-6 Direct Contact Engineering Control Areas
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## 1.0 PURPOSE OF THE OPERATION AND MAINTENANCE PLAN

Hull & Associates, Inc. (Hull) prepared this Operation and Maintenance Plan (O&M Plan) Version 4 on behalf of USS Realty, LLC; Oakley FC, LLC; Oakley Office Partners I, LLC; the City of Cincinnati; and Kroger Limited Partnership I, for the Oakley North Redevelopment Project property located at 4701 Marburg Avenue, Cincinnati, Hamilton County, Ohio (Property). This O&M Plan applies to the entire Property and supports a No Further Action Letter (NFA) submitted for the Property under the Ohio Environmental Protection Agency (Ohio EPA) Voluntary Action Program (VAP). The Property received a Covenant Not to Sue (CNS) from Ohio EPA under the name "Oakley North Redevelopment Project Property" (13NFA540).

The Environmental Covenant (EC) associated with the subject Property includes an Activity and Use Limitation (AUL) that prohibits human occupancy of any building constructed within Exposure Unit 1 (EU-1) of the Property prior to a remedy that mitigates exposure to indoor air vapors in excess of applicable standards being installed, operated and maintained as an engineering control under an operation and maintenance agreement. Engineering controls for future buildings constructed within EU-1 of this Property, if implemented, may include one of the following two options or a combination thereof:

1. Buildings will be constructed with commercial/industrial use restricted to the second level or higher. First floor uses will be limited to open air parking to provide a venting barrier between underlying soils/groundwater and the enclosed commercial spaces; or
2. Buildings will be constructed with commercial/industrial use allowable on any level, with the provision that the first floor will contain a vapor barrier/passive venting system (i.e., vapor mitigation system (VMS)) beneath the floor of the building.

The Owner also may propose another engineering control designed to maintain applicable standards, provided the proposed alternative engineering control is submitted to and approved by Ohio EPA prior to implementation. The AUL also allows for making a demonstration to Ohio EPA prior to building occupancy that the standards are met without such remedy. This plan is written expressly for use of a VMS remedy approach for any building constructed on the Property.

Additionally, to meet standards at the Property, the EA-6 Direct Contact Engineering Control Areas and EA-7 Direct Contact Engineering Control Area must be monitored and maintained to prevent direct contact with underlying soils. The EA-6 Direct Contact Engineering Control Areas surround a VAP excavation and Toxic Substances Control Act self-implementing closure excavation locations. The EA-6 engineering control areas are currently covered by a minimum of two feet of clean soils. Hardscape (i.e., parking lots, drives



and/or building slabs) will be constructed over the engineering control areas as Property development progresses.

The EA-7 Direct Contact Engineering Control Area surrounds a VAP excavation to the north, west and south. The northern portion of EA-7 is covered by parking lot and drives constructed in 2012-2013. The remainder of the engineering control area is currently covered by a minimum of two feet of clean soils. Hardscape (i.e., a parking lot and drives) will be constructed over the remainder of the engineering control area as Property development progresses.

The EA-6 Direct Contact Engineering Control Areas and the EA-7 Direct Contact Engineering Control Area must be monitored and maintained to prevent direct contact with underlying soils.

The Soil Management Area located southeast of the EA-6 Direct Contact Engineering Control Areas was a soil consolidation area for soils excavated from the Property and placed beneath a minimum of two feet of clean soil cover. As part of removal efforts for the consolidated soils, an approximate 90 ft. x 40 ft. x 9.5 ft. deep area was excavated by O'Rourke Construction on February 9 through 11, 2016; removal of the consolidated non-native soils was visually confirmed by Hull as excavation progressed. A detached, open-air parking garage is slated for construction over the former Soil Management Area. Details regarding the excavation and off-Property disposal of Soil Management Area soils will be provided in the annual O&M Report for the 2016 reporting period, including a copy of completed *Form A - Documentation of Excavation Activities*. Further details regarding the origination of the Soil Management Area were provided in the *Remedial Activities Documentation Report for the Oakley North Redevelopment Property* (Hull Document No. CIN027.300.0002, October 2013).

The purpose of this operation and maintenance (O&M) plan is to ensure the Property maintains compliance with Ohio EPA Voluntary Action Program (VAP) applicable standards through the implementation of the remedial activities described herein. The remedial activities contained in this operation and maintenance plan are to:

- Operate and monitor an active remedial system/remedy
- Maintain and monitor an engineering control
- Monitor passive remediation via sampling events
- Other(s): monitor/observe engineering controls including hardscapes, parking lots and landscaping areas as described in Section 2.

This Plan addresses both VMS and barrier forms of engineering controls.

## 2.0 IDENTIFICATION OF REMEDIAL ACTIVITIES SUBJECT TO THE O&M PLAN

Remedial activities subject to this O&M Plan (Plan) include:

### 1. Vapor Mitigation Systems (VMS)

- a. Construction verification of sub-slab vapor barriers and venting as an engineering control
- b. Inspection and maintenance of the VMS to verify remedy effectiveness

### 2. Direct Contact Engineering Controls (DC EnCon)

- a. Maintenance of hardscapes, landscaping and parking lots constructed over areas designated to require engineering controls to preclude direct contact exposures;
- b. Annual visual inspections of the engineering controls

A Property Location Map is provided as Figure 1. Figure 2, Property Boundary Map, shows the limits of the Property; any building constructed on the Property will require an effective VMS (unless constructed with open air parking, or similar, at first-floor level, as described in Section 1.0) for the building space (i.e. unit) to be occupied. Appendix A contains a legal survey and map further defining the Property boundary. Appendix B contains legal descriptions of the exposure units EU-1 and EU-2. Appendix C contains legal descriptions of the EA-6 DC EnCon, and Appendix D contains a legal description of the EA-7 DC EnCon.

Generally, the purpose of the VMS is to provide an impermeable barrier to prevent chemicals of concern (COCs) from emanating from subsurface environmental media into indoor air. Each VMS will generally include a sub-barrier ventilation system connected to vertical vent risers to allow potential sub-slab vapors to be vented from beneath the building slab to above the roofline of the subject building. The systems are being designed as passive systems; however, can be converted to active systems as described in Section 8.4, if deemed necessary due to irreparable damage or other breaches to the VMS.

The design of the proposed VMS will occur on a unit basis and will be evaluated in context of the foundation plans and architectural drawings. However, each VMS will have vent configurations and testing locations for each system placed beneath each individual unit. Each sub-slab vapor barrier and venting system will be installed and evaluated for compliance in accordance with the provisions described in this plan prior to unit occupancy. Further, each sub-slab venting system will be monitored as described in this plan to evaluate continued compliance with applicable standards.

This Plan supports compliance with the AUL on building occupancy when installing a VMS as an engineering control that eliminates indoor air vapor intrusion exposures to COCs emanating from soil or groundwater in

excess of applicable standards. To comply with this AUL provision, prior to the scheduled date of occupancy for each unit, a remedy Certification Report will be submitted to Ohio EPA under affidavit by a VAP certified professional attesting that the certification report documents the completed installation of a VMS for the unit is in compliance with the criteria of this O&M plan. Section 5.1 of this plan further describes the report.

Figure 3 shows the EA-6 and EA-7 DC EnCons. sDrives and parking lot areas associated with the Property's development were constructed as engineering controls over the northern portion of the EA-7 DC EnCon in 2012-2013. The remainder of the EA-7 engineering control area and the EA-6 DC EnCon are currently covered by a minimum of two feet of clean soils. Hardscape (i.e., parking lots, drives and/or building slabs) will be constructed over the engineering control areas as these areas of the Property are redeveloped. The direct contact engineering controls will be inspected on a semi-annual or annual basis, depending on the type of control (i.e., 2-foot clean soil cover or hardscape), as described in Section 5.0.

Figure 4 shows the proposed redevelopment plan for the Property. The Lot 9 retail building and a portion of the Kroger retail store were constructed on the Property, with a VMS installed beneath each building, prior to development of this Plan. The Lot 8 retail building is currently under construction. A VMS was installed beneath the Lot 8 building in December 2015; VMS documentation will be provided in a Certification Report for the Lot 8 building under separate cover. Existing buildings and indoor air engineering controls are shown on Figure 4 and summarized in Section 3.1.1. Future buildings constructed on the Property will follow this Plan with respect to the VMS engineering control requirements, with VMS construction documented in a Certification Report as described in Section 5.1.

### **3.0 DESCRIPTION AND PURPOSE OF THE REMEDIAL ACTIVITIES SUBJECT TO THE O&M PLAN**

The purpose of the described remedial activities is to prevent exposures to COCs that are in excess of applicable standards at the Property. Specifically, the items outlined in this Plan are designed to prevent exposure to vapors which may volatilize from contaminated groundwater underlying the site from emanating into closed building spaces at concentrations exceeding risk and hazard goals. Additionally, the existing direct contact engineering controls prevent exposures to soils which could contain concentrations of COCs in soils greater than Property-specific direct contact standards.

#### **3.1 Vapor Mitigation Systems**

VMSs include both sub-slab venting systems and physical barriers which will be located beneath the entirety of each building slab (or unit slab) that has enclosed indoor space above it. VMSs will consist of the following items:

1. A composite three-layer vapor barrier membrane system including:
  - a. a layer of polypropylene thermally bonded non-woven geotextile that serves as the vapor intrusion barrier base;
  - b. a layer of fluid applied, single-coarse, high build, polymer modified asphaltic emulsion at a thickness of 60 dry mils that is applied to the seams of the base fabric as a sealant and then sprayed as a full layer that acts as the core of the vapor intrusion barrier; and
  - c. a layer of polypropylene, staple-fiber, non-woven geotextile that serves as the vapor intrusion barrier protection coarse and bond to the poured concrete pad.
2. A geocomposite modular vent system placed within an approximate four to six inch thick permeable gravel vent layer immediately beneath the vapor barrier membrane; and
3. Vertical vent risers which are connected to the sub-slab venting system, and that run vertically through building columns and discharge above the roof with a wind turbine cap on the end of each stack; each vent riser will be equipped with a ball valve and sample port at the first floor level.

Building specific VMS design plans will be provided, along with installation details including QA/QC reports and smoke testing reports, in the Certification Reports which will be submitted following the installation of each VMS on the Property.

##### **3.1.1 Existing Vapor Mitigation Systems**

The Lot 9 retail building and the Kroger building were constructed at the locations shown on Figure 4 prior to development of this Plan. Each building includes a VMS; documentation of VMS installation beneath each building was provided to Ohio EPA for review and approval in the following documents:

1. Lot 9 Retail Building (Initial Tenant Space (Bar Louie) Opened September 3, 2015) – VMS documentation was provided in the *Operation and Maintenance Plan Version 3 for the Oakley North Redevelopment Property* (August 2015). The Plan was approved by the Ohio EPA in a letter dated August 28, 2015.
2. Kroger (Opened September 10, 2015) – VMS documentation was provided in the *Operation and Maintenance Plan Version 2 for the Milacron Plant 5 Property* (August 2015) and the *Operation and Maintenance Plan Version 3 for the Oakley North Redevelopment Property* (August 2015). Both Plans were approved by the Ohio EPA in letters dated August 28, 2015.

The VMS plans and associated QA/QC documentation for the Lot 9 and Kroger buildings are retained in the above referenced documents.

A VMS was installed beneath the Lot 8 retail building in December 2015; this building is currently under construction. A Certification Report documenting VMS installation and QA/QC testing will be submitted to the Ohio EPA under separate cover. Figure 4 shows the Lot 8 retail building location as well as future buildings/units to be equipped with VMSs.

Documentation of VMSs constructed beneath future buildings on the Property will be completed through issuance of a Certification Report per building or unit as described above.

### **3.2 Direct Contact Engineering Controls (DC EnCons)**

The EA-6 DC EnCon and EA-7 DC EnCon must be monitored and maintained to prevent direct contact with underlying soils. The EA-7 DC EnCon has been partially redeveloped and includes the use of hardscapes, landscapes and parking lot above soils in this area to mitigate direct contact exposures with soils in excess of direct contact standards. The EA-6 DC EnCon and southern portion of the EA-7 DC EnCon are located in portions of the Property slated for future redevelopment and are currently covered by a minimum of two feet of clean soils. The two-foot point of compliance for the green space areas within the EA-6 and EA-7 DC EnCons containing soil with COC concentrations above applicable VAP soil direct contact standards must be monitored and maintained. Maintenance of the parking lot/drives and/or future building slabs used as engineering controls is required to maintain compliance with applicable standards. Monitoring and maintenance requirements are discussed in Sections 5.0 and 6.0.

The EA-6 and EA-7 DC EnCons are shown on Figure 3 and further described in the corresponding land surveys found as Attachments C and D.

### **3.3 Remedial Monitoring**

Remedy monitoring under this Plan will evaluate the effectiveness of each installed engineering control (EnCon) including the VMS and use of the hardscapes, landscaping and parking lots for maintaining compliance with the applicable standards. Monitoring is further discussed in Section 5.1 of this document.

#### 4.0 APPLICABLE STANDARDS SUBJECT TO THE O&M PLAN

The O&M Agreement for the Property supports the implementation of engineering controls installed at the Property to mitigate potential exposures from vapor intrusion and direct contact. The potential exists for COCs to emanate from subsurface media into on-Property structures within EU-1 and therefore, any building within EU-1 will be constructed such that:

1. the first floor use is limited to open air parking to provide a venting barrier between underlying soils/groundwater and the enclosed commercial spaces; or
2. a VMS will be installed beneath the floor of the building.

Without engineering controls (e.g., a VMS), soil and groundwater at the Property contains concentrations of volatile organic compounds (VOCs) which contribute to exceedances of the hazard and risk goals for the soil to indoor air and groundwater to indoor air pathways, based on conservative, Property-specific indoor air screening levels and standards. The Property-specific screening levels and standards used to assess the indoor air pathway were developed in accordance with the May 2010 Ohio EPA guidance document *Sample Collection And Evaluation Of Vapor Intrusion To Indoor Air For Remedial Response And Voluntary Action Programs* (Indoor Air Guidance) as documented in the *Property-Specific Risk Assessment of the Oakley North Redevelopment Property* (Hull Document No. CIN027.200.0024, October 2013; provided as Appendix D to the Remedial Activities Documentation Report), using the U.S. EPA advanced soil spreadsheet adaptations of the Johnson & Ettinger model for vapor intrusion. The evaluation was conducted using conservative input parameters recommended by Ohio EPA in the Indoor Air guidance, including Ohio EPA values for a slab-on-grade commercial/industrial structure of default size, exposure parameters and model default values for properties associated with the most permeable of the Property-specific vadose zone soil types (i.e., silt loam).

An institutional control, the AUL on building occupancy was established by the Environmental Covenant that requires either installing a remedy that eliminates indoor air vapor intrusion exposure to COCs in soil or groundwater in excess of applicable standards, or having a certified professional demonstrate to Ohio EPA that the Property complies with applicable standards without further remedial activity for the pathway of vapor intrusion to indoor air exposure.

The Property-Specific Risk Assessment (PSRA) shows that, following implementation of the institutional and engineering controls, the Property complies with the applicable direct contact and soil/groundwater-to-indoor air standards for both the Commercial/Industrial Worker and Construction/Excavation Worker receptor populations.

## 5.0 EVALUATING THE EFFECTIVENESS OF THE REMEDIAL ACTIVITIES

### **5.1 Purpose and General Description of the Activities to Evaluate the Effectiveness of the Remedial Activities**

#### **5.1.1 Vapor Mitigation Systems**

The VMS will be inspected periodically throughout construction by the certified vapor barrier installer and a designated inspector. In order to demonstrate the appropriate installation and effectiveness of the vapor barrier, a smoke test will be conducted during the installation period of the vapor barrier. Smoke is introduced beneath the vapor barrier that displays any leaks or breaks in puncture/seam areas throughout the vapor barrier. Once all leaks have been identified, properly sealed, and no additional smoke can be seen emanating from beneath the vapor barrier; the final outer bond layer is applied which will adhere to the poured concrete, and the vapor barrier is finalized. Any needed repairs will be made before construction can proceed. A vapor barrier smoke test certification form will be completed by the installer and the designated inspector. An example of this form is included in Appendix F. Following installation, a certified professional will provide a Certification Report that documents the VMS has been installed for the unit in accordance with the criteria of this Plan. The certification report will be submitted to Ohio EPA under affidavit from the certified professional prior to scheduled occupancy of the unit. Approval by Ohio EPA must be received, pursuant to the AUL on building occupancy, prior to the occupancy of the unit or building. Occupancy has been defined as the official opening date of the business.

The VMS remedy is anticipated to remain effective as long as the vapor barrier and venting system is in place. Consequently, the VMS must be inspected routinely (at least annually) in accordance with this Plan to ensure that it continues to prevent exposure of property inhabitants to volatile vapors. The inspection will include visual observation of the vent risers and turbines to ensure their integrity and functionality. The floor slab will also be inspected, as practical, to look for signs of cracking, subsidence, structural defect, or visible slab repair work, which could signify potential issues with the performance and integrity of the sub-slab venting and barrier.

#### **5.1.2 Direct Contact Engineering Controls**

The DC EnCon areas will be visually inspected annually. A component of the Property remedy includes the use of elements of redevelopment to provide physical barriers to preclude direct contact with surface soils at the Property. These elements include structures, landscaping, hardscaping and parking lots. These DC EnCon areas will require annual inspections to ensure the features remain intact and document any conditions that may compromise the integrity of the DC EnCon. Conditions which may compromise the integrity and performance of the DC EnCon include breaks, substantial cracks, holes, subsidence or other detriment leading to the deterioration of the DC EnCons.



Any problems identified during the annual inspection will be addressed in accordance with Section 8 of this Plan.

## **5.2 Monitoring Activities**

The monitoring and inspections requirements discussed below must be conducted per unit as indicated, prior to March 1<sup>st</sup> of each year (excluding the year of installation). Results of inspections must be documented on the Appendix E reporting forms. An annual monitoring report must be submitted to Ohio EPA prior to March 1. In the event that degradation or penetration of the protective vapor barrier or vent risers has taken place, appropriate repairs must be made in accordance with this plan. Similarly, if monitoring shows degradation of the EA-6 and/or EA-7 DC EnCon areas, appropriate repairs must be made in accordance with the Plan.

### **5.2.1 Vapor Mitigation Systems**

#### **Building Slabs and Vapor Barrier Visual Inspection**

A designated person must inspect the building slabs at least annually. Particular attention must be paid to areas where potential penetration of the slab and vapor barrier is evident or likely. If disturbance or potential penetration of the vapor barrier is found, the contingency plans described in Section 8.3 for planned or unplanned VMS disturbances should be followed and appropriate response actions (such as repair, restoration, or venting) must be implemented. If adequate repair or restoration of the VMS cannot be feasibly made, the potential for exposure from vapor intrusion must be evaluated as described in Section 8.4 and may include system activation if passive controls are determined to be inadequate to maintain protection.

#### **Ventilation System**

Vent risers at the property must also be maintained and inspected annually to ensure their stability, integrity, and continued operation so that sub-slab vapors are vented through the roof with no leaks to the interior of the building. Vent risers are capped with wind-driven turbines. These turbines should be maintained and inspected to ensure they rotate freely. If turbine components require grease or oil to ensure rotation, care should be taken to avoid using a product(s) that contain volatile components that could impact vent sampling, should vent sampling ever be deemed necessary in the future to evaluate sub-slab conditions or as part of an alternate remedy demonstration in the event an irreparable breach or disturbance of the VMS occurs.

Additionally, no HVAC air handler intakes should be located or installed within 10 feet of the vent riser discharge points.

