

ASSIGNMENT

The undersigned on this 16th day of May, 2002 hereby assigns to Forest City Enterprises, Inc. ("Assignee") all of its rights, obligations and duties set forth in that certain Termination and Satisfaction of Orders and Release from Liability executed by the Ohio Environmental Protection Agency on August 21, 2000 and journalized on August 23, 2000 ("EPA Orders") except for those duties and obligations set forth in Section 17.B therein. A copy of the EPA Orders is attached hereto as Exhibit "A" and is hereby made a part hereof.

This assignment shall be without recourse, except as provided above.

OHIO DEPARTMENT OF ADMINISTRATIVE SERVICES
("DAS")

WITNESSES:

Sign here: Julie Tracker
Print name: Julie Tracker

Sign here: Paul S. Lehman
Print name: Paul S. Lehman

By: C. Scott Johnson
C. Scott Johnson, Director

Acknowledgment

State of Ohio, Franklin County, ss:

On this 16th day of May, 2002 before me personally appeared C. Scott Johnson, known to me to be the Director of Administrative Services, statutory agent, who acknowledged that he executed the foregoing Assignment for and on behalf of the Department of Administrative Services, that the same is his free and voluntary act and deed, and that he is duly authorized to enter into said Assignment.



PAUL S. LEHMAN
Notary Public
In and for the State of Ohio
My Commission Expires
September 5th, 2005

Paul S. Lehman
Notary Public, State of Ohio
My Commission Expires

The undersigned Assignee hereby accepts the foregoing assignment and agrees to fully and completely perform all obligations and duties on the part of DAS to be performed under the EPA Orders except as otherwise provided herein.
FOREST CITY ENTERPRISES, INC.

By: Samuel H. Miller
Samuel H. Miller, Co-Chairman of the Board & Tre:
Date: May 23, 2002

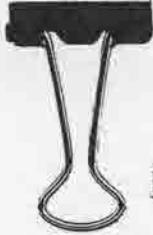
Acknowledged on this ~~16th~~ 6th day of May, 2002.

OHIO ENVIRONMENTAL PROTECTION AGENCY

By: Joseph Koncelik
Joseph Koncelik, Assistant Director

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FIRST AMENDMENT TO
DECLARATION OF COVENANTS, CONDITIONS & RESTRICTIONS

WHEREAS, the State of Ohio ("State") owns an approximately 49.1 acre tract of real property, as evidenced by a deed recorded in volume 85-6659, pages 28 through 33 of the Cuyahoga County Official Records, located in the State of Ohio, County of Cuyahoga, City of Cleveland, which real property is more particularly described in Exhibit 1 attached hereto and made a part hereof (the "Property"); and

WHEREAS, the Property is under the jurisdiction and control of the Ohio Department of Administrative Services ("Department"); and

WHEREAS, the Department, pursuant to Ohio Revised Code Section 123.01(A)(12), is the general custodian of all real property owned by the State; and

WHEREAS, the Property is the subject of the "Ohio Environmental Protection Agency Decision Document for the Coit Road Site, Cleveland, Ohio," dated March 23, 1998 ("Decision Document"), and Termination and Satisfaction of Orders and Release from Liability/Director's Final Findings and Orders, entered in the journal of the Director of the Environmental Protection Agency on August 23, 2000 ("Findings and Orders"); and

WHEREAS, the Property was subjected to various use restrictions, including limitation to only commercial or industrial land use, which are set forth in that certain Declaration of Covenants, Conditions & Restrictions dated July 30, 1999, and recorded on August 18, 1999 in Official Records Volume 199908200266 at pages 1 through 95, Recorder's Office, Cuyahoga County ("Prior Declaration"); and

WHEREAS, there is a contract between the State of Ohio (through the Department) and Forest City Enterprises to sell the Property to Forest City Enterprises, which in turn intends to sell an approximately 24.5 acre portion of the Property to the U.S. Department of Labor for construction of a Job Corps education/training facility as described in Exhibit 2 attached hereto and made a part hereof ("Job Corps Property"), which shall include dorm housing, a residential use; and

WHEREAS, under the terms of the contract Forest City Enterprises will own the remaining approximately 24.6 acre portion of the Property as described in Exhibit 3 attached hereto and made a part hereof ("Forest City Property"); and

WHEREAS, the State, including both the Department and the Ohio Environmental Protection Agency ("Ohio EPA"), has evaluated new information and determined that no danger is posed to the public health or safety or the environment by the conditions related to land use at the Property as long as the use restrictions set forth in this First Amendment to Declaration of Covenants, Conditions & Restrictions ("First Amendment to Declaration")

are met.

