

FINAL

**ENVIRONMENTAL CONDITION OF PROPERTY
REPORT UPDATE**

**SEBILLE MANOR PROPERTY
U.S. ARMY GARRISON SELFRIDGE
CHESTERFIELD TOWNSHIP, MICHIGAN**



July 2013

Prepared By:

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Louisville, KY 40202-2232**

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1.0 INTRODUCTION

The U.S. Army Corps of Engineers (USACE) Louisville District has prepared this Environmental Condition of Property (ECP) Report Update in support of the sale of the Sebille Manor Property. The property is a former non contiguous housing area of the U.S. Army Garrison – Selfridge (USAR-S), located three miles north of the Selfridge Air National Guard Base (SANG) on the west side of Sugarbush Road, north of 22 Mile Road in Chesterfield Township, Macomb County, Michigan.

Specifically, the property is identified in the Macomb County Assessor's Office as Tax Parcel ID Nos. 09-21-351-001 & 002, 09-28-101-002 & 003, containing approximately 102.69 acres. The property is depicted on the New Haven 7.5 Minute U.S. Geological Survey Topographic Map (Appendix A, Figure 1).

An Environmental Baseline Study (EBS) and Environmental Condition of Property Report (ECP) were prepared for the property in 2004 and 2006, respectively. The purpose of this ECP Report Update is to document and evaluate any changes since the 2006 ECP Report.

This ECP Report Update has been performed for the Sebille Manor Property in accordance with AR 200-1 and applicable ASTM standards. Under ASTM D6008-98, the following components were completed: interviews, government record reviews, visual inspections of the property and adjoining properties, and the declaration by the environmental professional responsible for the assessment.

2.0 BACKGROUND

Sebille Manor encompasses approximately 103 acres located on the west side of Sugarbush Road, north of 22 Mile Road in Chesterfield Township, Macomb County, Michigan. Sebille Manor served as a military housing complex for SANG that included 240 permanent structures including single-family and duplex units, and a youth center. The property also contained trees, landscaped areas, playgrounds, a water tower, and the Southerland Oemig Drain.

In 2005, Sebille Manor was listed for closure and disposition pursuant to the Department of Defense Base Realignment and Closure (BRAC) Report. A notice of Availability of Surplus Federal Property to State and Local Eligible Parties was issued in 2006. However, due to the economic climate in the region, sale of the Sebille Manor property was unsuccessful under the terms and conditions in the original notice. Beginning in 2010, work began on above-ground building structures on the Sebille Manor Property and all building structures have been demolished. Roads and limited components of underground infrastructure, storm, sewer and water mains, constructed of transite, remain in place.

2.1 PHYSICAL DESCRIPTION

This Site is generally flat with a gradual slope to the east towards Lake St. Clair. The elevation of the property is approximately 587 feet above sea level with the most notable topographic feature being the Sutherland Oemig Drain, a small stream that traverses the property from east to west in the northern portion of the Site. The entire property is fenced with restricted access. The property is currently vacant with a landscape of trees and grass. The only man-made structures remaining above-ground on the Site are paved roads, several storm drains, and a single telecommunications vault on a concrete pad. Water mains and storm drains remain below grade.

There are no water wells on the property. Potable water was supplied by SANG via 3" piping. The Site was provided electricity and natural gas by DTE and Consumer's Energy, respectively. The regional surficial groundwater flow direction in the vicinity of the site is assumed to be eastward toward St. Clair following topography gradient.

2.2 PREVIOUS INVESTIGATIONS

Previous environmental studies include an Environmental Baseline Survey (EBS) dated May 2004 prepared by Tetra Tech and an ECP Report dated September 2006 prepared Installation Management Command. The EBS included a review of historical aerial photographs, regulatory records review, site reconnaissance, and interviews. The ECP included a review of existing site environmental documents, including federal and state records, and aerial photographs. The information presented in the EBS was also evaluated and used where appropriate and updated in the ECP Report. The ECP report described the environmental condition of the property in support of the determination of the suitability to transfer or lease the property. Copies of the EBS and ECP are provided in Appendix B.

The 2004 EBS Report indicated that the Site had historically been used for agricultural purposes and concluded that no Comprehensive Environmental Response, Compensation, and Liability Act hazardous substance activities had occurred at the Site. The EBS did not identify any evidence of past storage, spills, release, and/or disposal of hazardous substances and/or petroleum products on the Site. The EBS concluded that there was no evidence that activities on the surrounding properties had negatively impacted or presented a current threat to the environmental conditions at the Site. No recognized environmental conditions were identified at the Site and the EBS recommended that the site be classified as Type 1, an area or parcel of real property where no release, or disposal of hazardous substances of petroleum products or their derivatives, has occurred (including no migration of these substances from adjacent properties).

The 2006 ECP Report concluded that "103 acres of USAG-S constituting Sebille Manor can be identified as Uncontaminated Property based on the investigation of real property described herein. The investigation does not find obvious presence or likely

presence of a release or threatened release of any hazardous substance or any petroleum product or its derivatives, including aviation fuel and motor oil on the real property (CERCLA, 120(h)).” Copies of the EBS and ECP (text only) are provided in Appendix B.

3.0 INTERVIEWS

The Detroit Arsenal Department of Public Works attested to the best of their knowledge, there are no past, threatened, or pending litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the parcel. They further indicated that there are no notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances and petroleum products. In addition, the following individuals were interviewed to determine if they are aware of any changes in site conditions since completion of the original EBS. They were also asked if they were aware of any recognized environmental conditions on the Site.

3.1 MR. LEROY PROSZKOWSKI, MICHIGAN, DETROIT ARSENAL

Mr. Proszkowski is the construction management/Contracting Officer’s Representative (COR) responsible for oversight of the contract for demolition and restoration of Sebille Manor. The interview took place on-site during the site reconnaissance on June 29, 2012. According to Mr. Proszkowski, demolition and restoration of the Site was conducted in two phases, beginning in July 2008 with the demolition, removal, and off-site disposal of houses, foundations, garage pads, youth center, water tower, and interior fences. The second phase included removal of fire hydrants, transformer, exterior lighting poles, overhead electric lines, driveways, walkways, sanitary lift station. This phase included removal of utilities (sewer and water lines) between the mains. Following removal of structures, the contractor restored disturbed areas by grading and reseeding with grass. As many trees as possible were retained during the work. The water and sewer mains were abandoned in place. The work was inspected regularly (at least twice a week) by Installation Management staff. He reported that no unusual staining or chemical odors were observed by inspectors during the demolition or restoration activities, and he was unaware of any environmental concerns associated with the Site. Photographs of the Site during demolition activities are provided in Appendix D.

3.2 GARY VOSS, DETROIT ARSENAL

Mr. Voss was the Asbestos Manager during the demolition project at Sebille Manor, and was interviewed by phone on July 2, 2013. Mr. Voss indicated that procedures for handling and disposal of asbestos containing materials (ACM) were specified in the NESHAPS permit approved by the State of Michigan. ACM were removed from structures to the extent practical prior to demolition. Samples of various materials were also collected during demolition. Building materials were kept wet during the work, and

disposed off-site at a permitted disposal facility. Mr. Voss also indicated that State Inspectors also visited the Site during the work, and that no notices of violation were issued for the project.

4.0 REVIEW OF REGULATORY DATABASE INFORMATION

An electronic database search of environmental records for the Property and surrounding sites was prepared by EDR on June 24, 2013. EDR focused on searching federal and state environmental databases and historical and current land uses to identify sites of potential environmental concern with addresses in the areas immediately surrounding the Property. Full documentation of the EDR database review is provided in Appendix C. Potential environmental sites of concern, located within corresponding ASTM search radius distances from the Site, were evaluated. The database search identified one site listed with the same address on the State Hazardous Waste Site List (SHWS) and Local Historical Landfill List (HIST LF), as “Sugarbush Road Dumpsite” and Dean Brothers Disposal”. This site was also listed on the Orphan Site Summary (couldn’t be mapped) as “Sugarbush Road Dumpsite” on the CERLCA-No Further Remedial Action Planned database. The facility status reported on the SHWS database was “Interim Response in Progress”. This site is located at least ¼ mile north of Sebille Manor and is not considered an environmental concern to Sebille Manor based on distance, topography and regional groundwater flow direction.

5.0 SITE RECONNAISSANCE

A site reconnaissance was performed to characterize on-site conditions and assess surrounding property uses and natural surface features that may have affected the condition of the subject property. In addition, a reconnaissance was conducted of the surrounding roads and readily accessible adjacent properties to identify obvious potential environmental conditions. Photographs taken as part of the site reconnaissance are provided in Appendix D.

The site visit was conducted on June 29, 2013 by Joan Cullen, P.G., CHMM, of the USACE Louisville District. Mr. Proszkowski and Ms. Cheryl Neades of the Detroit Arsenal accompanied Ms. Cullen during the site inspection. Ms. Maryann Fournety, Detroit Arsenal DPW Real Property Manager, provided access and confirmed information provided by Mr. Proszkowski. Weather conditions were sunny and the outside temperature was approximately 85° F. The site reconnaissance was conducted in a systematic manner focusing on the property boundaries and interior areas of the subject property, and a visual inspection of the adjacent properties.

At the time of the site inspection the Site was enclosed within a secured fenced area. Mr. Proszkowski indicated that the area had been fenced since initial development as residential property in 1958. The property was observed to be landscaped with trees and grass. No evidence of dumping, stained soil or stressed vegetation was observed during the site reconnaissance. No pole-mounted or pad-mounted transformers were

observed on the property. No recognized environmental conditions were identified during the inspection of Sebille Manor.

6.0 CONCLUSIONS

The U.S. Army Corps of Engineers (USACE) Louisville District has performed an Environmental Condition of Property Report Update in accordance with AR 200-1 and applicable ASTM standards. Under ASTM D6008-96, the following components were completed: interviews, government record reviews, visual inspections of the property and adjoining properties, and the declaration by the environmental professional responsible for the assessment.

Previous environment assessments of Sebille Manor included an EBS dated May 2004 prepared by Tetra Tech, Inc., and an ECP dated September 2006 prepared by Installation Management Command. These reports were performed in general conformance with ASTM standards and concluded that no recognized environmental conditions were present at Sebille Manor.

Changes to Sebille Manor since 2006 include removal of all structures, with the exception of a pad-mounted telecommunications unit by a former entrance to the property. This unit provides service to the general area beyond Sebille Manor. The demolition began in 2008, with regular oversight of the contractor's work by construction representatives and asbestos management of the Installation Management Command Garrison – Michigan Arsenal. All underground structures, with the exception of transite water, sewer, and stormwater mains, were removed and disposed in accordance with applicable regulations.

In accordance with CERCLA 120(h) (4), this ECP recommends that 103 acres of USAG-S constituting Sebille Manor can be identified as Uncontaminated Property (Category 1) based on investigation of the real property described herein that does not find obvious presence or likely presence of a release or threatened release of any hazardous substance or any petroleum product or its derivatives, including aviation fuel and motor oil, on the real property. This identification of Uncontaminated Property is based on a review of the current and previous uses of the real property as reported in the 2004 Environmental Baseline Survey, the 2006 Environmental Condition of Property, interviews conducted with persons knowledgeable of activities with the property between 2006 and at the time of this update, a review of government records, and a site reconnaissance of the property and surrounding area.

7.0 DECLARATION OF ENVIRONMENTAL PROFESSIONAL

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental professional as defined in §312.10 of 40 CFR 312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and

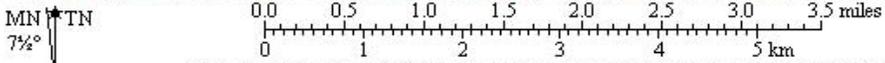
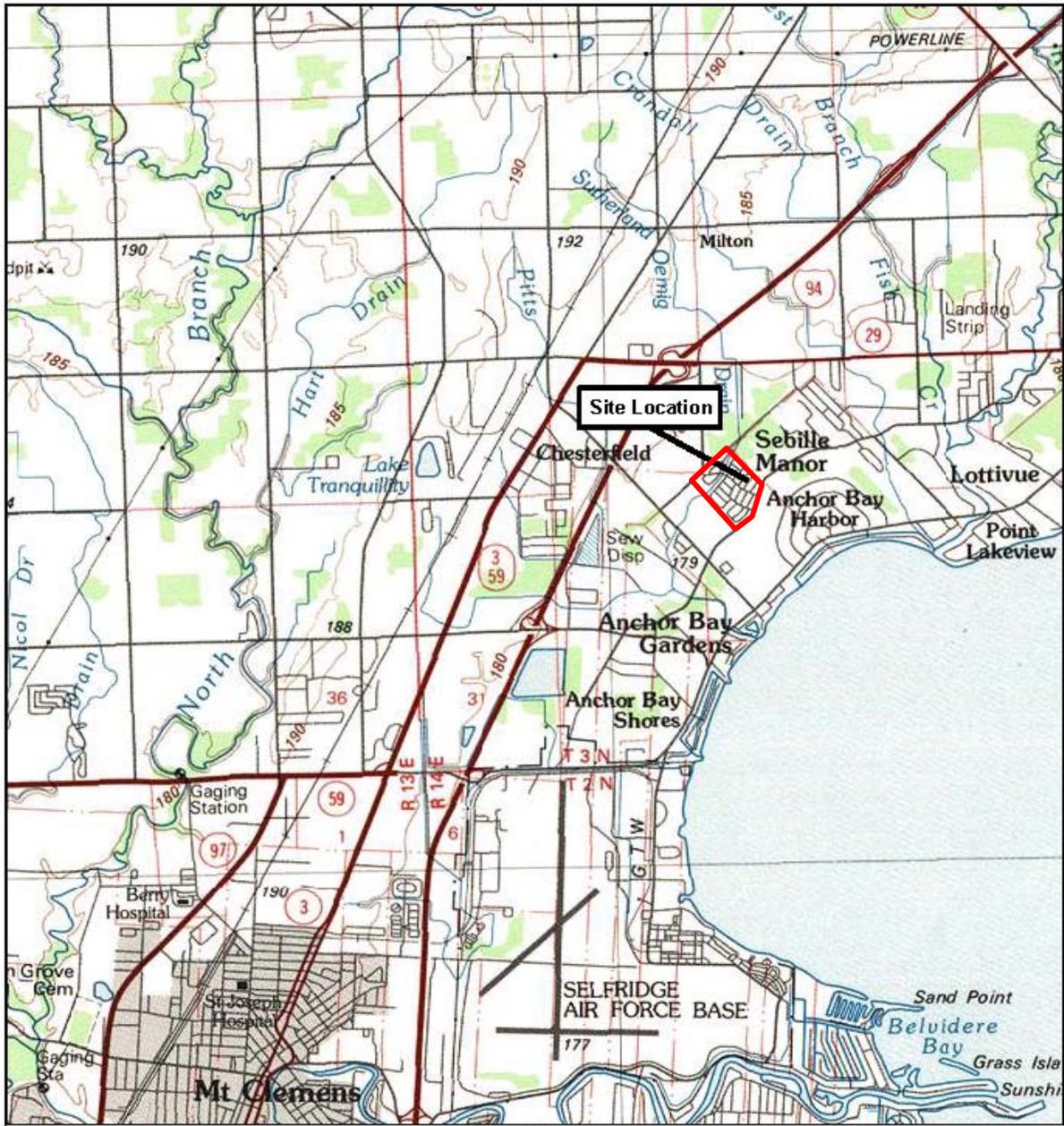
performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



1 August 2013

Joan T. Cullen, P.G. CHMM
Technical Manager
Environmental Branch, Louisville District

APPENDIX A
FIGURES



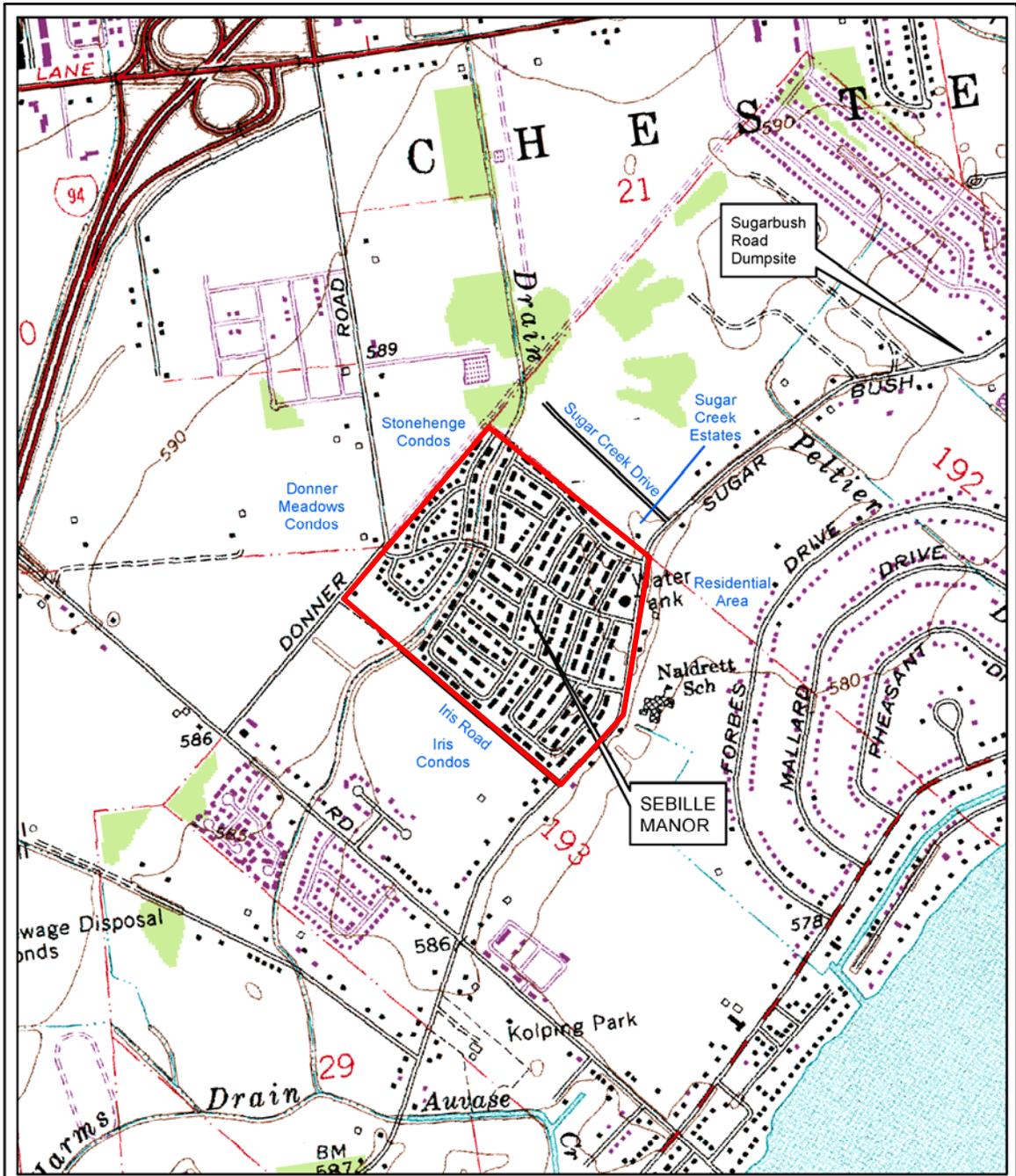
Map created with TOPO!® ©2001 National Geographic (www.nationalgeographic.com/topo)



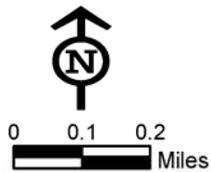
Seville Manor
 Environmental Baseline Survey
 G9012.3.0042.10.04
 Chesterfield Township, Macomb County, Michigan

FIGURE 1
 SITE LOCATION MAP

 Tetra Tech EM Inc.



Source: Map adapted from USGS Topographic Quadrangle: New Haven, Michigan (1983).



Seville Manor
Environmental Baseline Survey
G9012.3.0042.10.04
Chesterfield Township, Macomb County, Michigan

FIGURE 2
SITE VICINITY MAP

Tetra Tech EM Inc.

APPENDIX B

PREVIOUS ENVIRONMENTAL CONDITION OF PROPERTY REPORT (TEXT ONLY)

May 21, 2004

U.S. Army Garrison-Michigan
ATTN: AMSTA-CY-E
Environmental Coordinator
Building 970
Mail Stop 602
Selfridge ANGB, MI 48045

**Subject: Environmental Baseline Survey
U.S. Army Garrison-Michigan
Seville Manor
Chesterfield Township, Michigan 48045**

Dear Mr. Krawciw:

In accordance with contract no. DAAA09-01-D-3004, delivery order No. 0042, Tetra Tech EM Inc. (Tetra Tech) has conducted an Environmental Baseline Survey (EBS) of the above-referenced property. The objective of the EBS was to evaluate the property for indications of recognized environmental conditions. This EBS was conducted in general conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Standard Practice for Conducting Environmental Baseline Surveys, D 6008-96, ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, and Army regulations and technical guideline DA PAM 200-1.

Tetra Tech appreciates the opportunity to provide professional services to you for this project. If you have any questions regarding this report, please call me at (248) 350-9694 or Jack Brunner, Program Manager, at (312) 856-8700.

Sincerely,

Heidi Nemeth
Environmental Consultant

David L. Sawicki, C.P.G.
Detroit Operations Manager

Attachment: Environmental Baseline Survey Report

Cc: Joe Waring, IMA NWR
Jack Brunner, Tetra Tech

EXECUTIVE SUMMARY

The U.S. Army Garrison-Michigan (USAG-M) tasked Tetra Tech EM Inc. (Tetra Tech) to perform an Environmental Baseline Survey (EBS) for Seville Manor on Sugarbush Road in Chesterfield Township, Macomb County, Michigan. The USAG-M currently owns Seville Manor. The EBS for the site was performed in general conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standard Practice for Conducting Environmental Baseline Surveys, (D 6008-96), ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Army regulations, and Army technical guideline DA PAM 200-1.

The EBS produced the following findings for the Seville Manor property:

- Seville Manor is a residential area for enlisted soldiers that is located approximately two miles from Lake St. Clair. The site lies in a suburban setting and consists of approximately 103 acres. Seville Manor was established in the 1950s.
- A review of the Environmental Data Resources, Inc. Report and U.S. Fisheries and Wildlife wetland inventory map identified several large wetland areas near the site and adjacent to Lake St. Clair to the east. The Sutherland Oeming Drain runs through the northern portion of the site. Although no wetland inventory was conducted as part of the EBS, wetlands and wetland-type plants may exist on the site.
- An asbestos-containing materials (ACM) survey was not conducted as part of the EBS. However, during an ACM survey conducted at the site by Weston in 1993, several types of floor tiles and pipe fittings in the site buildings were identified as being asbestos-containing. During Tetra Tech's site reconnaissance, suspected asbestos-containing floor and ceiling tiles were noted. A lead-based paint survey was not conducted as part of the EBS. Tetra Tech reviewed a lead-based paint survey conducted in 1994 by Advanced Environmental Systems. During the survey, lead-based paint was identified on garage entrances and on front and rear doors of the site buildings.
- Electrical transformers located on the site contain fluids with polychlorinated biphenyl (PCB) concentrations ranging from 1 to 25 parts per million. The transformers were sampled in May 2003 by PLUS Engineering, Inc. All the transformers appeared to be in good condition, and none appeared to be leaking.
- One hazardous waste disposal facility near the site was identified during the environmental database search. The facility is approximately ½ mile from Seville Manor. According to Michigan Department of Environmental Quality, the facility has released arsenic; chromium; 4,4-DDT; and 4,4-DDE. Because of the facility's distance from the site and the interpreted groundwater flow direction, the facility is not considered to constitute a recognized environmental concern (REC) for the site.

Based on the results of the EBS and in accordance with ASTM D5745-98, Tetra Tech classified Seville Manor as a Category 1 property. According to ASTM classification of environmental condition of property type area standard, a Category 1 property contains an area or parcel of real estate where no release or disposal of hazardous substances, petroleum products, or their derivatives has occurred (and where there has been no migration of such substances from adjacent properties).

1.0 INTRODUCTION

Tetra Tech received authorization from the U.S. Army Garrison-Michigan (USAG-M) to conduct an environmental baseline survey (EBS) for Seville Manor, on Sugarbush Road in Chesterfield Township, Macomb County, Michigan. The EBS report has been prepared on behalf of USAG-M. No other parties have the right to rely on the contents of this EBS report without the written authorization of Tetra Tech.

The purpose of the EBS; the scope of services; and assessment limitations are discussed below. Section 2.0 describes the Seville Manor site property. Section 3.0 discusses the record review performed for the site. Section 4.0 summarizes information obtained from interviews and a site reconnaissance. Section 5.0 presents Tetra Tech's findings and conclusions. Section 6.0 addresses the qualifications of the environmental professionals who performed the EBS.

In addition; Appendix A contains the figures cited in this report; Appendix B provides aerial photographs of the site; Appendix C presents title information for the site property; Appendix D presents an environmental database report for the site; Appendix E discusses the Sanborn Fire Insurance (Sanborn) maps for the site; Appendix F presents a Raytheon transformer inspection report; Appendix G contains property photographs; and Appendix H documents the qualifications of the environmental professionals who performed the EBS.

1.1. Purpose

The purpose of the EBS was to evaluate the Seville Manor property for indications of recognized environmental conditions (REC) that may be present. The EBS was conducted in general conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standard Practice for Conducting Environmental Baseline Surveys, (D 6008-96), ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Army regulations, and Army technical guideline DA PAM 200-1. ASTM defines REC as follows: "The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions of storage

and use in compliance with local and state regulations. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of regulatory governmental agencies.”