## **5.2.2 Engineering Controls**

### **Monitoring of the EA-6 and EA-7 DC EnCons**

Clean soils currently covering the EA-6 and EA-7 DC EnCons will be visually inspected on a semi-annual basis. The purpose of the visual inspection is to note areas of erosion that could compromise the thickness of the cover (i.e., a minimum of two feet). The soil covers will be surveyed on at least three points annually to confirm that the soil cover achieves an elevation that will result in a minimum of two feet clean soil cover over the engineering control areas. Monitoring of the soil covering will continue until such time that hardscape is constructed over the engineering control areas. The scheduled inspections will be conducted in October and May. Surveys will be conducted in October.

Following their construction, parking lots, drives and/or building slabs on the EA-6 and EA-7 DC EnCons will be visually inspected on an annual basis. The purpose of the visual inspections is to note activities that may affect the structural integrity of the engineering control and to note the presence of any areas that indicate the integrity of the engineering controls has been compromised. For example, the inspection will evaluate the presence of any material breaks, holes, subsidence, or other detriment leading to the deterioration of the engineering control. The scheduled annual inspections will be conducted in October and will be documented in an annual report each March 1<sup>st</sup> on the inspection form provided in Appendix F of this O&M Plan. Any problems identified during a scheduled annual inspection shall be addressed in accordance with Sections 6.2 and 7.0 of this O&M Plan.

### **Monitoring of the Point of Compliance on the Green Space Areas in the EA-6 Direct Contact Engineering Control Areas and the EA-7 DC EnCons**

Compliance with applicable standards requires the maintenance of the two-foot point of compliance for the green space areas in the EA-6 and EA-7 DC EnCons. Annual inspections will be conducted to visually examine the soil consolidation area for any significant changes to the grade. The scheduled annual inspections will be documented in an annual report each March 1<sup>st</sup> on the inspection form provided in Appendix F of this O&M Plan. Any problems identified during a scheduled annual inspection shall be addressed in accordance with Sections 6.2 and 7.0 of this O&M Plan. In the event that a significant change to the grade of the green space areas in the EA-6 and/or EA-7 DC EnCons is desired in the future, a detailed plan will be submitted to Ohio EPA for approval before conducting the modification, and this O&M Plan and subsequent Annual O&M Reports will be amended as needed.

## **5.3 Monitoring Schedule**

All visual inspections for EnCons, including the DC EnCons and VMS, will take place annually prior to March 1 of each year. Visual inspections of the clean soils covering the EA-6 and EA-7 DC EnCons will be conducted in May and October; surveying of the clean soil cover will be conducted in October. If annual

inspections identify issues or problems with the EnCons, additional unscheduled inspections will be required to verify adequate repairs were implemented to correct any noted deficiencies related to the EnCons.

#### **5.4 Reporting**

The results of the annual inspections for all engineering controls will be summarized in an Annual O&M Report to be submitted to Ohio EPA by March 1 of each year.

#### **5.5 Termination Criteria**

As long as the use of engineering controls including DC EnCons and VMSs are needed to achieve compliance with the Standards, annual inspections and reporting of the engineering controls will be required. Additional requirements for termination criteria are outlined in Section 11.3.

## **6.0 OPERATION AND MAINTENANCE OF THE REMEDIAL ACTIVITIES SUBJECT TO THE O&M PLAN**

The Property relies on the following passive remedial activities and engineering controls to maintain compliance with the applicable VAP standards for the Property:

1. Vapor Mitigation Systems; and
2. Direct Contact Engineering Controls
  - a. Parking Lot
  - b. Landscape and Hardscape

### **6.1 Operation Tasks and Schedules**

The VMSs and DC EnCons are passive systems; therefore, no mechanical equipment or manual activities are needed to operate the remedies. The VMS consist of the vapor barrier, vent pipes and wind turbines. The system will operate (i.e., remain intact) at all times and under all conditions as an engineering control.

The DC EnCons are elements of the redevelopment that provide physical barriers to mitigate direct contact with soil at the Property.

### **6.2 Maintenance Tasks and Schedules**

#### **6.2.1 Maintenance of Vapor Mitigation Systems**

The remedy consists of maintaining a VMS under all buildings constructed within the Property boundary shown in Figure 2. Maintenance tasks for each VMS will be dependent on the findings in the annual inspections. If breaches or penetrations that may result in vapor intrusion are identified, they will be repaired within the timeframes outlined below. The repair method will be specific to the size and location of the exposure and will be evaluated at the time of discovery.

#### **6.2.2 Maintenance of the EA-6 DC EnCon and the EA-7 DC EnCon**

All problems with the engineering controls noted during inspections will be repaired to meet the appropriate specifications. Repairs may include concrete/asphalt sealant or patching, or equivalent technology for restoration. A Risk Mitigation Plan (RMP) (Hull Document No. CIN027.200.0007, November 2013 – revised July 2014) was prepared to comply with OAC 3745-300-11 and is provided as Appendix F of the O&M Plan (Exhibit 5, Attachment 2 to the CNS). If removal and replacement of the engineering control is necessary, the work will be monitored and documented in accordance with the requirements for excavation on the Property as provided in this O&M Plan and the RMP.

Applicable provisions of the RMP will be followed to limit the risks posed by excavation activities. The “Documentation of Excavation Activities” form (contained in Appendix E) will be completed prior to

performing excavation activities in the EA-6 DC EnCon and the area containing spent foundry sand and slag surrounding and including the EA-7 DC EnCon (refer to Figure 3). This form must describe the planned excavation activities and provide instructions for soil handling. Any deviations from the planned activities must also be documented on the form. The excavation work must be verified and approved by the Property owner and evidenced by signature of the Property Owner on the form.

The following procedures shall be followed during any activity that may result in a breach of any engineering control:

1. Soil excavated from below the engineering control must either be placed back beneath the engineering control, be properly disposed off-Property, or be placed below the applicable point of compliance (two feet below grade) in accordance with all applicable federal, state, and local regulatory standards and procedures. The soil may need to be characterized prior to disposal at a landfill. The disposal facility location or placement location on-Property shall be noted in the Property O&M records included in the annual updates to Ohio EPA.
2. The contractor will conduct excavation work using the appropriate safety practices as described within the RMP and in accordance with all applicable federal, state and local regulatory standards and procedures.
3. Prior to completing excavation work, the contractor will provide a surface finish that matches the engineering control removed to perform the work.
4. Upon completion, the work shall be inspected by the Property owner, and the activities recorded on the Documentation of Excavation Activities form. Documentation of the completion of the work and restoration of the engineering control will be provided per the requirements of this O&M Plan.

Unscheduled inspections to assess the condition of the engineering control will be conducted following annual inspections that identified problems with the engineering control. During an unscheduled inspection, the problems identified during the annual inspections will be evaluated and documented on the inspection form provided in Appendix F. Any problems identified during an unscheduled inspection shall be addressed using methods presented above.

### **6.2.3 Maintenance of the Point of Compliance on the Green Space Areas in the EA-6 DC EnCon and the EA-7 DC EnCon**

The two-foot cover may be maintained through one of the following options:

1. Maintain current grade consistent with the elevations demonstrated in the Remediation Completion Report for the Property shown on Figure 3.

2. Import suitable material to raise grade above the current elevation shown on Figure 3 of the Remediation Completion Report. Suitable material shall be virgin material quarried from a natural source or other material demonstrated through sampling and analysis to comply with the applicable standards outlined in the Remediation Completion Report.

The following procedures shall be followed during any activity which includes intrusive activities below a depth of two feet within the green space areas of the EA-6 DC EnCon and the EA-7 DC EnCon:

1. Soil excavated from below the upper two feet of the green space areas must either be placed back at a depth greater than two feet below final grade or be properly disposed off-Property, in accordance with all applicable federal, state, and local regulatory standards and procedures. The soil may need to be characterized prior to disposal at a landfill. Final disposition of the soil (i.e., disposal facility location or placement location on-Property) shall be noted in the Property O&M records included in the annual updates to Ohio EPA.
2. Fill material brought on the Property to replace on-Property soil removed from the upper two feet of the soil consolidation area must meet applicable hazard and risk goals for the commercial/industrial and construction/excavation worker across all complete exposure pathways at the Property pursuant to the PSRA.
3. The contractor will conduct excavation work using the appropriate safety practices as described within the RMP and in accordance with all applicable federal, state and local regulatory standards and procedures.
4. Upon completion, the work shall be inspected by the Property owner to insure applicable standards are maintained at the Property and the activities recorded on the Documentation of Excavation Activities form in Appendix F.

Unscheduled inspections to assess the condition of the engineering control will be conducted following annual inspections that identified problems with the engineering control. During an unscheduled inspection, the problems identified during the annual inspections will be evaluated and documented on the inspection form provided in Appendix E of this O&M Plan. Any problems identified during an unscheduled inspection shall be addressed using methods presented above.

### **6.3 Breach of the Vapor Barrier or Venting**

In the event that the vapor barrier or venting is breached or damaged, repairs must be made within 30 days from the cessation of the activity causing the disturbance. In the case of activities not initiated by the Property owner or their representative, repair must take place within 30 days of identifying the disturbance or potential performance issue.

## **7.0 ADJUSTMENTS TO NORMAL OPERATION AND MAINTENANCE**

In the event that annual inspections indicate repairs to the DC EnCons or VMS are needed, the repairs will be implemented within thirty (30) days of discovery. See also section 8.3 of this plan. Additionally, Section 8.0 of the Plan discusses the possibility of adding an active-venting feature to the VMS in the event that inspections identify that the passive system is ineffective.

## **8.0 IDENTIFYING AND ADDRESSING POTENTIAL PROBLEMS WITH THE REMEDIAL ACTIVITIES SUBJECT TO THE O&M PLAN**

### **8.1 Potential Problems**

The VMS remedy may encounter the following problems:

1. Breach or puncture of the vapor barrier under building slabs during utility and foundation excavations conducted as part of site redevelopment or renovation;
2. Disturbance of the vapor barrier by construction crews unfamiliar with this O&M plan; for instance, emergency repair to water or gas lines;
3. Disturbance of the vent risers;
4. Installation of air intakes on roofs within 10 feet of the vent riser; and
5. Impedance to free rotation of the wind turbines.

The DC EnCons remedy may encounter the following problems:

1. Erosion, animal digging/burrowing in landscaped areas;
2. Settlement or subsidence of hardscapes and parking lots; and
3. Cracking and deterioration of asphalt and/concrete.

### **8.2 Means of Detecting Potential Problems**

The potential problems indicated above would be identified as part of the regularly scheduled monitoring and inspections planned for the Property in Section 5. Additionally, Property maintenance personnel familiar with this Plan will typically learn of emergency repairs which disturb the vapor barriers or vent risers soon after they occur.

#### **8.2.1 Notification of Hazards**

When contractors or employees are engaged in construction/excavation activities that are reasonably expected to breach or penetrate the vapor barrier, disturb vent risers, or change HVAC intakes, the Property owner should take the following precautions and provide each contractor with the following information relevant to the property:

1. Notification that breaching the vapor barrier or vent risers at the property may allow the infiltration of harmful vapors which could cause adverse health effects to building occupants;



2. Notification that installation of an HVAC air intake within 10 feet of a vent riser discharge point may allow the introduction of harmful vapors which could cause adverse health effects to building occupants.
3. A copy of information provided in Sections 8.0 through 8.3.3 of this plan. The contractor must share this information with any subcontractor who is reasonably expected to impact the vapor mitigation system.
4. Contractors, their subcontractors, and employees must be informed of and follow the precautions found in Section 8.3 of this plan.

### **8.3 Contingency Plans**

#### **8.3.1 Unplanned Disturbance of Vapor Mitigation System**

In the event that the VMS is breached and the potential exists for intrusion of harmful vapors to indoor air, temporary measures should be taken to mitigate exposure to harmful vapors. These measures should be implemented at the start of a planned disturbance, or within seven (7) days of discovery of an unplanned disturbance. These measures should include temporary venting of the indoor space or temporary over-pressurization of the enclosed space.

In the event that vent risers are breached (broken, cracked, disconnected, etc.) in a manner that allows them to discharge to indoor air, the breach should be temporarily sealed with impermeable materials (such as plastic and high quality duct tape) until permanent repair can be made. When relying on these temporary measures to prevent exposure, they should be inspected at least weekly to ensure their continued effectiveness.

In the event that a vapor barrier disturbance has the potential to expose inhabitants to harmful vapors, the disturbance must be repaired within 30 days from the cessation of the activity causing the disturbance. In the event of actual damage to the barrier, repair must occur within 30 days of discovery, consistent with section 7.0 of this plan. The certified vapor barrier installer should be contacted prior to initiating repair work to coordinate sub-slab vapor barrier repair.

#### **8.3.2 Procedures for Planned Disturbance of Vapor Mitigation System**

For commercial and industrial buildings, work requiring penetration of the concrete slab is likely to be necessary at some point during the building lifespan. Building maintenance personnel should be familiar with this Plan, and made aware of the need to avoid or prevent penetrations through the slab when possible. However, if sub-slab work or other improvements resulting in potential disturbance of the sub-slab vapor barrier/passive venting system should be necessary, the certified vapor barrier installer should be notified of such work prior to initiation.

Intrusive work through the slab requires close coordination with the certified vapor barrier installer to ensure the slab removal and replacement plan is sufficient to complete vapor barrier repair work. Prior to initiating slab removal work, including drilling, saw-cutting or any other work which requires penetration through the slab, the certified vapor barrier installer must be contacted to review the slab removal plan and coordinate vapor barrier/passive venting system repair work. This may require removal of additional concrete beyond the cut/removal limits estimated for construction work, to allow for vapor barrier repair and overlap with the existing remaining barrier. For buildings where a utility fill space exists between the vapor barrier elevation and the bottom of floor slab, vapor barrier repair work may not be necessary, however it is recommended to contact the certified vapor barrier installer in advance of any slab penetration work in the event the barrier is encountered at shallower depths than anticipated.

Vapor barrier repair work typically involves replacing the damaged or removed section of barrier with a new section, and overlapping the edges of the remaining barrier. Note that the spray-applied layer of the barrier typically requires 24 hours to cure, after which a smoke test is performed and any identified leaks are sealed.

If sections of the sub-slab passive vent laterals lie within the work area, partial vent lateral removal and replacement may also be necessary if damaged during slab work. The certified vapor barrier/passive venting system installer shall inspect and replace vent sections as deemed necessary.

#### **8.4 Implementing Active Systems**

Based on the requirements of OAC 3745-300-11, the Plan will be used to implement the remedial activities needed for the Property to achieve applicable standards. In accordance with the Plan, if cracking or displacement of the floor slab is identified and cannot be feasibly repaired to maintain the integrity of the VMS, the following options can be considered:

1. Demonstration that the building operates under positive pressure; or
2. Collection of indoor air samples to demonstrate that COC concentrations in indoor air meet VAP applicable risk standards. Indoor air sampling would be collected and analyzed twice per year for a period of at least two years.

If passive controls cannot induce adequate pressure differentials to maintain protections, or if COCs in indoor air may exceed VAP applicable risk standards, the Owner will modify the passive system operate actively through the addition/operation of a fan or blower.

## 9.0 RECORD KEEPING

The following documents must be maintained to memorialize the installation and performance of the remedy. Records must be submitted to Ohio EPA in accordance with Section 10 of this Plan. Records will be retained for a minimum of 10 years, to coordinate with the record keeping requirements of a Certified Professional related to NFA Letter records, as described in the Ohio Revised Code (ORC) Section 3746.11(D) and OAC 3745-300-05(I). The Owner must provide Ohio EPA a time period of 45 days within which Ohio EPA may notify the Owner, by Certified Mail, of its intention to acquire and retain such documents (Record Acquisition and Retention Notice). If Ohio EPA notifies the Owner, Ohio EPA shall arrange for the procurement of such documents from the Owner within a time period not to exceed 45 days from the date of receipt of the Record Acquisition and Retention Notice.

The Owner must keep all documentation regarding activities conducted under this Plan for a minimum of ten (10) years from the termination date of the event, including:

### **Vapor Barrier Smoke Test Certification Report**

To be completed following vapor barrier installation and successful completion of the smoke test, and submitted prior to building occupancy under VAP certified professional affidavit as part of the Certification Report, as described in sections 2.0 and 5.1 of this plan.

### **Annual Operations & Maintenance Report**

To be completed annually, prior to March 1, with the following forms attached as applicable:

1. Documentation of Excavation Activities (to be completed any time excavation work is completed in the Property).
2. Inspection Form (to be completed annually to document the condition of direct contact EnCons).
3. Vapor Mitigation System Inspection Form (to be completed annually).
4. Vapor Mitigation System Disturbance Form (to be completed any time the vapor barriers are disturbed).

Example report forms are provided in Appendix E. Example O&M and inspection forms, to be included with the submittal requirements, are included in Appendix F of this plan.

## 10.0 - REPORTING ON OPERATION AND MAINTENANCE PLAN ACTIVITIES

The Owner will submit a report annually to Ohio EPA, under affidavit, on or before March 1 of each calendar year. The report will include the following:

1. Results from all remedy effectiveness evaluation activities;
2. A demonstration of the performance of all remedial activities subject to the O&M plan;
3. A description of the activities, if any, performed under contingency plans identified in Section 8.3 of this report;
4. The documents described in section 9.0, as applicable to the annual O&M report;
5. Confirmation that the remedial activities remain necessary to achieve or maintain applicable standards at the property, or verification conducted in accordance with OAC 3745-300-11 that the remedial activities are no longer needed for the property to comply with applicable standards.

Example reporting documents are included in Appendix E.

Furthermore, the Owner will provide additional reports when required by this Plan. Sections 2.0, 5.1 and 9.0 require remedy Certification Reports. Section 5.2 requires remedy monitoring reports and, if needed, a corrective measures proposal. Refer to these sections for the needed content and timing of the additional reporting requirements.

## **11.0 MODIFICATION OR TERMINATION OF THE OPERATION AND MAINTENANCE PLAN**

This Plan includes provisions for the modification or cessation of the remedial activities. It is possible that the remedy may not be needed in the future with no significant risk to public health and the environment due to changes at the subject property. All O&M Plan activities may be terminated when they are no longer necessary for the Property to comply with the applicable standards, in accordance with OAC 3745-300-11.

As redevelopment progresses, additional buildings or units constructed on the Property (Figure 2) may comply with the activities outlined in this Plan rather than creating a separate plan. Submittal and approval of the Certification Reports, on a unit by unit basis, will memorialize compliance with the terms of the Plan. It is also possible that alternative remedies (such as active venting with fans) may be considered in response to breaches of any vapor barrier, other system changes, or if it is determined that the current remedy is not effective at meeting applicable standards for indoor air.

The following sections outline the data and conditions necessary before remedial activities may be discontinued and the criteria which must be met before this Plan may be modified to incorporate additional units that rely on vapor mitigation systems.

### **11.1 Data and Information Collected**

Additional data to be collected in conjunction with modification or termination of a VMS for a unit under this plan may include the following:

1. Changes in anticipated land use;
2. Soil Gas/Indoor Air sampling to supplement data collected under this Plan.

### **11.2 Criteria for Modification**

In the event that new unit or additional building construction occurs on the Property, or the activities outlined in this Plan must be modified to remain protective of building occupants, Owner will propose modifications to this plan as appropriate. Owner may submit an addendum, such as the Certification Report, consisting of modified figures and sections that describe the new building or unit location and installed system, to modify this Plan. The Plan will be considered modified as of the date Ohio EPA approves the addendum.

### **11.3 Criteria for Termination**

To terminate this O&M Plan, all of the following conditions must be met:

1. Soils within the EA-6 DC EnCon and/or the EA-7 DC EnCon must meet applicable VAP standards for commercial/industrial land use and construction/excavation activities;
2. Applicable indoor air standards must be met for commercial/industrial land use across the Property without the need to maintain engineering controls; and
3. The Owner must submit a written request to terminate the O&M Plan in accordance with the termination provisions of the O&M Agreement and obtain written approval from Ohio EPA prior to O&M Plan termination.