NOW THEREFORE, the above recitals are hereby incorporated by reference as though fully set forth and rewritten herein, and the State of Ohio further makes the following amendments to the Prior Declaration:

1. **Institutional Controls for the approximately 24.5 acre Job Corps Property (Exhibit 2).**
 - a. **Prohibition Against Ground Water Extraction.** No person shall extract groundwater located at or underlying the entire Job Corps Property for any purpose, potable or otherwise, except for investigation or remediation of the ground water.
 - b. **Commercial or Industrial Land Use Restriction.** The portion of the Job Corps Property, described in Exhibits 2-A and 2-B, shall be used only for commercial or industrial land uses, as described in Ohio Administrative Code 3745-300-08(B)(2)(c)(ii) and (iii) (effective December 16, 1996). No residential land uses or development shall be permitted on these portions of the Job Corps Property. The point of compliance (depth of clean soil or fill material) is to a depth of two feet below ground surface. No excavation or construction activities shall be conducted below a depth of two feet without prior written approval from the Ohio EPA.
 - c. **Residential Land Use Restriction with Prohibition Against Basements.** The portion of the Job Corps Property, described in Exhibit 2-C, may be used for residential purposes, as described in Ohio Administrative Code 3745-300-08(B)(2)(c)(i) (effective December 16, 1996), with the condition that no basement or other permanent subsurface or underground structure designed for routine human occupancy shall be constructed on this portion of the Job Corps Property without obtaining prior written approval from the Ohio EPA. The point of compliance (depth of clean soil or fill material) is to a depth of four feet below ground surface. No residential development activities or excavation or construction activities shall be conducted below a depth of four feet without prior written approval from the Ohio EPA.
 - d. **Residential Land Use.** The portion of the Job Corps Property, described in Exhibits 2-D and 2-E, may be used for residential purposes, as described in Ohio Administrative Code 3745-300-08(B)(2)(c)(i) (effective December 16, 1996). The point of compliance (depth of clean soil or fill material) is to a depth of ten feet below ground surface. No excavation or construction activities shall be conducted below a depth of ten feet without prior written approval from the Ohio EPA.

2. **Institutional Controls for the approximately 24.6 acre Forest City Property (Exhibit 3).**
 - a. **Prohibition Against Ground Water Extraction.** No person shall extract groundwater located at or underlying the entire Forest City Property for any purpose, potable or otherwise, except for investigation or remediation of the ground water, including the ongoing bio-slurping/oil recovery operation.
 - b. **Commercial or Industrial Land Use Restriction.** The Forest City Property, as described in Exhibit 3, shall be used only for commercial or industrial land uses, as described in Ohio Administrative Code 3745-300-08(B)(2)(c)(ii) and (iii) (effective December 16, 1996). No residential land uses or development shall be permitted.
 - c. **Prohibition Against Excavation, Construction or Drilling Operations.** No excavation, construction, or drilling operations shall be conducted without securing prior written approval from the Ohio EPA, which (1) contravene the Decision Document or (2) exceed the allowable depths as shown on the contour maps titled "Existing Topography", "Fill Contours plus 4' of Original Surface", and "Top of Zone of Concern MSL Elevation" attached hereto as Exhibit 3-A (Exhibit C in the Prior Declaration). Moreover, at least thirty (30) days prior written notice must be sent to the Ohio EPA prior to the commencement of said excavation, construction, or drilling operations. All excavation, construction and drilling operations shall be conducted, and all materials generated therefrom shall be managed, handled, stored and disposed of, in accordance with all applicable federal, state and local laws, codes, rules and ordinances. Proper health and safety equipment shall be used and all necessary precautions shall be taken to limit potential exposure to soil contaminants during any such excavation, construction, or drilling operations.
3. **First Amendment to Declaration of Covenants, Conditions, and Restrictions are to be Binding and Run with the Land.** This First Amendment to Declaration shall run with the land and shall be binding upon all current owners of the Property, and their successors and assigns, including any leasehold interests on the Property or any portions of the Property.
4. **Enforcement.** Compliance with this First Amendment to Declaration may be enforced by a legal or equitable action brought in court of competent jurisdiction by one or more of the following parties: (a) Ohio Department of Administrative Services or its representatives; (b) Ohio EPA or its representatives; or (c) any party with legal standing under applicable law. Any delay or failure on the part of any party to take action to enforce compliance with this First Amendment to Declaration shall not bar any subsequent enforcement with respect to the noncompliance in question and

shall not be deemed a waiver of the right of any party to take action to enforce noncompliance.