1.2. Scope of Services

The services provided for this project consisted of the following:

- Provide a description of the site property’s location, current use and improvements and surrounding area
- Provide a general description of the site property topography, soils, geology, and groundwater flow direction (if available)
- Review reasonably ascertainable and practically reviewable regulatory information published by state and federal agencies, health, and environmental agencies
- Review information on the history of the site property, including aerial photographs, fire insurance maps, directories, and other readily available development data
- Conduct a site reconnaissance and environmental review of the site property, and assess the site for indications of hazardous substances, petroleum products, wells, storage tanks, solid waste disposal, pits and sumps, and utilities
- Conduct an area reconnaissance, including a brief review of adjacent property uses and any pertinent environmental information noted in the site vicinity
- Interview current owners and/or occupants of the site property
- Interview local government officials or agencies having jurisdiction over hazardous waste disposal or other environmental matters in the area of the site property
- Prepare a written report documenting Tetra Tech’s methods, findings, and conclusions

The goal of such a scope of services is typically to assist the intended user in qualifying for the “innocent landowner” defense to potential liabilities under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA or Superfund). The scope of services for the EBS project did not include advancement of soil borings, installation of groundwater monitoring wells, or collection of soil or groundwater samples. This scope of services also did not include the development of “Findings of Suitability for Leasing or Transfer” in accordance with ASTM Standard Practice D 6008-96.

1.3. Assessment Limitations

The findings and conclusions presented in this report are based on the procedures described in ASTM Standard Practice D 6008-96, informal discussions with various agencies, available literature cited in this report, conditions noted at the time of the EBS site reconnaissance, and interpretation of the information obtained as part of this EBS. The findings and conclusions are limited (1) to the specific project and properties described in this report and (2) by the accuracy and completeness of the information provided by others.

An EBS cannot wholly eliminate uncertainty regarding the potential for RECs in connection with a property. An EBS is intended to reduce but not eliminate uncertainty regarding the potential for RECs in connection with a property within reasonable limits of time and cost.

In fulfilling the scope of services, Tetra Tech used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession practicing in the same locality. No other warranty is made or intended. No intentional deviations from the ASTM Standard Practice D 6008-96 were made in the completion of this EBS.

2.0 SITE DESCRIPTION

This section identifies the site's location, summarizes site and vicinity characteristics, and provides physical setting information for the site.

2.1. Site Location

Seville Manor is located on Sugarbush Road near Cotton Road in Chesterfield Township, Michigan. The site is located approximately two miles northeast of the USAG-M and northwest of Anchor Bay of Lake St. Clair. A site location map is presented as Figures 1 in Appendix A.

2.2. Site and Vicinity Characteristics

For the purposes of this EBS, the site is the extent of Seville Manor, a residential housing development containing approximately 380 units, and approximately 103 acres in size. A site layout map is presented in Figure 3 in Appendix A. According to USAG-M personnel and aerial photos, Seville Manor was constructed in the late 1950s. In a declaration of taking, the U.S. government bought the site property for housing enlisted soldiers. Aerial photographs of the site and surrounding areas are included in Appendix B.

In addition to residential housing units, the site also contains trees, landscaped areas, a youth center, and the Sutherland Oeming Drain. Properties and features directly adjacent to Seville Manor include the Donner Meadows condominium community, Stonehenge condominiums, and Donner Road to the west; Sugar Creek Drive and Sugar Creek Estates residential area to the north; Sugarbush Road, Dean A. Naldrett Elementary School, and a residential area to the east; and Iris Road and Iris condominiums and residential area to the south. Anchor Bay, which is a part of Lake St. Clair, is approximately 3/4-mile southeast of the property. USAG-M is approximately 2 miles southwest of the site.

According to a title provided by the U.S. Army (Army) and a title search performed by Tetra Tech, the U.S. government purchased the site parcel in 1959 under a declaration of taking. In 1959, three parcels were purchased by the U.S. government in a declaration of taking filed as Civil No. 19175. The site parcel was

then leased to the Army in a 55-year lease agreement with Selfridge Air Force Base Housing, Inc. See Appendix C for the title information.

The title search identified the following legal description for the site parcel:

A parcel of land commencing at the northeast corner of Private Claim No. 192, Township 3 North, Range 14 east, Michigan Meridian, Chesterfield Township, Macomb County, Michigan; thence along northwest line of said Private Claim No. 192, as follows: S 49°04'54"W 1872.5 feet; thence S 49°43'00"W 1794.24; thence S 49°21'34"W 543.9 feet, passing from Private Claim No. 192 into Private Claim No. 193 to the point of beginning, said point being the most northern corner of Tract "A"; thence with the common boundary to lands now or formerly owned by Matilda Matejick and lands of said Tract "A", as follows: S 40°21'13" E 1466.05 feet; thence S 49°21'34" W 16.17 feet; thence S 40°21'13" E 317 feet to a point in the center of Sugarbush Road, said point being the most eastern corner of said Tract "A"; thence along Sugarbush Road and continuing with the boundary of said Tract "A" as follows: S 18°48'47" W 1499.91 feet; hence S 52°09'15" W 499.30 feet to a point; thence leaving said center of Sugarbush Road, and continuing with said boundary of Tract "A" N 39°54'00" W 33.02 feet to a point on the northwest right-of-way line of Sugarbush Road; thence with said right-of-way line and continuing with said boundary of Tract "A" S 52°03'30" W 239.4 feet to a point being the most southern corner of said Tract "A"; thence leaving said right-of-way line and with the southwest boundary of said Tract "A", as follows: N 40°03'07" W 1766.48 feet to a point on the centerline of the Sutherland and Oeming Drain; thence along the center of said drain N 57°30'39" E 221.15 feet, to a point; thence N 40°27'00" E 25 feet to a point; thence leaving said center line of drain, and continuing with said southwest boundary of Tract "A" N 39°54'00" W 735.98 feet to a point in the center of Donner Road, and being on the northwest line of Private Claim No. 193, said point being the most western corner of said Tract "A"; thence with the center of Donner Road and the northwest boundary of said Tract "A" N 48°59'00" E 287.5 feet to a point being the intersection of the southeast corner of Fractional Section 20, the southwest corner of Fractional Section 21, and the most northeast corner of Private Claim No. 145, with said northwest line of Private Claim No. 193; thence continuing with said northwest line of Private Claim 193 and Tract "A" N 49°21'34" E 1495.5 feet to the point of beginning, containing 102.69 acres, more or less.

2.3. Physical Setting Information

According to the U.S. Geological Survey (USGS) 7.5-minute topographic map series, specifically, the New Haven, Michigan quadrangle, dated 1983, the site is located at an elevation of approximately 587 feet above mean sea level (msl). The western portion of the site is located in a 500-year flood plain. The Sutherland Oeming Drain, which crosses the northwest portion of the site, is located in a 100-year flood plain.

According to physical setting information provided by EDR, the surficial soils at the site property are generally a clay loam, and the deeper soils consist of a silty clay loam. There may be relatively shallow

bedrock at 5 feet below ground surface. The regional surficial groundwater flow direction in the vicinity of the site is likely eastward towards Lake St. Clair. According to the U.S. Department of Agriculture Soil Conservation Service soil survey of Macomb County, Michigan, the Oakville, Selfridge, and Toledo soil groups have been mapped within the site boundary. Oakville series soils are classified as well-drained, level to undulated, and sandy. Selfridge series soils are classified as level to gently sloping, sandy or loamy sands, and somewhat poorly drained. Toledo series soils are classified as poorly drained clay or silty clay. According to *Quaternary Geology of Southern Michigan*, (1982), the site area contains deposits mapped as Toledo-Paulding that consists of nearly level, poorly drained soils that have fine textured subsoils on lake plains.

EDR reports that one groundwater well and 12 oil or gas wells are located within a 1-mile radius of the site. Water from the groundwater well is likely used for industrial or irrigation purposes because the site and surrounding areas are provided with drinking water by the City of Detroit. The City of Detroit obtains drinking water from the Detroit River.

Based on the topography of the site area and its proximity to Lake St. Clair, the local groundwater gradient is interpreted to be to the southeast toward Lake St. Clair. Typically the hydrogeologic gradient follows the topographic gradient, but without groundwater data for the site, the exact flow direction of the groundwater cannot be determined. Groundwater levels may fluctuate both seasonally and over longer periods of time in response to the degree of water infiltration into soils. Also, based on the zone of influence of the groundwater well, the groundwater flow direction may vary throughout the immediate area of the site.

3.0 RECORDS REVIEW

This section summarizes the findings of Tetra Tech's record review for the site, including regulatory information and historical use information.

3.1. Regulatory Information

EDR was contracted by Tetra Tech to provide a listing of governmental information pertaining to potential and documented environmental impacts to the site. A listing of the agency files queried by EDR includes the following:

- National Priorities List (NPL)
- Proposed NPL
- Deleted NPL
- NPL Liens
- Resource Conservation and Recovery Information System (RCRIS)
- Biennial Reporting System (BRS)
- Superfund (CERLA) Consent Decrees (CONSENT)
- Records of Decision (ROD)
- Department of Defense Sites (DOD)
- U.S. Brownfields
- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)
- CERCLIS No Further Remedial Action Planned (NFRAP)
- Resource Conservation and Recovery Act (RCRA) Administration Action Tracking System (RAATS)
- Emergency Response Notification System (ERNS)
- RCRA Corrective Action Activity (CORRACTS)
- Hazardous Materials Incident Report System (HMIRS)
- Toxic Release Inventory System (TRIS)
- Polychlorinate Biphenyls (PCB) Activity Database Sites (PADS)
- Facility Index System (FINDS)
- Material Licensing Tracking System (MLTS)
- Mines Master Index File (MINES)

- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)/TSCA Tracking System (FTTS)
- Aboveground Tank Database (AST)
- State Hazardous Waste Sites (SHWS)
- Solid Waste Facilities Database (SWF/LF)
- LUST Sites (LUST)
- UST Facility List (UST)
- Baseline Environmental Assessment Database (BEA)
- USTs on Indian Land (Indian UST)
- Inactive Solid Waste Facilities (HST LF)
- Deleted List of Contaminated Sites (DEL SHWS)

The objective of the regulatory information review was to evaluate whether the site property or nearby properties are listed as having a past or present record of actual or potential environmental hazards that are under investigation or may have an adverse impact on the site. A summary of the listings queried by EDR, the corresponding ASTM minimum search distances for each respective listing, and the date of the last government version of each listing is provided in the EDR report located in Appendix D. Upon Tetra Tech’s review of EDR’s database, the facilities below were identified as having previous violations or noncompliance issues.

| Facility | Database | MDEQ Facility Identification No. | Location and Distance from Site |
|-------------------------|--------------------|---|---|
| Dean Brothers Disposal | HIST LF | 50000023 | Off 23-Mile Road 1/4-1/2 mile east-northeast |
| Dean Brothers Disposal | HIST LF | 50000024 | 48221 Sugarbush Road 1/4-1/2 mile east-northeast |
| Sugarbush Road Dumpsite | CERC-NFRAP SHWS | NA | Sugarbush Road 1/4-1/2 mile east-northeast |

According to the Michigan Department of Environmental Quality (MDEQ) inactive solid waste facilities database (HIST LF), the two Dean Brothers Disposal facilities are not operating and do not have any RECs. According to Mr. Soheil Ghevami of MDEQ, Sugarbush Road Dumpsite was formerly an operating disposal facility. In 1987, the facility operator declared bankruptcy and discontinued managing the facility. The site is contaminated and contamination may be migrating off site. Chemicals of concern on the site include arsenic; chromium; 4,4-DDT; and 4,4-DDE.

3.2. Historical-Use Information

The objective of the historical use information review is to develop a history of the previous uses of the site property and surrounding area in order to help identify the likelihood of past uses having led to RECs in connection with the property. Tetra Tech reviewed only those historical sources that were readily available and practically reviewable and were likely to be useful to develop a history of the previous uses of the site property and surrounding area within the time and cost constraints of this EBS. Tetra Tech's findings are summarized below.

3.2.1. Aerial Photographs

Aerial photographs for the years 1940, 1955, 1964, 1973, 1985, 1993, and 2000 were obtained from EDR and reviewed to gain information about the history of development on and in the vicinity of the site. The observations made during the review are summarized below. The aerial photographs are included in Appendix B.

1940 Aerial Photograph, Scale 1 inch = 555.6 feet

The 1940 aerial photograph shows the site as being undeveloped. Seville Manor is not shown. Sugarbush Road has been constructed along the southeastern boundary of the site. Cotton Road has been constructed to the southwest of the site. Several residences are present northwest of the site. Several farms are present along Sugarbush Road and Cotton Road. There appears to be exposed soil near the center of the photograph.

1955 Aerial Photograph, Scale 1 inch = 555.6 feet

In the 1955 aerial photograph, the majority of the site and its vicinity appear the same. Some additional residences have been built. The exposed area in the 1940 photograph appears to have been expanded.

1964 Aerial Photograph, Scale 1 inch = 555.6 feet

In the 1964 aerial photograph, the residences and roads associated with Seville Manor are present. Dean A. Naldrett Elementary School has been built southeast of the site, along Sugarbush Road. All other areas appear the same.

1973 Aerial Photograph, Scale 1 inch = 606.1 feet

In the 1973 aerial photograph, additional residences have been built to the southwest and southeast of the site. The elementary school near the site has expanded. All other areas appeared the same.

1985 Aerial Photograph, Scale 1 inch = 666.7 feet

In the 1985 aerial photograph, additional residences have been built north, east, south, and west of the site.

1993 Aerial Photograph, Scale 1"=606.1'

In the 1993 aerial photograph, additional residences have been built to the north of the site. All other areas appear the same.

2000 Aerial Photograph, Scale 1"=666.7'

In the 2000 aerial photograph, additional residences have been built to the north and south of the site. All other areas appear the same.

3.2.2 Sanborn Fire Insurance Maps

Sanborn fire insurance maps for the site were requested from EDR. However, according to EDR, no such maps are available. A copy of the relevant documentation from EDR is included in Appendix E.

4.0 INFORMATION FROM INTERVIEWS AND SITE RECONNAISSANCE

Tetra Tech obtained information concerning the site during interviews with various individuals and a site reconnaissance. This information is summarized below. Photographs of the site taken by Tetra Tech are included in Appendix G.

4.1. Interviews

Tetra Tech conducted a site reconnaissance on October 20 and 21, 2003. Several Army and contractor personnel knowledgeable of Seville Manor were interviewed at that time. Also, Tetra Tech conducted previous interviews as part of EBS conducted of Building 326 for the U.S. Army Reserve, 88th Readiness Command on September 24, 2003 and October 2, 2003. Interviews with these personnel are summarized below.

Mr. Ron Wesley, Director of Public Works, has been working at USAG-M for approximately 20 years. He stated that he was not aware of any spills or other environmental issues at Seville Manor in the past. He believed the site property was purchased by the U.S. Air Force in the 1950s, was developed in 1960s, and had been used for residential purposes since it was developed. Seville Manor was purchased from Air Force by the Army in 1988. Prior to the 1950s, the site was owned by a civilian and used for farming.

Mr. Mike Czenkus has conducted maintenance at the base for the on-site contractor, Raytheon, for over 20 years. He is familiar with maintenance at Seville Manor. He stated that three units had geothermal heaters/coolers installed by DTE Energy as a pilot study. The residences discharge their wastewater to the Chesterfield Township wastewater treatment facility.

Mr. Soheil Ghevami, MDEQ HST LF, was interviewed on February 12, 2004. Mr. Ghevami stated that the Sugarbush Dump site is contaminated. The site continues to contain hazardous waste including arsenic, chromium, 4,4-DDT, and 4,4-DDE.

Mr. Mohammad Arif, the Air National Guard environmental coordinator at the facility since 1992, was interviewed via telephone on October 2, 2003 regarding environmental activities conducted on the base. He stated that the Air National Guard operations are considered a RCRIS LQG due to aircraft maintenance operations. Wastes accumulated by the Air National Guard operations include used oil, antifreeze, paint waste, and solvents, which are sent off site for proper disposal and/or recycling. He also stated that several areas onsite have been reviewed and/or closed under MDEQ protocols. These buildings include the following, with their status:

- Vagas Tank Farm-Remediation and closure completed in 1998
- Military Vehicle Service Station (LUST)-Feasibility Study currently under review by MDEQ
- Base Service Station (LUST)-Feasibility Study to be conducted
- Vehicle Maintenance Storage- Feasibility Study currently under review by MDEQ
- Hazardous Waste Storage Building- Feasibility Study currently under review by MDEQ
- Hanger 9 Disposal Area- Feasibility Study currently under review by MDEQ
- Hanger 10 Storage/Disposal Area- Feasibility Study currently under review by MDEQ
- UST adjacent to Building 24-Industrial closure approved by MDEQ in April 2003
- East Ramp (JP-8 spill)-Industrial closure approved by MDEQ in April 2003
- Fuel dispensing area by Building 99-Partial remediation complete with additional investigation to be conducted in 2004
- Fuel Storage Area No. 2- Feasibility Study currently under review by MDEQ

All these areas are at least 2 miles from Seville Manor. However, some of these areas are still under MDEQ investigation. MDEQ is aware of all of these areas and their association with the base activities. Mr. Arif also stated that a capped landfill also exists on the base, approximately 3 miles southwest of Seville Manor. This landfill was closed 3 years ago and is under post closure protocols.

4.2. Known Current and Past Uses of the Property and Adjoining Properties

The Seville Manor site consists of a residential area approximately 103 acres in size. The USAG-M owns the site. Seville Manor consists of 380 housing units used by enlisted soldiers. The units are of six types. The unit layouts are shown in figures 4 through 9 in Appendix A.

Properties and features directly adjacent to the site include the Donner Meadows condominium community, the Stonehenge condominiums, and Donner Road to the west; Sugar Creek Drive and the Sugar Creek Estates residential area to the north; Sugarbush Road, Dean A. Naldrett Elementary School, and a residential area to the east; and Iris Road and the Iris condominiums and residential area to the south. Anchor Bay, which is a part of Lake St. Clair, is approximately 3/4-mile southeast of the site (see Appendix A, Figure 1). USAG-M is approximately 2 miles southwest of Seville Manor. Historical sources indicate that the site property has been used as residential housing for military personnel since 1959. Previous site property owners included Edward and Matilda Matejcek, George and Sylvia Meldrum, and Carl and Margaret Hauswirth.

4.3. Property Layout

Sparse trees and landscaped areas surround the housing units on site. The Sutherland Oeming Drain runs from northeast to southwest along the northeast edge of the site. The topography of the site is relatively flat.

There were 380 residential units on the site. During the site reconnaissance, Tetra Tech entered approximately 10 percent of the individual housing units. Tetra Tech evaluated the exterior and interior of each unit for potential RECs. Six residential unit types were identified during the reconnaissance. The unit layouts are presented as figures 4 through 9 in Appendix A.

4.4. Hazardous Substances and Petroleum Products

Hazardous materials noted during the site reconnaissance included various cleaning supplies such as soaps and spray paints stored in garages. Tetra Tech did not notice visibly stained soil or any other indications that hazardous materials were present on the site. Tetra Tech observed stained concrete and asphalt on residential driveways. Generally, staining appeared to be associated with petroleum products that may have leaked from automobiles parked in the driveways.

4.5. Storage Tanks

During the site reconnaissance and while conducting interviews, Tetra Tech discovered that no USTs are present at the site. There is an aboveground water tower on the site located along Sugarbush Road.

4.6. Potential PCB-Containing Equipment

During the site reconnaissance, 62 transformers were identified on the site. During an inspection in 2003, the Raytheon subcontractor conducted testing of the fluids in the transformers and reported that none of the transformers contained PCBs. A copy of their report is included in Appendix F. However, in reviewing the report Tetra Tech identified a number of transformers containing PCB concentrations between 1 and 25 part per million (ppm). According to the Toxics Substance Control Act (TSCA), PCB-containing material must be disposed of as hazardous waste if they contain PCBs at a concentration above 50 ppm. All transformers appeared to be in good condition, and none appeared to be leaking. According to Occupational Safety and Health Administration (OSHA) regulations, the acceptable exposure limit for PCBs is 1 ppm.

4.7. Indications of Solid Waste Disposal

Other than general refuse in containers, solid waste materials were not noted in or around any residences during the site reconnaissance. According to Army personnel, the residents dispose of all general refuse through curbside pickups conducted by Waste Management Inc.

4.8. Potable Water Sources and Sanitary/Wastewater Discharges

Site residents obtain potable water from the City of Detroit. The only known wastewater discharge from the site is sanitary sewage, which is discharged to the Chesterfield Township wastewater treatment plant.

4.9. Drains and Sumps

No unidentified drains or sumps were observed on the site property. Site storm water runoff is collected by catch basins and flows to numerous storm sewers located along Seville Manor roads.

4.10. Other Utilities

This site is provided electricity and natural gas by DTE and Consumer's Energy, respectively. The majority of the residents utilize window air conditioning units for cooling and a boiler system (natural gas) for heat to the residential buildings. Some utilize central heating and cooling units.

4.11. Potential Wetlands

During the site reconnaissance, free-standing water was noted in the Sutherland Oeming Drain. Lake St. Clair is located to the east of the site. Additionally, the EDR report and the USFW wetland inventory map identified several wetland areas along Lake St. Clair located east of the site.

4.12. Suspect Asbestos Containing Material and Lead-Based Paint

No asbestos-containing material (ACM) or lead-based paint (LBP) survey was conducted at the site as part of the EBS. However, as part of the information gathering process, Tetra Tech conducted a review of available environmental reports pertaining to the site:

- "Lead-Based Paint and Risk Assessment", Advanced Environmental Systems, 1994
- "Draft Asbestos Survey Report of Family Housing Buildings at Selfridge Air National Guard Base, Michigan.", Roy F. Weston, 1993

According to the LBP survey report, "solid type doors" including exterior doors and doors to the garage contained LBP. According to the asbestos survey, floor tiles and pipe fittings contained asbestos. During Tetra Tech's site reconnaissance, suspected asbestos-containing floor and ceiling tiles were observed.

5.0 FINDINGS AND CONCLUSIONS

The EBS produced the following findings for the Seville Manor property:

- Seville Manor is a residential area for enlisted soldiers that is located approximately two miles from Lake St. Clair. This site lies in a suburban setting and consists of approximately 103 acres. Seville Manor was established in the 1950s.
- A review of an EDR and a USFW wetland inventory map identified several large wetland areas near the site and adjacent to Lake St. Clair to the east. The Sutherland Oeming Drain runs through the northern portion of the site. Although a wetland inventory was not conducted as a part of the EBS, wetlands and wetland-type plants may exist on the site.
- An ACM survey was not conducted as part of the EBS. However, during an ACM survey conducted at the site by Weston in 1993, several types of floor tiles and pipe fittings in the buildings were identified as being asbestos-containing. During Tetra Tech's site reconnaissance, suspected asbestos-containing floor and ceiling tiles were noted. A lead-based paint survey was not conducted as part of the EBS. Tetra Tech reviewed a lead-based paint survey conducted at the site in 1994 by Advanced Environmental Systems. During the survey, lead-based paint was identified on garage entrances and on front and rear doors of site buildings.
- Electrical transformers located on the site contain fluids with PCB concentrations ranging from 1 to 25 ppm. The transformers were sampled in May 2003 by PLUS Engineering, Inc. All transformers appeared to be in good condition, and none appeared to be leaking.
- One hazardous waste disposal facility was identified during an environmental database search. The facility is located approximately ½ mile from Seville Manor. According to MDEQ, the facility has released arsenic; chromium; 4,4-DDT; and 4,4-DDE. Because of the facility's distance from the site and the interpreted groundwater flow direction, the facility is not considered to constitute an REC for the site. A site vicinity map is presented in Figure 2 in Appendix A.

Based on the results of the EBS and the ASTM D5746-98, Tetra Tech classified Seville Manor as a Category 1 property. According to the ASTM standard classification of environmental condition of property type area, a Category 1 property contains an area or parcel of real estate where no release or disposal of hazardous substances, petroleum products, or their derivatives has occurred (and where there has been no migration of these substances from adjacent properties).

6.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

The qualifications of the environmental professional who managed and conducted the EBS are summarized in Appendix H.



U.S. Army BRAC 2005
Environmental Condition of Property Report
SEBILLE MANOR PROPERTY
U.S. Army Garrison Selfridge – Selfridge,
Michigan
September 2006

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Appendix A: List of Parcels and Buildings, Transformer Inventory List

Appendix B: Methodology and Data Record: Title Information, EDR Report, Sanborn Fire Insurance Maps, Aerial Photos.

Appendix C: Site Maps and Figures

The following lists of acronyms, abbreviations, and definitions are intended to be comprehensive and are contained in this Environmental Condition of Property (ECP) Report.