It should be noted that demolition or razing all or a portion of a building on the subject property negates the need for a vapor barrier engineering control in that area. However, any new building(s) constructed in its place is subject to the AUL on building occupancy under the environmental covenant. This will likely require installation of a VMS for any building for human occupancy on the Property shown on Figure 2. The VMS is to be maintained as an engineering control under this Plan.

## 12.0 REFERENCES

A variety of technical documents and publications were referred to during the course of this project. Some of the references consulted are presented below. Referenced documents and publications may or may not have been reviewed in their entirety. The guidelines and procedures presented in the documents and publications referenced have not been strictly adhered to unless stated otherwise.

Hull & Associates, Inc. *Phase I Property Assessment for Intermec Technologies Corporation and Kirk & Blum Property*. Hull Document No. VHI001.200.0010. October 2010.

Hull & Associates, Inc. *Phase II Environmental Property Assessment of the Oakley North Property*. Hull Document No. USR001.200.0005. January 2011.

Hull & Associates, Inc. *Phase I Property Assessment Update for the Oakley North Redevelopment Property*. Hull Document No. CIN027.300.0003. October 2013.

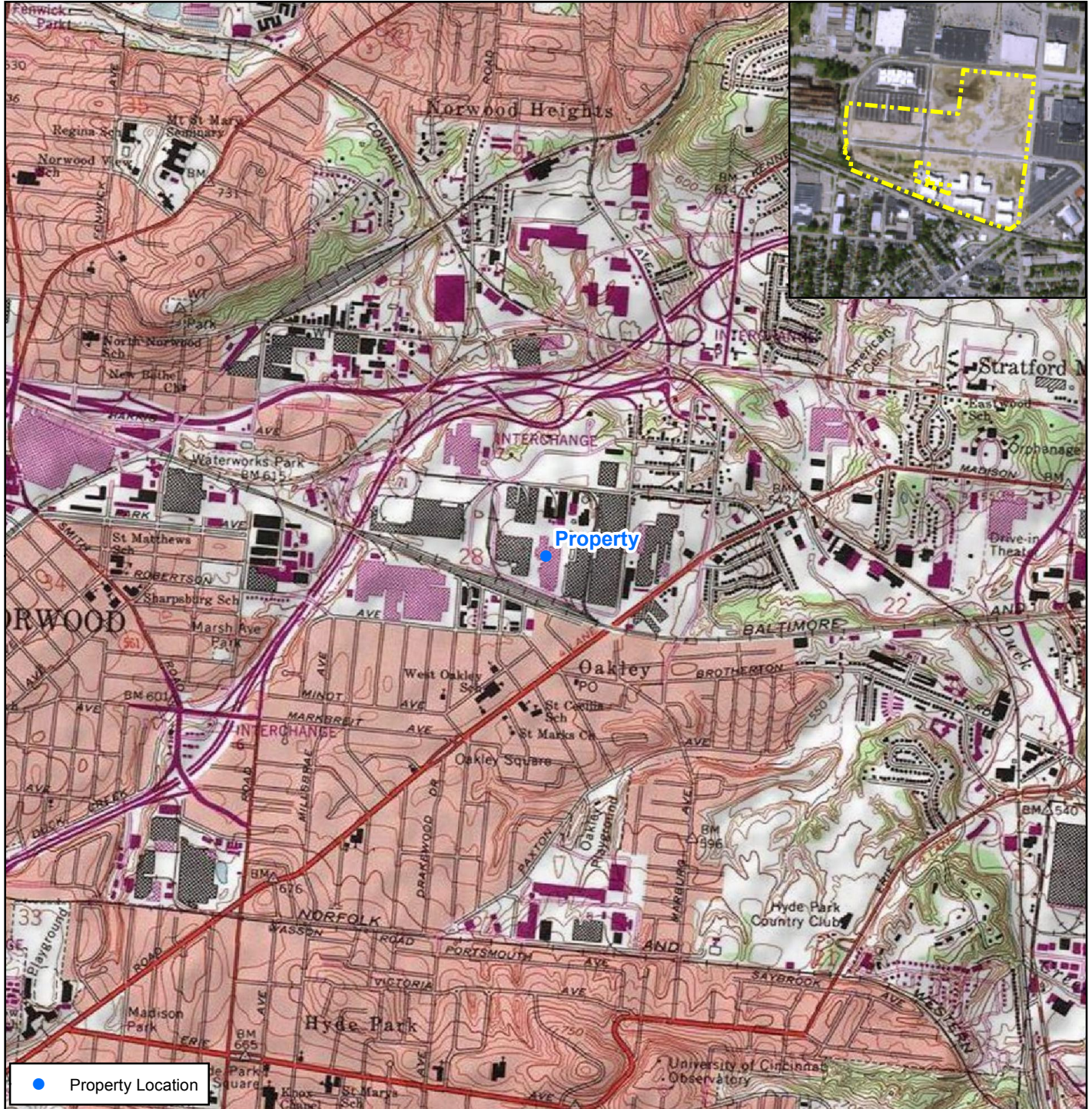
Hull & Associates, Inc. *Remedial Activities Documentation Report for the Oakley North Redevelopment Property*. Hull Document No. CIN027.300.0002. October 2013.

Hull & Associates, Inc. *Property-Specific Risk Assessment the Oakley North Redevelopment Property (Appendix D to the Remedial Activities Documentation Report)*. Hull Document No. CIN027.200.0024. November 2013.

Hull & Associates, Inc. *Risk Mitigation Plan for the Oakley North Redevelopment Property*. Hull Document No. CIN027.200.0007. October 2013.

## FIGURES

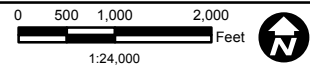




● Property Location



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Quad: Cincinnati East

Source: The topographic map was acquired through the USGS Topographic Map web service. Topo quadrangle date not provided.

The aerial photo in the inset was acquired through the ESRI Image web service. Aerial photography dated 2012.



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Operations and Maintenance Plan Version 4  
 Oakley North Redevelopment Project

### Property Location Map

4701 Marburg Avenue  
 Cincinnati, Hamilton County, Ohio

Date:

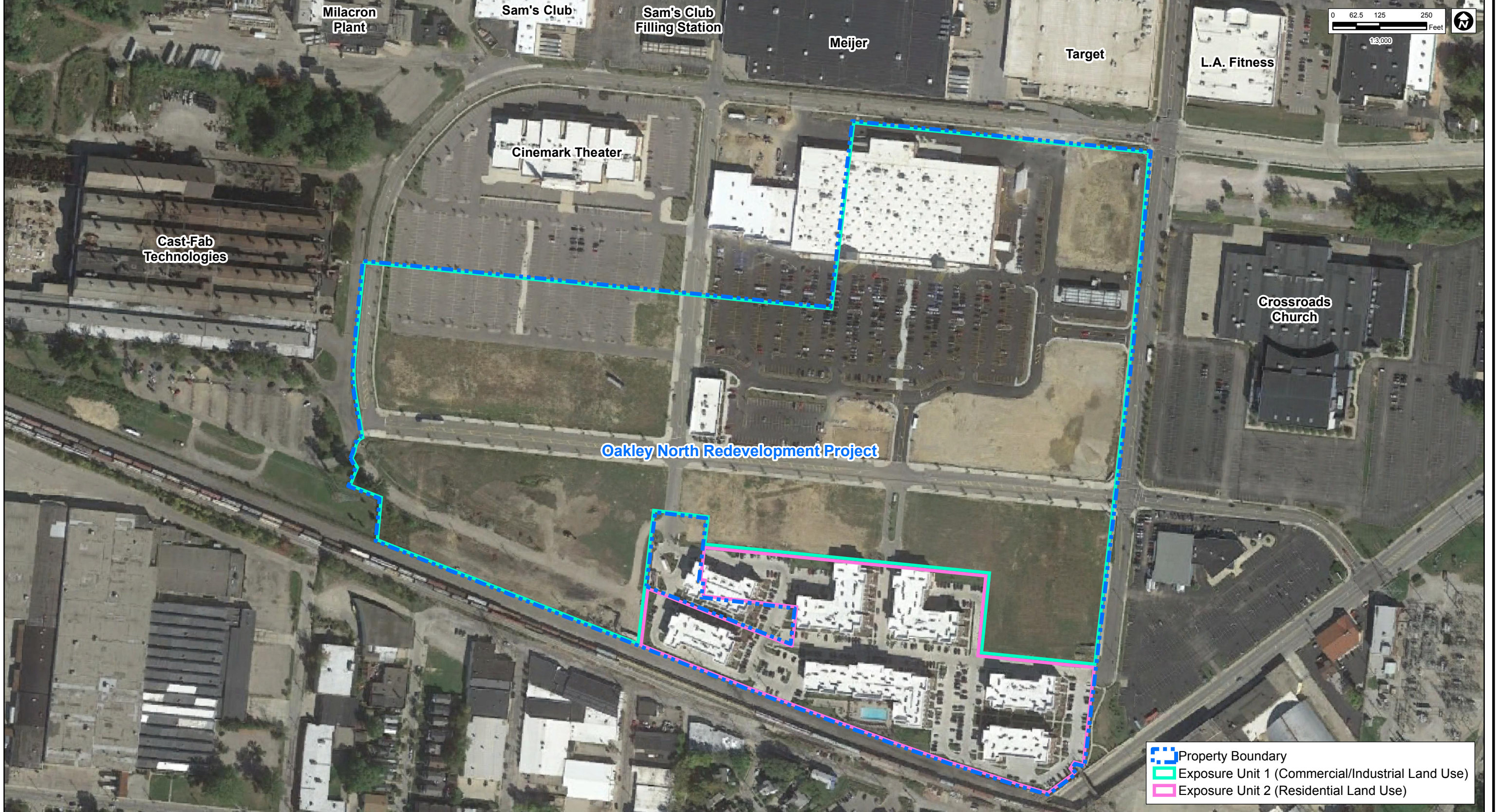
February 2016

File Name:  
 MLY004\_01\_Fig01\_PropLocMap.mxd

Edited: 2/16/2016 By: jslifer

Figure

1



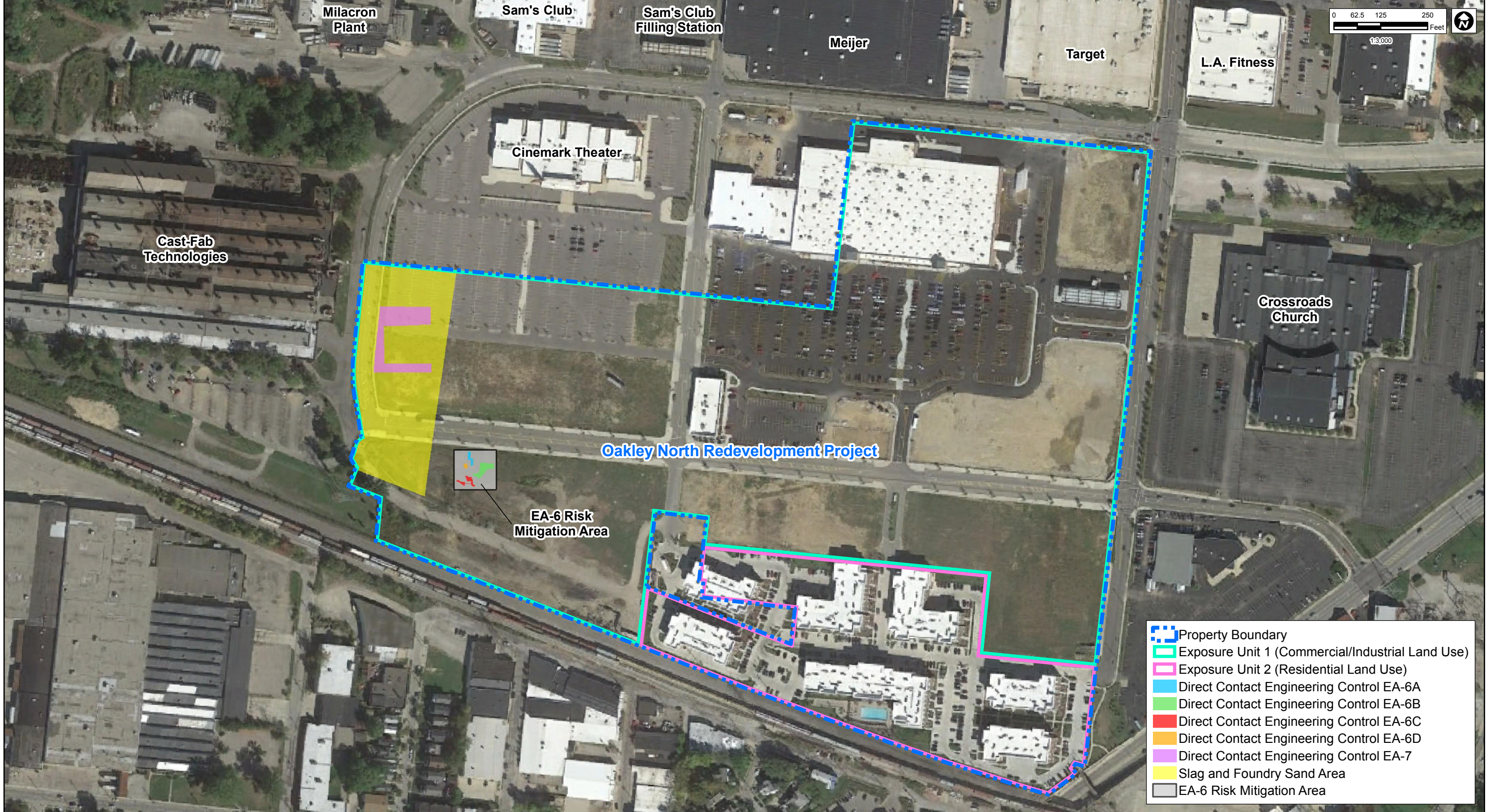
- Property Boundary
- Exposure Unit 1 (Commercial/Industrial Land Use)
- Exposure Unit 2 (Residential Land Use)

4770 Duke Drive  
Suite 300  
Mason, Ohio 45040

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February 2016	
Operations and Maintenance Plan Version 4 Oakley North Redevelopment Project	
<b>Property Plan</b>	<b>Figure 2</b>
4701 Marburg Avenue City of Cincinnati, Hamilton County, Ohio	



- Property Boundary
- Exposure Unit 1 (Commercial/Industrial Land Use)
- Exposure Unit 2 (Residential Land Use)
- Direct Contact Engineering Control EA-6A
- Direct Contact Engineering Control EA-6B
- Direct Contact Engineering Control EA-6C
- Direct Contact Engineering Control EA-6D
- Direct Contact Engineering Control EA-7
- Slag and Foundry Sand Area
- EA-6 Risk Mitigation Area



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February 2016

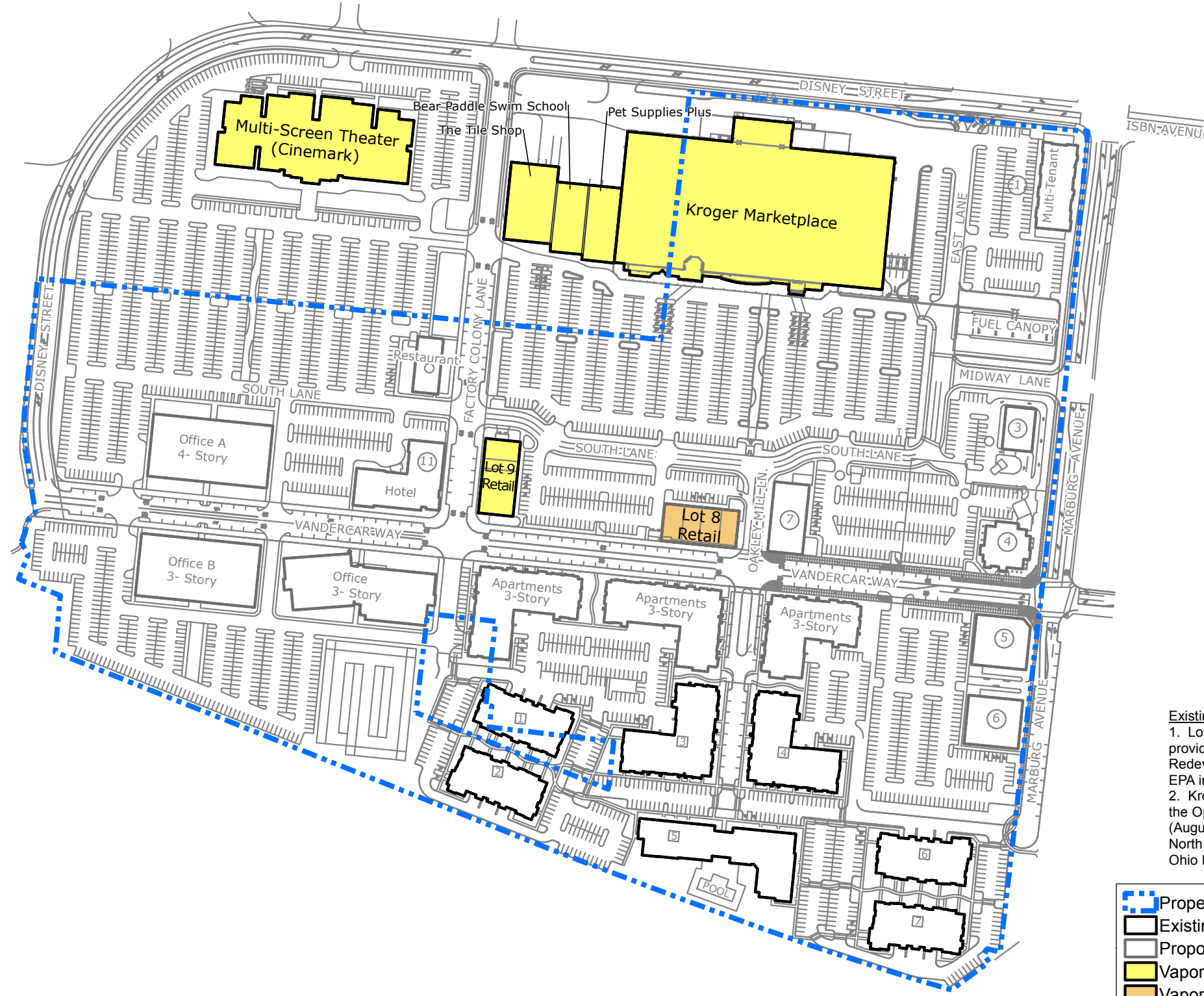
Operations and Maintenance Plan Version 4  
Oakley North Redevelopment Project

Figure

**Aerial Map**

**3**

4701 Marburg Avenue  
City of Cincinnati, Hamilton County, Ohio



**Existing Vapor Mitigation Systems:**  
 1. Lot 9 Retail Building (Opened August 31, 2015) - VMS documentation was provided in the Operation and Maintenance Plan Version 3 for the Oakley North Redevelopment Property (August 2015). The Plan was approved by the Ohio EPA in a letter dated August 28, 2015.  
 2. Kroger (Opened September 10, 2015) - VMS documentation was provided in the Operation and Maintenance Plan Version 2 for the Milacron Plant 5 Property (August 2015) and the Operation and Maintenance Plan Version 3 for the Oakley North Redevelopment Property (August 2015). Both Plans were approved by the Ohio EPA in letters dated August 28, 2015.

- Property Boundary
- Existing Building
- Proposed Future Development
- Vapor Barrier/Passive Venting System (Complete)
- Vapor Barrier/Passive Venting System (Building Under Construction)



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February 2016	
Operations and Maintenance Plan Version 4 Oakley North Redevelopment Project	
<b>Proposed Redevelopment Plan</b>	
3025 Disney Street Cincinnati, Hamilton County, Ohio	
Figure	<b>4</b>

## **APPENDIX A**

### Legal Description and Plat of Property

**C.O.R.F. BOUNDARY LEGAL**  
**Rev. July 1, 2014**

Situate in Section 28, Town 4, Fractional Range 2, Miami Purchase, City of Cincinnati, State of Ohio and being part of a parcel conveyed to USS Realty, LLC. by deed recorded in Official Record 11973, Page 1921, all references herein being to the records located in the Hamilton County, Ohio Recorder's Office and being more particularly described as follows:

Beginning in an Iron Pin found in the intersection of the westerly right of way line of Marburg Avenue (60' street) and the northerly right of way of Madison Road (generally, an 80' street with varying R/Ws); thence

In said westerly right of way line of Marburg Avenue, North 06° 40' 30" East, 24.03 feet to an Iron Pin being the TRUE POINT OF BEGINNING of the C.O.R.F. Boundary herein described; thence the following 23 courses:

1. Leaving said westerly right of way line of Marburg Avenue and in said northerly right of way line of Madison Road, North 75° 17' 34" West, 25.94 feet to a point; thence
2. Continuing in said northerly right of way line of Madison Road, South 14° 42' 26" West, 8.15 feet to a point; thence
3. Continuing in said northerly right of way line of Madison Road, South 53° 20' 26" West, 6.61 feet to a point; thence
4. Continuing in said northerly right of way line of Madison Road, South 36° 31' 47" East, 17.89 feet to a point; thence
5. Continuing in said northerly right of way line of Madison Road, South 53° 28' 48" West, 94.04 feet to an Iron Pin found, said Iron Pin being in the northerly right of way line of a parcel conveyed to CSX Railroad by deeds recorded in Deed Book 953, Page 391 and deed Book 958, Page 6; thence
6. Leaving said northerly right of way line of Madison Road and in said northerly right of way line of CSX Railroad in a curve to the right having a radius of 3,755.83 feet and a delta angle of 1° 12' 02", an arc distance of 78.70 subtended by a chord which bears North 73° 49' 30" West, 78.70 feet to an Iron Pin found; thence
7. Continuing in said northerly right of way line of CSX Railroad, North 72° 02' 27" West, 197.73 feet to an Iron Pin found; thence
8. Continuing in said northerly right of way line of CSX Railroad in a curve to the right having a radius of 11,395.28 feet and a delta angle of 2° 55' 44", an arc distance of

582.52 feet subtended by a chord which bears North 69° 45' 37" West, 582.46 feet to an Iron Pin found; thence

9. Continuing in said northerly right of way line of CSX Railroad, North 68° 17' 45" West, 1,058.64 feet to an Iron Pin found, said Iron Pin being in a corner common to a parcel conveyed to JEB BBB Real Estate LLC by deed recorded in Official Record 11554, Page 1331; thence
10. Leaving said right of way line of CSX Railroad and in the line common to said JEB BBB Real Estate LLC, North 05° 16' 15" East, 113.64 feet to an Iron Pin found; thence
11. Continuing in said line common to JEB BBB Real Estate LLC, North 68° 17' 45" West, 90.06 feet to an Iron Pin found; thence
12. Continuing in said line common to JEB BBB Real Estate LLC, North 21° 42' 15" East, 52.79 feet to an Iron Pin found; thence
13. Continuing in said line common to JEB BBB Real Estate LLC in a curve to the right having a radius of 330.43 feet and a delta angle of 05° 17' 37", an arc distance of 30.53 feet subtended by a chord which bears North 28° 47' 38" West, 30.52 feet to an Iron Pin found in a corner common to a parcel conveyed to JEB BBB Real Estate LLC by deed recorded in Official Record 11936, Page 1661; thence
14. In the line common to said JEB BBB Real Estate LLC in a curve to the left having a radius of 85.00 feet, a delta angle of 19° 01' 35" and an arc distance of 28.23 feet subtended by a chord which bears North 20° 02' 26" East, 28.10 feet to an Iron Pin found; thence
15. Continuing in said line common to JEB BBB Real Estate LLC in a curve to the right having a radius of 45.00 feet, a delta angle of 50° 03' 20" and an arc distance of 39.31 feet subtended by a chord which bears North 30° 31' 55" East, 38.08 feet to an Iron Pin found in the westerly right of way line of Disney Street; thence
16. Continuing in said line common to JEB BBB Real Estate LLC and in said westerly right of way line of Disney Street, North 09° 14' 14" West, 113.10 feet to an Iron Pin found; thence
17. Continuing in said line common to JEB BBB Real Estate LLC and in said westerly right of way line of Disney Street in a curve to the right having a radius of 403.00 feet, a delta angle of 15° 00' 30" and an arc distance of 105.56 feet subtended by a chord which bears North 01° 43' 59" West, 105.26 feet to an Iron Pin found; thence

18. Continuing in said line common to JEB BBB Real Estate LLC and in said westerly right of way line of Disney Street, North 05° 46' 16" East, 260.88 feet to a point; thence
19. Leaving said line common to JEB BBB Real Estate LLC and said westerly right of way line of Disney Street, South 84° 15' 30" East, 1,254.38 feet to a point; thence
20. North 06° 40' 30" East, 503.00 feet to a Magnail found; thence
21. South 84° 15' 30" East, 800.42 feet to an Iron Pin found, said Iron Pin being in said westerly right of way line of Marburg Avenue; thence
22. In said westerly right of way line of Marburg Avenue, South 05° 06' 30" West, 527.65 feet to an Iron Pin found; thence
23. Continuing in said westerly right of way line of Marburg Avenue, South 06° 40' 30" West, 1,129.84 to an Iron Pin, said Iron Pin being the TRUE POINT OF BEGINNING of the C.O.R.F. Boundary herein described.

Excepting from property as described above, the following:

Beginning in an Iron Pin found in the intersection of the westerly right of way line of Marburg Avenue (60' street) and the northerly right of way of Madison Road (generally, an 80' street with varying R/Ws); thence

Leaving said westerly right of way line of Marburg Avenue and in said northerly right of way line of Madison Road, North 75° 17' 34" West, 25.94 feet to a point; thence

Continuing in said northerly right of way line of Madison Road, South 14° 42' 26" West, 8.15 feet to a point; thence

Continuing in said northerly right of way line of Madison Road, South 53° 20' 26" West, 6.61 feet to a point; thence

Continuing in said northerly right of way line of Madison Road, South 36° 31' 47" East, 17.89 feet to a point; thence

Continuing in said northerly right of way line of Madison Road, South 53° 28' 48" West, 94.04 feet to an Iron Pin found, said Iron Pin being in the northerly right of way line of a parcel conveyed to CSX Railroad by deeds recorded in Deed Book 953, Page 391 and deed Book 985, Page 6; thence



Leaving said northerly right of way line of Madison Road and in said northerly right of way line of CSX Railroad in a curve to the right having a radius of 3,755.83 feet and a delta angle of  $1^{\circ} 12' 02''$ , an arc distance of 78.70 subtended by a chord which bears North  $73^{\circ} 49' 30''$  West, 78.70 feet to an Iron Pin found; thence

Continuing in said northerly right of way line of CSX Railroad, North  $72^{\circ} 02' 27''$  West, 197.73 feet to an Iron Pin found; thence

Continuing in said northerly right of way line of CSX Railroad in a curve to the right having a radius of 11,395.28 feet and a delta angle of  $2^{\circ} 55' 44''$ , an arc distance of 582.52 feet subtended by a chord which bears North  $69^{\circ} 45' 37''$  West, 582.46 feet to an Iron Pin found; thence

Leaving said northerly right of way line of CSX Railroad, North  $45^{\circ} 39' 17''$  East, 175.90 feet to an Iron Pipe Found, said Iron Pipe being in the southeasterly corner of a parcel formerly conveyed to The Kirk and Blum Manufacturing Company by deeds recorded in Deed Book 2434, Page 170 and Deed Book 3654, Page 740, said Iron Pipe being the TRUE POINT OF BEGINNING of the Exception herein described; thence the following 8 courses:

1. In the southerly line of said Kirk and Blum Manufacturing Company, North  $68^{\circ} 17' 30''$  West, 414.12 feet to a point, said point being in the southwesterly corner of said Kirk and Blum Manufacturing Company; thence
2. In the westerly line of said Kirk and Blum Manufacturing Company, North  $06^{\circ} 40' 30''$  East, 199.70 feet to a point; thence
3. Leaving said westerly line of The Kirk and Blum Manufacturing Company, South  $83^{\circ} 19' 30''$  East, 137.23 feet to a point; thence
4. South  $06^{\circ} 41' 57''$  West, 169.26 feet to a point; thence
5. South  $83^{\circ} 20' 28''$  East, 11.96 feet to a point; thence
6. South  $06^{\circ} 45' 54''$  West, 42.22 feet to a point; thence
7. South  $83^{\circ} 19' 30''$  East, 250.89 feet to a point in the easterly line of said Kirk and Blum Manufacturing Company; thence
8. In said easterly line of Kirk and Blum Manufacturing Company, South  $06^{\circ} 40' 30''$  West, 95.64 feet to an Iron Pipe, said Iron Pipe being the TRUE POINT OF BEGINNING of the Exception herein described.

Containing 56.1821 acres (2,447,291 square feet) less the exception of 1.0626 acres (46,287 square feet) = Net Area of 55.1195 acres (2,401,004 square feet).



*Patrick S. Finn*  
7.1.14

**C.O.R.F. COMMERCIAL/INDUSTRIAL USE EXPOSURE UNIT  
Rev. July 1, 2014**

Situate in Section 28, Town 4, Fractional Range 2, Miami Purchase, City of Cincinnati, State of Ohio and being part of a parcel conveyed to USS Realty, LLC. by deed recorded in Official Record 11973, Page 1921, all references herein being to the records located in the Hamilton County, Ohio Recorder's Office and being more particularly described as follows:

Beginning in an Iron Pin found in the intersection of the westerly right of way line of Marburg Avenue (60' street) and the northerly right of way of Madison Road (generally, an 80' street with varying R/Ws); thence

In said westerly right of way line of Marburg Avenue, North 06° 40' 30" East, 295.52 feet to a point being in the former southeasterly corner of Lot No. 2 of the Oakley Station Subdivision and the former northeasterly corner of a parcel conveyed to Oakley FC, LLC by deed recorded in Official Record 12146, Page 1650 and also being the TRUE POINT OF BEGINNING of the C.O.R.F. Commercial/Industrial Use Exposure Unit parcel herein described; thence the following 23 courses:

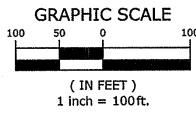
1. North 84° 15' 30" West, 299.69 feet to a point; thence
2. North 05° 44' 30" East, 214.24 feet to a point; thence
3. North 84° 15' 21" West, 761.99 feet to a point in the CORF Boundary Line; thence
4. In said CORF Boundary Line, North 06° 41' 57" East, 77.51 feet to a point; thence
5. Continuing in said CORF Boundary Line, North 83° 19' 30" West, 137.23 feet to a point; thence
6. Continuing in said CORF Boundary Line, South 06° 40' 30" West, 199.70 feet to a point; thence
7. Continuing in said CORF Boundary Line, South 68° 17' 30" East, 2.94 feet to a point; thence
8. Leaving said CORF Boundary Line, South 05° 44' 39" West, 167.23 feet to a point in the northerly right of way line of CSX Railroad; thence
9. In the northerly right of way line of CSX Railroad, North 68° 17' 45" West, 764.84 feet to an Iron Pin found, said Iron Pin being in a corner common to a parcel conveyed to JEB BBB Real Estate LLC by deed recorded in Official Record 11554, Page 1331; thence
10. Leaving said right of way line of CSX Railroad and in the line common to said JEB BBB Real Estate LLC, North 05° 16' 15" East, 113.64 feet to an Iron Pin found; thence
11. Continuing in said line common to JEB BBB Real Estate LLC, North 68° 17' 45" West, 90.06 feet to an Iron Pin found; thence
12. Continuing in said line common to JEB BBB Real Estate LLC, North 21° 42' 15" East, 52.79 feet to an Iron Pin found; thence

13. Continuing in said line common to JEB BBB Real Estate LLC in a curve to the right having a radius of 330.43 feet and a delta angle of  $05^{\circ} 17' 37''$ , an arc distance of 30.53 feet subtended by a chord which bears North  $28^{\circ} 47' 38''$  West, 30.52 feet to an Iron Pin found in a corner common to a parcel conveyed to JEB BBB Real Estate LLC by deed recorded in Official Record 11936, Page 1661; thence
14. In the line common to said JEB BBB Real Estate LLC in a curve to the left having a radius of 85.00 feet, a delta angle of  $19^{\circ} 01' 35''$  and an arc distance of 28.23 feet subtended by a chord which bears North  $20^{\circ} 02' 26''$  East, 28.10 feet to an Iron Pin found; thence
15. Continuing in said line common to JEB BBB Real Estate LLC in a curve to the right having a radius of 45.00 feet, a delta angle of  $50^{\circ} 03' 20''$  and an arc distance of 39.31 feet subtended by a chord which bears North  $30^{\circ} 31' 55''$  East, 38.08 feet to an Iron Pin found in the westerly right of way line of Disney Street; thence
16. Continuing in said line common to JEB BBB Real Estate LLC and in said westerly right of way line of Disney Street, North  $09^{\circ} 14' 14''$  West, 113.10 feet to an Iron Pin found; thence
17. Continuing in said line common to JEB BBB Real Estate LLC and in said westerly right of way line of Disney Street in a curve to the right having a radius of 403.00 feet, a delta angle of  $15^{\circ} 00' 30''$  and an arc distance of 105.56 feet subtended by a chord which bears North  $01^{\circ} 43' 59''$  West, 105.26 feet to an Iron Pin found; thence
18. Continuing in said line common to JEB BBB Real Estate LLC and in said westerly right of way line of Disney Street, North  $05^{\circ} 46' 16''$  East, 260.88 feet to a point; thence
19. Leaving said line common to JEB BBB Real Estate LLC and said westerly right of way line of Disney Street, South  $84^{\circ} 15' 30''$  East, 1,254.38 feet to a point; thence
20. North  $06^{\circ} 40' 30''$  East, 503.00 feet to a Magnail found; thence
21. South  $84^{\circ} 15' 30''$  East, 800.42 feet to an Iron Pin found, said Iron Pin being in said westerly right of way line of Marburg Avenue; thence
22. In said westerly right of way line of Marburg Avenue, South  $05^{\circ} 06' 30''$  West, 527.65 feet to an Iron Pin found; thence
23. Continuing in said westerly right of way line of Marburg Avenue, South  $06^{\circ} 40' 30''$  West, 858.34 feet to the TRUE POINT OF BEGINNING of the C.O.R.F. Commercial/Industrial Use Exposure Unit parcel herein described.

Containing 1,965,337 square feet or 45.1180 acres



CORF BOUNDARY  
55.1195 ACRES



GLOBAL INTELLIGENCE.  
LOCAL KNOWLEDGE.  
23 Triangle Park Drive, Suite 2300  
Cincinnati, OH 45246  
Contact: Nicholas Reed  
513-942-3141 ext. 240  
Fax: 513-981-2283  
www.mecomp.com

REVISION:

OAKLEY STATION SUBDIVISION  
CORF BOUNDARY

SECTION 28, TOWN 4 FRACTIONAL RANGE 2,  
MIAMI PURCHASE, CITY OF CINCINNATI,  
COUNTY OF HAMILTON, OHIO

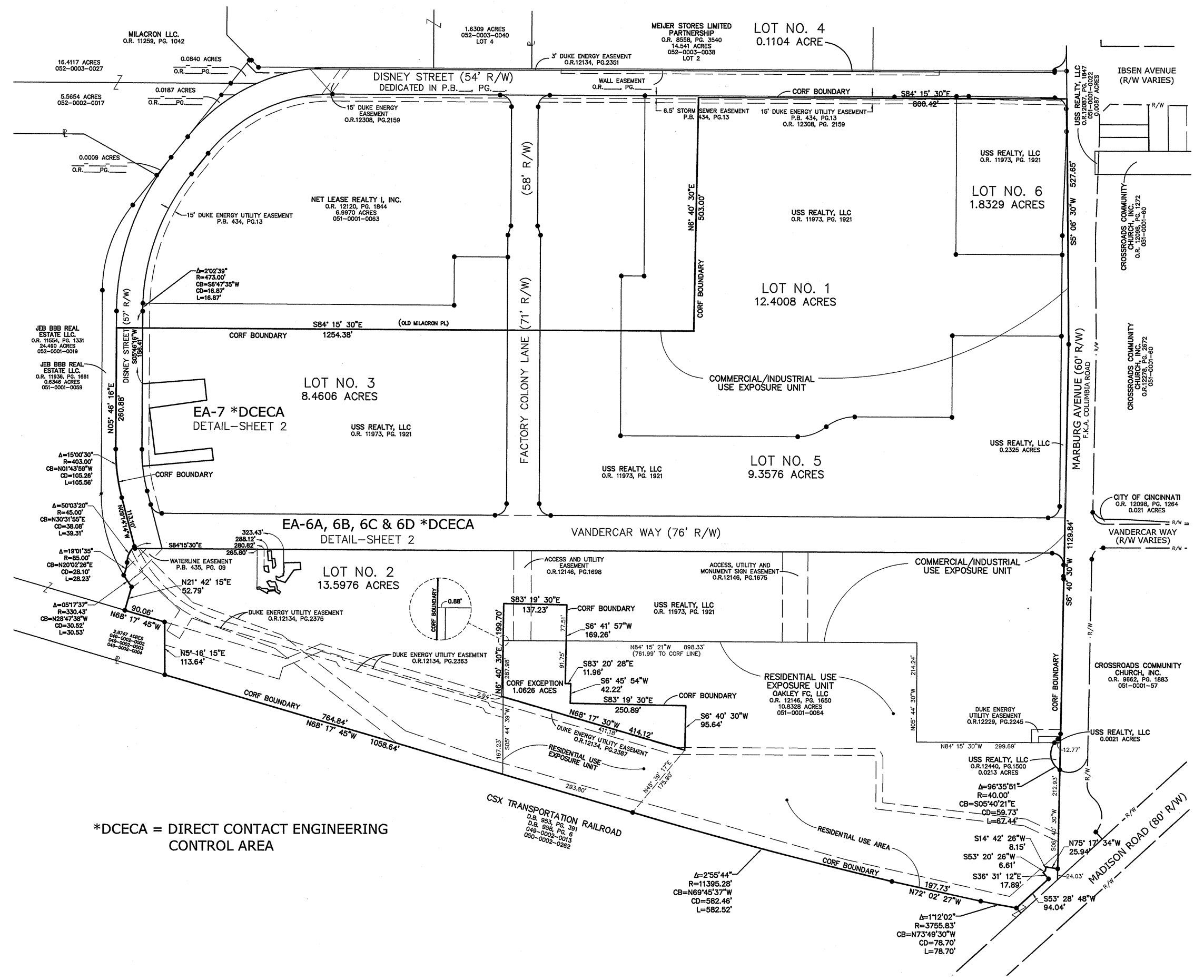


STAMP: 7.1.14

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TS	PF	PF

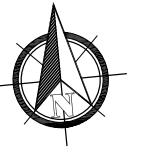
M-E No.: 11-085  
DATE: OCTOBER, 2013  
REV: JULY, 2013  
SCALE: 1"=100'  
PRINT DATE:

SHEET NO.: 1/2



\*DCECA = DIRECT CONTACT ENGINEERING CONTROL AREA

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REVISION:

OAKLEY STATION SUBDIVISION  
CORF BOUNDARY

SECTION 28, TOWN 4 FRACTIONAL RANGE 2,  
MIAMI PURCHASE, CITY OF CINCINNATI,  
COUNTY OF HAMILTON, OHIO

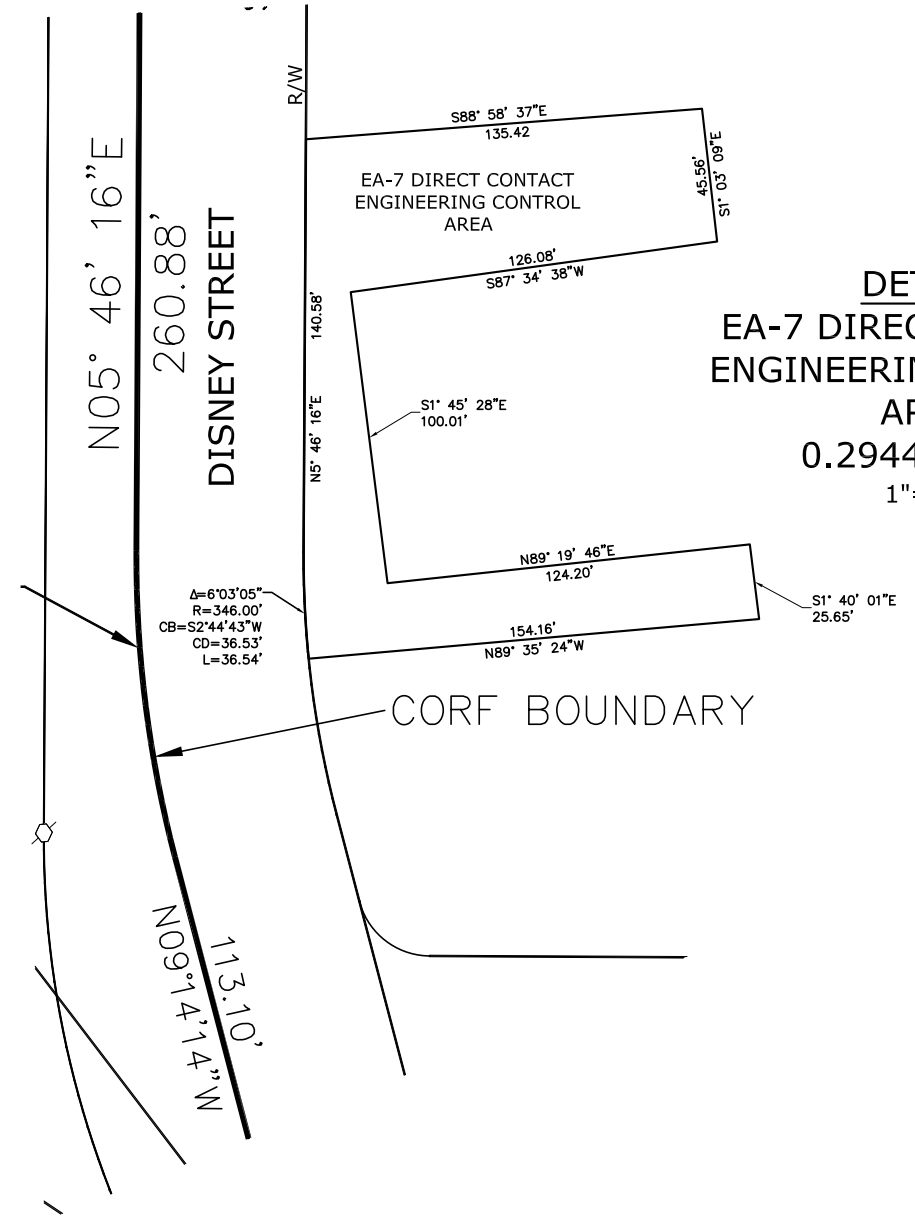
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FIELD	DRAFT	CHECK
TS	PF	PF

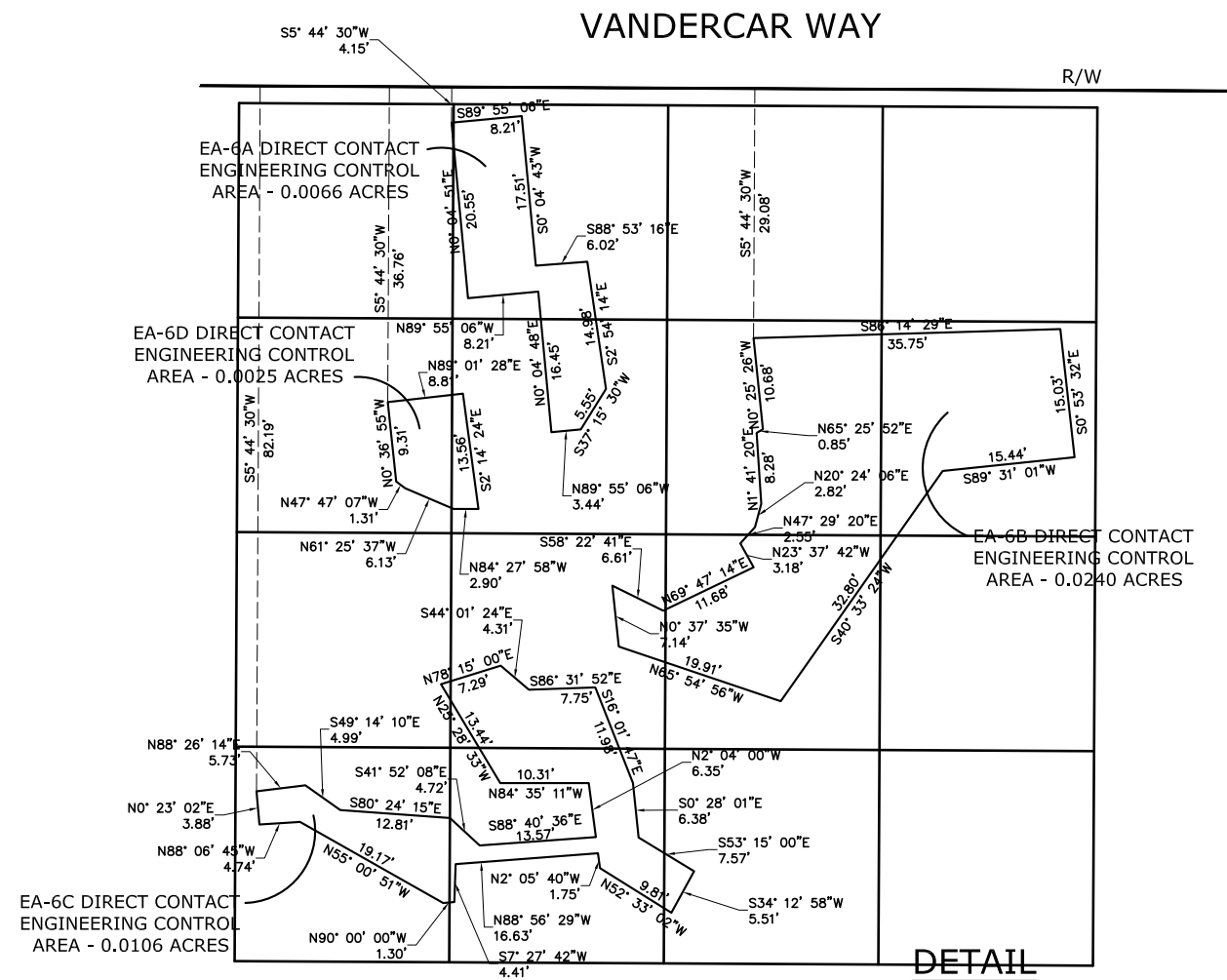
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DATE: OCTOBER, 2013  
REV: JULY, 2014  
SCALE: AS NOTED

SHEET NO.: 2/2

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**DETAIL**  
EA-7 DIRECT CONTACT  
ENGINEERING CONTROL  
AREA  
0.2944 ACRES  
1"=30'



**DETAIL**  
EA-6A, 6B, 6C & 6D  
DIRECT CONTACT  
ENGINEERING CONTROL  
AREAS  
1"=10'

## **APPENDIX B**

Legal Descriptions for Exposure Unit 1 (EU-1) and Exposure Unit 2 (EU-2)

**C.O.R.F. BOUNDARY LEGAL**  
**Rev. July 1, 2014**

Situate in Section 28, Town 4, Fractional Range 2, Miami Purchase, City of Cincinnati, State of Ohio and being part of a parcel conveyed to USS Realty, LLC. by deed recorded in Official Record 11973, Page 1921, all references herein being to the records located in the Hamilton County, Ohio Recorder's Office and being more particularly described as follows:

Beginning in an Iron Pin found in the intersection of the westerly right of way line of Marburg Avenue (60' street) and the northerly right of way of Madison Road (generally, an 80' street with varying R/Ws); thence

In said westerly right of way line of Marburg Avenue, North  $06^{\circ} 40' 30''$  East, 24.03 feet to an Iron Pin being the TRUE POINT OF BEGINNING of the C.O.R.F. Boundary herein described; thence the following 23 courses:

1. Leaving said westerly right of way line of Marburg Avenue and in said northerly right of way line of Madison Road, North  $75^{\circ} 17' 34''$  West, 25.94 feet to a point; thence
2. Continuing in said northerly right of way line of Madison Road, South  $14^{\circ} 42' 26''$  West, 8.15 feet to a point; thence
3. Continuing in said northerly right of way line of Madison Road, South  $53^{\circ} 20' 26''$  West, 6.61 feet to a point; thence
4. Continuing in said northerly right of way line of Madison Road, South  $36^{\circ} 31' 47''$  East, 17.89 feet to a point; thence
5. Continuing in said northerly right of way line of Madison Road, South  $53^{\circ} 28' 48''$  West, 94.04 feet to an Iron Pin found, said Iron Pin being in the northerly right of way line of a parcel conveyed to CSX Railroad by deeds recorded in Deed Book 953, Page 391 and deed Book 958, Page 6; thence
6. Leaving said northerly right of way line of Madison Road and in said northerly right of way line of CSX Railroad in a curve to the right having a radius of 3,755.83 feet and a delta angle of  $1^{\circ} 12' 02''$ , an arc distance of 78.70 subtended by a chord which bears North  $73^{\circ} 49' 30''$  West, 78.70 feet to an Iron Pin found; thence
7. Continuing in said northerly right of way line of CSX Railroad, North  $72^{\circ} 02' 27''$  West, 197.73 feet to an Iron Pin found; thence
8. Continuing in said northerly right of way line of CSX Railroad in a curve to the right having a radius of 11,395.28 feet and a delta angle of  $2^{\circ} 55' 44''$ , an arc distance of



582.52 feet subtended by a chord which bears North 69° 45' 37" West, 582.46 feet to an Iron Pin found; thence

9. Continuing in said northerly right of way line of CSX Railroad, North 68° 17' 45" West, 1,058.64 feet to an Iron Pin found, said Iron Pin being in a corner common to a parcel conveyed to JEB BBB Real Estate LLC by deed recorded in Official Record 11554, Page 1331; thence
10. Leaving said right of way line of CSX Railroad and in the line common to said JEB BBB Real Estate LLC, North 05° 16' 15" East, 113.64 feet to an Iron Pin found; thence
11. Continuing in said line common to JEB BBB Real Estate LLC, North 68° 17' 45" West, 90.06 feet to an Iron Pin found; thence
12. Continuing in said line common to JEB BBB Real Estate LLC, North 21° 42' 15" East, 52.79 feet to an Iron Pin found; thence
13. Continuing in said line common to JEB BBB Real Estate LLC in a curve to the right having a radius of 330.43 feet and a delta angle of 05° 17' 37", an arc distance of 30.53 feet subtended by a chord which bears North 28° 47' 38" West, 30.52 feet to an Iron Pin found in a corner common to a parcel conveyed to JEB BBB Real Estate LLC by deed recorded in Official Record 11936, Page 1661; thence
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18. Continuing in said line common to JEB BBB Real Estate LLC and in said westerly right of way line of Disney Street, North 05° 46' 16" East, 260.88 feet to a point; thence
19. Leaving said line common to JEB BBB Real Estate LLC and said westerly right of way line of Disney Street, South 84° 15' 30" East, 1,254.38 feet to a point; thence
20. North 06° 40' 30" East, 503.00 feet to a Magnail found; thence
21. South 84° 15' 30" East, 800.72 feet to an Iron Pin found, said Iron Pin being in said westerly right of way line of Marburg Avenue; thence
22. In said westerly right of way line of Marburg Avenue, South 05° 06' 30" West, 527.65 feet to an Iron Pin found; thence
23. Continuing in said westerly right of way line of Marburg Avenue, South 06° 40' 30" West, 1,129.84 to an Iron Pin, said Iron Pin being the TRUE POINT OF BEGINNING of the C.O.R.F. Boundary herein described.

Excepting from property as described above, the following:

Beginning in an Iron Pin found in the intersection of the westerly right of way line of Marburg Avenue (60' street) and the northerly right of way of Madison Road (generally, an 80' street with varying R/Ws); thence

Leaving said westerly right of way line of Marburg Avenue and in said northerly right of way line of Madison Road, North 75° 17' 34" West, 25.94 feet to a point; thence

Continuing in said northerly right of way line of Madison Road, South 14° 42' 26" West, 8.15 feet to a point; thence

Continuing in said northerly right of way line of Madison Road, South 53° 20' 26" West, 6.61 feet to a point; thence

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1. In the southerly line of said Kirk and Blum Manufacturing Company, North  $68^{\circ} 17' 30''$  West, 414.12 feet to a point, said point being in the southwesterly corner of said Kirk and Blum Manufacturing Company; thence
2. In the westerly line of said Kirk and Blum Manufacturing Company, North  $06^{\circ} 40' 30''$  East, 199.70 feet to a point; thence
3. Leaving said westerly line of The Kirk and Blum Manufacturing Company, South  $83^{\circ} 19' 30''$  East, 137.23 feet to a point; thence
4. South  $06^{\circ} 41' 57''$  West, 169.26 feet to a point; thence
5. South  $83^{\circ} 20' 28''$  East, 11.96 feet to a point; thence
6. South  $06^{\circ} 45' 54''$  West, 42.22 feet to a point; thence
7. South  $83^{\circ} 19' 30''$  East, 250.89 feet to a point in the easterly line of said Kirk and Blum Manufacturing Company; thence
8. In said easterly line of Kirk and Blum Manufacturing Company, South  $06^{\circ} 40' 30''$  West, 95.64 feet to an Iron Pipe, said Iron Pipe being the TRUE POINT OF BEGINNING of the Exception herein described.

Containing 56.1821 acres (2,447,291 square feet) less the exception of 1.0626 acres (46,287 square feet) = Net Area of 55.1195 acres (2,401,004 square feet).



*Patrick S. Finn*  
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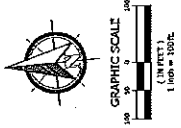
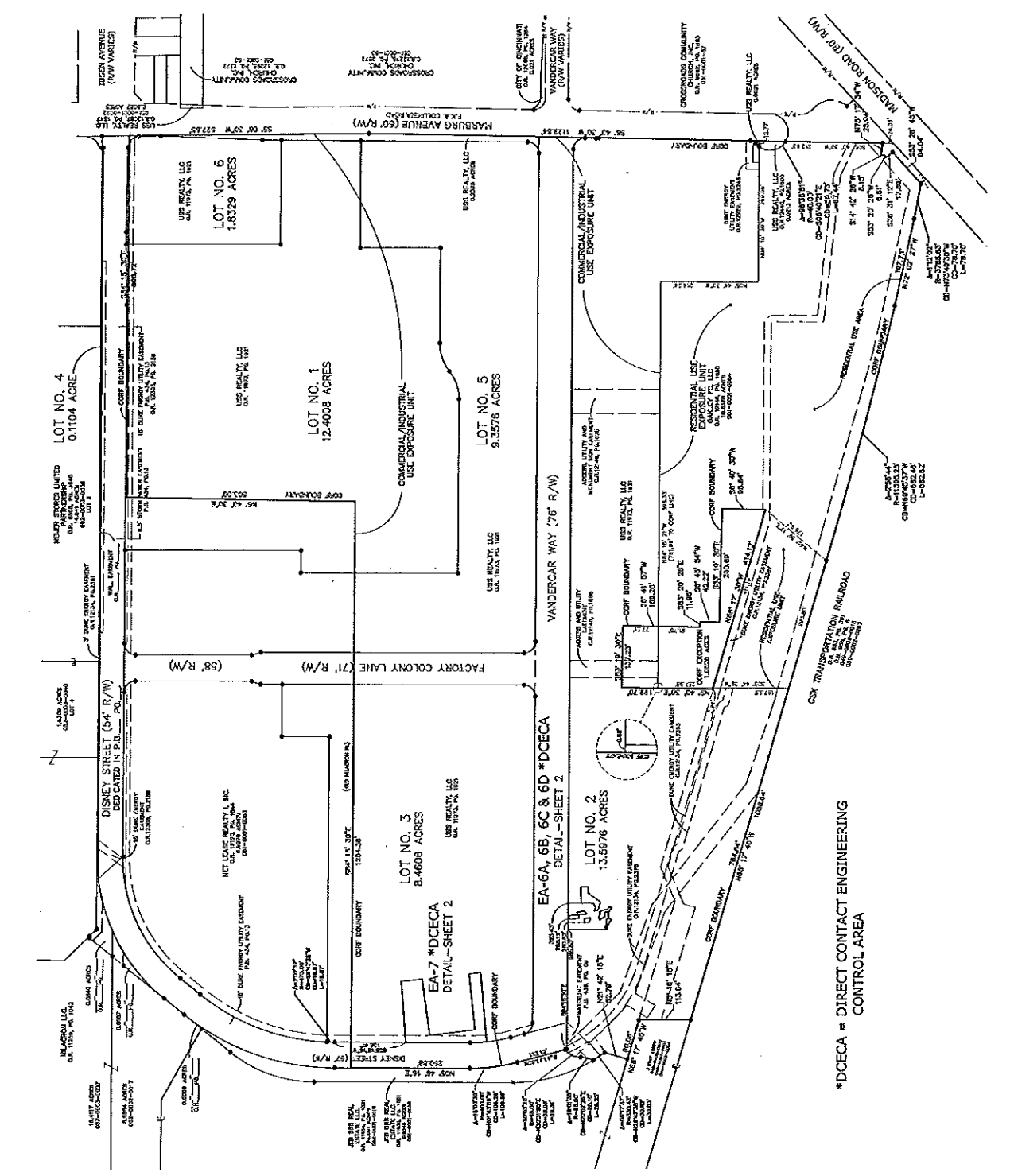
1. North 84° 15' 30" West, 299.69 feet to a point; thence
2. North 05° 44' 30" East, 214.24 feet to a point; thence
3. North 84° 15' 21" West, 761.99 feet to a point in the CORF Boundary Line; thence
4. In said CORF Boundary Line, North 06° 41' 57" East, 77.51 feet to a point; thence
5. Continuing in said CORF Boundary Line, North 83° 19' 30" West, 137.23 feet to a point; thence
6. Continuing in said CORF Boundary Line, South 06° 40' 30" West, 199.70 feet to a point; thence
7. Continuing in said CORF Boundary Line, South 68° 17' 30" East, 2.94 feet to a point; thence
8. Leaving said CORF Boundary Line, South 05° 44' 39" West, 167.23 feet to a point in the northerly right of way line of CSX Railroad; thence
9. In the northerly right of way line of CSX Railroad, North 68° 17' 45" West, 764.84 feet to an Iron Pin found, said Iron Pin being in a corner common to a parcel conveyed to JEB BBB Real Estate LLC by deed recorded in Official Record 11554, Page 1331; thence
10. Leaving said right of way line of CSX Railroad and in the line common to said JEB BBB Real Estate LLC, North 05° 16' 15" East, 113.64 feet to an Iron Pin found; thence
11. Continuing in said line common to JEB BBB Real Estate LLC, North 68° 17' 45" West, 90.06 feet to an Iron Pin found; thence
12. Continuing in said line common to JEB BBB Real Estate LLC, North 21° 42' 15" East, 52.79 feet to an Iron Pin found; thence