Acronyms and Abbreviations

| Acronym | Full Title |
|----------------|---|
| AAFES | Army & Air Force Exchange Service |
| AAI | All Appropriate Inquiries |
| ACM | Asbestos Containing Material |
| ACSIM | Assistant Chief of Staff for Installation Management |
| AEC | Army Environmental Center |
| AHERA | Asbestos Hazard Emergency Response Act of 1986 |
| AR | Army Regulations |
| ARC | Army Reserve Center |
| ARNG | Army National Guard |
| ASR | Archive Search Report |
| ASTM | American Society for Testing and Materials |
| BCP | DoD BRAC Cleanup Plan Guidebook |
| BEA | Bureau of Economic Analysis |
| BEC | BRAC Environmental Coordinator |
| BIC | Business Initiative Council |
| BRAC | Base Realignment and Closure |
| BRACD | Base Realignment and Closure Division |
| BRS | Biennial Reporting System |
| CC | Compliance Cleanup |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CIRCLIS | Comprehensive Environmental Response, Compensation Information System |
| CERFA | Community Environmental Response Facilitation Act |
| CFR | Code of Federal Regulations |
| CONSENT | Superfund (CERCLA) Consent Decrees |
| CWA | Clean Water Act |
| DOD | U.S. Department of Defense |
| EA | Environmental Assessment |
| EBS | Environmental Baseline Survey |
| ECP | Environmental Condition of Property |
| EDR | Environmental Data Registry |
| ERNS | Emergency Response Notification System |
| ESA | Endangered Species Act |
| FEMA | Federal Emergency Management Agency |
| FIFRA | Federal Insecticide, Fungicide, and Rodenticide Act |
| FINDS | Facility Index System |
| GO | General Officer |
| GOMO | General Officer Management Office |
| GSA | General Services Administration |
| HQDA | Headquarters Department of Army |

| Acronym | Full Title |
|------------------|--|
| HMIRS | Hazardous Materials Incident Report System |
| HST LF | Inactive Solid Waste Facilities Database |
| HUD | U.S. Dept of Housing and Urban Development |
| ILHC | Interim Lead Hazard Controlls |
| IMA | Installation Management Agency |
| INRMP | Integrated National Resources Management Plan |
| IRP | Installation Restoration Program |
| LBP | Lead Based Paint |
| LOMA | Letters of Map Ammendment |
| LUST | Leaking Underground Storage Tank |
| LRA | Local Redevelopment Authority |
| LQG | Large Quantity Generator |
| MACOM | Major Command |
| MDEQ | Michigan Department of Environmental Quality |
| MDLEG | Michigan Department of Labor and Economic Growth |
| MEC | Munitions Constituents and Explosives of Concern |
| MIANG | Michigan Army National Guard |
| MIDNR | Michigan Department of Natural Resources |
| MLTS | Material Licensing Tracking System |
| MMRP | Military Munitions Response Program |
| NEPA | National Environmental Policy Act |
| NFRRP | CERCLIS No Further Remedial Action Planned |
| NPEDS | National Pollution Discharge Elimination System |
| NPL | National Priorities List |
| NRC | Nuclear Regulatory Commission |
| NRHP | National Registry of Historic Places |
| O&M | Operations and Maintenance |
| PCB | Polychlorinated Biphenyls |
| pCi/l | picoCuries per liter |
| PPM | Parts per million |
| POTW | Publicly Owned Treatment Works |
| RCRA | Resource Conservation and Recovery Act |
| RCRIS | Resource Conservation and Recovery Information System |
| REC | Recognized Environmental Condition |
| REC ₂ | Record of Consideration |
| ROD | Record of Decision |
| RQ | Reportable Quantity |
| RSO | Radiation Safety Officer |
| SHWA | Solid and Hazardous Waste Act |
| SWF/LF | Solid Waste Facilities Database |
| TRIS | Toxic Release Inventory System |
| TSCA | Toxic Substance Control Act |
| USACHPPM | U.S. Army Center for Health Promotion and Preventative Medicine |
| USAG-S | U.S. Army Garrison - Selfridge |
| USEPA | U.S. Environmental Protection Agency |
| USFW | U.S. Fish and Wildlife |
| UST/AST | Underground Storage Tank/Above Ground Storage Tanks |
| TACOM | U.S. Army Tank and Automotive Command |

| Acronym | Full Title |
|----------------|------------------------|
| UXO | Unexploded Ordnance |
| VSI | Visual Site Inspection |
| XRF | X-Ray Fluorescence |

Definitions

| Term | Definition |
|---|--|
| BRAC Environmental Coordinator (BEC) | An employee assigned to provide work as the lead BRAC environmental coordinator for a wide variety of technical situations and activity operational requirements, directing actions with regard to schedules, priorities, methods, materials, and equipment. The role of the BEC is to provide principle oversight for the Activity Base Commander, Lead Organization, and BRACD regarding all BRAC related environmental programs for the installation. |
| Closure | All missions of the installation have ceased or have been relocated. All personnel positions (military, civilian and contractor) have either been eliminated or relocated, except for personnel required for care taking, conducting any on-going environmental cleanup, and disposal of the base, or personnel remaining in authorized enclaves. In the context of this document, this may be referred to as “full closure”. |
| Environmental Baseline Survey (EBS) | A process by which a characterization of the environmental condition of a facility or property is conducted. An EBS is required by the Army for the transfer or acquisition of real property and identifies potential cleanup requirements and liabilities. See definition for Environmental Condition of Property (ECP). |
| Environmental Condition of Property (ECP) | A management approach for providing efficient and effective development of a comprehensive environmental condition / liability characterization for a facility or property. The ECP process applies industry best practices and standards; provides effective oversight and quality assurance, and unifies the EBS and the (MEC) Archives Search Report steps taken in prior BRAC rounds into a unified effort. The ECP is based on the Initial Site Investigation (ISI) project approved by the Business Initiative Council (BIC). The Army’s ECP Report meets DOD’s ECP Report requirement. |
| Environmental Condition of Property (ECP) Categories 1-7 definitions | <p>Category 1. Definition: Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).</p> <p>Category 2. Definition: Areas where only release or disposal of petroleum products has occurred.</p> <p>Category 3. Definition: Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.</p> <p>Category 4. Definition: Areas where release, disposal, and/or migration of hazardous substances has occurred, and all remedial actions necessary to protect human health and the environment have been taken.</p> <p>Category 5. Definition: Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are under way, but all required remedial actions have not yet been taken.</p> <p>Category 6. Definition: Areas where release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented.</p> <p>Category 7. Definition: Areas that are not evaluated or require additional evaluation.</p> |
| Environmental Professional | EPA’s all appropriate inquiries (AAI) Final Ruling states the definition of an Environmental Professional establishes a balance between the merits |

| Term | Definition |
|-----------------------------|---|
| | <p>of setting a high standard of excellence for the conduct of all appropriate inquiries through the establishment of stringent qualifications for environmental professionals and the need to ensure that experienced and highly competent individuals currently conducting all appropriate inquiries are not displaced. In summary, the definition of environmental professional included in the final rule includes individuals who possess the following qualifications:</p> <ul style="list-style-type: none"> • Hold a current Professional Engineer's or Professional Geologist's license or registration from a state, tribe, or U.S. territory and have the equivalent of three (3) years of full-time relevant experience; or • Be licensed or certified by the federal government, a state, tribe, or U.S. territory to perform environmental inquiries as defined in Sec. 312.21 and have the equivalent of three (3) years of full-time relevant experience; or • Have a Baccalaureate or higher degree from an accredited institution of higher education in science or engineering and the equivalent of five (5) years of full-time relevant experience; or • Have the equivalent of ten (10) years of full-time relevant experience. <p>The definition of “relevant experience” is “participation in the performance of environmental site assessments that may include environmental analyses, investigations, and remediation which involve the understanding of surface and subsurface environmental conditions and the processes used to evaluate these conditions and for which professional judgment was used to develop opinions regarding conditions indicative of releases or threatened releases to the subject property.”</p> <p>The final rule retains the proposed requirement that environmental professionals remain current in their field by participating in continuing education or other activities and be able to demonstrate such efforts.</p> |
| Excess Real Property | <p>Per AR 405-45, any real property under the control of any Federal agency that the head of the agency determines is not required for agency needs and discharge of the responsibilities of the agency or the installation where the property is located. The excess status is assigned to the real property once a formal report of excess has been processed. Real property that has been determined excess to the Department of the Army must be screened with other Department of Defense elements before it is excess to Department of Defense.</p> |
| Garrison Commander | <p>Per General Order 4, 22 August 2002, Garrison commanders, on behalf of the regions and the IMA, will have a responsibility to provide a standard level of base support to installation customers listed on the Army Stationing and Installation Plan. The Garrison commander is responsible to ensure that training support and training enabler functions and activities are responsive to the needs of the senior mission commander on the installation in the execution of the senior mission commander's duties.</p> |

| Term | Definition |
|--|---|
| Installation | Per AR 405-45, an aggregation of contiguous or near contiguous, common mission-supporting real property holdings under the jurisdiction of or possession controlled by the Department of the Army or by a State, commonwealth, territory, or the District of Columbia, and at which an Army unit or activity (Active, Army Reserve, or Army National Guard) is assigned. An installation is a single site or a grouping of two or more sites for the purposes of real property inventory control. The real property accountability officer is at the installation level. |
| Installation Commander | Per AR 600-20, the installation commander is normally the senior commander on the installation. In addition to mission functions, the installation commander has overall responsibility for all real estate, facilities, base support operations, and activities on the installation. |
| Lead Organization | Per the BRAC 2005 Implementation Plan Guidance, the Army organization which will have the lead responsibility for preparation of an installation Implementation Plan. This will generally be the Army organization which has operational control of the installation identified in the BRAC recommendations. |
| Local Redevelopment Authority (LRA) | Any authority or instrumentality established by State or local government and recognized by the Secretary of Defense, through the Office of Economic Adjustment, as the entity responsible for developing the redevelopment plan with respect to the installation, or for directing implementation of the plan. |
| Military Installation | Per Section 2910 of Title XXIX, Defense Base Closure and Realignment Act of 1990, as amended, the term "military installation" means a base, camp, post, station, yard, center, homeport facility for any ship, or other activity under the jurisdiction of the Department of Defense, including any leased facility. This term does not include any facility used primarily for civil works, rivers and harbors projects, flood control, or other projects not under the primary jurisdiction or control of the Department of Defense. |
| Personal Property | According to 41 CFR 102-36.40, personal property is defined as: "Any property except real property. The term excludes records of the Federal Government, and naval vessels of the following categories: battleships, cruisers, aircraft carriers, destroyers, and submarines. "Related personal property" means any personal property that is an integral part of real property. It is: Related to, designated for or specifically adapted to the functional capacity of the real property and removal of this personal property would significantly diminish the economic value of the real property, or Determined by the Administrator of General Services to be related to the real property. |
| Real Property | AR 405-90: Real property consists of lands and improvements to land, buildings, and structures, including improvements and additions, and utilities. It includes equipment affixed and built into the facility as an integral part of the facility (such as heating systems), but not movable equipment (such as plant equipment). In many instances, this term is synonymous with 'real estate' |
| Realignment | Any action that both reduces and relocates functions and DoD civilian personnel positions, but does not include a reduction in force resulting from workload adjustments, reduced personnel or funding levels, skill imbalances, or other similar cause. A realignment may terminate the DoD requirement for the land and facilities on part of an installation. That |

| Term | Definition |
|---------------------------------|--|
| Senior Mission Commander | part of the installation shall be treated as “closed”, and in the context of this document referred to as a “partial closure”. The Senior Mission Commander is a General Officer (G.O.) with command oversight of one or more non-G.O. Installation Commanders. The Senior Mission Commander conveys MACOM mission priorities to the Installation Commander, and provides executive oversight and communicates installation management priorities not established by HQDA or IMA to the Installation Commander and Garrison Commander. Senior Mission Commanders' orders from the General Officer Management Office (GOMO) will specify the installations for which they will serve as SMC. |

1 Executive Summary

This Environmental Condition of Property (ECP) report is intended to document reliable information regarding the environmental condition of 103 acres of real property that constitutes the U.S. Army-Garrison-Selfridge (USAG-S) Seville Manor to determine the property's suitability for outgrant or transfer in substantial compliance with American Society for Testing and Materials (ASTM) Standard Practice D-6008-96 and in accordance with U.S. Army Regulation (AR) 200-1, Environmental Protection and Enhancement. Seville Manor is an active military housing complex containing 352 housing units as part of 240 permanent structures including single-family and duplex units. In addition to residential housing units, the property also contains a youth center.

This ECP recommends that 103 acres of USAG-S constituting Seville Manor can be identified as Uncontaminated Property based on investigation of the real property described herein. The investigation does not find obvious presence or likely presence of a release or threatened release of any hazardous substance or any petroleum product or its derivatives, including aviation fuel and motor oil, on the real property (CERCLA, 120(h)). This identification of Uncontaminated Property is based on a review of information concerning the current and previous uses of the real property as reported in the 2004 Environmental Baseline Survey (EBS) (**Tetra Tech, 2004**) and this ECP. In 2004, the USAG-S completed an EBS for Seville Manor and the results of the EBS have been used where appropriate and updated accordingly in this ECP document.

2 Purpose

The purpose of the ECP is to document the environmental condition of the Seville Manor Housing Area, which is a part of the U.S. Army Garrison – Selfridge (USAG-S). This is achieved by:

Identifying, characterizing, and documenting the obviousness of the presence or likely presence of a release or threatened release of a hazardous substance or petroleum product associated with the property's historical and current use.

Identifying, characterizing, and documenting the obviousness of the presence or likely presence of a release or threatened release of a hazardous substance or petroleum product from an adjacent property that is likely to cause or contribute to contamination of Seville Manor.

2.1 General

The ECP meets the DoD requirement to prepare an ECP Report. The ECP was performed to collect reliable information regarding the environmental condition of Seville Manor to determine the property's suitability for outgrant or transfer, and to meet the U.S. Army Regulation (AR) 200-1, Environmental Protection and Enhancement. The information gathered during this assessment will also be used with the objective of assisting the U.S. Army (Army), the General Services Administration (GSA), and the purchaser in making informed business decisions about the transfer of the property by reducing uncertainty regarding its environmental condition.

The Army prepares an ECP for the following purposes:

- Identify, characterize and document the presence or likely presence of a release or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property associated with the historical and current use of the installation.
- Identify, characterize and document the release or possible release of any hazardous substances or petroleum products from an adjacent property that would likely cause or contribute to contamination at the installation.
- Provide a basis for determining if the property is suitable for transfer, lease, or assignment.
- Provide information to satisfy legal requirements including:
 - Notification requirements under §120(h)(1) and (3)(A)(i) of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and state or local real property transfer requirements;
 - Uncontaminated parcel identification requirements of Section 120(h)(4) of CERCLA; and
 - State or local real property transfer requirements that are applicable to the federal government and the transaction.
- Provide a commercially acceptable level of environmental information necessary to facilitate the divestiture of the property.

The ECP contains the information required to comply with the provisions of 40 CFR, Part 373 that require a notice accompany contracts for the sale of, and deeds entered into for the transfer of, federal property on which hazardous substances may have been stored, released or disposed of. CERCLA §120(h) stipulates that a notice is required if certain quantities of designated hazardous substances have been stored on the property for one year or more—specifically, quantities exceeding (1) 1,000 kilograms or the reportable quantity (RQ), whichever is greater, of the substances specified in 40 CFR 302.4, or (2) 1 kilogram of acutely hazardous waste as defined in 40 CFR 261.30. A notice is also required if hazardous substances have been disposed of or released on the property in an amount greater than or equal to the RQ. AR 200-1 requires that an ECP address asbestos, lead-based paint, radon and other substances potentially hazardous to health.

This ECP was performed in substantial compliance with American Society for Testing and Materials (ASTM) Standard Practice D-6008-96. Although many of the ECP development activities may be considered “due diligence” functions, the ECP Report is not prepared to satisfy a real property purchaser's duty to conduct an “appropriate

inquiry” to establish an “innocent purchaser defense” to CERCLA 107 liability. Any such use of the ECP by any party is outside the control of the United States Army and beyond the scope of the ECP. The United States Army, its officers, employees or contractors make no warranties or representations that any ECP Report satisfies any such requirements for any party.

2.2 Scope

The scope of work for this ECP included the review of existing site environmental documents, including federal and state records, and aerial photographs. In 2004, the USAG-S completed an EBS for Seville Manor and the results of the EBS have been used where appropriate and updated accordingly in this ECP document (**Tetra Tech, 2004**). As part of the 2004 EBS, a site visit, which included visual inspections and employee interviews, was conducted and the information obtained has been included in this ECP. Additionally, reasonably obtainable federal, state, and local government records for adjacent properties were reviewed in the EBS and have been referenced and in some cases included in the ECP as Appendices. This ECP report describes the environmental condition of the property and will be used to support determination of the suitability to transfer or lease.

2.3 Assumptions

To comply with the requirements in AR 200-1 and ASTM Standards, this ECP Report was prepared to permit formulation of an opinion of the environmental condition of the USAG-S/Seville Manor Property. Opinions on the environmental conditions at the site are based on information from the site reconnaissance, interviews, and collection and review of readily available information. New information or changes in property use could require a review and possible modification of the findings and conclusions contained in this report.

The information obtained from the Army, the Army’s representatives, individuals interviewed and prior environmental reports is considered to be accurate unless our reasonable inquiries indicated otherwise.

2.4 Limitations

Although this investigation was performed professionally, no investigation may be considered so comprehensive as to guarantee complete information regarding the possible presence of materials on the site that currently or in the future may be considered hazardous. The conclusions presented in this ECP Report are based on information that was reasonably available from the designated site contacts and other public sources at the time the ECP was conducted. In addition, information obtained from the 2004 EBS including records review and interviews has been assumed to be correct and complete, unless contradictory information was obtained through other sources.

2.5 Report Organization

The remainder of the ECP is organized as follows:

Section 3 - Survey Methodology: This section provides a description of the data collection methods employed and describes the methodology used for the 2004 EBS which has been used and updated as a significant source of information for this document.

Section 4 – Property Description: This section provides the installation location and description, background of the installation, including existing environmental conditions, historic and current land use, and facility history, including the operational history, and occupancy history; the environmental setting, including climate, topography, geology and demography; the biological and cultural resources summary; and a description of the installation utilities, including water, industrial/sanitary sewer systems, stormwater system, and the electrical system.

Section 5 – Environmental Conditions: This section provides the existing environmental information and also includes information on biological resources, cultural resources, including; historic, archeological, buildings, and related consultations.

Section 6 - Conclusions:

Section 7 - References: Provides an inventory of the reference material used in the preparation of this ECP Report. The appendixes are arranged as follows:

Appendix A: List of Parcels and Buildings

Appendix B: Methodology and Data Record: Title Information, EDR Report, Sanborn Fire Insurance Maps, Aerial Photos.

Appendix C: Site Maps and Figures

3 Survey Methodology

In 2004, the U.S. Army Garrison-Selfridge (USAG-S) completed an EBS for Seville Manor on Sugarbush Road in Chesterfield Township, Macomb County, Michigan (**Tetra Tech, 2004**). The results of the EBS have been used where appropriate and updated accordingly in this ECP document.

3.1 Development of Study Sections

The purpose of the EBS was to evaluate the Seville Manor property for indications of recognized environmental conditions (REC) that may be present. The EBS was conducted in general conformance with the scope and limitations of the ASTM Standard Practice for Conducting Environmental Baseline Surveys, (D 6008-96), ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Army regulations, and Army technical guideline DA PAM 200-1. ASTM defines REC as follows: “The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release or a material threat of a release of any hazardous substances or petroleum

products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions of storage and use in compliance with local and state regulations. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of regulatory governmental agencies.” (Tetra Tech, 2004)

3.2 Visual Site Inspection

As part of the 2004 EBS for Seville Manor, the contractor conducted a site reconnaissance of the property on October 20 and 21, 2003 (Tetra Tech, 2004). The site reconnaissance consisted of entering approximately 10 % of the individual housing units and evaluating the units for potential indications of RECs.

3.3 Aerial Photography Analysis

Aerial photographs for the years 1940, 1955, 1964, 1973, 1985, 1993, and 2000 were obtained as part of the 2004 EBS (Tetra Tech, 2004). The observations made during the review are summarized below and the aerial photographs are included in **Appendix B**. Note that each aerial photograph in Appendix B contains an identification sheet preceding each photograph.

1940 Aerial Photograph, Scale 1 inch = 555.6 feet

The 1940 aerial photograph shows the site as being undeveloped. Seville Manor is not shown. Sugarbush Road has been constructed along the southeastern boundary of the site. Cotton Road has been constructed to the southwest of the site. Several residences are present northwest of the site. Several farms are present along Sugarbush Road and Cotton Road. There appears to be exposed soil near the center of the photograph.

1955 Aerial Photograph, Scale 1 inch = 555.6 feet

In the 1955 aerial photograph, the majority of the site and its vicinity appear the same. Some additional residences have been built. The exposed area in the 1940 photograph appears to have been expanded.

1964 Aerial Photograph, Scale 1 inch = 555.6 feet

In the 1964 aerial photograph, the residences and roads associated with Seville Manor are present. Dean A. Naldrett Elementary School has been built southeast of the site, along Sugarbush Road. All other areas appear the same.

1973 Aerial Photograph, Scale 1 inch = 606.1 feet

In the 1973 aerial photograph, additional residences have been built to the southwest and southeast of the site. The elementary school near the site has expanded. All other areas appeared the same.

1985 Aerial Photograph, Scale 1 inch = 666.7 feet

In the 1985 aerial photograph, additional residences have been built north, east, south, and west of the site.

1993 Aerial Photograph, Scale 1"=606.1'

In the 1993 aerial photograph, additional residences have been built to the north of the site. All other areas appear the same.

2000 Aerial Photograph, Scale 1"=666.7'

In the 2000 aerial photograph, additional residences have been built to the north and south of the site. All other areas appear the same.

3.4 Records Review

2004 EBS Records Review: As part of the 2004 EBS, Environmental Data Resources (EDR) Inc. provided a listing of governmental information pertaining to potential and documented environmental impacts to the site. The complete EDR data base report from the 2004 EBS report (October 23, 2003) is provided in **Appendix B**. A listing of the files queried includes the following:

National Priorities List (NPL)

Proposed NPL

Deleted NPL

NPL Liens

Resource Conservation and Recovery Information System (RCRIS)

Biennial Reporting System (BRS)

Superfund (CERLA) Consent Decrees (CONSENT)

Records of Decision (ROD)

Department of Defense Sites (DOD)

U.S. Brownsfields

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

CERCLIS No Further Remedial Action Planned (NFRAP)

Resource Conservation and Recovery Act (RCRA) Administration Action Tracking System (RAATS)

Emergency Response Notification System (ERNS)

RCRA Corrective Action Activity (CORRACTS)

Hazardous Materials Incident Report System (HMIRS)

Toxic Release Inventory System (TRIS)

Polychlorinated Biphenyls (PCB) Activity Database Sites (PADS)

Facility Index System (FINDS)

Material Licensing Tracking System (MLTS)
Mines Master Index File (MINES)
Toxic Substances Control Act (TSCA)
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)/TSCA Tracking System (FTTS)
Aboveground Tank Database (AST)
State Hazardous Waste Sites (SHWS)
Solid Waste Facilities Database (SWF/LF)
LUST Sites (LUST)
UST Facility List (UST)
Baseline Environmental Assessment Database (BEA)
USTs on Indian Land (Indian UST)
Inactive Solid Waste Facilities (HST LF)
Deleted List of Contaminated Sites (DEL SHWS)

3.4.1 Additional Record Sources

Other sources of records for information not included in the 2004 EBS are USAG-S Environmental Management Division reports as follows:

- Draft Multi-Family Lead Inspection and Risk Assessment for Seville Housing Units, TECOM, Inc, Dates of Inspection December 2004 to March 2005, **(USAG-S,c, 2006)**.
- Draft Asbestos Inspection Report for Seville Manor Housing, TECOM, Inc, Dates of Inspection April 2005 to May 2006, **(USAG-S,b, 2006)**
- Preventive Maintenance Inspection at Seville Manor, Transformer Inspection Retrofill Corporation for TECOM, Inc, April 10 to April 18, 2006, **(USAG-S,a, 2006)**
- AMSTA-QRA, Memo for C, Facilities Management Branch (AMSTA-XEM), Subj: Analysis of ATM Radon Samples, 17-Dec-1991, **(AMSTA-QRA, 1991)**.

3.5 Interviews

Personnel Interviews 2004 EBS: Interviews were conducted with USAG-S personnel as part of the 2004 EBS **(Tetra Tech, 2004)**. This information from the 2004 EBS is summarized below:

Mr. Ron Wesley, Director of Base Operations, has been working at USAG-S for approximately 20 years. He stated October 20, 2003, that he was not aware of any spills or other environmental issues at Seville Manor in the past. He believed the site property was purchased by the U.S. Air Force in the 1950s, was developed in 1960s, and had been used for residential purposes since it was developed. Seville Manor was

transferred from the Air Force to the Army in 1988. Prior to the 1950s, the site was privately owned and used for farming.

Former base operations contractor Mr. Mike Czenkus had conducted maintenance at the base, for over 20 years. He is familiar with maintenance at Seville Manor. He stated October 21, 2003 that three units had geothermal heaters/coolers installed by DTE Energy as a pilot study. The residences discharge their wastewater to the Chesterfield Township wastewater treatment facility.

Mr. Soheil Ghevami, MDEQ HST LF, was interviewed on February 12, 2004. Mr. Ghevami stated that the Sugarbush Dump site located ½ mile north of Seville (EPA ID# MID981093933) is contaminated. The site continues to contain hazardous waste including arsenic, chromium, 4,4-DDT, and 4,4-DDE (**location presented in Figure 2 of Appendix C**).

The Sugarbush Dump was a private facility located approximately ½ mile north of Seville Manor (also see Paragraph 5.16, Adjacent Properties, for additional discussion of the Sugarbush Dump site). As stated in the EBS, the Sugarbush Dump site is not considered to be a recognized environmental concern for Seville Manor.

Mr. Mohammad Arif, the Air National Guard environmental coordinator at the Selfridge Air National Guard Base since 1992, was interviewed via telephone on October 2, 2003 regarding environmental activities conducted on the base. He stated that the Main Garrison Air National Guard operations are considered a RCRA Large Quantity Generator (LQG) due to aircraft maintenance operations. Wastes accumulated by the Air National Guard operations include used oil, antifreeze, paint waste, and solvents, which are sent off site for proper disposal and/or recycling.

4 Property Description

4.1 Installation Location and Description

Seville Manor covers 103 acres and is a housing area which is part of the USAG-S. Maps showing the general location of Seville Manor are provided in **Figures 1 to 3 in Appendix C**. Seville Manor is non contiguous with the main Garrison property and is located approximately 3 miles northeast of the Garrison and northwest of Anchor Bay of Lake St. Clair. The Seville Manor housing area lies within Chesterfield Township.

Seville Manor currently has 352 housing units as part of 240 permanent structures including single-family and duplex units. According to property records, some units were demolished over the years and debris was sent off-site to construction and debris landfills. Floor plans for housing types are provided in **Figures 4 to 9 in Appendix C**.

In addition to residential housing units, the site also contains trees, landscaped areas, play grounds, a youth center, a water tower, and the Sutherland Oemig Drain. Properties and features directly adjacent to Seville Manor include the Donner Meadows condominium community, Stonehenge condominiums, and Donner Road to the west; Sugar Creek Drive and Sugar Creek Estates residential area to the north; Sugarbush Road, Dean A. Naldrett Elementary School, and a residential area to the east; and Iris

Road and Iris condominiums and residential area to the south. Anchor Bay, which is a part of Lake St. Clair, is approximately 3/4-mile southeast of the property.

Sparse trees and landscaped areas surround the housing units on site. The Sutherland Oemig Drain runs from northeast to southwest through the northeast edge of the site. The topography of the site is relatively flat with a gradual slope towards Lake St. Clair.

The title search conducted as part of the 2004 EBS identified the following legal description for the Seville Manor site parcel:

A parcel of land commencing at the northeast corner of Private Claim No. 192, Township 3 North, Range 14 east, Michigan Meridian, Chesterfield Township, Macomb County, Michigan; thence along northwest line of said Private Claim No. 192, as follows: S 49°04'54"W 1872.5 feet; thence S 49°43'00"W 1794.24; thence S 49°21'34"W 543.9 feet, passing from Private Claim No. 192 into Private Claim No. 193 to the point of beginning, said point being the most northern corner of Tract "A"; thence with the common boundary to lands now or formerly owned by Matilda Matejick and lands of said Tract "A", as follows: S 40°21'13" E 1466.05 feet; thence S 49°21'34" W 16.17 feet; thence S 40°21'13" E 317 feet to a point in the center of Sugarbush Road, said point being the most eastern corner of said Tract "A"; thence along Sugarbush Road and continuing with the boundary of said Tract "A" as follows: S 18°48'47" W 1499.91 feet; thence S 52°09'15" W 499.30 feet to a point; thence leaving said center of Sugarbush Road, and continuing with said boundary of Tract "A" N 39°54'00" W 33.02 feet to a point on the northwest right-of-way line of Sugarbush Road; thence with said right-of-way line and continuing with said boundary of Tract "A" S 52°03'30" W 239.4 feet to a point being the most southern corner of said Tract "A"; thence leaving said right-of-way line and with the southwest boundary of said Tract "A", as follows: N 40°03'07" W 1766.48 feet to a point on the centerline of the Sutherland and Oemig Drain; thence along the center of said drain N 57°30'39" E 221.15 feet, to a point; thence N 40°27'00" E 25 feet to a point; thence leaving said center line of drain, and continuing with said southwest boundary of Tract "A" N 39°54'00" W 735.98 feet to a point in the center of Donner Road, and being on the northwest line of Private Claim No. 193, said point being the most western corner of said Tract "A"; thence with the center of Donner Road and the northwest boundary of said Tract "A" N 48°59'00" E 287.5 feet to a point being the intersection of the southeast corner of Fractional Section 20, the southwest corner of Fractional Section 21, and the most northeast corner of Private Claim No. 145, with said northwest line of Private Claim No. 193; thence continuing with said northwest line of Private Claim 193 and Tract "A" N 49°21'34" E 1495.5 feet to the point of beginning, containing 102.69 acres, more or less.

4.2 Historic Land Use

In June 1959, three parcels comprising a total of 103 acres were obtained for the construction of the Seville Manor housing area. Prior to the 1950s, the site was used for farming and previous site property owners included Edward and Matilda Matejick,

George and Sylvia Meldrum, and Carl and Margaret Hauswirth. The title information obtained as part of the 2004 EBS is provided in **Appendix B**.

4.3 Facility History

USAG-S mission is a subordinate command of the U.S. Army Installation Management Agency (IMA), Northwest Region Office. The USAG-S is a government-owned, government operated facility. Operation of the garrison has largely been privatized over the last 20 years to include base operation and administrative support services.

The last of the postwar housing projects, Seville Manor was constructed from 1959 to 1961 under the “Capehart” program. Currently Seville Manor has 352 housing units as part of 240 permanent structures including single-family and duplex units. According to property records, some units were demolished over the years and debris was sent off-site to construction and debris landfills. Floor plans for housing types are provided in **Figures 4 to 9** in **Appendix C**.

According to a title provided by the Army and a title search performed as part of the 2004 EBS (**See Appendix B**), the U. S. government purchased the site parcel in 1959 under a declaration of taking filed as Civil No. 19175. The site parcel was then permitted by the Air Force in a 55-year agreement with the “Air Force No. Two”, as “Mortgagor-Builder.” The property was licensed by the U.S. Air Force to the Michigan Air National Guard. In February 1989 the property was transferred from the U.S. Property and Fiscal Office for Michigan to the U.S. Army Tank Automotive Command which became, in part, USAG-S.

4.3.1 Operational History

Since 1959 Seville Manor has been used for Department of Defense personnel housing only. No other Army related operational uses have been documented for this area.

4.3.2 Occupancy, Lease and Easement History

Since construction Seville Manor has been a military housing area in support of the installation. Seville Manor property has never been leased for other private use. The maintenance and grounds keeping support of the housing area and Youth Center was from the installation. The maintenance shops and materials were all located on the installation not at Seville. There were no maintenance shops, equipment, supplies, or chemicals located or stored at Seville Manor.

The Environmental Baseline Survey identified title documents prior to the property acquisition by the Department of Defense. Those title documents identify an easement for the Sutherland Oemig drain. However, the Louisville USACE Real Estate Office has no recorded easements for the Seville Manor property. The Sutherland Oemig drains runs roughly northeast-southwest across the property separating the northern quarter of the property from the remainder. The drain is surrounded by a chain link fence and receives runoff from the surrounding areas.

4.3.3 Range Operations

Based on the findings of a 2006 Historical Records Review report there were no historical ranges or evidence that this area ever was used for military range activities (USACE, 2006).

4.4 Installation Utilities (Historic and Current)

4.4.1 Water Systems

4.4.1.1 Potable Water Production

Seville Manor is supplied potable water from the Selfridge Air National Guard Base distribution system. The water main connects directly to the installation with approximately 3 miles of 3" transite main leading to the Seville Manor property. Transite is a composite material made of 12-50% asbestos and cement. A water tower at Seville Manor is used to maintain pressure during water use surges. The water supply originates at the City of Mt. Clemens Water Treatment Plant with source intake from Lake St. Clair. Mt. Clemens provides all the potable water to the geographic area but also has an emergency agreement and connection with the Detroit Water and Sewer Department.

The service lines within Seville Manor have not been sampled or surveyed for transite pipe. However, as new fire hydrants and leads were installed, transite pipe was observed. Over the years approximately 10% of the system has been replaced with non-transite pipe. It is reasonable to expect the remaining site potable mains and leads are constructed of transite

Water consumption is typical of residential areas and is dependent on housing population. A general summary of annual water consumption compiled from utility invoice records is as follows:

Table 4.4-1, Annual Water Consumption at Seville Manor

| | FY05 | FY04 | FY03 | FY02 | FY01 |
|----------|--------|--------|--------|--------|--------|
| 1000 GAL | 26,263 | 30,625 | 32,674 | 36,917 | 38,730 |

4.4.2 Industrial and Sanitary Sewers and Treatment Plants

Seville Manor sanitary force mains currently connect to Chesterfield Township and are metered. Originally a force main carried the sewage 3 miles to the USAG-S base which at one time operated its own waste water treatment plant. The Army severed the sewer connection to the base at both ends in 1986 and the old sewer is abandoned in place. The abandoned sanitary main is constructed of transite pipe.

Seville Manor sanitary sewers are now connected to the wastewater collection and treatment system of the Detroit publicly owned treatment works (POTW). The POTW is not designed to treat non-domestic waste (**Parsons ES, 2001g**).

The Seville Manor lift station was installed by the Department of Defense and is maintained by the 127th ANG. There is a meter located in a manhole downstream of the lift station. Within Seville Manor the sanitary service lines leading to the lift station are gravity fed.

In 2005 the USAG-S conducted an illicit connection survey of both the sanitary and storm sewers at Seville Manor. The investigation included review of maps and as-built drawings; visual inspection of ditches, manholes, inlets, outfalls; dye and smoke testing of the storm sewer; water quality sampling; and televising of the system as necessary. The purpose was to ensure no direct illicit connections between the sanitary and the storm sewers. The intent was not to assess the condition or composition of the mains. No direct illicit connections were found. However, it is known during rainfall events that the Seville Manor lift station consistently gives a high water alarm. Storm water intrusion is likely but the source has not been identified.

Table 4.4-2, Sanitary Sewage Treatment System

| Name (Site ID) | Location | Peak Monthly Outflow/Treated (MG per month) | Maximum Peak Daily Outflow/Treated Million Gallons per day | Permitted Daily Treatment/Processing Capacity Million Gallons | Maximum daily treatment/processing capacity (Design) Million G |
|------------------------|--|---|--|---|--|
| Seville Manor-OFF SITE | Off Military Installation Publicly Owned Plant | 3.36 | 0.11 | 0.57 | 0.57 |

4.4.3 Stormwater System

Seville Manor storm sewers feed into the Sutherland Oemig Drain which flows northeast to southwest through the northern portion of the housing area. The Oemig Drain also carries flows from upstream and adjacent properties

Seville Manor is an Army nested jurisdiction under the Chesterfield Township Municipal Separate Storm Sewer (MS4) permit. The Army storm water MS4 permit coverage will terminate with the disposition of the property.

An illicit connection survey conducted by USAG-S in 2005 did not identify any direct connections between the storm and sanitary sewers.

4.4.4 Electrical System

Electric power is the sole energy source for the residences at Seville Manor. The electric heating units do not have mercury thermostats. Seville Manor is provided electricity by DTE Energy Co. Power consumption is typical of residential areas and is dependent on housing population. A general summary of annual electricity use compiled from utility invoice records is provided in **Table 4.4-3**.

Table 4.4-3, Annual Electricity Use at Seville Manor

| | FY05 | FY04 | FY03 | FY02 | FY01 |
|-----|-----------|------------|------------|------------|------------|
| KWH | 9,992,308 | 12,158,376 | 12,067,598 | 11,549,226 | 12,237,459 |

4.4.5 Natural Gas

None of the residences at Seville Manor are serviced with natural gas. The Youth Center is serviced with natural gas.

4.5 Environmental Setting – Natural and Physical Environment

4.5.1 Climate

The climate of southeastern Michigan is classified as humid-continental to semi-marine. It is dominated by continental polar air masses in the winter and tropical air masses in the summer. Intensely contrasting seasonal temperature changes, highly variable weather, and abundant precipitation throughout the year result from the interaction of these air masses along with cold fronts associated with east-moving cyclones **(OTC, 1997)**.

Climatic data from the National Oceanic and Atmospheric Administration's National Climatic Data Center show that the 30-year mean annual temperature is 48.0 degrees Fahrenheit (°F.). The 30-year mean daily maximum is 56.4 °F., and the 30-year mean daily minimum is 39.5 °F. Precipitation patterns in the area tend to be distributed relatively evenly with the highest rains falling from April to September. Precipitation data from the NCC show that the 30-year mean annual rainfall is 28.18 inches and the 30-year mean annual snowfall is 34.3 inches. Prevailing winds are typically from the southwest **(Michigan State Climatologist's Office, 2002)**.

4.5.2 Topography

According to the U.S. Geological Survey 7.5-minute topographic map series, specifically, the New Haven, Michigan quadrangle, 1983, the site is located at an elevation of approximately 587 feet above mean sea level. The land surface is generally flat with a gradual slope towards Lake St. Clair.

4.5.3 Surface Water Hydrology

The only surface water feature on the property is a small stream referred to as the Sutherland Oemig Drain which runs roughly northeast-southwest separating the northern quarter of the property from the rest. The stream is surrounded by a chain link fence and with the exception of storm events the drain usually contains only several inches of running water. The Sutherland Oemig Drain is a Macomb County drain and receives upstream and adjacent property runoff as well as runoff from Seville Manor.

4.5.3.1 Wetlands

According to the EDR report (**See Appendix B –EDR Overview and Detail Map**) there is a small area identified as a Federal Wetland located on the northeast corner of the Seville Manor property. However based on recent visual observations by USAG-S this area shows no signs of standing water and consists of a paved parking area and is the location of the guard house. Other wetlands not located on Seville Manor are present to the north of the property and their location is shown on the EDR maps in Appendix B.

4.5.3.2 Floodplains

On maps dated 1978, the 100-year and 500-year flood zones are shown and are centered along the Sutherland Oemig Drain. On the 1978 map the western portion of Seville Manor was shown to lie within a 500-year flood plain. The Sutherland Oemig Drain, which crosses the northwest portion of the site, was located in a 100-year flood plain. These flood zones covered approximately one-third of the housing area (**FEMA, 1978**).

Since 1978, Letters of Map Amendment (LOMA) have been submitted to FEMA for nearby properties. Additionally, the Macomb County 2005 Hazard Mitigation Plan states that Seville Manor is not considered in the flood zone because of upstream improvements to the Oemig drain. Flood plain maps are available at the Chesterfield Township Engineering Office and through FEMA under the reference of Clover Estates LOMA Case #99-05-147P dated October 1999, and LOMA Case #97-05-187P dated December 1997 (**Macomb, 2005**).

4.5.4 Geology

The state of Michigan is situated within the Central Lowland Physiographic Province of the Interior Plains and its physiography is a result of the Pleistocene glaciation. The glaciated terrain of Macomb County, located in the Eastern Lake Section of the Central Lowland Province, is characterized by maturely dissected and glaciated knolls, lowlands, moraines, lakes, and lacustrine plains (**OTC, 1997**).

The area encompassing Seville Manor lies on top of glacial lakebed deposits of the ancestral Lake St. Clair on the southeastern edge of the Michigan Basin. The basin consists of sedimentary rocks ranging from older Cambrian rocks around the edges to younger Jurassic rocks in the middle of the basin. Beneath the Cambrian rocks are igneous, metamorphic, and sedimentary rocks of Precambrian Age (**OTC, 1997**).

The dominant soil type at Seville Manor is generally a clay loam, and the deeper soils consist of a silty clay loam. There may be relatively shallow bedrock at 5 feet below ground surface. According to the U.S. Department of Agriculture Soil Conservation Service soil survey of Macomb County, Michigan, the Oakville, Selfridge, and Toledo soil groups have been mapped within the site boundary. Oakville series soils are classified as well-drained, level to undulated, and sandy. Selfridge series soils are classified as level to gently sloping, sandy or loamy sands, and somewhat poorly

drained. Toledo series soils are classified as poorly drained clay or silty clay. According to Quaternary Geology of Southern Michigan, (1982), the site area contains deposits mapped as Toledo-Paulding that consists of nearly level, poorly drained soils that have fine textured subsoils on lake plains (**Tetra Tech, 2004**).

4.5.4.1 Hydrogeology

Based on the topography of the site area and its proximity to Lake St. Clair, the local groundwater gradient is interpreted to be to the southeast toward Lake St. Clair. Typically the hydrogeologic gradient follows the topographic gradient, but without groundwater data for the site, the exact flow direction of the groundwater cannot be determined. Groundwater levels may fluctuate both seasonally and over longer periods of time in response to the degree of water infiltration into soils. Also, based on the zone of influence of the groundwater well, the groundwater flow direction may vary throughout the immediate area of the site (**Tetra Tech, 2004**).

In the 2004 EBS, EDR (October 2003) reports that one groundwater well and 12 oil or gas wells are located within a 1-mile radius of the site. Water from the groundwater well is likely used for industrial or irrigation purposes because the site and surrounding areas are provided with drinking water by the City of Mt. Clemens. Connections exist to the City of Detroit water system in the event of emergencies. Mt. Clemens obtains drinking water from Lake St. Clair and the City of Detroit obtains drinking water from the Detroit River (**Tetra Tech, 2004**). The nearest Wellhead Protection Area as designated by the MDEQ is the Town of Richmond, located approximately 15 miles north of USAG-S (**MDEQ, 2002**).

4.5.5 Demography and Land Use

The estimated population of Mount Clemens is 17,312 and Macomb County is 788,149 (**Staubach, 2006**).

Land in this area is currently zoned for one or two family residential housing. Land use west of the main base is a mixture of residential, commercial and recreational. Based on the City of Mount Clemens Land Use Plan, future land uses and zoning for the region will be similar to existing conditions. The I-94 Freeway corridor, between Joy Road on the north and the Clinton River to the south is being developed for light industrial purposes. This is due to the fact that Mount Clemens, like many of the cities and villages in Macomb County, is nearing built-out capacity; much of the usable land is now occupied by structures or land uses making it unavailable for future growth. Future zoning and land uses will remain similar to existing conditions because, while there is a strong need for redevelopment, Mount Clemens Land Use Plan encourages the preservation and protection of neighborhoods from intrusion by unplanned non-residential uses.

Land use at Seville Manor consists of residential units and is surrounded primarily by similar residential development. Properties and features directly adjacent to Seville Manor include the Donner Meadows condominium community, Stonehenge condominiums, and Donner Road to the west; Sugar Creek Drive and Sugar Creek

Estates residential area to the north; Sugarbush Road, Dean A. Naldrett Elementary School, and a residential area to the east; and Iris Road and Iris condominiums and residential area to the south. Anchor Bay, which is a part of Lake St. Clair, is approximately 3/4-mile southeast of the property (**Tetra Tech, 2004**).

4.6 Biological and Cultural Resources Summary

4.6.1 Biological Resources and Consultations

USAG-S is not engaged in any consultation or biological opinion for biological resources at Seville Manor. Biological resources at Seville Manor are limited because the area is mostly improved with land use at Seville Manor consisting of residential units. Seville Manor is surrounded primarily by similar residential development. Vegetation is mostly in areas that are landscaped and mowed and much of the natural vegetation has been removed to accommodate housing development in support of the military mission. This suburban habitat provides a corresponding limited diversity of plant and animal species.

4.6.1.1 Endangered Species

Although no federally listed species occur at Seville Manor, several state listed species may potentially occur. The U.S. Fish and Wildlife Service (USFWS) provides a current list of species that are regarded as candidates for possible future listing under the Endangered Species Act (ESA). Candidate species do not receive statutory protection under the ESA, however, the USFWS considers it important to alert government agencies, private industry, and the general public that these species are at risk and may in the near future warrant protection under the Act. Michigan state-listed species are protected under the Natural Resources and Environmental Protection Act (Act 451), which is enforced through the Michigan Department of Natural Resources (MIDNR). The potentially occurring threatened and endangered species at Seville Manor are listed in the following Table 4.6-1.

Table 4.6-1, State Endangered and Candidate Species

| Scientific Name | Common Name | Type | Federal Status | State Status |
|--------------------------------|---------------------------|-------------|-----------------------|---------------------|
| <i>Myotis sodalis</i> | Indiana bat | Bat | LE | E |
| <i>Accipiter cooperii</i> | Cooper's Hawk | Bird | | SC |
| <i>Asio otus</i> | Long-eared Owl | Bird | | T |
| <i>Buteo lineatus</i> | Red-shouldered Hawk | Bird | | T |
| <i>Chlidonias niger</i> | Black Tern | Bird | | SC |
| <i>Circus cyaneus</i> | Northern Harrier | Bird | | SC |
| <i>Nycticorax nycticorax</i> | Black-crowned Night-heron | Bird | | SC |
| <i>Rallus elegans</i> | King Rail | Bird | | E |
| <i>Sterna forsteri</i> | Forster's Tern | Bird | | SC |
| <i>Sterna hirundo</i> | Common Tern | Bird | | T |
| <i>Acipenser fulvescens</i> | Lake Sturgeon | Fish | | T |
| <i>Ammocrypta pellucida</i> | Eastern Sand Darter | Fish | | T |
| <i>Hiodon tergisus</i> | Mooneye | Fish | | T |
| <i>Macrhybopsis storeriana</i> | Silver Chub | Fish | | SC |

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| <u>Scientific Name</u> | <u>Common Name</u> | <u>Type</u> | <u>Federal Status</u> | <u>State Status</u> |
|--|--|----------------|-----------------------|---------------------|
| <i>Notropis anogenus</i> | Pugnose Shiner | Fish | | SC |
| <i>Noturus miurus</i> | Brindled Madtom | Fish | | SC |
| <i>Percina copelandi</i> | Channel Darter | Fish | | E |
| <i>Percina shumardi</i> | River Darter | Fish | | E |
| <i>Alasmidonta marginata</i> | Elktoe | Invertebrate | | SC |
| <i>Alasmidonta viridis</i> | Slippershell Mussel | Invertebrate | | SC |
| <i>Lampsilis fasciola</i> | Wavy-rayed Lampmussel | Invertebrate | | T |
| <i>Nicrophorus americanus</i> | American Burying Beetle | Invertebrate | | E |
| <i>Obovaria olivaria</i> | Hickorynut | Invertebrate | | SC |
| <i>Obovaria subrotunda</i> | Round Hickorynut | Invertebrate | | E |
| <i>Pleurobema coccineum</i> | Round Pigtoe | Invertebrate | | SC |
| <i>Villosa fabalis</i> | Rayed bean | Invertebrate | C | SC |
| <i>Villosa iris</i> | Rainbow | Invertebrate | | SC |
| <i>Clemmys guttata</i> | Spotted Turtle | Reptile | | T |
| <i>Elaphe vulpina gloydi</i> | Eastern Fox Snake | Reptile | | T |
| <i>Sistrurus catenatus catenatus</i> | Eastern Massasauga | Reptile | C | SC |
| <i>Agalinis gattingeri</i> | Gattinger's Gerardia, Roundstem Foxglove | Vascular Plant | | E |
| <i>Arabis missouriensis</i> var. <i>deamii</i> | Missouri Rock-cress | Vascular Plant | | SC |
| <i>Armoracia lacustris</i> | Lake Cress | Vascular Plant | | T |
| <i>Carex davisii</i> | Davis's Sedge | Vascular Plant | | SC |
| <i>Carex lupuliformis</i> | False Hop Sedge | Vascular Plant | | T |
| <i>Carex richardsonii</i> | Richardson's Sedge | Vascular Plant | | SC |
| <i>Cirsium hillii</i> | Hill's Thistle | Vascular Plant | | SC |
| <i>Fraxinus profunda</i> | Pumpkin Ash | Vascular Plant | | T |
| <i>Galearis spectabilis</i> | Showy Orchis | Vascular Plant | | T |
| <i>Gentiana puberulenta</i> | Downy Gentian | Vascular Plant | | E |
| <i>Gentianella quinquefolia</i> | Stiff Gentian | Vascular Plant | | T |
| <i>Gymnocladus dioicus</i> | Kentucky Coffee-tree | Vascular Plant | | SC |
| <i>Hieracium paniculatum</i> | Panicled Hawkweed | Vascular Plant | | SC |
| <i>Hydrastis canadensis</i> | Goldenseal | Vascular Plant | | T |
| <i>Linum virginianum</i> | Virginia Flax | Vascular Plant | | T |
| <i>Mimulus alatus</i> | Wing-stemmed Monkey-flower | Vascular Plant | | X |
| <i>Monarda didyma</i> | Oswego tea, beebalm | Vascular Plant | | X |
| <i>Plantago cordata</i> | Heart-leaved Plantain | Vascular Plant | | E |
| <i>Platanthera ciliaris</i> | Orange or Yellow Fringed Orchid | Vascular Plant | | T |
| <i>Quercus shumardii</i> | Shumard's oak | Vascular Plant | | SC |
| <i>Scirpus clintonii</i> | Clinton's Bulrush | Vascular Plant | | SC |

E – Endangered; C – Candidate; SC – Special Concern; T – Threatened, X – Probably Extirpated

Source: Macomb County Current as of August 2005

http://web4.msue.msu.edu/mnfi/data/cnty_dat.cfm?h=&county=Macomb

4.6.1.2 Prehistoric/Historic Resources

Archaeological Sites

An archaeological /cultural resources assessment was conducted in compliance with Army Regulation 200-4 and Section 110 of the National Historic Preservation Act of 1966 as amended for the U.S. Army Garrison- Selfridge in southeastern Michigan. The findings of the assessment are final and are presented in the Archeological Assessment U.S. Army Garrison –Selfridge (**Parsons, 2002**).

This report describes an assessment of the archaeological potential for both the main garrison and Seville Manor based on existing environmental conditions and archival information. The assessment concluded that as a result of the extensive surface and subsurface disturbance that has occurred through time within the boundaries of USAG-S and Seville Manor, intact archaeological sites are not likely to occur. Since the physical integrity of any archaeological deposits would be lacking, no archaeological resources eligible for the National Registry of Historic Places (NRHP) are expected to occur on USAG-S lands. No future archaeological investigations are recommended. The Michigan State Historic Preservation Officer has concurred with these findings.