13. Continuing in said line common to JEB BBB Real Estate LLC in a curve to the right having a radius of 330.43 feet and a delta angle of  $05^{\circ} 17' 37''$ , an arc distance of 30.53 feet subtended by a chord which bears North  $28^{\circ} 47' 38''$  West, 30.52 feet to an Iron Pin found in a corner common to a parcel conveyed to JEB BBB Real Estate LLC by deed recorded in Official Record 11936, Page 1661; thence
14. In the line common to said JEB BBB Real Estate LLC in a curve to the left having a radius of 85.00 feet, a delta angle of  $19^{\circ} 01' 35''$  and an arc distance of 28.23 feet subtended by a chord which bears North  $20^{\circ} 02' 26''$  East, 28.10 feet to an Iron Pin found; thence
15. Continuing in said line common to JEB BBB Real Estate LLC in a curve to the right having a radius of 45.00 feet, a delta angle of  $50^{\circ} 03' 20''$  and an arc distance of 39.31 feet subtended by a chord which bears North  $30^{\circ} 31' 55''$  East, 38.08 feet to an Iron Pin found in the westerly right of way line of Disney Street; thence
16. Continuing in said line common to JEB BBB Real Estate LLC and in said westerly right of way line of Disney Street, North  $09^{\circ} 14' 14''$  West, 113.10 feet to an Iron Pin found; thence
17. Continuing in said line common to JEB BBB Real Estate LLC and in said westerly right of way line of Disney Street in a curve to the right having a radius of 403.00 feet, a delta angle of  $15^{\circ} 00' 30''$  and an arc distance of 105.56 feet subtended by a chord which bears North  $01^{\circ} 43' 59''$  West, 105.26 feet to an Iron Pin found; thence
18. Continuing in said line common to JEB BBB Real Estate LLC and in said westerly right of way line of Disney Street, North  $05^{\circ} 46' 16''$  East, 260.88 feet to a point; thence
19. Leaving said line common to JEB BBB Real Estate LLC and said westerly right of way line of Disney Street, South  $84^{\circ} 15' 30''$  East, 1,254.38 feet to a point; thence
20. North  $06^{\circ} 40' 30''$  East, 503.00 feet to a Magnail found; thence
21. South  $84^{\circ} 15' 30''$  East, 800.72 feet to an Iron Pin found, said Iron Pin being in said westerly right of way line of Marburg Avenue; thence
22. In said westerly right of way line of Marburg Avenue, South  $05^{\circ} 06' 30''$  West, 527.65 feet to an Iron Pin found; thence
23. Continuing in said westerly right of way line of Marburg Avenue, South  $06^{\circ} 40' 30''$  West, 858.34 feet to the TRUE POINT OF BEGINNING of the C.O.R.F. Commercial/Industrial Use Exposure Unit parcel herein described.

Containing 1,965,337 square feet or 45.1180 acres



CORF BOUNDARY  
55.1195 ACRES



**M&E**  
**IBI GROUP**  
LOCAL KNOWLEDGE  
20 Throughway Drive, Suite 200  
Cincinnati, Ohio 45245  
Phone: (513) 762-1200  
www.mandegroup.com

CORF BOUNDARY  
OAKLEY STATION SUBDIVISION  
SECTION 28, TOWN 4 FRACTIONAL RANGE 2,  
MIAMI PURCHASE, CITY OF CINCINNATI,  
COUNTY OF HAMILTON, OHIO

DATE	DESCRIPTION
7/1/14	ISSUED
10/20/13	REVISED
10/20/13	REVISED
1/14/10	REVISED

SEAL OF THE CITY OF CINCINNATI  
PLANNING DEPARTMENT  
7/1/14

\*DCECA = DIRECT CONTACT ENGINEERING CONTROL AREA

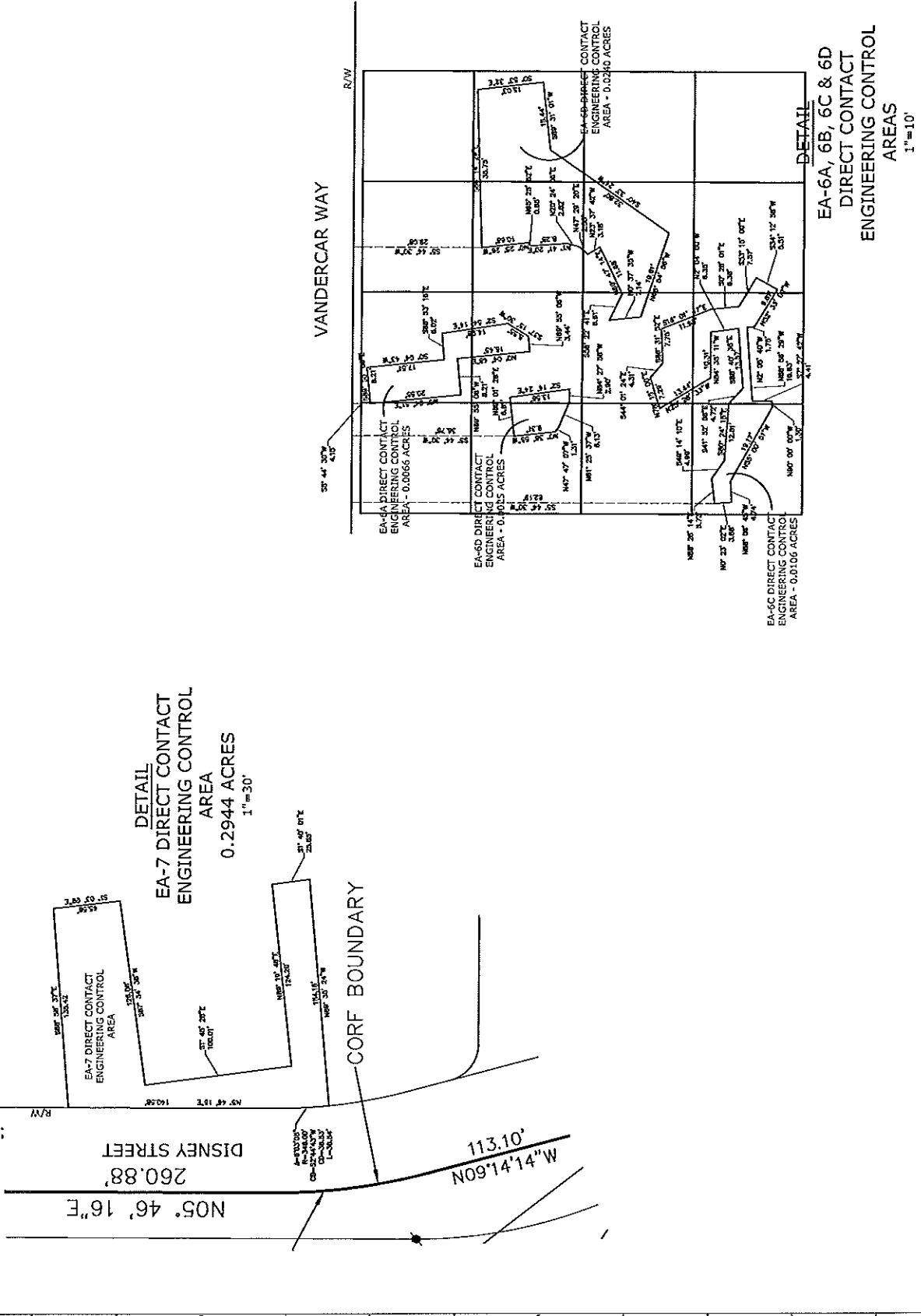


GLOBAL INTELLIGENCE.  
LOCAL KNOWLEDGE.  
75 Franklin Parkway, Suite 200  
Cincinnati, OH 45246  
Tel: 513.963.1234  
Fax: 513.963.1235  
www.ibigroup.com

OAKLEY STATION SUBDIVISION  
CORP BOUNDARY  
SECTION 28, TOWN 4 FRACTIONAL RANGE 2,  
MIAMI HUNTSVILLE, CITY OF CINCINNATI,  
COUNTY OF HAMILTON, OHIO

FIELD	DATE	DESCRIPTION
DESIGNED BY	11/05	
CHECKED BY	11/05	
DATE	NOVEMBER 2011	
SCALE	AS SHOWN	

SHEET NO. 2/2



DETAIL  
EA-7 DIRECT CONTACT  
ENGINEERING CONTROL  
AREA  
0.2944 ACRES  
1"=30'

DETAIL  
EA-6A, 6B, 6C & 6D  
DIRECT CONTACT  
ENGINEERING CONTROL  
AREAS  
1"=10'

N05° 46' 16"E  
260.88'

M, 41° 14' 16"N  
.01311

CORP BOUNDARY

VANDERCAR WAY

DISNEY STREET

R/W

R/W



## **OAKLEY FC, LLC PORTION IN CORF – RESIDENTIAL USE EXPOSURE UNIT**

Situate in Section 28, Town 4, Fractional Range 2, Miami Purchase, City of Cincinnati, State of Ohio and being part of a parcel conveyed to Oakley FC, LLC by deed recorded in Official Record 12146, Page 1650, all references herein being to the records located in the Hamilton County, Ohio Recorder's Office and being more particularly described as follows:

Beginning in an Iron Pin found in the intersection of the old westerly right of way line of Marburg Avenue (60' street) and the northerly right of way line of a parcel conveyed to CSX Transportation by deeds recorded in Deed Book 953, Page 391 and Deed Book 985, Page 6, said Iron Pin being 24.03 feet from the intersection of said westerly right of way line of Marburg Avenue and the northerly right of way line of Madison Avenue, said Iron Pin also being the TRUE POINT OF BEGINNING of the CORF Parcel herein described; thence the following 21 courses:

1. Leaving said westerly right of way line of Marburg Avenue and in said northerly right of way line of CSX Transportation, North  $75^{\circ} 17' 34''$  West, 25.94 feet to a point; thence
2. Continuing in said northerly right of way line of CSX Transportation, South  $14^{\circ} 42' 26''$  West, 8.15 feet to a point; thence
3. Continuing in said northerly right of way line of CSX Transportation, South  $53^{\circ} 20' 26''$  West, 6.61 feet to a point; thence
4. Continuing in said northerly right of way line of CSX Transportation, South  $36^{\circ} 31' 12''$  East, 17.89 feet to an Iron Pin set; thence
5. Continuing in said northerly right of way line of CSX Transportation, South  $53^{\circ} 28' 48''$  West, 94.04 feet to an Iron Pin found; thence
6. Continuing in said northerly right of way line of CSX Transportation in a curve to the right having a radius of 3,755.83 feet and a delta angle of  $1^{\circ} 12' 02''$ , an arc distance of 78.70 subtended by a chord which bears North  $73^{\circ} 49' 30''$  West, 78.70 feet to an Iron Pin found; thence
7. Continuing in said northerly right of way line of CSX Transportation, North  $72^{\circ} 02' 27''$  West, 197.73 feet to an Iron Pin found; thence
8. Continuing in said northerly right of way line of CSX Transportation in a curve to the right having a radius of 11,395.28 feet and a delta angle of  $2^{\circ} 55' 44''$ , an arc distance of 582.52 feet subtended by a chord which bears North  $69^{\circ} 45' 37''$  West, 582.46 feet to an Iron Pin found; thence

9. Continuing in said northerly right of way line of CSX Transportation, North 68° 17' 45" West, 293.80 feet to a 5/8" Iron Pin Set; thence
10. Leaving said right of way line of CSX Transportation, North 05° 44' 39" East, 167.23 feet to a point in the CORF Boundary Line; thence
11. In said CORF Boundary Line, South 68° 17' 30" East, 411.18 feet to a point; thence
12. Continuing in said CORF Boundary Line, North 06° 40' 30" East, 95.64 feet to a point; thence
13. Continuing in said CORF Boundary Line, North 83° 19' 30" West, 250.89 feet to a point; thence
14. Continuing in said CORF Boundary Line, North 06° 45' 54" East, 42.22 feet to a point; thence
15. Continuing in said CORF Boundary Line, North 83° 20' 28" West, 11.96 feet to a point; thence
16. Continuing in said CORF Boundary Line, North 06° 41' 57" East, 91.75 feet to a point in the northerly line of said Oakley FC, LLC; thence
17. Leaving said CORF Boundary Line and in said northerly line of Oakley FC, LLC, South 84° 15' 21" East, 761.99 feet to a point; thence
18. Continuing in said northerly line of Oakley FC, LLC, South 05° 44' 30" West, 214.24 feet to a point; thence
19. Continuing in said northerly line of Oakley FC, LLC, South 84° 15' 30" East, 299.69 feet to a point, said point being in the westerly right of way line of Marburg Avenue; thence
20. In said westerly right of way line of Marburg Avenue in a curve to the left having a radius of 40.00 feet, a delta angle of 96°35' 51" and an arc distance of 67.44 feet subtended by a chord which bears South 05° 40' 21" East, 59.73 feet to a point in the easterly line of said Oakley FC, LLC; thence
21. Leaving said westerly right of way line of Marburg Avenue and in said easterly line of said Oakley FC, LLC, South 06° 40' 30" West, 212.93 feet to the TRUE POINT OF BEGINNING of the Parcel herein described.

Containing 435,667 Square Feet or 10.0015 Acres.

Bearings based on Ohio State Plane Coordinate System, South Zone, as determined by ties to City of Cincinnati Control Monuments.

This description was prepared by Patrick S. Finn, P.S. No. 7181 of M•E Companies, Civil Engineering Group, Cincinnati, Ohio.



*Patrick S. Finn*  
21 OCT 13



GRAPHIC SCALE  
(IN FEET)  
1 inch = 100ft.



GLOBAL OFFICE  
LOCAL KNOWLEDGE  
21 Through Park Drive, Suite 2300  
Cincinnati, Ohio 45260  
Phone: 513.963.8800  
Fax: 513.963.8801  
www.ibigroup.com

OAKLEY STATION SUBDIVISION  
CORP BOUNDARY

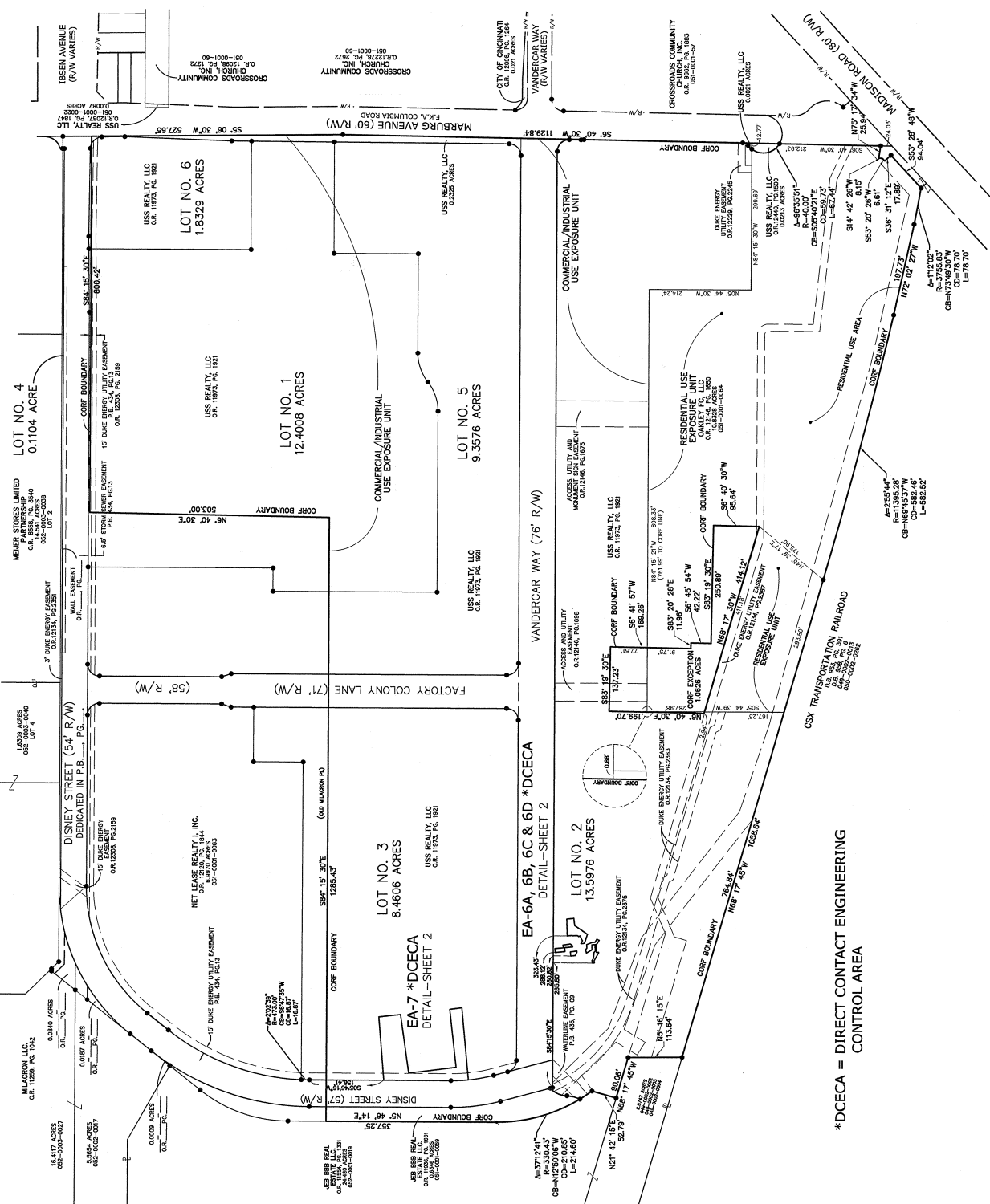
SECTION 28, TOWN 4 FRACTIONAL RANGE 2,  
MIAMI PURCHASE, CITY OF CINCINNATI,  
COUNTY OF HAMILTON, OHIO



FIELD	DRAFT	CHECK
TS	TR	TR
DATE:	OCTOBER, 2013	
SCALE:	1" = 100'	
PRINT DATE:		

SHEET NO.: 1/2

CORP BOUNDARY  
55.5501 ACRES



\*DCECA = DIRECT CONTACT ENGINEERING CONTROL AREA

## **APPENDIX C**

Legal Description for the EA-6 Direct Contact Engineering Control Areas

**EA-6A DIRECT CONTACT ENGINEERING CONTROL AREA**

Situated in the State of Ohio, County of Hamilton, City of Cincinnati, Section 28, Town 4, Fractional Range 2, Miami Purchase, being a part of Lot No. 2 lying within the COAF Boundary, all references herein being to the records located in the Hamilton County, Ohio Recorder's Office and being more particularly described as follows:

Beginning for reference in a point in the intersection of the westerly right of way line of Disney Street and the southerly right of way line of Vandercar Way; thence

In said southerly right of way line of Vandercar Way, South 84° 15' 30" East, 288.12 feet to a point; thence

Leaving said southerly right of way line of Vandercar Way, South 05°44' 30" West, 4.15 feet to the True Place of Beginning of the EA-6A Area parcel herein described; thence the following 9 courses:

1. South 89° 55' 06" East, 8.21 feet to a point; thence
2. South 00° 04' 43" West, 17.51 feet to a point; thence
3. South 88° 53' 16" East, 6.02 feet to a point; thence
4. South 02° 54' 14" East, 14.98 feet to a point; thence
5. South 37° 15' 30" West, 5.55 feet to a point; thence
6. North 89° 55' 06" West, 3.44 feet to a point; thence
7. North 00° 04' 48" East, 16.45 feet to a point; thence
8. North 89° 55' 06" West, 8.21 feet to a point; thence
9. North 00° 04' 51" East, 20.55 feet to the True Place of Beginning of the EA-6A Area parcel herein described.