The assessment provided the following conclusion:

“The probability for the occurrence of prehistoric and historical archaeological resources for Seville Manor was determined to be medium and low, respectively. The potential of encountering prehistoric resources is slightly higher for the Seville Manor area than at the Main Garrison because of the presence of a beach ridge feature and its location between two known sites. Prehistoric sites associated with hunting forays or procurement activities may be expected. A review of historical settlement patterns indicated that the Seville Manor area was unlikely to contain domestic dwellings or other permanent structures. This area also exhibited extensive surface and subsurface disturbance, including drainage improvements and construction of the subdivision” (**Parsons, 2003**).

Buildings/Structures

Seville Manor buildings are defined as Capehart Era Army family housing and associated structures. These buildings are considered to be reviewed under Section 106 of the National Historic Preservation Act through Program Comment of the Advisory Council on Historic Places dated May 31, 2002. Under the Program Comment specified activities including maintenance and repair; rehabilitation; layaway/mothballing; renovation; demolition; transfer, sale, or lease from Federal ownership for all Army Family Housing built between 1949 and 1962 can be undertaken without further National Historic Preservation Act compliance or State Historic Preservation Office consultation.

4.7 Site Maps

Supporting maps are provided in **Appendix C** of this ECP.

5 Environmental Conditions

USAG-S, including the Seville Manor property, is not on the National Priorities List (NPL). No sites representing a CERCLA release have been identified on the Seville Manor property.

5.1 Environmental Permits/Licenses

5.1.1 RCRA Status

There are no permitted hazardous waste treatment, storage, or disposal units on the Seville Manor property. There were no satellite accumulation points or any hazardous storage areas at Seville Manor. All maintenance and grounds keeping equipment and materials were stored on the main installation. The main Army Garrison USAG-S is a small quantity generator of hazardous waste with EPA Generator ID No. MI0000182642.

5.1.2 Solid Waste Permits

USAG-S does not hold a solid waste permit. Solid wastes at Seville Manor are disposed of by Waste Management Inc. a contracted solid waste disposal service (**Tetra Tech, 2004**).

5.1.3 UST/AST Permits

During the 2004 EBS site reconnaissance at Seville Manor and while conducting interviews, it was determined that no underground storage tanks are present at the Seville Manor site. Homes on the property rely on electricity as the sole energy source for home heating. There is an aboveground water tower on the site located along Sugarbush Road.

5.1.4 NPDES Permits

Seville Manor has storm water permit coverage as a nested jurisdiction under the Chesterfield Township MS4 permit. There are no other NPDES permits for the site.

5.1.5 Drinking Water Permits

Seville Manor is supplied potable water from the Selfridge Air National Guard Base distribution system. The drinking water supply originates at the City of Mt. Clemens Water Treatment Plant with source intake from Lake St. Clair. Drinking water permits are not required.

5.1.6 Air Permits

No air permits are required or maintained (**USAEC, 2005a**).

5.1.7 NRC Licenses

No Nuclear Regulatory Commission (NRC) permits are required or maintained by USAG-S at Seville Manor. According to the USAG-S Radiation Safety Officer (RSO) contractors have used radioactive sources in test equipment for roadway construction

and lead paint analysis (**USAEC, 2005b**). The RSO manages a radiation permit program required by Army regulation to document device use and source licenses.

5.1.8 Other permits/licenses

No other permits are required or maintained.

5.2 Environmental Cleanup

With the exception of ongoing programmatic asbestos and lead based paint hazard removal, potential abatement and interim hazard control (**See Sections 5.5 and 5.6**) there are no other known environmental cleanup projects related to the property at Seville Manor.

5.2.1 Previous Environmental Investigations

The U.S. Army Garrison-Selfridge (USAG-S) tasked Tetra Tech EM Inc. (Tetra Tech) to perform an Environmental Baseline Survey (EBS) for Seville Manor. The results of the EBS have been used where appropriate and updated accordingly in this ECP document. The purpose of the EBS was to evaluate the Seville Manor property for indications of recognized environmental conditions (REC) that may be present. The EBS was conducted in general conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standard Practice for Conducting Environmental Baseline Surveys, (D 6008-96), ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Army regulations, and Army technical guideline DA PAM 200-1. ASTM defines REC as follows: “The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions of storage and use in compliance with local and state regulations. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of regulatory governmental agencies.” (**Tetra Tech, 2004**)

As previously stated, the information obtained from the 2004 EBS has been incorporated and updated accordingly in this ECP Document.

5.3 Hazardous Substances

As observed during the 2004 EBS site reconnaissance, various typical household items including cleaning supplies, soaps and spray paints were stored in garages. Visibly stained soil or any other indications of hazardous materials on the site were not observed. Stained concrete and asphalt was observed on residential driveways. Generally, staining appeared to be associated with petroleum products that may have leaked from automobiles parked in the driveways.

5.4 Petroleum Products

Only small volumes of petroleum products for household use were observed. As noted above, stained concrete and asphalt was observed on residential driveways which appeared to be associated with petroleum products leaked from parked automobiles.

5.4.1 Polychlorinated Biphenyls

Currently there are 61 electrical transformers on the Seville Manor Property. A previous TECOM inventory listed 62 locations but one of these was found to be mistaken upon field verification (Pole SM131). The most recent physical inspection is dated April 2006; most recent PCB tests are generally from 2004.

Table A-2 in **Appendix A** identifies the Seville Manor transformers and recent PCB content records. One transformer (Pole SM079, 29062 Brault) is a replacement transformer for a unit that failed in April 2006. The failure was mechanical in nature. An internal wire came loose and could not be reconnected in a timely manner. There was no release of mineral oil due to the failure and the PCB content based on testing is below detection. The testing of transformer fluid identified PCB concentrations ranging from <2 to 22 (ppm) parts per million. According to TSCA, PCB-containing material must be disposed of as hazardous waste if they contain PCBs at a concentration above 50 ppm. All transformers appeared to be in good condition, and none appeared to be leaking.

In addition to transformers, household *PCB* containing items such as microwave ovens and fluorescent light ballasts and fixtures have been used at Seville Manor. Due to the small quantities of PCBs contained in such items and residential use it is believed no contamination has resulted from their use.

5.5 Asbestos-Containing Materials (ACM)

The USAG-S Base Operations Contractor has developed an Asbestos O&M Plan that is included as an appendix in the USAG-S Asbestos Management Plan (**Parsons, 2001c**). The Asbestos Management Plan is available for review in the USAG-S Environmental Management Office located in Bldg. 970 at Selfridge ANG Base, Michigan. Asbestos-related documentation associated with O&M activities is located in work order files maintained by the USAG-S Base Operations Contractor (TECOM).

TECOM conducted an asbestos inspection of accessible areas of all buildings located in Seville Manor during April 2005 to May 2006. The inspections were performed by State of Michigan accredited Building Inspectors in accordance with current Asbestos Hazard Emergency Response Act (AHERA) and Michigan Department of Labor and Economic Growth (MDLEG) regulations according to recognized techniques.

TECOM's work did not include destructive methods of inspection to confirm the presence or absence of asbestos containing material (ACM) inside inaccessible spaces

behind intact walls and/or ceilings. Additionally, to prevent unnecessary damage and voiding of roof warranties TECOM did not include asphalt-based roofing materials within the inspection.

Prior to implementing any future demolition activities, inaccessible areas and roofing must be inspected to determine asbestos content and remove any Friable and Category 1 or Category 2 Non-friable asbestos will need to be removed as required by the EPA National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulation.

Building Inspection (ACM)

TECOM Inspection included all accessible areas of the building interior and exterior. Accessible areas were visually checked and homogeneous (materials) areas of ACM were identified. Samples of suspect ACM were collected and touched to determine their degree of friability.

Inaccessible Areas (ACM)

Certain spaces or materials within a building which were inaccessible during the course of the inspection, even when limited destructive methods were utilized, include but are not limited to the following: Floor tile or mastics located underneath carpeting, other floor tile, wall covering or other materials that would be destroyed or damaged to gain access.

Discussion of ACM Inspection Results

Description of building type(s) and type of ACM identified within Seville Manor is summarized below. A full Asbestos Inspection Report for each building is available for review in the Environmental Management Office located in Bldg. 970 at Selfridge ANG Base, Michigan (**USAG-S, 2006b**).

Seville Manor Housing (ACM)

The following Asbestos Containing Materials were identified through-out Seville Manor:

- Joint compound on seams and nail heads of drywall walls and ceilings.
- Black mastic on underside of kitchen sink.
- Resilient floor coverings (e.g., sheet flooring, 9"x9" & 12"x12" floor tile, and underlying mastic) in many homes.
- Cove base and mastic.
- Tan/Grey wall coverings and mastic in bathrooms.
- Exterior caulking/crack sealant.

Transite Water Pipe: In addition to ACM identified in housing units and as mentioned in Section 4.4.1.1 approximately 3 miles of 3" transite water main lead to the Seville Manor property. Transite is a composite material made of 12-50% asbestos and cement. Although the service lines within Seville Manor have not been sampled or

surveyed for transite pipe, as new fire hydrants and leads were installed, transite pipe was observed. Over the years approximately 10% of the system has been replaced with non-transite pipe. It is reasonable to expect the remaining site potable mains are constructed of transite.

5.6 Lead and Lead-Based Paint

The USAG-S Base Operations Contractor has developed a Lead-Based Paint (LBP) O&M Plan that is included as an appendix in the USAG-S LBP Management Plan **(Parsons, 2001d)**. The LBP Management Plan is available for review in the USAG-S Environmental Management Office located in Bldg. 970 at Selfridge ANG Base, Michigan

Lead based paint (LBP) inspection and risk assessment were performed in 2004-2005 throughout the Seville Manor housing areas at USAG-S. The Seville Manor housing area consists of single dwelling homes and duplexes with attached garages. Seville Manor housing has been classified as multi-family for inspection and risk assessment under HUD regulations. In multi-family inspections, a percentage of units are tested and an area wide report is made for all units based on the test results and statistical data analyses. At Seville Manor, 54 of 352 units were inspected as the statistical subset of housing units.

The LBP inspection and risk assessment were performed by EPA/Michigan certified lead risk assessors. All types of painted surfaces, interior and exterior, were tested using X-Ray fluorescence (XRF) technologies. In cases where the XRF detected LBP and the paint was in poor condition (cracked, peeling, chalking, etc.) the inspector may have recommended further sampling methods by using dust wipes, vacuum samples, air samples or soil samples.

Detailed composite data analyses were performed for each tested component. Determination of positive or negative lead content was reported by component on the basis of average measured values in the tested units. Lead hazard occurrence was analyzed similarly. In general, only 41 of over 6,300 tested surfaces were found to present a hazard from deteriorated condition with lead concentration greater than HUD/EPA thresholds for hazard. Based on these data analyses, there are no consistent facility-wide deteriorated lead based paint hazards. However, even though facility-wide hazards are not determined to be present, components in certain tested units were determined to present hazards. In these instances, Interim Lead Hazard Control (ILHC) was implemented when LBP hazards were identified in occupied buildings. With proper ILHC, lead hazards in occupied units have been removed but underlying lead remains (e.g., peeling paint is removed and the surface is re-painted, or bare soil is covered with mulch but lead remains in the soil). ILHC was not conducted when LBP hazards were identified in units that were not occupied and were not to be reoccupied under BRAC actions.

Lead inspection and hazard assessment results are applicable for the time that testing was conducted and for the condition of surfaces at the time they were tested. Units that

were not tested or surfaces that were inaccessible will require additional testing efforts for verification lead content. A summary of the 2004-2005 inspection and risk assessment for survey buildings is presented in the following **Table 5.6-1**. A summary of lead concentrations found in soil at target housing units is presented in **Table 5.6-2**.

The full Multi-Family Lead Inspection and Risk Assessment Report is located in the USAG-S Environmental Management Office located in Bldg. 970, Selfridge ANG Base, Michigan.

Table 5.6-1, Summary of LBP Inspection and Risk Assessment for Survey Buildings at Seville Manor 2004-2005

| Table 5.6-1, Summary of LBP Inspection and Risk Assessment for Survey Buildings at Seville Manor 2004-2005 | | | | | | |
|---|---------------|-------------------|------------------------------|-------------------------|--|--------------------------|
| Lead Inspection / Risk Assessment | | | | | Interim Lead Hazard Control | |
| Address | Street | Year Built | Inspection Start Date | LBP Hazard Found | Notes | Action Taken |
| 29037 | Baker | 1961 | 12/9/04 | No | | No Action Taken |
| 29050 | Baker | 1961 | 12/23/04 | No | | No Action Taken |
| 29078 | Baker | 1961 | 12/17/04 | No | | No Action Taken |
| 29152 | Baker | 1961 | 12/13/04 | Yes | Peeling living rm. Door jamb. | No Action Taken - Vacant |
| 29625 | Baker | 1961 | 1/3/05 | No | | No Action Taken |
| 29659 | Baker | 1961 | 12/15/04 | No | | No Action Taken |
| 29724 | Baker | 1961 | 12/23/04 | No | | No Action Taken |
| 29053 | Bek | 1961 | 12/15/04 | No | | No Action Taken |
| 29058 | Bek | 1961 | 12/16/04 | No | | No Action Taken |
| 29111 | Bek | 1961 | 12/16/04 | No | | No Action Taken |
| 29417 | Bek | 1961 | 12/16/04 | No | | No Action Taken |
| 29464 | Bek | 1961 | 1/15/05 | Yes | Poor: garage ceiling | No Action Taken - Vacant |
| 29465 | Bek | 1961 | 12/16/04 | No | | No Action Taken |
| 29624 | Bek | 1961 | 12/17/04 | No | | No Action Taken |
| 48133 | Bialas | 1961 | 12/22/04 | Yes | Peeling garage electrical panel and pipe | No Action Taken - Vacant |
| 48221 | Bialas | 1961 | 12/27/04 | Yes | Poor: living room exterior door | No Action Taken – Vacant |
| 48249 | Bialas | 1961 | 1/8/05 | No | | No Action |

Table 5.6-1, Summary of LBP Inspection and Risk Assessment for Survey Buildings at Seville Manor 2004-2005

| Lead Inspection / Risk Assessment | | | | | Interim Lead Hazard Control | |
|-----------------------------------|---------|------|---------------------|-----|--|---|
| | | | | | | Taken |
| 48250 | Bialas | 1961 | 12/18/04 | No | | No Action Taken |
| 48305 | Bialas | 1961 | 12/18/04 | Yes | Poor: garage ceiling | No Action Taken – Vacant |
| 29099 | Brault | 1961 | 12/20/04 | No | | No Action Taken |
| 29439 | Brault | 1961 | 12/20/04 | No | | No Action Taken |
| 29660 | Brault | 1961 | 12/20/04 | No | | No Action Taken |
| 29677 | Brault | 1961 | 12/20/04 | Yes | Soil hazard: Sample was taken in winter with 6"-8" of snow on ground. When snow melted, risk assessment was conducted; no bare soil. | No bare soil exists; therefore ILHC not required. |
| 29345 | Craw | 1961 | 12/22/04 | No | | No Action Taken |
| 29364 | Craw | 1961 | 12/22/04 | No | | No Action Taken |
| 29380 | Craw | 1961 | 1/8/05 | Yes | Poor: garage door jamb | No Action Taken - Vacant |
| 29410 | Craw | 1961 | 1/8/05 | Yes | Poor: exterior pipe | ILHC remove failed paint and re-paint |
| 29460 | Craw | 1961 | 12/21/04 | Yes | Peeling garage door, door jamb and electrical panel. Poor: kitchen door jamb. Peeling and Poor: room 1 door jamb | No Action Taken - Vacant |
| 29672 | Craw | 1961 | 12/23/04 | No | | No Action Taken |
| 48421 | Douglas | 1961 | 12/27/04 | No | | No Action Taken |
| 48475 | Hawk | 1961 | 1/8/05 | No | | No Action Taken |
| 48534 | Hawk | 1961 | 12/10/04 | Yes | Peeling Living Rm. Door | ILHC remove failed paint and re-paint |
| 48596 | Hawk | 1961 | 1/20/05 | No | | No Action Taken |
| 29251 | Hibbs | 1961 | 12/22/04 | Yes | Poor and peeling door jambs, pipe, ext. roof support. | ILHC remove failed paint and re-paint |
| 29539 | Hibbs | 1961 | 12/27/04 | No | | No Action Taken |
| 29703 | Hibbs | 1961 | 12/20/04 | Yes | Peeling outside door and jamb | No Action Taken - Vacant |
| 29746 | Hibbs | 1961 | 12/29/2004 & 1/8/05 | Yes | Poor: garage door, cracked living room door jamb | No Action Taken - Vacant |

Table 5.6-1, Summary of LBP Inspection and Risk Assessment for Survey Buildings at Seville Manor 2004-2005

| Lead Inspection / Risk Assessment | | | | | Interim Lead Hazard Control | |
|-----------------------------------|-----------|------|----------|-----|--|--------------------------|
| 29835 | Hibbs | 1961 | 1/25/05 | No | | No Action Taken |
| 48315 | Hoenshell | 1961 | 12/28/04 | No | | No Action Taken |
| 48135 | Pearl | 1961 | 12/28/04 | Yes | Peeling garage wall | No Action Taken - Vacant |
| 48227 | Pearl | 1961 | 12/27/04 | No | | No Action Taken |
| 48342 | Pearl | 1961 | 12/28/04 | Yes | Peeling garage ceiling | No Action Taken - Vacant |
| 29108 | Pearson | 1961 | 12/20/04 | No | | No Action Taken |
| 29452 | Pearson | 1961 | 1/13/05 | No | | No Action Taken |
| 29526 | Pearson | 1961 | 12/22/04 | No | | No Action Taken |
| 29646 | Pearson | 1961 | 12/21/04 | Yes | Chalking garage ceiling and ceiling beam, Poor: garage door and door jamb, peeling outside door, cracked outside door jamb | No Action Taken - Vacant |
| 29678 | Pearson | 1961 | 12/21/04 | Yes | Poor: garage ceiling | No Action Taken - Vacant |
| 29716 | Pearson | 1961 | 12/28/04 | No | | No Action Taken |
| 47861 | S Brooks | 1961 | 12/28/04 | No | | No Action Taken |
| 48474 | Salitrik | 1961 | 12/28/04 | No | | No Action Taken |
| 29541 | Wright | 1961 | 1/4/05 | No | | No Action Taken |
| 29558 | Wright | 1961 | 1/6/05 | No | | No Action Taken |
| 29604 | Wright | 1961 | 12/21/04 | Yes | Poor: garage pipe. Peeling kitchen door jamb, outside door, outside roof support and room 1 door jamb | No Action Taken - Vacant |
| 29641 | Wright | 1961 | 12/30/04 | Yes | Poor: garage door jamb, peeling outside pipe | No Action Taken - Vacant |

Table 5.6-2, USAG-S Seville Manor 2005 HUD Title X LBP Risk Assessment

| TARGET HOUSING EXTERIOR DRIP LINE COMPOSITE SAMPLE | | | | | | |
|---|------------------|------------|--|---------|--------------|------------|
| LEAD (Pb) IN SOIL DURING LBP INSPECTION | | | | | | |
| ADDRESS | STREET | Pb ug/g | | ADDRESS | STREET | Pb ug/g |
| 29037 | Baker | 70.3 | | 29460 | Craw | 75.2 |
| 29050 | Baker | <9.6 | | 29672 | Craw | 101 |
| 29078 | Baker | 86.0 | | 48421 | Douglas | 46.5 |
| 29152 | Baker | 82.8 | | 48475 | Hawk | 27.5 |
| 29625 | Baker | 21.0 | | 48534 | Hawk | 82.4 |
| 29659 | Baker | 30.9 | | 48596 | Hawk | 20.5 |
| 29724 | Baker | 39.7 | | 29251 | Hibbs | 17.1 |
| 29053 | Bek | 58.7 | | 29539 | Hibbs | 48.0 |
| 29058 | Bek | 51.0 | | 29703 | Hibbs | 117 |
| 29111 | Bek | 69.3 | | 29746 | Hibbs | 98.8 |
| 29417 | Bek | 31.5 | | 29835 | Hibbs | 89.8 |
| 29464 | Bek | 132 | | 48315 | Hoenshell | 92.8 |
| 29465 | Bek | 22.0 | | 48135 | Pearl | 48.1 |
| 29624 | Bek | 72.0 | | 48227 | Pearl | 101 |
| 29058 | Bek Play Area | <9.6 | | 48342 | Pearl | 66.2 |
| 48133 | Bialas | 67.7 | | 29108 | Pearson | 38.4 |
| 48221 | Bialas | 38.7 | | 29452 | Pearson | 28.8 |
| 48249 | Bialas | 45.7 | | 29526 | Pearson | 40.0 |
| 48250 | Bialas | 18.0 | | 29646 | Pearson | 38.2 |
| 48305 | Bialas | 41.9 | | 29678 | Pearson | 18.0 |
| 29099 | Brault | 22.6 | | 29716 | Pearson | 71.5 |
| 29439 | Brault | 27.3 | | 47861 | S. Brooks*** | 407 |
| 29677 | Brault*** | 1442 | | 48474 | Saltrinx | 17.3 |
| 29345 | Craw | 18.1 | | 29541 | Wright | 25.7 |
| 29364 | Craw | 44.4 | | 29558 | Wright | 32.6 |
| 29410 | Craw | 458 | | 29604 | Wright | 361 |
| <p>*** 29439 Brault and 47861 S. Brooks: soil samples were collected when there was 6"-8" of snow on the ground. When snow melted and risk assessment conducted; it was determined that no bare soil existed (i.e., grass was present). Therefore, no ILHC was conducted. The standard under 40 CFR Part 745, Jan 2001 is 1,200 ppm in bare soil.</p> | | | | | | |

5.7 Radioactive Material

There is no evidence of any releases of radiological materials at Seville Manor. However, potential items containing small radiological sources such as exit signs and smoke detectors if any would need to be removed and properly disposed of prior to demolition/modification of areas/buildings/structures. Ionization type smoke detectors, use a small radioactive source (usually an oxide of americium-241) as a key component in detecting smoke particles and some exit signs use a small radioactive source (tritium gas) which creates an illuminated sign in the event of an electrical outage or a fire. According to USAG-S the only known building to have potentially contained a tritium exit sign was the Youth Center, which is now equipped with a non-tritium containing sign using battery backup. The housing units do not have exit signs. It is assumed that all homes are equipped with smoke detectors but a survey to determine the type of detectors present has not been conducted.

5.8 Historical Landfills/Dumps

No landfills or dumps were identified on the property based on information obtained as part of the 2004 EBS and supporting EDR Report.

5.9 Explosive Contaminated Structures

There is no evidence that explosives related to military use have been handled at Seville Manor (USACE, 2006).

5.10 Radon

Under the Army radon reduction program, 635 Alpha Track Monitors (ATM) radon samples were taken from individual Army Family Housing units and OMA facilities at USAG-S, including Seville Manor. ATM's typically were set in place from 2-Dec-1989 to 10-Mar-1990. For all readings the maximum radon measurement was 2.8 pCi/l. The recommended EPA action level is 4.0 pCi/l (AMSTA-QRA, 1991).

In the 2004 EBS, the EDR report provided information that area radon is less than 4.0 pCi/l (See Appendix B EDR Report). Furthermore since the residences at Seville were constructed on slab with no basements, radon accumulation is usually unlikely.

5.11 Pesticides

Pesticide management at Seville Manor is conducted under the USAG-S Integrated Pest Management Plan (Parsons, 2001 f). The Pest Controller is certified by the DoD or licensed by the State of Michigan. Pests included in the plan are weeds and other unwanted vegetation, termites, mosquitoes, crawling insects (ants, crickets, cockroaches, etc.), spiders, and mice and other vertebrate pests. The plan serves as the framework through which pest management is defined and implemented at USAG-S, including Seville Manor. Elements of the pest management program are health and environmental safety, pest identification and pest management, as well as pesticide storage, transportation, use and disposal.

At Seville Manor, pesticides are applied in accordance with the pesticide product label by licensed applicators. Being a residential area, pesticide application at Seville Manor follows instruction for residential use on the label.

The USAG-S Base Operations Contractor conducts routine pest management activities. A licensed professional outside contractor is used to handle larger pest management projects. Otherwise, residents purchase pesticides from AAFES facilities and the self-help facility and apply them on an individual basis. There was no storage or mixing of pesticides at Seville Manor other than what a housing resident may have purchased for individual use.

Pesticide products registered by the USEPA for general use are sold at USAG-S in the Army& Air Force Exchange Service (AAFES) facilities such as the BX/PX. Because the pesticides are mostly used for lawn and garden maintenance, these products are sold during the spring and summer. By the end of the season, all pesticide products have been sold or are sent back to the manufacturer.

Chemical pest control products are also available through the USAG-S self-help program. These products are accompanied by educational materials instructing the users about pests and the application of the products (**Parsons, 2001f**).

A summary of pesticide product type records since 1990 is presented in the following **Table 5.11-1**.

| Table 5.11-1, Licensed Pesticide Applicator Records For Seville Manor (Source: DD Form 1532-1 SINCE 1990) | | | |
|---|------|----------------------|------------|
| PESTICIDE PRODUCT | PEST | PESTICIDE PRODUCT | PEST |
| 565 Plus XLO | ants | Dursban LO | fleas |
| Advance Ant Bait | ants | BP300 | flies |
| Baygon | ants | Safrotin | flies |
| Bifenthrin | ants | 565 Plus XLO | gnats |
| Chem-Tox fogger | ants | Diazinon | grubs |
| Deltadust | ants | Wasp Freeze | hornets |
| Deltamethrin | ants | Maki | mice |
| Diazinon | ants | Talon-G | mice |
| Drax Ant Bait Gel | ants | Mole Patrol | moles |
| Drax Ant Kil PF | ants | Moletox II | moles |
| Drax Liquidator Ant Bait | ants | Anvil 2+2 ULV | mosquitoes |
| Dursban 4E | ants | Malathion | mosquitoes |
| Dursban LO | ants | Lambda Cyhalothrin | pillbugs |
| Dursban Turf | ants | Boric Acid | roaches |
| Ficam Plus | ants | BP300 | roaches |
| Formula 18-GL | ants | Cyfluthrin | roaches |
| Lambda Cyhalothrin | ants | Deltamethrin | roaches |
| Lesco Fogger | ants | Hydroprene | roaches |
| MaxForce Ant Bait | ants | Microcare Boric Acid | roaches |
| Microcare | ants | Prentox Exciter | roaches |
| Microcare ChemTox | ants | Baygon | spiders |
| Ortho Home Defense | ants | Bifenthrin | spiders |

| Table 5.11-1, Licensed Pesticide Applicator Records For Seville Manor (Source: DD Form 1532-1 SINCE 1990) | | | |
|---|---------|------------------------------------|---------|
| PESTICIDE PRODUCT | PEST | PESTICIDE PRODUCT | PEST |
| Orthoboric acid | ants | Chem-Tox fogger | spiders |
| PI | ants | Deltamethrin | spiders |
| Pro Control | ants | Diazinon | spiders |
| Suspend SC Drax Gel | ants | Formula 18-GL | spiders |
| Tempo | ants | Microcare | spiders |
| Apicide | bees | Ortho Home Defense | spiders |
| Carbaryl | bees | Safrotin | spiders |
| Wasp Freeze | bees | Suspend SC Drax Gel | spiders |
| Diazinon | beetles | 565 Plus XLO | wasps |
| Microcare | beetles | Carbaryl | wasps |
| Bifenthrin | earwigs | Spectracide Wasp and Hornet Killer | wasps |
| | | Wasp Freeze | wasps |

5.12 Other Identified Concerns

No other environmental concerns have been identified.

5.13 Identification of Uncontaminated Property

In accordance with CERCLA 120(h) (4), this ECP recommends that 103 acres of USAG-S constituting Seville Manor can be identified as Uncontaminated Property based on investigation of the real property described herein that does not find obvious presence or likely presence of a release or threatened release of any hazardous substance or any petroleum product or its derivatives, including aviation fuel and motor oil, on the real property. This identification of Uncontaminated Property is based on a review of the following sources of information concerning the current and previous uses of the real property as reported in the 2004 Environmental Baseline Survey and this ECP:

- (i) A detailed search of Federal Government records pertaining to the property (Provided in EDR Report Appendix B).
- (ii) Recorded chain of title documents regarding the real property. This action was conducted as part of the 2004 EBS and is provided in Appendix B.
- (iii) Aerial photographs that reflect prior uses of the real property (Provided in Appendix B).
- (iv) A visual inspection of the real property and buildings, structures, equipment, and other improvements on the real property, and a visual inspection of properties immediately adjacent to the real property. This action was conducted as part of the 2004 EBS.

(v) A physical inspection of residential property adjacent to the real property has not been conducted.

(vi) Reasonably obtainable Federal, State, and local government records of each adjacent facility where there has been a release of any hazardous substance or any petroleum product or its derivatives, including aviation fuel and motor oil, and which is likely to cause or contribute to a release or threatened release of any hazardous substance or any petroleum product or its derivatives, including aviation fuel and motor oil, on the real property. This action was conducted as part of the 2004 EBS.

(vii) Interviews with current or former employees involved in operations on the real property. This action was conducted as part of the 2004 EBS.

5.14 Description of Remaining Property

USAG-S property other than Seville Manor consists of 520 acres which represent the USAG-S Army Main Garrison located approximately 3 miles south of Seville Manor. The USAG-S Main Garrison property which is being transferred to the US Air Force under BRAC 05 is addressed in a separate ECP Document titled U.S. Army BRAC 2005 Environmental Condition of Property Report USAG-S (Main Garrison Property) July 2006 (**USAG-S, 2006d**).

5.14.1 NEPA (National Environmental Policy Act)

The US Army Corps of Engineers under the direction of the BRAC Division is currently in the process of collection of information to support the required NEPA documentation. Depending on the Local Redevelopment Authority (LRA) reuse plan, the NEPA document will consist of :

- 1) Record of Consideration (REC₂) if LRA's reuse plan for property is unchanged (all residential); and
- 2) Environmental Assessment (EA) if the LRA's reuse plan for property changes significantly from its present residential use (e.g. park, library, conservation, etc.)

5.15 Applicable Regulatory Compliance Issues

No regulatory compliance issues have been identified at Seville Manor.

5.16 Adjacent Properties

As part of the 2004 EBS a regulatory information review was conducted to evaluate whether the site property or nearby properties are listed as having a past or present record of actual or potential environmental hazards that are under investigation or may have an adverse impact on the site. A summary of the listings queried by EDR, the corresponding ASTM minimum search distances for each respective listing, and the date of the last government version of each listing is provided in the EDR report. Based on the 2004 EBS review of the EDR database, the facilities below were identified as having previous violations or noncompliance issues.

| Table 5.16-1, List of Adjacent Properties | | | |
|--|-----------------|----------------------------------|---|
| Facility | Database | MDEQ Facility Identification No. | Location and Distance from Site |
| Dean Brothers Disposal | HST LF | 50000023 | Off 23-Mile Road 1/4-1/2 mile east-northeast |
| Dean Brothers Disposal | HST LF | 50000024 | 48221 Sugarbush Road 1/4-1/2 mile east-northeast |
| Sugarbush Road Dumpsite | CERC-NFRAP SHWS | NA | Sugarbush Road 1/4-1/2 mile east-northeast |

According to the MDEQ inactive solid waste facilities database (HIST LF), the two Dean Brothers Disposal facilities are not operating and do not have any RECs. According to MDEQ, the Dean Brothers facilities and a municipal landfill were combined into one site known as the Sugarbush Road dumpsite (MID981093933) located approximately ½ mile north of Seville Manor. Chesterfield Township operated the licensed municipal landfill in the early 1960's. In 1967 the Chesterfield Township landfill and the adjoining Dean Brothers landfill were combined into one landfill. The landfill accepted light industrial and municipal refuse. In 1987, the facility operator declared bankruptcy and discontinued managing the facility. According to MDEQ, the site is contaminated with chemicals of concern including arsenic; chromium; 4,4-DDT; and 4,4-DDE (**Tetra Tech, 2004**).

The generally understood groundwater flow in the Chesterfield Township area is southeast toward Lake St. Clair. Seville Manor is southwest of the Sugarbush Road dump site. As stated in the EBS the dumpsite is not considered a recognized environmental concern (REC) for Seville Manor.

6 Conclusions

In accordance with CERCLA 120(h) (4), this ECP recommends that 103 acres of USAG-S constituting Seville Manor can be identified as Uncontaminated Property based on investigation of the real property that does not find obvious presence or likely presence of a release or threatened release of any hazardous substance or any petroleum product or its derivatives on the real property. This identification of Uncontaminated Property is based on a review of sources of information concerning the current and previous uses of the real property as reported in the 2004 Environmental Baseline Survey and this ECP.

- There is no evidence that hazardous substances were stored, released, or disposed on the property in excess of the reportable quantities listed in 40 CFR 373. Accordingly,

there is no need for any notification of hazardous substance storage, release, or disposal.

- Pesticide management at Seville Manor is conducted under the USAG-S Integrated Pest Management Plan by DoD certified or State of Michigan licensed pest management personnel. Pesticide products are applied by licensed professionals in accordance with the pesticide product label that follows instruction for residential use and by residents who purchase registered pesticide products from on-base stores and self-help facility.
- There is no evidence that any petroleum products in excess of 55 gallons at one time were stored, released, or disposed on the property. Accordingly, there is no need for any notification of petroleum product storage, release, or disposal. There is no evidence that petroleum products were stored in underground or above ground storage tanks on the property.
- *PCB Equipment* such as microwave ovens and fluorescent light ballasts and fixtures may have been used at Seville Manor. There is no *PCB-containing electrical equipment* (>50 ppm PCB) located on the property and there is no evidence of release from PCB equipment. In an inspection of 60 transformers performed again in April 2006, several units contained PCB from 2 to 12 ppm and all appeared to be in good condition
- Asbestos inspection of accessible areas of all buildings located in Seville Manor was conducted during April 2005 to May 2006. The inspections were performed by State of Michigan accredited Building Inspectors in accordance with current AHERA and Michigan MDLEG regulations according to recognized techniques. Work did not include destructive methods of inspection to confirm the presence or absence of ACM inside inaccessible spaces behind intact walls and/or ceilings. Asbestos Containing Materials identified during in Seville Manor housing were joint compound on seams and nail heads of drywall walls and ceilings, black mastic on underside of kitchen sink, resilient floor coverings, cove base and mastic, tan/grey wall coverings and mastic in bathrooms, and exterior caulking/crack sealant. The ACM does not currently pose a threat to human health or the environment because friable asbestos that would pose an unacceptable risk to human health is removed or encapsulated under an Asbestos Management Plan.
- Lead based paint (LBP) inspection and risk assessment were performed in 2004-2005 by EPA/Michigan certified lead risk assessors on 54 units as a statistical subset of housing units at Seville Manor according to provisions of Title X, Residential Lead Based Paint Hazard Reduction Act. Interim lead hazard control is implemented under a Lead Based Paint Management Plan for LBP hazards identified in occupied buildings.
- There is no evidence of any release of radiological material at Seville Manor.
- Radon surveys were conducted in each building at Seville Manor. Radon was not detected above the EPA residential action level of 4 picocuries per liter (pCi/L).

- Based on a review of existing records and available information, none of the buildings or surrounding land at Seville Manor is known to contain explosives or unexploded ordinance.
- Intact archaeological sites are not likely to occur within the boundaries of Seville Manor. No archaeological resources eligible for the NRHP are expected to occur on USAG-Selfridge lands. Seville Manor buildings (Capehart Era Army family housing and associated structures) are considered to be reviewed under Section 106 of the National Historic Preservation Act through Program Comment of the Advisory Council on Historic Places dated May 31, 2002.
- There are no environmental remediation orders or agreements applicable to the property at Seville Manor.
- Environmental conditions on adjacent property do not present any recognized environmental concern to the property at Seville Manor.

7 References

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- Parsons ES, 2001f. *Final Pest Management Plan*. Prepared for U.S. Army Garrison-Selfridge, Macomb County, Michigan. Prepared by Parsons Engineering Science. June 2001.
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- Tetra Tech, 2004. Environmental Baseline Survey, U.S. Army Garrison – Michigan Seville Manor, *Mt. Clemens, Michigan 48045*, Prepared for the U.S. Army Garrison – Michigan, May 2004.
- Tecom Inc, 2005, Spill Prevention Control and Countermeasures; Installation Spill Contingency Plan (SPCC/ISCP). Prepared for U.S. Army Garrison – Michigan (Selfridge).
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- USAEC 2005a, After Action Report ECP Workshop, Prepared by USAEC for US Army BRAC-D and U.S. Army Garrison-Selfridge, July 2005.
- USAEC, 2005b, Email from Karen Lapajenko McGuire Radiation Safety Officer (RSO) covering USAG-S concerning the commodities and potential issues at USAG-S to M. Kipp, August 18, 2005
- USAG-S, 2006a, Preventive Maintenance Inspection at TECOM, Inc. Seville Manor, Transformer Inspection Retrofill Corporation, April 2006.
- USAG-S, 2006b, Draft Asbestos Inspection Report, USAG-S Seville Manor, Dates of Inspection April 2005 to May 2006, TECOM Inc, June 2006
- USAG-S, 2006c, Draft Multi-Family Lead Inspection and Risk Assessment for Seville Housing Units, Dates of Inspection December 2004 to March 2005, TECOM Inc, June 2006
- USAG-S, 2006d, U.S. Army BRAC 2005 Environmental Condition of Property Report USAG-S (Main Garrison Property), July 2006
- USAG-S 1992, AMSTA-QRA, Memo for C, Facilities Management Branch (AMSTA-XEM), Subj: Analysis of ATM Radon Samples, 17-Dec-1991

**APPENDIX B. Methodology and Data Record
Includes:**

- Title Information Seville Manor (Source EBS May 2004, Tetra Tech)
- Aerial photographs of Seville Manor for the years 1940, 1955, 1964, 1973, 1985, 1993, and 2000. (Source EBS May 2004, Tetra Tech)
- EDR Report for Seville Manor, October 23, 2003 (Source EBS May 2004, TetraTech)
- Sanborn Fire Insurance Maps (not available for Seville Manor area as of October 24, 2003, Source EBS May 2004, Tetra Tech)

SCHEDULE B

* (SEE PAGE 1)

The property described in Schedule A hereof is free and clear of all interests, encumbrances and defects of title and all other matters whatsoever of record, or which, though not of record, are known to this Corporation to exist, which are impairing, or adversely affecting the title to said property, EXCEPT THE FOLLOWING:

1. All taxes, including any special assessments against the foregoing land, up to and including the year 1958, have been paid.
2. Mechanic's Liens not of record.
3. Rights of Parties in Possession.
4. An easement 60 feet wide for a portion of the Sutherland and Oernig Drain in Private Claims 192 and 193, Town 3 North, Range 14 East, Chesterfield Township, Macomb County, Michigan, the center line of which is described as follows: Beginning at a point which is distant from the intersection of the Northwesterly line of Private Claim No. 193, with the Southerly line of Fractional Section 20, North 49 degrees 21 minutes 34 seconds East, 1495.56 feet along the Northwesterly line of Private Claim 193 and South 40 degrees 21 minutes 13 seconds East, 176.97 feet; thence, from this point of beginning, South 39 degrees 03 minutes 50 seconds West, 65.46 feet; thence South 40 degrees 27 minutes 00 seconds West, 101.44 feet; thence South 36 degrees 52 minutes 30 seconds West, 205.45 feet; thence South 36 degrees 36 minutes 10 seconds West, 102.84 feet; thence South 22 degrees 10 minutes 30 seconds West, 113.18 feet; thence South 11 degrees 31 minutes 10 seconds West, 341.55 feet; thence South 16 degrees 54 minutes 40 seconds West, 158.93 feet; thence South 37 degrees 08 minutes 50 seconds West, 307.83 feet; thence South 44 degrees 15 minutes 00 seconds West, 402.10 feet; thence South 40 degrees 27 minutes 00 seconds West, 121.70 feet to a point on the Northeasterly line of "Supervisor's Plat No. 12" as recorded in liber 18, pages 34 and 35 of plats, Macomb County Records, said point being distant South 48 degrees 59 minutes 00 seconds West, 287.50 feet along the Northwesterly line of Private Claim 193 and South 39 degrees 54 minutes 00 seconds East, 736.00 feet along subdivision line from the intersection of the Northwesterly line of Private Claim 193 with the Southerly line of Fractional Section 20.

NOTE: The former owners of this property, prior to the Declaration of Taking, entitled United States of America, vs. 36.71 acres of land, etc., in Civil No. 19175, filed June 18, 1959, in the United States District Court for the Eastern District of Michigan, Southern Division, were Edward J. Matejcik and Matilda Matejcik, his wife.

* DESCRIPTION CONTINUED.

West 2267.94 feet (along a line common with George Meldrum) to a point on the Northwesterly line of Private Claim 193; thence North 49 degrees 21 minutes 34 seconds East, 838.28 feet along said Northwesterly line of Private Claim 193 to the point of beginning. Said parcel contains 38.71 acres of land, more or less.

BURTON ABSTRACT AND TITLE CO.
350 East Congress Street
Detroit 26, Michigan

To: THE UNITED STATES OF AMERICA
Re: Selfridge Air Force Base, Michigan
(Capehart Family Housing) Site "D"

Application No. 85447
TRACT NO. 100

BURTON ABSTRACT AND TITLE CO., a Corporation organized and existing under the laws of the State of Michigan, with its principal office in the City of Detroit, State of Michigan, hereby certifies that it has made a thorough search of the title to the property described in SCHEDULE A hereof, beginning with the patent from the United States of America, and that the title to said property was indefeasibly vested in fee simple of record in (*SEE OVER)

as of the fourteenth day of May 1959 free and clear of all encumbrances, defects, interests and all other matters whatsoever, either of record or otherwise known to the Corporation impairing or adversely affecting the title to said property, except as shown in SCHEDULE B hereof.

The Maximum Liability of the undersigned under Application No. 85447 is limited to the sum of \$ 1,000,000.

In consideration of the premium paid, this certificate is issued for the use and benefit of the United States of America.

IN WITNESS WHEREOF, said Corporation has caused these presents to be signed in its name and behalf, sealed with its corporate seal and delivered by its proper officer hereunto duly authorized, as of the date last above mentioned.

BURTON ABSTRACT AND TITLE CO.

By Philip J. Greco
Authorized Officer.

SCHEDULE A

The property covered by this certificate is accurately and fully described as follows: Part 1: Land in the Township of Chesterfield, Macomb County, Michigan described as: A parcel of land in Private Claim 192 and 193, Township 3 North, Range 14 East, Michigan Meridian, Chesterfield Township, Macomb County, Michigan more particularly described as follows: Commencing at the intersection of the Northwest line of Private Claim 193 and the south line of Section 20; thence North 52° 00' East, 1103.20 feet to the point of beginning; thence North 52° 00' East, 415.0 feet; thence South 37° 35' East, 1450.0 feet; thence South 52° 03' West, 27.4 feet; thence South 37° 35' East, 329.19 feet; thence South 22° 00' West, 449.46 feet along the centerline of Sugarbush Road; thence North 37° 35' West, 2004.02 feet to the point of beginning. Said parcel contains 17.90 acres, more or less.

Part 2: Land in the Township of Chesterfield, Macomb County, Michigan, described as: A parcel of land in Private Claim 193, Township 3 North, Range 14 East, Michigan Meridian, Chesterfield Township, Macomb County, Michigan, more particularly described as follows: Beginning at a point on the North line. (See Reverse Side)

*nothing was registered
copy of this is 2 more
and amount is suggested
5/27/19*
38.71 acres of 37.90 (taking only 1st 2)

The property described in Schedule A hereof is free and clear of all interests, encumbrances and defects of title and all other matters whatsoever of record, or which, though not of record, are known to this Corporation to exist, impairing or adversely affecting the title to said property, EXCEPT THE FOLLOWING:

1. All taxes, including any special assessments against the foregoing land, up to and including the year 1958, have been paid.

- 2. Mechanic's Liens not of record.
- 3. Rights of Parties in Possession.

***OWNERS:**

- Part 1: Edward J. Matejck and Matilda Matejck, his wife
- Part 2: Matilda Matejck
- Part 3: ~~Edward J. Matejck~~ Edward J. Matejck and Matilda Matejck, his wife.

Continuation of Description:

of Private Claim 193 which is North 52° 03' East, 668.5 feet from the intersection of the North line of Private Claim 193 and the South line of Section 20 extended; thence North 52° 03' East 434.7 feet along the northerly line of Private Claim 193; thence South 37° 35' East, 2004.02 feet to the centerline of Sugarbush Road; thence South 22° 00' West, 504.07 feet along said centerline; thence North 37° 35' West, 2256.55 feet to point of beginning. Said parcel contains 20.0 acres, more or less.

Part 3: Land in the Township of Chesterfield, Macomb County, Michigan, described as: A parcel of land in Private Claim 192 and 193, Township 3 North, Range 14 East, Michigan Meridian, Chesterfield Township, Macomb County, Michigan, more particularly described as follows: Commencing at the Northeast corner Private Claim 192; thence South 49° 11' West, 1876.4 feet; thence South 49° 43' West, 1791.75 feet to point of beginning; thence South 49° 31' 30" West, 661 feet; thence South 49° 18' West 289.3 feet; thence South 40° 21' East, 2014.87 feet; thence North 19° 11' East, 505.17 feet; thence North 53° 52' East, 510.5 feet; thence North 40° 11' West, 1798.96 feet to the point of beginning; except commencing at intersection of the Northwest line of Private Claim 193 and South line of Section 20; thence North 52° 00' East, 1103.20 feet to point of beginning; thence North 52° 00' East, 415 feet; thence South 37° 35' East, 1450 feet; thence South 52° 03' West, 27.40 feet; thence South 37° 35' East, 329.19 feet; thence South 22° 00' West, 449.46 feet along the centerline of Sugarbush Road; thence North 37° 35' West, 2004.02 feet to point of beginning. Said parcel contains 22.21 acres, more or less.

4. Subject to a 60 foot easement for drain purposes across the Northerly part of subject property as shown on the survey dated August 4, 1958.

(Signature)

(Signature)

(Signature)

BURTON ABSTRACT AND TITLE CO.
350 East Congress Street
Detroit 26, Michigan

To: THE UNITED STATES OF AMERICA
Re: Selfridge Air Force Base, Michigan
(Capehart Family Housing, Site)

Application No. 85447
TRACT NO. 101

BURTON ABSTRACT AND TITLE CO., a Corporation organized and existing under the laws of the State of Michigan, with its principal office in the City of Detroit, State of Michigan, hereby certifies that it has made a thorough search of the title to the property described in SCHEDULE A hereof, beginning with the patent from the United States of America, and that the title to said property was indefeasibly vested in fee simple of record in the United States of America as of the 26th day of July, 1959, free and clear of all encumbrances, defects, interests and all other matters whatsoever, either of record or otherwise known to the Corporation impairing or adversely affecting the title to said property, except as shown in SCHEDULE B hereof.

The Maximum liability of the undersigned under Application No. 85447 is limited to the sum of \$ 7,000.00. In consideration of the premium paid, this certificate is issued for the use and benefit of the United States of America.

IN WITNESS WHEREOF, said Corporation has caused these presents to be signed in its name and behalf, sealed with its corporate seal and delivered by its proper officer thereunto duly authorized, as of the date last above mentioned.

BURTON ABSTRACT AND TITLE CO.
By *[Signature]*
Authorized Officer

SCHEDULE A
The property covered by this certificate is accurately and fully described as follows:
A parcel of land in Private Claim 193, Township 3 North, Range 14 East, Michigan Meridian, Chesterfield Township, Macomb County, Michigan, described as follows: Beginning at a point on the Northwesterly line of Private Claim 193, distant North 49 degrees 21 minutes 34 seconds East, 270.00 feet from the intersection of the Northwesterly line of Private Claim 193 with the Southerly line of Fractional Section 20; thence from this point of beginning, North 49 degrees 21 minutes 34 seconds East, 387.22 feet along the said Private Claim line; thence South 40 degrees 25 minutes 34 seconds East, 2267.94 feet (along a line common with Matilda Matejck) to the centerline of Sugar Bush Road; thence South 18 degrees 48 minutes 47 seconds West, 443.50 feet along said centerline of Sugar Bush Road; thence North 40 degrees 34 minutes 00 seconds West, 2493.34 feet (along a line common with Carl Hauswirth) to the point of beginning.
Said parcel contains 21.00 acres of land, more or less.

(See Reverse Side)

SCHEDULE B

The property described in Schedule A hereof is free and clear of all interests, encumbrances and defects of title and all other matters whatsoever of record, or which, though not of record, are known to this Corporation to exist, impairing, or adversely affecting the title to said property; EXCEPT THE FOLLOWING:

1. All taxes, including any special assessments against the foregoing land, up to and including the year 1958 have been paid.
2. Mechanic's liens not of record.
3. Rights of Parties in Possession.
4. An easement 60 feet wide for a portion of the Sutherland and Oemig Drain in Private Claims, 192 and 193, Town 3 North, Range 14 East, Cheaterfield Township, Macomb County, Michigan, the center line of which is described as follows: Beginning at a point which is distant from the intersection of the Northwesterly line of Private Claim No. 193, with the Southerly line of Fractional Section 20, North 49 degrees 21 minutes 34 seconds East, 1495.56 feet along the Northwesterly line of Private Claim 193 and South 40 degrees 21 minutes 13 seconds East, 176.97 feet, thence, from this point of beginning, South 39 degrees 03 minutes 50 seconds West, 65.46 feet; thence South 40 degrees 27 minutes 00 seconds West, 101.44 feet; thence South 36 degrees 52 minutes 30 seconds West, 205.45 feet; thence South 36 degrees 36 minutes 10 seconds West, 102.84 feet; thence South 22 degrees 10 minutes 30 seconds West, 113.18 feet; thence South 11 degrees 31 minutes 10 seconds West, 341.55 feet; thence South 16 degrees 54 minutes 40 seconds West, 158.93 feet; thence South 37 degrees 08 minutes 50 seconds West, 307.83 feet; thence South 44 degrees 15 minutes 00 seconds West, 402.10 feet; thence South 40 degrees 27 minutes 00 seconds West, 121.70 feet to a point on the Northeasterly line of "Supervisor's Plat No. 12" as recorded in Liber 18 of plats, on pages 34 and 35, Macomb County Records, said point being distant South 48 degrees 59 minutes 00 seconds West, 287.50 feet along the Northwesterly line of Private Claim 193 and South 39 degrees 54 minutes 00 seconds East, 736.00 feet along subdivision line from the intersection of the Northwesterly line of Private Claim 193 with the Southerly line of Fractional Section 20.