Containing 288 square feet or 0.0066 acres.

Bearings herein are based on ties to the City of Cincinnati control monuments 2509 and 2510 as set forth in a plat of survey of record in Plat Book 350, Page 45.



*Patrick S. Finn*  
21 OCT 13

**EA-6B DIRECT CONTACT ENGINEERING CONTROL AREA**

Situated in the State of Ohio, County of Hamilton, City of Cincinnati, Section 28, Town 4, Fractional Range 2, Miami Purchase, being a part of Lot No. 2 lying within the COAF Boundary, all references herein being to the records located in the Hamilton County, Ohio Recorder's Office and being more particularly described as follows:

Beginning for reference in a point in the intersection of the westerly right of way line of Disney Street and the southerly right of way line of Vandercar Way; thence

In said southerly right of way line of Vandercar Way, South 84° 15' 30" East, 323.43 feet to a point; thence

Leaving said southerly right of way line of Vandercar Way, South 05°44' 30" West, 29.08 feet to the True Place of Beginning of the EA-6B Area parcel herein described; thence the following 14 courses:

1. South 86° 14' 29" East, 35.75 feet to a point; thence
2. South 00° 53' 32" East, 15.03 feet to a point; thence
3. South 89° 31' 01" West, 15.44 feet to a point; thence
4. South 40° 33' 24" West, 32.80 feet to a point; thence
5. North 65° 54' 56" West, 19.91 feet to a point; thence
6. North 00° 37' 35" West, 7.14 feet to a point; thence
7. South 58° 22' 41" East, 6.61 feet to a point; thence
8. North 69° 47' 14" East, 11.68 feet to a point; thence
9. North 23° 37' 42" West, 3.18 feet to a point; thence
10. North 47° 29' 20" East, 2.55 feet to a point; thence
11. North 20° 24' 06" East, 2.82 feet to a point; thence
12. North 01° 41' 20" East, 8.28 feet to a point; thence
13. North 65° 25' 52" East, 0.85 feet to a point; thence
14. North 00° 25' 26" West, 10.68 feet to the True Place of Beginning of the EA-6B Area parcel herein described.

Containing 1,045 square feet or 0.0240 acres.

Bearings herein are based on ties to the City of Cincinnati control monuments 2509 and 2510 as set forth in a plat of survey of record in Plat Book 350, Page 45.



**EA-6C DIRECT CONTACT ENGINEERING CONTROL AREA**

Situated in the State of Ohio, County of Hamilton, City of Cincinnati, Section 28, Town 4, Fractional Range 2, Miami Purchase, being a part of Lot No. 2 lying within the COAF Boundary, all references herein being to the records located in the Hamilton County, Ohio Recorder's Office and being more particularly described as follows:

Beginning for reference in a point in the intersection of the westerly right of way line of Disney Street and the southerly right of way line of Vandercar Way; thence

In said southerly right of way line of Vandercar Way, South 84° 15' 30" East, 323.43 feet to a point; thence

Leaving said southerly right of way line of Vandercar Way, South 05°44' 30" West, 82.19 feet to the True Place of Beginning of the EA-6C Area parcel herein described; thence the following 23 courses:

1. North 88° 26' 14" East, 5.73 feet to a point; thence
2. South 49° 14' 10" East, 4.99 feet to a point; thence
3. South 80° 24' 15" East, 12.81 feet to a point; thence
4. South 41° 52' 08" East, 4.72 feet to a point; thence
5. South 88° 40' 36" East, 13.57 feet to a point; thence
6. North 02° 04' 00" West, 6.35 feet to a point; thence
7. North 84° 35' 11" West, 10.31 feet to a point; thence
8. North 25° 28' 33" West, 13.44 feet to a point; thence
9. North 78° 15' 00" East, 7.29 feet to a point; thence
10. South 44° 01' 24" East, 4.31 feet to a point; thence
11. South 86° 31' 52" East, 7.75 feet to a point; thence
12. South 16° 01' 47" East, 11.98 feet to a point; thence
13. South 00° 28' 01" East, 6.38 feet to a point; thence
14. South 53° 15' 00" East, 7.57 feet to a point; thence
15. South 34° 12' 58" West, 5.51 feet to a point; thence
16. North 52° 33' 02" West, 9.81 feet to a point; thence
17. North 02° 05' 40" West, 1.75 feet to a point; thence
18. North 88° 56' 29" West, 16.63 feet to a point; thence
19. South 07° 27' 42" West, 4.41 feet to a point; thence
20. North 90° 00' 00" West, 1.30 feet to a point; thence
21. North 55° 00' 51" West, 19.17 feet to a point; thence
22. North 88° 06' 45" West, 4.74 feet to a point; thence
23. North 00° 23' 02" East, 3.88 feet to the True Place of Beginning of the EA-6C Area parcel herein described.



Containing 460 square feet or 0.0106 acres.

Bearings herein are based on ties to the City of Cincinnati control monuments 2509 and 2510 as set forth in a plat of survey of record in Plat Book 350, Page 45.



**EA-6D DIRECT CONTACT ENGINEERING CONTROL AREA**

Situated in the State of Ohio, County of Hamilton, City of Cincinnati, Section 28, Town 4, Fractional Range 2, Miami Purchase, being a part of Lot No. 2 lying within the CORF Boundary, all references herein being to the records located in the Hamilton County, Ohio Recorder's Office and being more particularly described as follows:

Beginning for reference in a point in the intersection of the westerly right of way line of Disney Street and the southerly right of way line of Vandercar Way; thence


In said southerly right of way line of Vandercar Way, South 84° 15' 30" East, 280.85 feet to a point; thence

Leaving said southerly right of way line of Vandercar Way, South 05°44' 30" West, 36.76 feet to the True Place of Beginning of the EA-6D Area parcel herein described; thence the following 6 courses:

1. North 89° 01' 28" East, 8.81 feet to a point; thence
2. South 02° 14' 24" East, 13.56 feet to a point; thence
3. North 84° 27' 58" West, 2.90 feet to a point; thence
4. North 61° 25' 37" West, 6.13 feet to a point; thence
5. North 47° 47' 07" West, 1.31 feet to a point; thence
6. North 00° 36' 55" West, 9.31 feet to the True Place of Beginning of the EA-6D Area parcel herein described.

Containing 108 square feet or 0.0025 acres.

Bearings herein are based on ties to the City of Cincinnati control monuments 2509 and 2510 as set forth in a plat of survey of record in Plat Book 350, Page 45.



*Patrick S. Finn*  
11 NOV 13



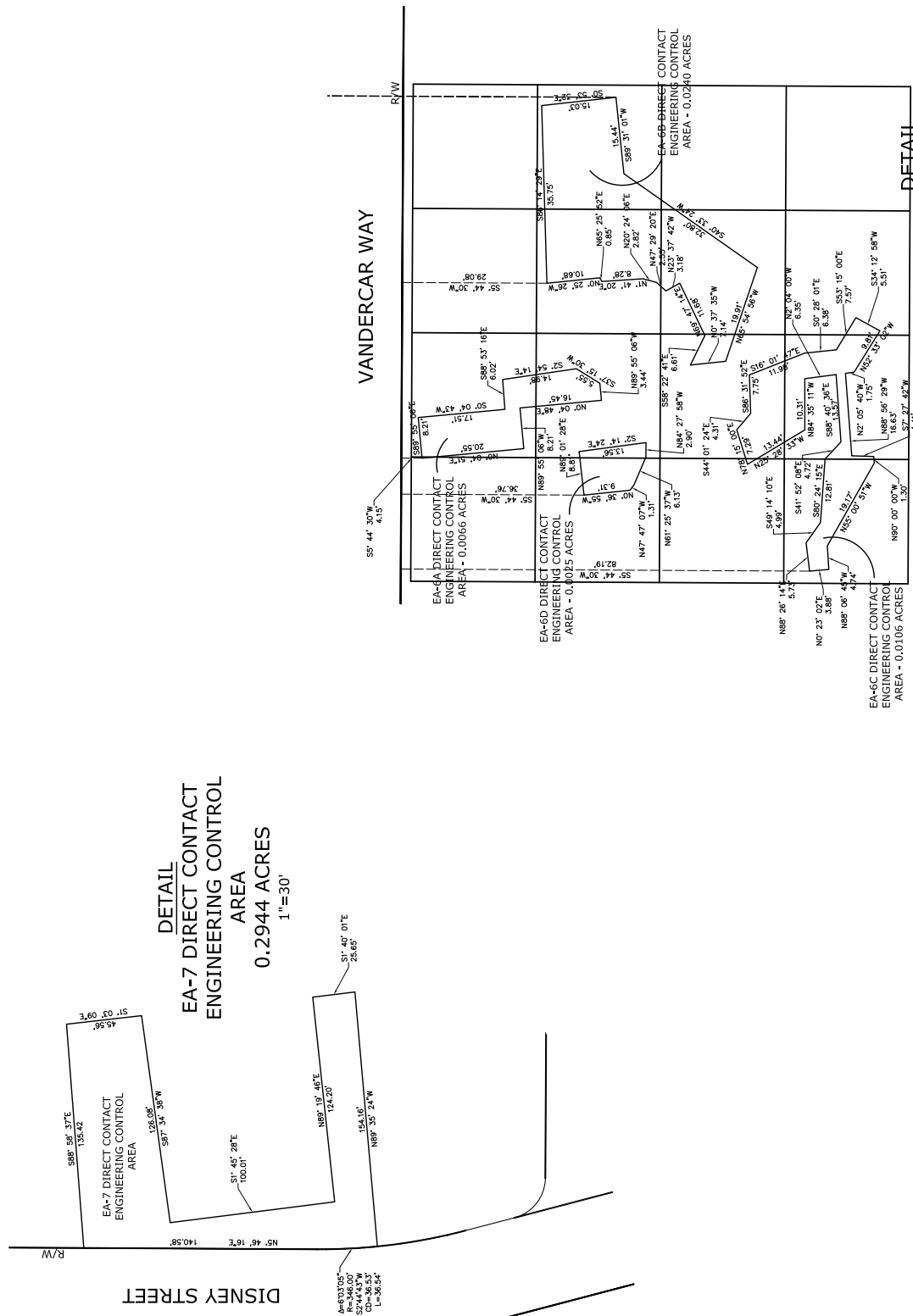
GLOBAL INTELLIGENCE  
 10000 W. 111th Street, Suite 200  
 Overland Park, KS 66207  
 3130 Maple Ave. Ste. 200  
 Overland Park, KS 66204  
 913.442.2121 ext. 200  
 www.mnconcrete.com

OAKLEY STATION SUBDIVISION  
 CORP BOUNDARY

SECTION 28, TOWN 4 FRACTIONAL RANGE 2,  
 MIAMI PURCHASE, CITY OF CINCINNATI,  
 COUNTY OF HAMILTON, OHIO

DATE:	11-085
DATE:	OCTOBER, 2013
SCALE:	AS NOTED
FIELD:	TS
DRAWN:	RF
CHECK:	RF

SHEET NO. 2/2



**DETAIL**  
 EA-6A, 6B, 6C & 6D  
 DIRECT CONTACT  
 ENGINEERING CONTROL  
 AREAS  
 1"=10'

## **APPENDIX D**

Legal Description for the EA-7 Direct Contact Engineering Control Area

**EA-7 DIRECT CONTACT ENGINEERING CONTROL AREA**

Situated in the State of Ohio, County of Hamilton, City of Cincinnati, Section 28, Town 4, Fractional Range 2, Miami Purchase, being a part of Lot No. 3 lying within the COAF Boundary, all references herein being to the records located in the Hamilton County, Ohio Recorder's Office and being more particularly described as follows:

Beginning for reference in a point in the northwesterly corner of Lot No. 3 of the Oakley Station Subdivision, said point being in the easterly right of way line of Disney Street; thence In said easterly right of way line of Disney Street in a curve to the left having a radius of 473.00 feet, a delta angle of 02° 02' 39" and an arc distance of 16.87 feet subtended by a chord which bears South 06° 47' 35" West, 16.87 feet to a point; thence Continuing in said easterly right of way line of Disney Street, South 05° 46' 16" West, 156.41 feet to the True Place of Beginning of the EA-7 Area parcel herein described; thence the following 9 courses:

1. Leaving said easterly right of way line of Disney Street, South 88° 58' 37" East, 135.42 feet to a point; thence
2. South 01° 03' 09" East, 45.56 feet to a point; thence
3. South 87° 34' 38" West, 126.08 feet to a point; thence
4. South 01° 45' 28" East, 100.01 feet to a point; thence
5. North 89° 19' 46" East, 124.20 feet to a point; thence
6. South 01° 40' 01" East, 25.65 feet to a point; thence
7. North 89° 35' 24" West, 154.16 feet to a point in said easterly right of way line of Disney Street; thence
8. In said easterly right of way line of Disney Street in a curve to the right having a radius of 346.00 feet, a delta angle of 06° 03' 05" and an arc distance of 36.54 feet subtended by a chord which bears North 02° 44' 43" East, 36.53 feet to a point; thence
9. Continuing in said easterly right of way line of Disney Street, North 05° 46' 16" East, 140.58 feet to the True Place of Beginning of the EA-7 Area parcel herein described.

Containing 12,826 square feet or 0.2944 acres.

Bearings herein are based on ties to the City of Cincinnati control monuments 2509 and 2510 as set forth in a plat of survey of record in Plat Book 350, Page 45.





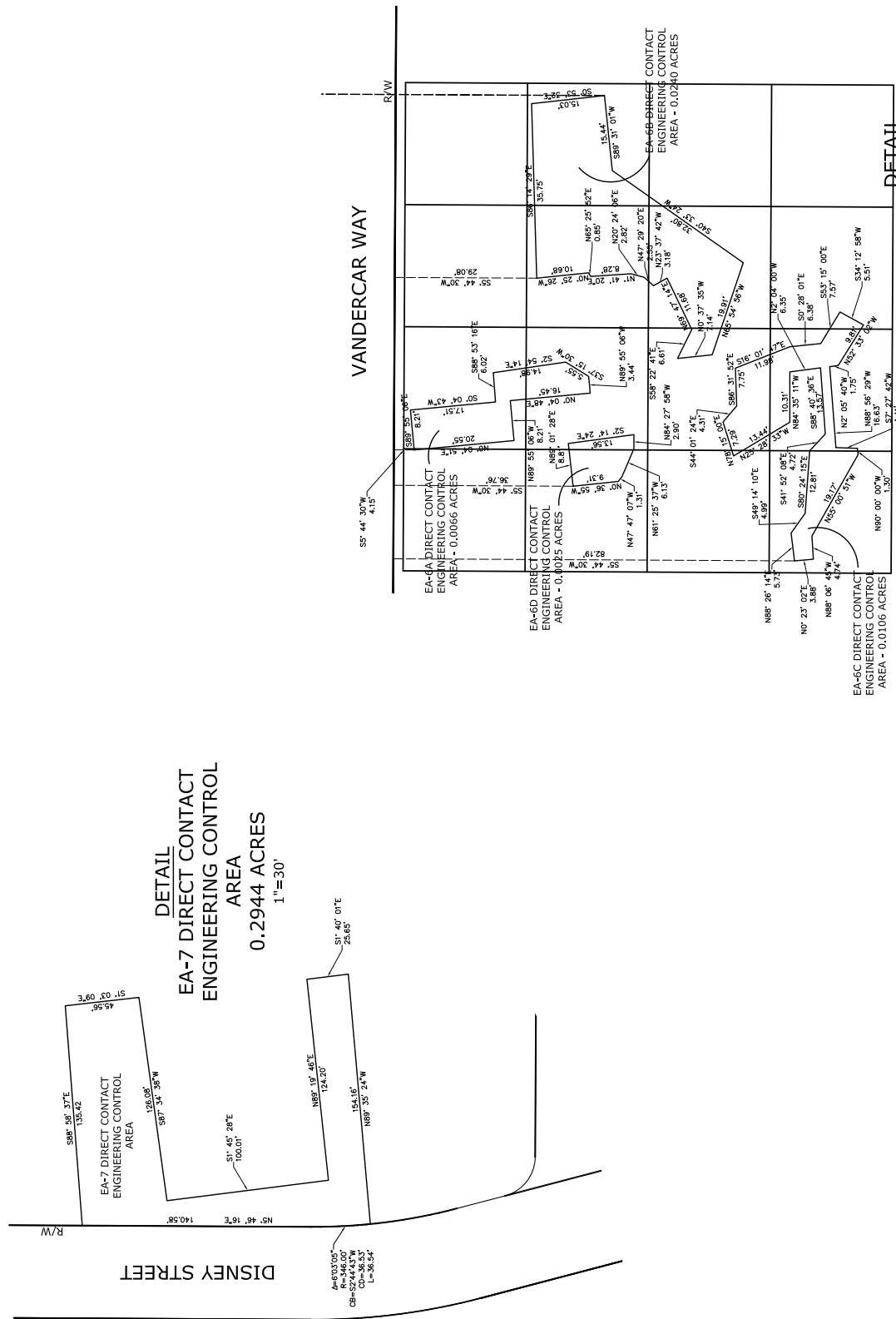
GLOBAL INTELLIGENCE,  
 10000 W. 11th Street, Suite 200  
 33176 Miami, FL 33196  
 (305) 551-2200  
 (305) 551-2200  
 www.mnconcepts.com

OAKLEY STATION SUBDIVISION  
 CORP BOUNDARY

SECTION 28, TOWN 4 FRACTIONAL RANGE 2,  
 MIAMI PURCHASE, CITY OF CINCINNATI,  
 COUNTY OF HAMILTON, OHIO

DATE:	1-1-08
DATE:	OCTOBER, 2013
SCALE:	AS NOTED
FIELD:	TS
DRAWN:	RF
CHECK:	RF

SHEET NO.: 2/2



**DETAIL**  
 EA-6A, 6B, 6C & 6D  
 DIRECT CONTACT  
 ENGINEERING CONTROL  
 AREAS  
 1"=10'

## **APPENDIX E**

### **Example Annual Report Forms**

Form A - O&M Report Cover Letter

Form B – Operation & Maintenance Inspection Form

Form C – Notice that RMP was Not Implemented  
Annual Report Affidavit

## **Operation & Maintenance Plan (O&M) Reporting Instructions & Templates**

### **Instructions:**

Some properties that receive Covenants Not to Sue from Ohio EPA are subject to Operation and Maintenance (O&M) Plans and Agreements. Some properties may also have risk mitigation measures in place that are included in a Risk Mitigation Plan (RMP). The Covenant Not to Sue issued for this Property included either an O&M Plan and/or a Risk Mitigation Plan. The O&M Plan and Risk Mitigation Plan both require the Volunteer or property owner to report to Ohio EPA if and/or how these plans were implemented during the reporting period agreed upon.

These instructions and attached templates are meant to assist you in providing the necessary information to Ohio EPA in a format that is easy for you to complete and provides Ohio EPA a consistent format to review the O&M and RMP reports. This will help Ohio EPA determine whether these Properties meet the requirements in the Plans and Agreements in the Covenant Not to Sue.

Please fill out the applicable forms for any site inspections, scheduled or otherwise, that take place on the Property. The site inspection forms are to be submitted to Ohio EPA as part of the reporting process as outlined in the O&M plan and/or in the RMP. Not all portions of the forms will apply to all properties, so please include the portions that are applicable to your needs and remove those portions that are not applicable to your property.