NOTE: The former owners of this property, prior to the Declaration of Taking, entitled United States of America, vs. 21.00 acres of land, etc., in Civil No. 19175, filed June 18, 1959 in the United States District Court for the Eastern District of Michigan, Southern Division, were George Meldrum and Sylvia Meldrum, his wife.

BURTON ABSTRACT AND TITLE CO.
350 East Congress Street
Detroit 26, Michigan

To: THE UNITED STATES OF AMERICA
Re: Selfridge Air Force Base, Michigan
(Capehart Family Housing Site)

Application No. 85447
TRACT NO. 101

BURTON ABSTRACT AND TITLE CO., a Corporation organized and existing under the laws of the State of Michigan, with its principal office in the City of Detroit, State of Michigan, hereby certifies that it has made a thorough search of the title to the property described in SCHEDULE A hereof, beginning with the patent from the United States of America, and that the title to said property was indefeasibly vested in fee simple of record in George Meldrum and Sylvia Meldrum, his wife as of the fourteenth day of May, 1959 free and clear of all encumbrances, defects, interests and all other matters whatsoever, either of record or otherwise known to the Corporation impairing or adversely affecting the title to said property, except as shown in SCHEDULE B hereof.

The Maximum liability of the undersigned under Application No. 85447 is limited to the sum of \$ 1,000.00

In consideration of the premium paid, this certificate is issued for the use and benefit of the United States of America.

IN WITNESS WHEREOF, said Corporation has caused these presents to be signed in its name and behalf, sealed with its corporate seal and delivered by its proper officer thereunto duly authorized, as of the date last above mentioned.

BURTON ABSTRACT AND TITLE CO.

By [Signature]
Authorized Officer

SCHEDULE A

The property covered by this certificate is accurately and fully described as follows: Land in the Township of Chesterfield, Macomb County, Michigan, described as: A parcel of land in Private Claim 193, Township 3 North, Range 14 East, Michigan Meridian, Chesterfield Township, Macomb County, Michigan, more particularly described as follows: Beginning at a point 270 feet North 49° 18' East of the intersection of the northwesterly line of said Private Claim 193 with the southerly line of Fractional Section 20; thence continuing North 49° 18' East 387.22 feet along the northwesterly line of Private Claim 193; thence South 40° 21' East approximately 2267.94 feet (along a common property line with Matilda Matejck) to a point on the centerline of Sugarbush Road; thence South 19° 11' West 443.5 feet along said centerline of Sugarbush Road; thence North 40° 28' West 2490.44 feet (along a common property line with Carl Hauswirth) to the point of beginning. Said parcel contains 21.02 acres, more or less.

(See Reverse Side)

*Selfridge Air Force Base
21.02 acres
land owned
by the
military
5/11/59*

SCHEDULE B

The property described in Schedule A hereof is free and clear of all interests, encumbrances and defects of title and all other matters whatsoever of record, or which, though not of record, are known to this Corporation to exist, impairing or adversely affecting the title to said property, EXCEPT THE FOLLOWING:

1. All taxes, including any special assessments against the foregoing land, up to and including the year 1958, have been paid.

2. Mechanic's Liens not of record.

3. Rights of Parties in Possession.

4. Subject to a 60 foot easement for drain purposes across the Northerly part of subject property as shown by survey dated August 4, 1958.

BURTON ABSTRACT AND TITLE CO.
350 East Congress Street
Detroit 26, Michigan

To: THE UNITED STATES OF AMERICA

Application No. 85447

Re: Selfridge Air Force Base, Michigan
(Capehart Family Housing Site).

TRACT NO. 102

BURTON ABSTRACT AND TITLE CO., a Corporation organized and existing under the laws of the State of Michigan, with its principal office in the City of Detroit, State of Michigan, hereby certifies that it has made a thorough search of the title to the property described in SCHEDULE A hereof, beginning with the patent from the United States of America, and that the title to said property was indefeasibly vested in fee simple of record in

United States of America as of the 6th day of July, 1959 free and clear of all encumbrances, defects, interests and all other matters whatsoever, either of record or otherwise known to the Corporation impairing or adversely affecting the title to said property, except as shown in SCHEDULE B hereof.

The Maximum liability of the undersigned under Application No. 85447 is limited to the sum of \$ 16,000.00

In consideration of the premium paid, this certificate is issued for the use and benefit of the United States of America.

IN WITNESS WHEREOF, said Corporation has caused these presents to be signed in its name and behalf, sealed with its corporate seal and delivered by its proper officer thereunto duly authorized, as of the date last above mentioned.

BURTON ABSTRACT AND TITLE CO.

By [Signature]
Authorized Officer

SCHEDULE A

The property covered by this certificate is accurately and fully described as follows:

A parcel of land in Private Claim 193, Township 3 North, Range 14 East, Michigan Meridian, Chesterfield Township, Macomb County, Michigan, described as follows: Beginning at the intersection of the northwesterly line of Private Claim 193 with the southerly line of Fractional Section 20; thence north 49 degrees 21 minutes 34 seconds East 270.00 feet along said northwesterly line of Private Claim 193; thence south 40 degrees 34 minutes 00 seconds East 2493.34 feet (along a line common with George Meldrum) to the centerline of Sugar Bush Road; thence south 18 degrees 48 minutes 47 seconds West 102.33 feet along said centerline of Sugar Bush Road; thence south 52 degrees 09 minutes 15 seconds West 499.30 feet along the centerline of Sugar Bush Road to the northeasterly line of "Supervisor's Plat No. 12" as recorded in Liber 18, of Plats, on pages 34 and 35, Macomb County Records; thence north 39 degrees 54 minutes 00 seconds West 2519.33 feet along said northeasterly line of "Supervisor's Plat No. 12" to the most northerly corner of said Plat, being also the centerline of Donner Road; thence north 48 degrees 59 minutes 00 seconds East 287.50 feet along said centerline of Donner Road to the point of beginning; Containing 33.24 acres of land, more or less. (See Reverse Side)

*(SEE OVER)

SCHEDULE B

The property described in Schedule A hereof is free and clear of all interests, encumbrances and defects of title and all other matters whatsoever of record, or which, though not of record, are known to this Corporation to exist, impairing, or adversely affecting the title to said property, EXCEPT THE FOLLOWING:

1. All taxes, including any special assessments against the foregoing land, up to and including the year 1958 have been paid.
2. Mechanic's Liens: not of record.
3. Rights of Parties in Possession.
4. *** (SEE ATTACHED RIDER FOR EASEMENTS DESCRIPTION).

NOTE: The former owners of this property, prior to the Declaration of Taking, entitled United States of America, vs. 42.98 acres of land, etc., in Civil No. 19175, filed June 18, 1959 in the United States District Court for the Eastern District of Michigan, Southern Division, were Carl Hauswirth and Margaret Hauswirth, his wife.

Charles Moskowitz, formerly held a Leasehold interest, as lessee under an Oil and Gas Lease, dated January 5, 1959.

* DESCRIPTION OF REAL ESTATE CONTINUED.

ALSO, All that part of Lot 1 lying southeasterly of the centerline of the Sutherland and Oernig Drain, of "Supervisor's Plat No. 12" of part of Private Claim 193, Township 3 North, Range 14 East, Michigan Meridian, Chesterfield Township, Macomb County, Michigan, as recorded in Liber 18 of plats, on pages 34 and 35, Macomb County Records, and more particularly described as follows: Beginning at the most easterly corner of said Lot 1, thence south 52 degrees 03 minutes 30 seconds, West 239.40 feet along the southeasterly line of said Lot; thence north 40 degrees 03 minutes 07 seconds West, 1766.48 feet along the southwesterly line of said lot to a point on the centerline of said drain; thence north 57 degrees 30 minutes 39 seconds East 221.15 feet along said centerline; thence north 40 degrees 27 minutes 00 seconds East 25.00 feet along said centerline to a point on the northeasterly line of said Lot; thence south 39 degrees 54 minutes 00 seconds East 1750.31 feet along said lot line to the point of beginning. Containing 9.74 acres of land, more or less.

Said Tract No. 102 contains a total acreage of 42.98 acres of land, more or less.

SCHEDULE B

The property described in Schedule A hereof is free and clear of all interests, encumbrances and defects of title and all other matters whatsoever of record, or which, though not of record, are known to this Corporation to exist, impairing, or adversely affecting the title to said property, EXCEPT THE FOLLOWING:

1. All taxes, including any special assessments against the foregoing land, up to and including the year *SEE BELOW have been paid.
2. Mechanic's Liens not of record.
3. Rights of Parties in Possession.

* All taxes, including any special assessments against the foregoing land, up to and including the year 1956 have been Paid, as to all of subject property except the Southeast 10 acres of Lot 1, Supervisors' Plat No. 12 of said Chesterfield Township. (1957 and 1958 Taxes Unpaid).

All taxes, including any special assessments against the foregoing land, up to and including the year 1957 have been paid, as to that portion of subject property described as: The southeast 10 acres of Lot 1, Supervisors' Plat No. 12 of said Chesterfield Township. (1958 Taxes Unpaid).

4. Mortgage for \$2,600.00 executed by Carl Hauswirth and Margaret Hauswirth, his wife, to The Marine Savings Bank, a Michigan Banking Corporation, of Marine City, Michigan, dated September 21, 1951 and recorded October 5, 1951 in liber 569, page 306 of mortgages, Register No. 91471.

5. Subject to the Leasehold interest of Charles Moskowitz, lessee under an Oil and Gas Lease, dated January 5, 1959, as disclosed in Application.

RIDER

TRACT NO. 102

**(DESCRIPTION OF EASEMENTS)

4. An easement 60 feet wide for a portion of the Sutherland and Oemig Drain in Private Claims 192 and 193, Town 3 North, Range 14 East, Chesterfield Township, Macomb County, Michigan, the center line of which is described as follows: Beginning at a point which is distant from the intersection of the Northwesterly line of Private Claim No. 193, with the Southerly line of Fractional Section 20, North 49 degrees 21 minutes 34 seconds East, 1495.56 feet along the Northwesterly line of Private Claim 193 and South 40 degrees 21 minutes 13 seconds East, 176.97 feet, thence, from this point of beginning, South 39 degrees 03 minutes 50 seconds West, 65.46 feet; thence South 40 degrees 27 minutes 00 seconds West 101.44 feet; thence South 36 degrees 52 minutes 30 seconds West, 205.45 feet; thence South 36 degrees 36 minutes 10 seconds West, 102.84 feet; thence South 22 degrees 10 minutes 30 seconds West, 113.18 feet; thence South 11 degrees 31 minutes 10 seconds West, 341.55 feet; thence South 16 degrees 54 minutes 40 seconds West, 158.93 feet; thence South 37 degrees 08 minutes 50 seconds West, 307.83 feet; thence South 44 degrees 15 minutes 00 seconds West, 402.10 feet; thence South 40 degrees 27 minutes 00 seconds West, 121.70 feet to a point on the Northeasterly line of "Supervisor's Plat No. 12" as recorded in liber 18 of plats, on pages 34 and 35, Macomb County Records, said point being distant South 48 degrees 59 minutes 00 seconds West, 287.50 feet along the Northwesterly line of Private Claim 193 and South 39 degrees 54 minutes 00 seconds East, 736.00 feet along subdivision line from the intersection of the Northwesterly line of Private Claim 193 with the Southerly line of Fractional Section 20.

ALSO. An easement for the Sutherland and Oemig Drain, more particularly described as follows: An easement 30 feet wide for said Sutherland and Oemig Drain through Lot 1 of "Supervisor's Plat No. 12" aforesaid, lying Southeast of the center line of said drain, described as follows: Beginning at a point on the Northeasterly line of said "Supervisor's Plat No. 12" distant South 39 degrees 54 minutes 00 seconds East, 736.00 feet from the most northerly corner of said Plat; thence, from this point of beginning, South 40 degrees 27 minutes 00 seconds West, 25.00 feet; thence South 57 degrees 30 minutes 39 seconds West 221.15 feet to the Southwesterly line of Lot No. 1 of said Plat; thence South 40 degrees 03 minutes 07 seconds East, 30.26 feet along said Lot line; thence North 57 degrees 30 minutes 39 seconds East, 221.67 feet; thence North 40 degrees 27 minutes 00 seconds East, 24.40 feet to the Northeasterly line of Lot No. 1; thence North 39 degrees 54 minutes 00 seconds West, 30.43 feet along lot line to the point of beginning.

Rider, attached to and forming part of Policy or Commitment No. 85447. - TRACT NO. 102

BURTON ABSTRACT AND TITLE CO.

By _____
Authorized Signature.

REPORT OF TITLE
DETROIT AREA SUPPORT CENTER
(CAPEHART HOUSING AREA)
PARCEL 'B' OF TRACT NO. 'A'
(FORMERLY TRACT NO. 102, SELFRIDGE FAMILY HOUSING ANNEX NO.2)
MACOMB COUNTY, MICHIGAN

1. Legal Description is attached as Exhibit "A" hereto.
2. Title was vested in the United States of America as follows:

This land was acquired in condemnation proceedings entitled "United States of America vs. 102.69 acres of land, more or less, situate in Macomb County, State of Michigan, and Matilda Matejcik, et al.", in the Declaration of Taking, filed June 18, 1959, as Civil No. 19175, pertaining to Tract No. 102, in the District Court of the United States for the Eastern District of Michigan, Southern Division, Detroit, and Final Judgment dated and filed November 28, 1961

3. Based upon the Audit Files of the U.S. Army Engineer District, Louisville, I find and report that the property is subject to the following exceptions, reservation, conditions, and restrictions relating to the title acquired:
 - a. Existing easements for public roads and highway, for public utilities, for railroads and for pipelines.
 - b. Existing 60-foot wide easement for drain purposes for a portion of the Sutherland and Oemig Drain, as per survey dated August 4, 1958.
4. The United States of America retroceded exclusive federal legislative jurisdiction to the State of Michigan for concurrent federal legislative jurisdiction, and was effective on June 1, 1972. In February 1989, 102.69 acres were reassigned from the Secretary of the Air Force to the Secretary of the Army for the Selfridge Army Garrison Housing Area, and the United States of America presently has concurrent federal legislative jurisdiction over the subject area.

04 March 2002
Date



B.L. Baldes, PLS, Real Estate Cadastral
U.S. Army, Engineer District, Louisville, KY.
Off: 502-315-6954, Fax: 502-315-7008

REPORT OF TITLE
DETROIT AREA SUPPORT CENTER
(CAPEHART HOUSING AREA)
PARCEL 'B' OF TRACT NO. 'A'
(FORMERLY TRACT NO. 101, SELFRIDGE FAMILY HOUSING ANNEX NO.2)
MACOMB COUNTY, MICHIGAN

1. Legal Description is attached as Exhibit "A" hereto.

2. Title was vested in the United States of America as follows:

This land was acquired in condemnation proceedings entitled "United States of America vs. 102.69 acres of land, more or less, situate in Macomb County, State of Michigan, and Matilda Matejcek, et al.", in the Declaration of Taking, filed June 18, 1959, as Civil No. 19175, pertaining to Tract No. 101, in the District Court of the United States for the Eastern District of Michigan, Southern Division, Detroit, and Final Judgment dated and filed November 28, 1961

3. Based upon the Audit Files of the U.S. Army Engineer District, Louisville, I find and report that the property is subject to the following exceptions, reservation, conditions, and restrictions relating to the title acquired:

- a. Existing easements for public roads and highway, for public utilities, for railroads and for pipelines.
- b. Existing 60-foot wide easement for drain purposes for a portion of the Sutherland and Oemig Drain, as per survey dated August 4, 1958.

4. The United States of America retroceded exclusive federal legislative jurisdiction to the State of Michigan for concurrent federal legislative jurisdiction, and was effective on June 1, 1972. In February 1989, 102.69 acres were reassigned from the Secretary of the Air Force to the Secretary of the Army for the Selfridge Army Garrison Housing Area, and the United States of America presently has concurrent federal legislative jurisdiction over the subject area.

04 March 2002
Date



B.L. Baldes, PLS, Real Estate Cadastral
U.S. Army, Engineer District, Louisville, KY.
Off: 502-315-6954, Fax: 502-315-7008

REPORT OF TITLE
DETROIT AREA SUPPORT CENTER
(CAPEHART HOUSING AREA)
PARCEL 'B' OF TRACT NO. 'A'
(FORMERLY TRACT NO. 100, SELFRIDGE FAMILY HOUSING ANNEX NO.2)
MACOMB COUNTY, MICHIGAN

1. Legal Description is attached as Exhibit "A" hereto.
2. Title was vested in the United States of America as follows:

This land was acquired in condemnation proceedings entitled "United States of America vs. 102.69 acres of land, more or less, situate in Macomb County, State of Michigan, and Matilda Matejcek, et al.", in the Declaration of Taking, filed June 18, 1959, as Civil No. 19175, pertaining to Tract No. 100, in the District Court of the United States for the Eastern District of Michigan, Southern Division, Detroit, and Final Judgment dated and filed November 28, 1961

3. Based upon the Audit Files of the U.S. Army Engineer District, Louisville, I find and report that the property is subject to the following exceptions, reservation, conditions, and restrictions relating to the title acquired:
 - a. Existing easements for public roads and highway, for public utilities, for railroads and for pipelines.
 - b. Existing 60-foot wide easement for drain purposes for a portion of the Sutherland and Oemig Drain, as per survey dated August 4, 1958.
4. The United States of America retroceded exclusive federal legislative jurisdiction to the State of Michigan for concurrent federal legislative jurisdiction, and was effective on June 1, 1972. In February 1989, 102.69 acres were reassigned from the Secretary of the Air Force to the Secretary of the Army for the Selfridge Army Garrison Housing Area, and the United States of America presently has concurrent federal legislative jurisdiction over the subject area.

04 March 2002
Date



B.L. Baldes, PLS, Real Estate Cadastral
U.S. Army, Engineer District, Louisville, KY.
Off: 502-315-6954, Fax: 502-315-7008

PORTION OF TRACT "A"
(Parcel B)

SELFRIDGE AIR NATIONAL GUARD BASE
(Capehart Family Housing Annex)
MILITARY RESERVATION
MACOMB COUNTY, MICHIGAN

LEGAL DESCRIPTION OF TRANSFER AREA (CONT'D)

N 40°03'07" W 1766.48 feet, more or less, to a point on the centerline of the Sutherland and Oemig Drain; thence along the center of said drain

N 57°30'39" E 221.15 feet, more or less, to a point; thence

N 40°27'00" E 25.00 feet, more or less, to a point; thence leaving said center line of drain, and continuing with said southwest boundary of Tract "A"

N 39°54'00" W 735.98 feet, more or less, to a point in the center of Donner Road, and being on the northwest line of Private Claim No. 193, said point being the most western corner of said Tract "A"; thence with the center of Donner Road and the northwest boundary of said Tract "A"

N 48°59'00" E 287.50 feet, more or less, to a point being the intersection of the southeast corner of Fractional Section 20, the southwest corner of Fractional Section 21, and the most northeast corner of Private Claim No. 145, with said northwest line of Private Claim No. 193; thence continuing with said northwest line of Private Claim 193 and Tract "A"

N 49°21'34" E 1495.50 feet, more or less, to the point of beginning, containing 102.69 acres, more or less.

10 Dec 1987
C.T.M.

PORTION OF TRACT "A"
(Parcel B)

SELFRIDGE AIR NATIONAL GUARD BASE
(Capehart Family Housing Annex)
MILITARY RESERVATION
MACOMB COUNTY, MICHIGAN

LEGAL DESCRIPTION OF TRANSFER AREA

Situated in the State of Michigan, County of Macomb, Chesterfield Township, Township 3 North, Range 14 East of Michigan Meridian, a part of Private Claim No. 193, a portion of Tract "A" as acquired by The United States of America, and more particularly described as follows:

Commencing at the northeast corner of Private Claim No. 192; thence along northwest line of said Private Claim No. 192, as follows:

S 49°04'54" W 1872.50 feet, more or less; thence

S 49°43'00" W 1794.24 feet, more or less; thence

S 49°21'34" W 543.90 feet, more or less, passing from Private Claim No. 192 into Private Claim No. 193 to the point of beginning, said point being the most northern corner of Tract "A"; thence with the common boundary to lands now or formerly owned by Matilda Matejick and lands of said Tract "A", as follows:

S 40°21'13" E 1466.05 feet, more or less; thence

S 49°21'34" W 16.17 feet, more or less; thence

S 40°21'13" E 317.00 feet, more or less, to a point in the center of Sugar Bush Road, said point being the most eastern corner of said Tract "A"; thence along said Sugar Bush Road and continuing with the boundary of said Tract "A" as follows:

S 18°48'47" W 1499.91 feet, more or less; thence

S 52°09'15" W 499.30 feet, more or less, to a point; thence leaving said center of Sugar Bush Road, and continuing with said boundary of Tract "A"

N 39°54'00" W 33.02 feet, more or less to a point on the northwest right-of-way line of Sugar Bush Road; thence with said right-of-way line and continuing with said boundary of Tract "A"

S 52°03'30" W 239.40 feet, more or less, to a point being the most southern corner of said Tract "A"; thence leaving said right-of-way line and with the southwest boundary of said Tract "A", as follows:

AF LICENSE TO STATE OF MICHIGAN

| | | |
|---------------------------|-----------------------------|---------------------------------|
| FAX TRANSMITTAL | | # of pages ▶ |
| To <u>Frankie Stull</u> | From <u>Lloyd Foe</u> | |
| Dept./Agency | Phone # <u>502.315.6969</u> | |
| Fax # <u>586.307.5059</u> | Fax # | |
| NSN 7540-01-317-7388 | 5088-101 | GENERAL SERVICES ADMINISTRATION |

SUPERCEDES DEPARTMENT OF
THE AIR FORCE LICENSE
NO. DACA45-3-72-6074

DEPARTMENT OF THE AIR FORCE LICENSE FOR NATIONAL GUARD PURPOSES LICENSE NO. DACA27-3-92-9

THE SECRETARY OF THE AIR FORCE, by Authority contained in Title 10, United States Code, Section 2233, hereby grants to the STATE OF MICHIGAN, DEPARTMENT OF MILITARY AFFIARS, 2500 S. Washington Avenue, Lansing, Michigan 48913-5101, hereinafter referred to as the licensee, a license for an indefinite term, commencing on 1 January 1992 but revocable at will by the Secretary of the Air Force, to use and occupy for year-round training and support of the Michigan Air National Guard, certain land and improvements comprising a portion of the Selfridge Air National Guard Base, Macomb County, Michigan, located substantially as shown in red on Exhibit "A" attached hereto and made a part hereof.

THIS LICENSE is granted subject to the following conditions:

1. That the use and occupancy herein authorized shall be without cost or expense to the Regular Establishment of the Military Departments of the Department of Defense and shall be under the general supervision and subject to the approval of the Secretary of the Air Force or his duly authorized representative and subject also to such rules and regulations as he may from time to time prescribe.
2. That the licensee shall maintain and keep in good repair and condition the premises herein authorized to be used, and all costs of operations, maintenance, and restoration occasioned by reason of the occupancy of the premises by the licensee shall be paid for from funds available to the licensee, or from funds other than those appropriated for the Regular Establishment of the said Departments.
3. That the United States (hereinafter referred to as the Government) reserves the right to use the property included in this license, or any part thereof, including all buildings and improvements situated thereon, for such purposes as the Department of the Air Force deems necessary in the interest of national defense.

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SELFRIDGE AIR NATIONAL GUARD BASE, MI

4. That the Government shall not be responsible or liable for injuries to persons or damage to property when such injuries or damage are caused by, or result from, the licensee's use of the premises under the terms of this license and is not due to the negligence of the Government.
5. That the Licensee shall pay the cost, as determined by the duly authorized representative of the Secretary of the Air Force, of producing and/or supplying any utilities and other services furnished by the Government or through Government-owned facilities for use of the licensee, including the licensee's proportionate share of the cost of operation and maintenance of the Government-owned facilities by which such utilities or services are produced or supplied. Payment shall be in the manner prescribed by said representative upon bills rendered monthly. The Government shall be under no obligation to furnish utilities or services.
6. That no addition to or alteration or improvement of the premises shall be made without prior written authorization from the Secretary of the Air Force or his duly authorized representative. All additions, alterations, and improvements so authorized shall be maintained by the licensee in good repair and condition. Permanent additions, alterations, and improvements (which shall be so designated by the Secretary of the Air Force or his duly authorized representative) shall, upon completion, become and remain the property of the Government.
7. That the facilities included in this license shall not be used for the quartering of personnel engaged in Michigan Air National Guard activities except when such personnel are in the Federal service or participating in authorized training.
8. This license may be relinquished by the licensee upon giving thirty (30) days notice in writing to the Secretary of the Air Force through his duly authorized representative.
9. That, on or before the date of expiration of this license or its relinquishment by the licensee, the licensee shall vacate the premises, remove all property of the licensee therefrom (excluding those permanent additions, alterations, and improvements which under the provisions of Condition 6 hereof have become the property of the Government), and restore the premises to as good condition as that existing upon the date of commencement of the term of this license, damages beyond the control of the licensee and due to fair wear and tear excepted. If, however, this license is revoked, the licensee shall vacate the premises, remove said property therefrom, and restore the

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premises as aforesaid within such time as the Secretary of the Air Force may designate. In either event, if the licensee shall fail or neglect to remove said property and so restore the premises, then at the option of the Secretary of the Air Force said property shall either become the property of the Government without compensation therefor, or the Secretary of the Air Force may cause the property to be removed and the premises to be so restored at the expense of the licensee, and no claim for damages against the Government or its officers or agents shall be created by or made on account of such removal and restoration.

10. That the licensee shall comply with all applicable Federal laws and regulations and with all applicable laws, ordinances, and regulations of the state, county, and municipality wherein the premises are located.

11. That the licensee shall not remove or disturb, or cause or permit to be removed or disturbed, any historical, archaeological, architectural, or other cultural artifacts, relics, vestiges, remains or objects of antiquity. In the event such items are discovered on the premises, the licensee shall immediately notify the District Engineer, Louisville District, and the State Historical Preservation Officer, and the site and the material shall be protected by the grantee from further disturbance until a professional examination of them can be made or until clearance to proceed is authorized by the District Engineer.

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This license is not subject to Title 10, United States Code, Section 2662.

IN WITNESS WHEREOF, I have hereunto set my hand by authority of the Secretary of the Air Force this 26 day of January 1992.

Michael G. Barter
MICHAEL G. BARTER
Chief, Real Estate Division
Louisville District, Corps of Engineers
Louisville, Kentucky

The above instrument, together with all the conditions and provisions thereof, is hereby accepted this 19th day of December 1991.

STATE OF MICHIGAN, DEPARTMENT
OF MILITARY AFFAIRS

BY: Ronald L. Seely
RONALD L. SEELY, Brig Gen, MI ANG
TITLE: Assistant Adjutant General for Air



AERIAL 1 SEVILLE MANOR, YEAR 2000



AERIAL 2 SEVILLE MANOR, YEAR 1993



AERIAL 3 SEVILLE MANOR, YEAR 1985



AERIAL 4 SEVILLE MANOR, YEAR 1973



AERIAL 5 SEVILLE MANOR, YEAR 1964



AERIAL 6 SEVILLE MANOR, YEAR1955



AERIAL 7 SEVILLE MANOR, YEAR 1940



Seville Manor Property

Sugarbush/Cotten

New Baltimore, MI 48047

Inquiry Number: 3646421.4

June 25, 2013

EDR Historical Topographic Map Report

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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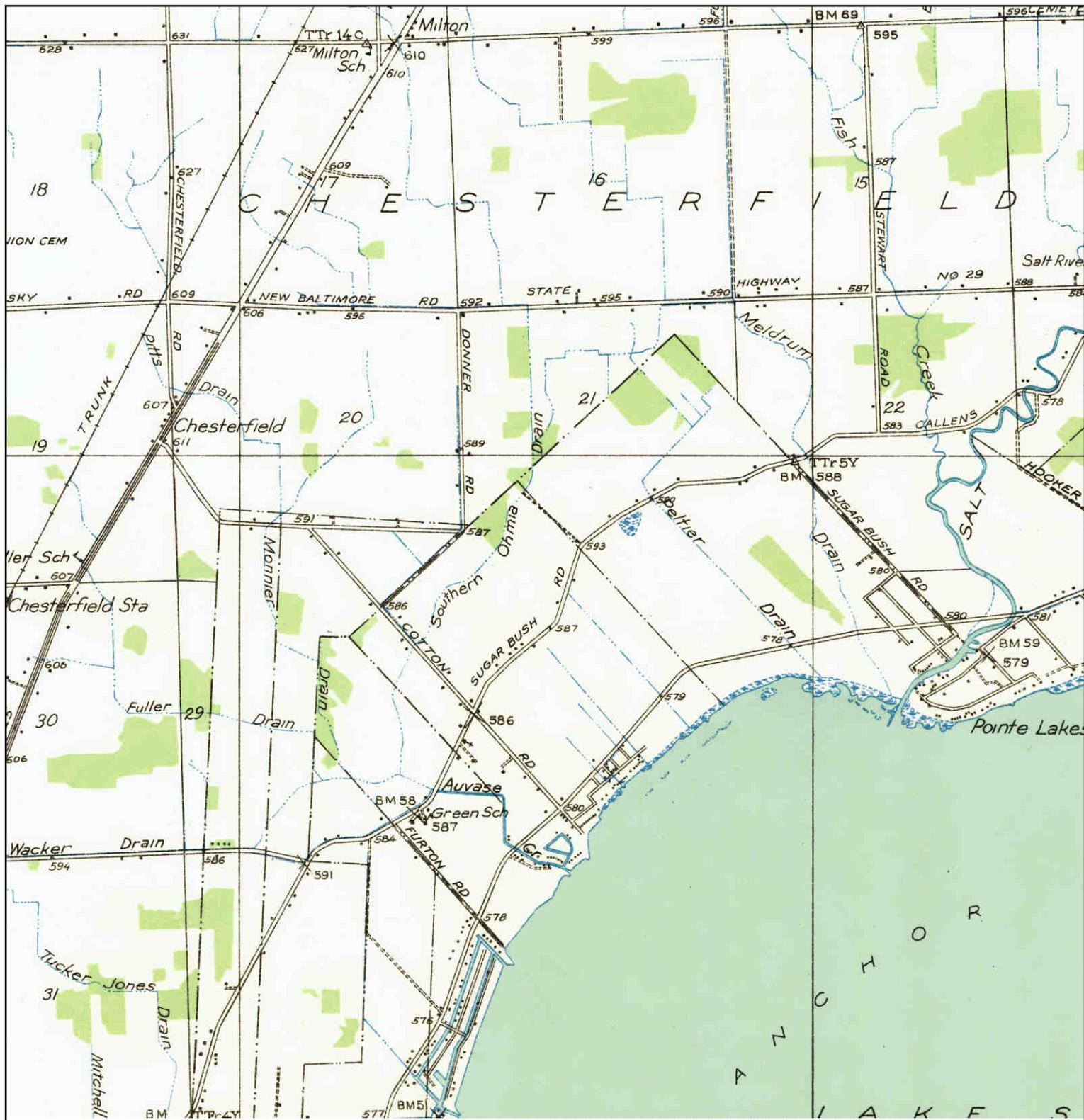
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Historical Topographic Map



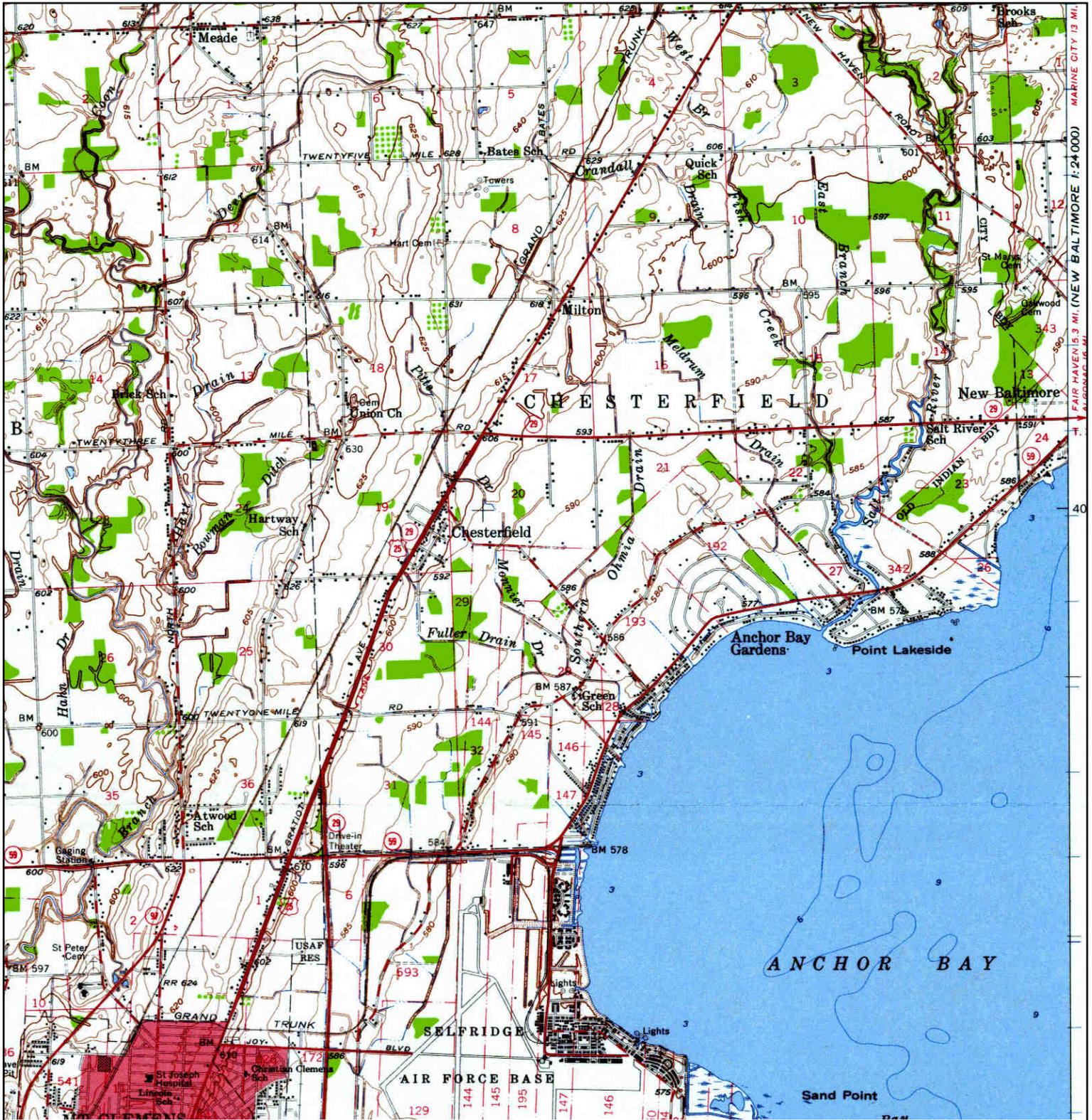
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| <p>N ↑</p> | <p>TARGET QUAD NAME: MOUNT CLEMENS MAP YEAR: 1929</p> | <p>SITE NAME: Sebill Manor Property ADDRESS: Sugarbush/Cotten New Baltimore, MI 48047 LAT/LONG: 42.661 / -82.811</p> | <p>CLIENT: US Army Corps of Engineers CONTACT: Joan Cullen INQUIRY#: 3646421.4 RESEARCH DATE: 06/25/2013</p> |
| | <p>SERIES: 15</p> | | |
| | <p>SCALE: 1:62500</p> | | |
| | | | |
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Historical Topographic Map



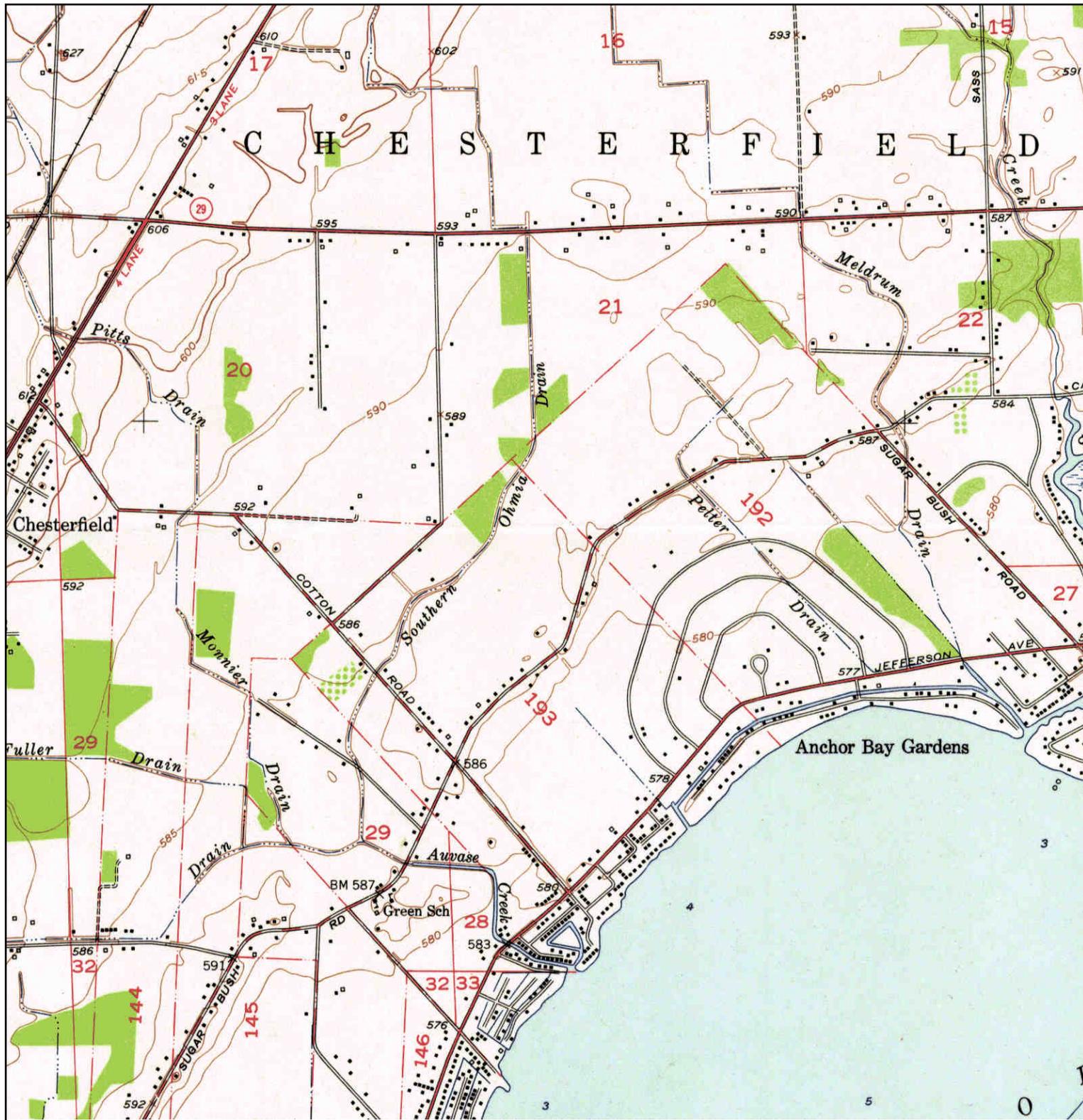
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|----------------|--|---|---|
| <p>N ↑</p> | <p>TARGET QUAD NAME: NEW HAVEN MAP YEAR: 1936</p> | <p>SITE NAME: Seville Manor Property ADDRESS: Sugarbush/Cotton New Baltimore, MI 48047 LAT/LONG: 42.661 / -82.811</p> | <p>CLIENT: US Army Corps of Engineers CONTACT: Joan Cullen INQUIRY#: 3646421.4 RESEARCH DATE: 06/25/2013</p> |
| | <p>SERIES: 7.5 SCALE: 1:31680</p> | | |

Historical Topographic Map



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|----------|--|--|---|
| <p>N</p> | <p>TARGET QUAD</p> <p>NAME: MOUNT CLEMENS</p> <p>MAP YEAR: 1952</p> | <p>SITE NAME: Sebill Manor Property</p> <p>ADDRESS: Sugarbush/Cotten New Baltimore, MI 48047</p> <p>LAT/LONG: 42.661 / -82.811</p> | <p>CLIENT: US Army Corps of Engineers</p> <p>CONTACT: Joan Cullen</p> <p>INQUIRY#: 3646421.4</p> <p>RESEARCH DATE: 06/25/2013</p> |
| | <p>SERIES: 15</p> <p>SCALE: 1:62500</p> | | |
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Historical Topographic Map



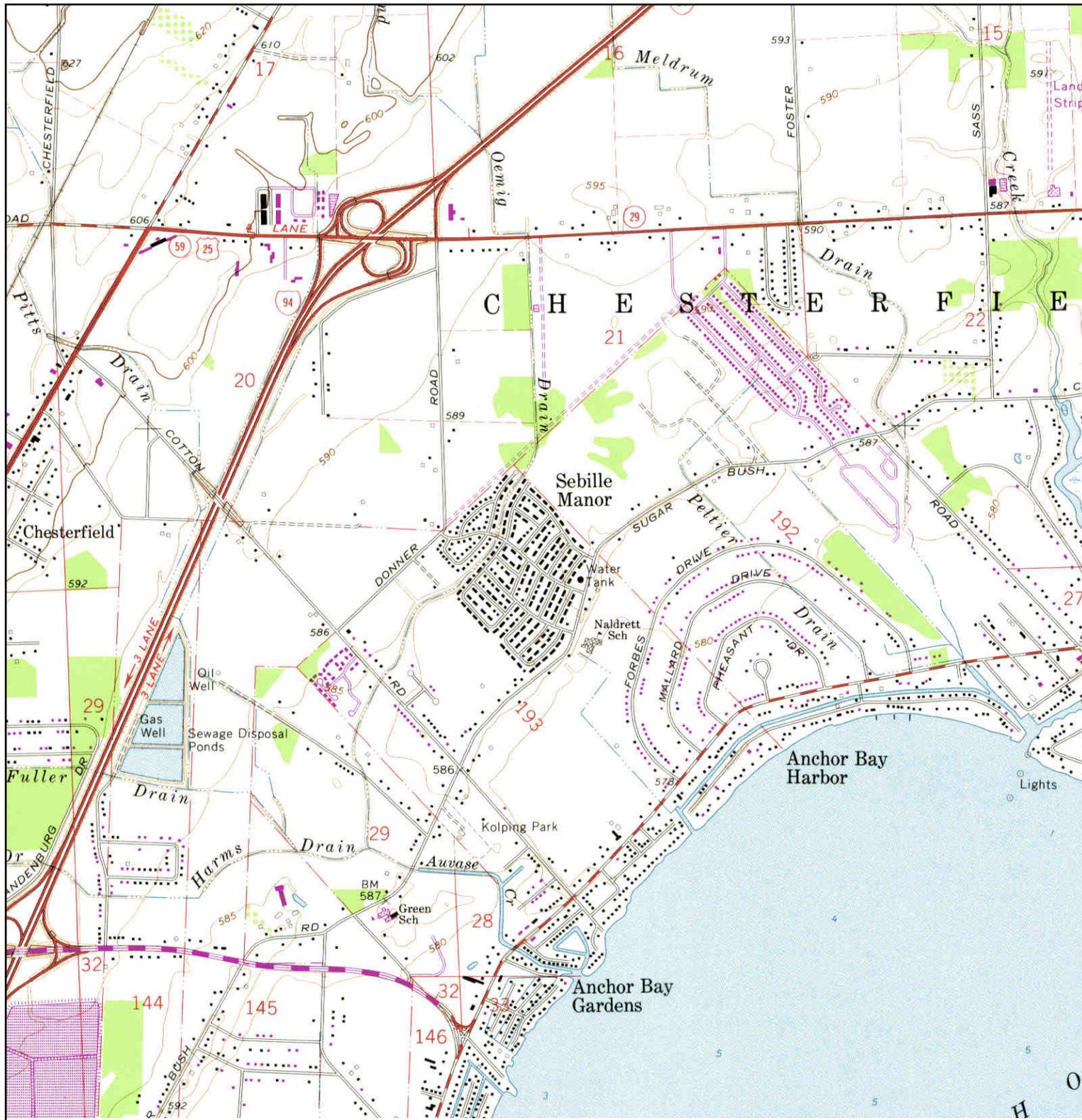
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| | SERIES: 7.5 SCALE: 1:24000 | | |

Historical Topographic Map



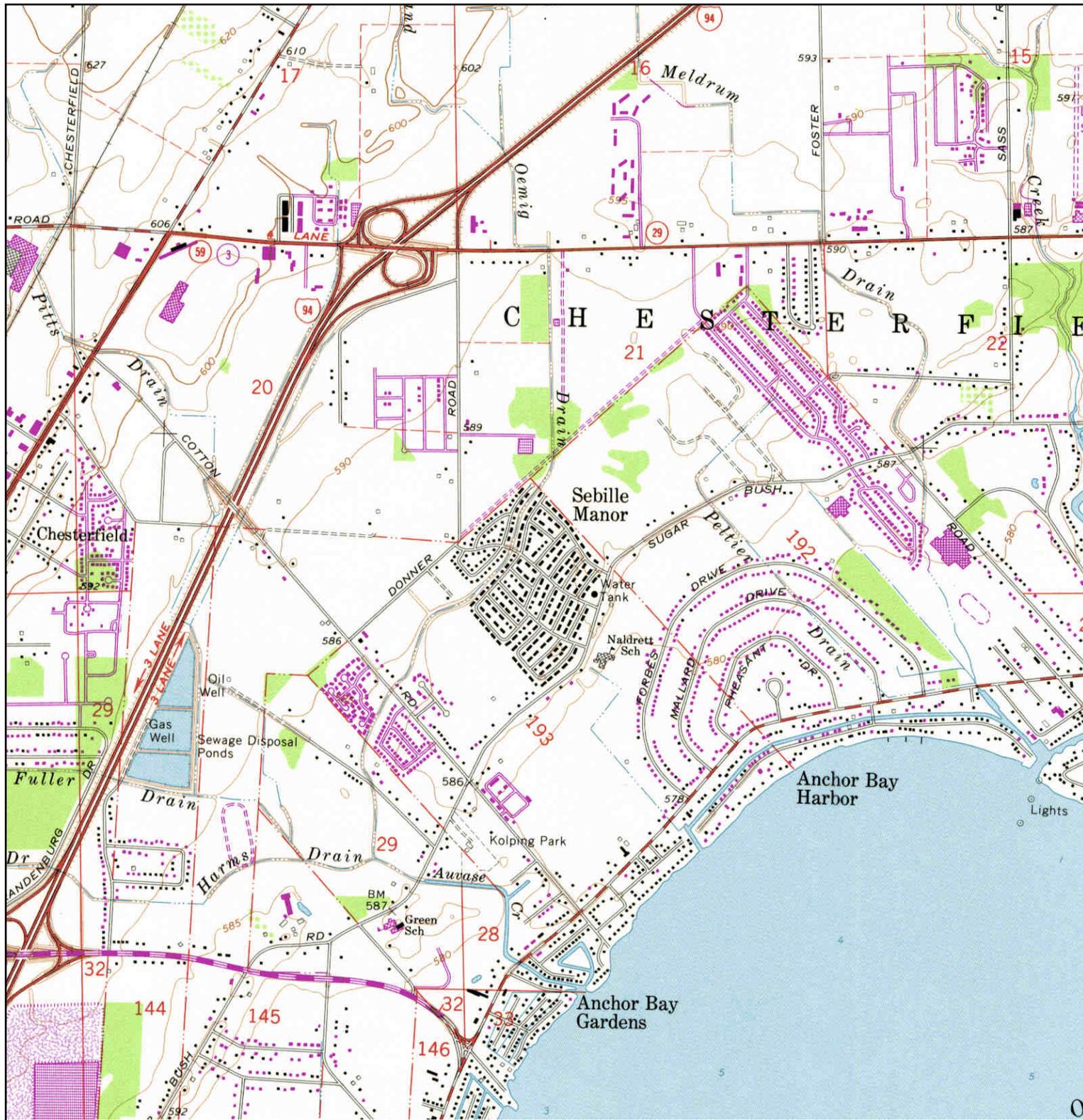
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|  | TARGET QUAD NAME: NEW HAVEN MAP YEAR: 1968 | SITE NAME: Seville Manor Property ADDRESS: Sugarbush/Cotten New Baltimore, MI 48047 LAT/LONG: 42.661 / -82.811 | CLIENT: US Army Corps of Engineers CONTACT: Joan Cullen INQUIRY#: 3646421.4 RESEARCH DATE: 06/25/2013 |
| | SERIES: 7.5 SCALE: 1:24000 | | |

Historical Topographic Map



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| <p>N ↑</p> | TARGET QUAD | SITE NAME: Seville Manor Property | CLIENT: US Army Corps of Engineers |
| | NAME: NEW HAVEN | ADDRESS: Sugarbush/Cotton | CONTACT: Joan Cullen |
| | MAP YEAR: 1973 | NEW BALTIMORE, MI 48047 | INQUIRY#: 3646421.4 |
| | PHOTOREVISED FROM :1968 | LAT/LONG: 42.661 / -82.811 | RESEARCH DATE: 06/25/2013 |
| | SERIES: 7.5 | | |
| | SCALE: 1:24000 | | |

Historical Topographic Map



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|----------------|-------------------------|--|---|
| <p>N ↑</p> | TARGET QUAD | SITE NAME: Seville Manor Property | CLIENT: US Army Corps of Engineers |
| | NAME: NEW HAVEN | ADDRESS: Sugarbush/Cotton | CONTACT: Joan Cullen |
| | MAP YEAR: 1983 | NEW BALTIMORE, MI 48047 | INQUIRY#: 3646421.4 |
| | PHOTOREVISED FROM :1968 | LAT/LONG: 42.661 / -82.811 | RESEARCH DATE: 06/25/2013 |
| | SERIES: 7.5 | | |
| | SCALE: 1:24000 | | |
| | | | |

APPENDIX D
SITE RECONNAISSANCE PHOTOGRAPHS



Photograph 1. Housing units on Seville Manor prior to demolition in 2010



Photograph 2. Sutherland Oemig Drain on northern portion of Seville Manor in 2010.



Photograph 3. Demolition of housing units on Seville Manor in 2010.



Photograph 4. Keeping building materials wet during demolition at Seville Manor in 2010.



Photograph 5. Restoration of Seville Manor following completion of demolition activities in 2011



Photograph 6. Restoration of Seville Manor following completion of demolition activities in 2011.



Photograph 7. Seville Manor, June 29, 2013



Photograph 8. Telecommunications unit on concrete pad near former entrance to Seville Manor.



Photograph 9. Seville Manor, June 29, 2013



Photograph 10. Northwestern portion of Seville Manor adjoining Donner Road, June 29, 2013