Include the following information in each report as applicable to your reporting needs:

- Summarize what is subject to regular reporting under the O&M plan and/or RMP
- Summarize results from all remedy effectiveness evaluation activities;
- A demonstration of the performance of all remedial activities subject to the O&M Plan (A demonstration might include photos, affidavits, etc.);
- A demonstration of how compliance with applicable standards is being met or maintained, including the measures used to maintain the remedy's protectiveness of public health and safety and the environment until the property achieves compliance with applicable standards through a permanent remedy, if one is not already in place (A demonstration might include photos, affidavits, etc.);
- Confirmation that the active or passive remedial activities, or engineered controls, are operating and performing as designed and remain in place. State if these activities or controls are necessary to achieve or maintain applicable standards at the property, or verification conducted in accordance with OAC 3745-300-11(D)(2) and the termination criteria included in the plan that the remedial activities are no longer needed for the property to comply with applicable standards.

- Photo log – Pictures are very helpful and we encourage their use in your reports. If you are including photos with your O&M or RMP report, please include detailed descriptions of where the photo was taken. Include a figure of the Property to help the Ohio EPA better understand where the picture was taken on the Property.

The report should be submitted ***under affidavit*** as a hard copy and also on a cd in pdf format, to both the Central Office Compliance Coordinator at: 50 W. Town St., P.O. Box 1049, Columbus, Ohio 43216, **AND** to the District Site Coordinator. The addresses for the district offices can be located here: <http://www.epa.state.oh.us/directions.aspx>

We have also included a copy of an affidavit template with these instructions in Form D.

When submitting reports, please attach a cover letter and be sure to include the Property name, and address, the associated NFA number that can be found in the Covenant Not to Sue or contact Ohio EPA, and year/time period that the report covers. Form A is a template letter that may be used for report submittal, please feel free to attach any necessary pertinent and/or supporting documentation to the following forms if need be. Form B is the report template to be used when submitting your O&M reports and your RMP report when it was implemented to Ohio EPA if your CNS contains an O&M or RMP. Form C is the report template to be used if you have a RMP and it was not implemented during the reporting year.



## Form A – O&M Report Cover Letter

Date

Ohio Environmental Protection Agency  
Division of Environmental Response and Revitalization  
Attn: Central Office Compliance Coordinator  
50 West Town Street  
P.O. Box 1049  
Columbus, Ohio 43216

AND

Ohio Environmental Protection Agency  
[District Office]  
Division of Environmental Response and Revitalization  
Attn: Site Coordinator  
[District Office Address]

RE: [Annual/Semi-Annual/Tri-Annual] Report for [Reporting Year] Operation and Maintenance [and Annual Notification of Risk Mitigation Plan Implementation] for the [property name] Property, [XXNFAXXX]

Dear Sir/Madame:

Please find enclosed the [Annual/Semi-Annual/Tri-Annual] report for the [Reporting Year] Operation and Maintenance (O&M) activities at the [property name] Property. [If an RMP applies, insert the following: In addition, this submittal provides annual notification as to whether the Risk Mitigation Plan (RMP) was implemented at the Property.]

An affidavit supporting this [Annual/Semi-Annual/Tri-Annual] report is enclosed. [Annual/Semi-Annual] reports for subsequent years will be submitted by [choose one: March 1<sup>st</sup>/September 1<sup>st</sup>] of the year following the applicable reporting period.

An electronic copy of this report is being provided on compact disc concurrent with the hard copy submission. Additional copies are being provided to the parties listed in the properties O&M agreement. If you have any questions or require additional information, please feel free to contact me at [enter email or phone number where contact/you may be reached.]

Sincerely,  
[Your name]

**Form B - Operation & Maintenance Inspection Form  
Oakley North Redevelopment Property  
4701 Marburg Avenue  
Cincinnati, Ohio 45209**

Date of Inspection: \_\_\_\_\_

Inspector Name/Title:

\_\_\_\_\_

Relationship to Owner/Affiliation:

\_\_\_\_\_

Time: \_\_\_\_\_ Scheduled/Unscheduled: \_\_\_\_\_

Area(s) of Property Inspected: [List the areas of the property subject to the O&M that were inspected]

Weather Conditions:

\_\_\_\_\_

- 1.) Other than the required submittals called for in the O&M Plan, have you submitted any notifications to the Director of the Ohio EPA regarding the VAP Property and/or its O&M obligations during the past year?      Yes      No

If yes, please attach a copy of the notifications to this form.

If no, please describe the current land use:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[Insert a brief description of each engineering control that is being inspected, followed by a description of what has been observed with each, any problems identified, breaches observed, etc. as follows:]

2a. EA-6 Direct Contact Engineering Controls

Observations: (ex. No problems identified, or if there are issues, detail what has been observed)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[Repeat this portion as necessary for each engineering control being inspected on the property. i.e. Including, but not limited to: buildings, pavement, fencing, landscape/vegetative areas, sub slab vent systems, temporary engineering controls, pump and treatment systems, etc.]

2b. EA-7 Direct Contact Engineering Control

Observations: (ex. No problems identified, or if there are issues, detail what has been observed)

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2c. Lot 9 Retail Building Slab over the Sub-Slab Vapor Barrier/Passive Ventilation System

Observations: (ex. No problems identified, or if there are issues, detail what has been observed)

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2d. Kroger Building Slab over the Sub-Slab Vapor Barrier/Passive Ventilation System

Observations: (ex. No problems identified, or if there are issues, detail what has been observed)

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[If there is a building, landscape, or pavement engineering control on the Property, insert the following:]

2.) During the past year, were any projects conducted on the Property that involved excavation?

Yes    No

If yes, did the excavation project penetrate any area subject to a pavement, building, and landscape engineering control?

Yes    No

If the answer to either of the above questions is yes, please describe in detail, the excavation activity and location of the excavation, if risk mitigation measures were implemented include a RMP report as necessary. Provide a figure of the property where excavation activities were conducted and how the property receptors were protected

during the excavation activities occurred. (If necessary, please attach any additional information to this form.)

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[If the O&M plan requires groundwater monitoring at the property, a monitoring report which presents the results of all testing and analysis conducted in the field and the laboratory will need to be submitted to Ohio EPA annually/semi-annually, unless sampling indicated unusual results that required contingency action to be implemented or evaluated. Please refer to your O&M plan for further instruction as to what is required to be reported upon for groundwater monitoring.]

Other active or passive remedial activities being conducted on the property should also be reported. Include a summary of the operation and maintenance of the equipment used for these activities and the results of all testing and analysis conducted in the field. If new buildings or other pavement engineering controls are installed on the property that go below the minimum point of compliance at the property and result in the building or pavement acting as an engineered control, the property owner will need to contact Ohio EPA to determine if the new construction has resulted in a remedy change at the property.

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Signature & Date

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Printed Name & Title

Telephone Number: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

[If there is a Risk Mitigation Plan (RMP) for the Property and it was not implemented within the past reporting year, please fill out and attach form C. If the RMP was implemented, please provide a written report as required by the RMP, indicating what activities were conducted that required you to implement the RMP.]

**Form C - Ohio EPA Voluntary Action Program  
Notice that RMP was NOT implemented  
[Property Name, NFA Number]**

**Directions:**

Please sign and date this form. Provide any necessary corrections to the contact information. Return this form to:

Ohio EPA  
Division of Environmental Response and Revitalization  
Central Office  
Attn: Compliance Coordinator  
50 W. Town St., Suite 700  
P.O. Box 1049  
Columbus, Ohio 43215

AND

Ohio EPA  
Division of Environmental Response and Revitalization  
[District Office]  
Attn: Site Coordinator  
[District Office address]

\_\_\_\_\_ No activities were conducted at this property during the reporting period that caused an Implementation of the Risk Mitigation Plan.

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Signature & Date

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Printed Name & Title

Telephone Number: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

**Annual Report Affidavit**

State of \_\_\_\_\_ )  
  )           ss:  
County of \_\_\_\_\_ )

I, \_\_\_\_\_ *[name of affiant]*, being first duly sworn according to law, state that, to the best of my knowledge, information and belief:

1. I am an adult over the age of eighteen years old and competent to testify herein.
2. I am authorized to submit this affidavit on behalf of *[Property Owner/Property Name]*
3. The purpose of this submission is to provide the affidavit required by OAC 3745-300-11(F)(2).
4. The Operation and Maintenance (O&M) Report (submitted on *[date submitted]*) is submitted under this affidavit and incorporated by reference herein.
5. The work indicated by this submission was conducted in compliance with all applicable local, state and federal laws and regulations.
6. The information, data, documents and reports submitted under this affidavit are true, accurate and complete.

Further affiant sayeth naught.

\_\_\_\_\_  
Signature of Affiant

Sworn to before me and subscribed in my presence this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Notary Public

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## **APPENDIX F**

### **Example O&M and Inspection Forms**

Form A – Documentation of Excavation Activities

Form B - Inspection Report

Example Vapor Barrier Quality Control Inspection Form (for use in Certification Reports)

Vapor Mitigation System Inspection Form

Vapor Mitigation System Disturbance Form

**FORM A - DOCUMENTATION OF EXCAVATION ACTIVITIES**

Submittal Date: \_\_\_\_\_

Status of Excavation: \_\_\_\_\_Planned \_\_\_\_\_Emergency

Contractor:

Address: \_\_\_\_\_ Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ City, State, Zip: \_\_\_\_\_

Contact: \_\_\_\_\_ Contact: \_\_\_\_\_

Phone: \_\_\_\_\_ Phone: \_\_\_\_\_

Proposed Excavation Activities: \_\_\_\_\_

Excavation Location (attach drawing as necessary): \_\_\_\_\_

Dates of Excavation: \_\_\_\_\_ Estimated No. of Days to Complete \_\_\_\_\_

Approximate Depth: \_\_\_\_\_ Utilities involved: \_\_\_\_\_

Backfill Material: \_\_\_\_\_ Backfill Source: \_\_\_\_\_

**The following will be adhered to during Excavation:**

1. Soil excavated below the engineering control must either be placed beneath the engineering control, be properly disposed off the Property, or placed below the two foot point of compliance. The soil will need to be characterized prior to disposal, for example if sent to a landfill. Final disposition of the soil (i.e., disposal facility location or placement location On-Property) shall be noted in the Property O&M records included in the yearly updates to Ohio EPA;
2. Fill material brought on the Property to replace on-Property soil must meet applicable hazard and risk goals for the commercial/industrial and construction/excavation worker across all complete exposure pathways at the Property pursuant to the PSRA.;
3. The contractor will conduct excavation work using the appropriate safety practices as described within the Risk Mitigation Plan and precautions as any such excavation project in accordance with all applicable federal, state and local regulatory standards and procedures; and
4. Upon completion, the work must be inspected by the Property owner or its representatives, and documented on this form.

This form will be submitted to the Property owner no less than one week prior to planned excavation activities and as soon as reasonably possible for emergency situations. No excavation will occur on the Property until authorized by the Property owner, unless it is an emergency situation.



Description of Deviation from Proposed Excavation Activities (attach drawings as necessary):

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**AUTHORIZATIONS:**

Work Authorized: \_\_\_\_\_ Date: \_\_\_\_\_

Completed Work \_\_\_\_\_ Date: \_\_\_\_\_

Inspected and \_\_\_\_\_  
Approved:

**FORM B – INSPECTION REPORT**

Date of Inspection: \_\_\_\_\_ Relationship to Property \_\_\_\_\_  
Owner:

Inspector Name \_\_\_\_\_  
(Please Print):

**Point of Compliance (POC) Inspection:**

Observations: \_\_\_\_\_  
\_\_\_\_\_

Action needed to address POC issue? \_\_\_\_\_NO\_\_\_\_\_YES

If yes, recommended action with resolution:  
\_\_\_\_\_  
\_\_\_\_\_

**Engineering Control Inspection:**

Observations: \_\_\_\_\_  
\_\_\_\_\_

Action needed to address damage (voids, etc.)? \_\_\_\_\_NO\_\_\_\_\_YES

If yes, recommended action with resolution:  
\_\_\_\_\_  
\_\_\_\_\_

**Drainage Ditch Inspection:**

Observations: \_\_\_\_\_  
\_\_\_\_\_

Any oily sheen observed? \_\_\_\_\_NO\_\_\_\_\_YES

If yes, recommended action with resolution:  
\_\_\_\_\_  
\_\_\_\_\_

**Other Applicable Property Use Restrictions:**

Observations: \_\_\_\_\_

\_\_\_\_\_

Action needed to address issue? \_\_\_\_\_NO\_\_\_\_\_YES

If yes, recommended action with resolution:

\_\_\_\_\_

\_\_\_\_\_  
(Inspector Signature)

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## DAILY APPLICATOR QUALITY CONTROL CHECKLIST FOR LIQUID BOOT® GAS VAPOR BARRIERS

<b>JOB</b>	
<b>TEMP</b>	
<b>DATE</b>	

✓	
	Ensure surface preparation checklist is completed before spraying
	Ensure applicator has sufficient material to complete days' work
	Ensure applicators equipment is working properly
	Review Liquid Boot Training Manual before start of job
	Do a test section 10ft x 10ft to observe for blistering (Concrete only)
	Protect all areas not to be sprayed
	Insure all penetrations are sealed according to Liquid Boot Training Manual
	During application, frequently check thickness using tactile measurements
	After application, sweep, or wet vacuum, off ponding catalyst on all horizontal surfaces
	QC overall thickness of membrane
	QC for pinholes
	QC blisters for proper thickness
	QC for shrinkage and stippled areas
	QC all penetrations
	QC all vertical to horizontal transitions
	Call for inspection

<b>MATERIAL USAGE CHECK</b>	TOTAL Square Footage Sprayed		SQ. FT.
	Divided by Number of Drums Used		DRUMS
	*Equals Square Feet Per Drum		
* Should be between 600 & 620 sq. feet per "A" drum, for an 80 mil dry membrane			

<b>REMARKS:</b>	
<b>SIGNATURE</b>	

## SURFACE PREPARATION INSPECTION REPORT FOR LIQUID BOOT® GAS VAPOR BARRIERS

<b>JOB</b>	
<b>TIME</b>	
<b>DATE</b>	

	YES	NO	N/A
Does site require inspection by a Government Authority or other inspection? If yes, who? <b>Inspecting agency:</b> _____			
Is there standing water? If yes, has all ponding water been removed from the membrane?			
Is ventilation required? If yes, what type? <b>Ventilation type:</b> _____			
Are precautions necessary for unprotected areas?			
Is the surface free of all dust?			
Is surface free of all dirt?			
Is the surface free of all grease?			
Is the surface free of all curing compounds or releasing agents?			
Are all voids prepared as specified in the Liquid Boot Training Manual?			
Are all inside corners of 120° or less sealed with 3/4" cant of Trowel Grade?			
Is the geotextile rolled out with heat rolled side up?			
Is the geotextile free of wrinkles?			
Is the geotextile held tight inside of corners?			
Does the geotextile have a minimum of 6" overlap?			

<b>REMARKS:</b>	
<b>APPLICATOR SIGNATURE</b>	
<b>INSPECTOR SIGNATURE</b>	

## LIQUID BOOT® MEMBRANE FIELD REPORT FOR CETCO APPROVED APPLICATORS

<b>JOB</b>		<b>AREA REVIEWED</b>	
<b>TEMP</b>		<b>DATE SPRAYED</b>	
<b>TIME</b>		<b>DATE REVIEWED</b>	

	ACCEPTABLE	NOT ACCEPTABLE
Check condition of spray equipment (running smoothly)		
Check to make sure Applicator is properly stirring drums		
Check for proper spray technique -No arching, proper PRESSURE distance from surface		
Check for proper masking of rebar		
Check that concrete is clean, dry and bug holes filled		
Check that form tie holes a fully grouted and taped with Hardcast 1602		
Check overall thickness of membrane - <b>60 MILS DRY MINIMUM</b>		
Check membrane for shadows and holes		
Check the blisters for proper thickness		
Check stippled membrane for shrinkage and proper thickness		
Check around all penetrations for proper detailing		
Check for spraying too thick		
Check vertical to horizontal transitions for proper cant strips		
Check overall appearance of membrane		
Check for proper installation of geotextile - heat set side up, laid smoothly, minimum wrinkles		
Check for proper installation of drainage with fabric towards the earth		
<b>TAKE PICTURES FOR MARKETING AND TO SHOW PROBLEM AREAS</b>	<b>DONE: YES / NO</b>	

<b>MATERIAL USAGE CHECK</b>	TOTAL Square Footage Sprayed	SQ. FT.
* Should be between 600 & 620 sq. feet per "A" drum, for an 80 mil dry membrane	Divided by Number of Drums Used	DRUMS
	*Equals Square Feet Per Drum	

<b>REMARKS:</b>	
<b>SIGNATURE</b>	

Send copies to:  Owner  Applicator  Architect  Engineer

**NOTE: THE ABOVE REPORT IS GIVEN AS A COURTESY TO ASSIST THE APPLICATOR, JOB INSPECTOR AND GENERAL CONTRACTOR. DUE TO NUMEROUS REASONS FOR POTENTIAL LEAKS, THIS REPORT DOES NOT GUARANTEE THERE WILL BE NO LEAKS AND CETCO DOES NOT TAKE RESPONSIBILITY FOR IMPROPER APPLICATION. PROPER APPLICATION IS THE APPLICATOR'S RESPONSIBILITY.**

COUPON TESTS	
TEST AREA	SAMPLE THICKNESS
1	
2	
3	

SMOKE TESTING		
TEST AREA	PASS / FAIL	COMMENTS
1		
2		
3		

## Vapor Mitigation System Inspection Form

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Date/Time of Inspection: \_\_\_\_\_

Date of Last Inspection: \_\_\_\_\_

What prompted this inspection:  Routine Annual Inspection  
 Reported Disturbance of building vapor barrier  
 Other: \_\_\_\_\_

What portion of the property was inspected? *(Note - portions of the property can be inspected at different times, provided the entire property receives inspections once per year in accordance with the Operations & Maintenance Plan.) Attach a map or sketch as appropriate.*

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Was any disturbance of the building slabs or vapor risers observed? \_\_\_\_\_  
*If yes, complete a "Vapor Mitigation System Disturbance Form" for each disturbance.*

Are there any areas where there is risk of disturbance resulting in damage to the vapor barrier or vent risers? For instance, areas where the building slab is damaged but not yet breached.  
*If yes, please explain and attach a map showing the location of the disturbance.*

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Is the discharge of the vent risers unobstructed and at least 10 feet from any HVAC air intakes, and do wind turbines spin freely without obstruction?

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*If the entire property was not inspected, also indicate the portion of the property that was inspected. Photographs can also be included.*

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Inspection Performed By: \_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Company

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## Vapor Mitigation System Disturbance Form

*(Complete this form any time a vapor mitigation system is damaged or distributed.)*

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Date of Disturbance: \_\_\_\_\_ to \_\_\_\_\_

If disturbance was unplanned, when was it discovered? \_\_\_\_\_

Describe any event resulting in damage to the building slab, vapor barrier or vent riser: \_\_\_\_\_

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What company or contractor was responsible for the excavation activities that caused the disturbance?

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Was the company or contractor notified in advance of the Operations & Maintenance Plan for the Property?

If not, when were they notified? \_\_\_\_\_

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What temporary measures are or were implemented to prevent exposure to harmful vapors by occupants?

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Were any building occupants exposed to harmful vapors? \_\_\_\_\_

If yes, please explain the nature and duration of their exposure: \_\_\_\_\_

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Was any air or soil gas testing conducted? If yes, please attach results. \_\_\_\_\_



What steps were or are being taken to repair the damage? \_\_\_\_\_  
\_\_\_\_\_

Has the vapor mitigation system been restored to proper operation? \_\_\_\_\_

*Please attach a map showing the location of the exposure/disturbance. Photographs should also be included.*

\_\_\_\_\_

Report Completed By: \_\_\_\_\_  
Printed Name Company  
  
\_\_\_\_\_  
Signature Date