5. **Record in Deed Records.** This First Amendment to Declaration shall be recorded in the same manner as a deed in the Office of the Recorder of Cuyahoga County, and shall be deemed incorporated by reference in any instrument hereafter conveying any interest in the Property or any portion of the Property, as hereinafter described in Paragraph 9 hereof.
6. **Severability.** If any one or more provisions of the First Amendment to Declaration is found unenforceable in any respect, the validity, legality, and enforceability of the remaining portions shall not in any way be affected or impaired.
7. **Governing Law.** This First Amendment to Declaration shall be governed by and interpreted in accordance with the laws of the State of Ohio, including Ohio Revised Code Chapter 3746 and Ohio Administrative Code Chapter 3745-300.
8. **Headings.** All headings used herein are for convenience and shall not be used to interpret or qualify the terms of this First Amendment to Declaration.
9. **Notice of Restrictions upon Conveyance.** Except as otherwise provided in this paragraph, each instrument hereafter conveying any interest in the Property or any portion of the Property shall contain a recital acknowledging this First Amendment to Declaration and providing the recording location of this First Amendment to Declaration upon such conveyance substantially in the following form: "The real property described herein is subject to: (a) the Declaration of Covenants, Conditions & Restrictions recorded in the Office of the Cuyahoga County Recorder at Volume 199908200266, pages 1 through 95, and (b) the First Amendment to Declaration of Covenants, Conditions & Restrictions by the State of Ohio, acting by and through the Ohio Department of Administrative Services and recorded with the Office of the Recorder of Cuyahoga County on the _____ day of _____, 2002 in Cuyahoga County Deed Records _____
[insert location of declaration of use restriction (e.g., "Volume, Page" or "Document Number")] as if the same were fully set forth herein." The foregoing recital shall not be required to be set forth in the Governor's Deed transferring the Property to Forest City Enterprises (pursuant to the contract between the State [through the Department] and Forest City Enterprises) since the specific legislation authorizing the contract and sale does not authorize or provide for insertion of the language contained in said recital. In addition, this First Amendment to Declaration will be filed and recorded simultaneously with the filing and recording of the Governor's Deed and therefore the above referenced recital is unnecessary.
10. **Easement.** If the Property, or any portion thereof, is conveyed, assigned or

transferred so that the State of Ohio no longer has title to the Property, then the State of Ohio shall retain an easement on behalf of the Ohio EPA for the purpose of allowing the Ohio EPA access to and over the Property to continue to monitor compliance with the covenants, restrictions, limitations, and conditions and uses.

11. **Modification.** This First Amendment to Declaration may only be modified by an instrument duly executed by all of the then owners of the Property or all of the then owners of any portion of the Property, as applicable, with the prior written consent of the Director of Ohio EPA and the written acknowledgment of the Director of Ohio EPA that the modification of the restrictions contained herein will not be inconsistent with the April 2002 Voluntary Action Program No Further Action Letter issued for the Job Corps Property and the Decision Document for the Property. Such modification shall become effective on and after the date of recording the instrument in the deed records of the Cuyahoga County Recorder's Office.

Except as modified herein, all terms and conditions of the Prior Declaration shall remain in full force and effect.

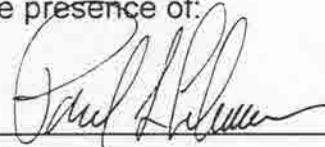
IN WITNESS WHEREOF, the Director of the Ohio Department of Administrative Services, acting on behalf of the State of Ohio pursuant to Ohio Revised Code Section 123.01 (A) (12), has hereunto set his hand to this First Amendment to Declaration of Covenants, Conditions & Restrictions on this 16th day of May, 2002.

STATE OF OHIO, acting by and through
the Ohio Department of Administrative
Services

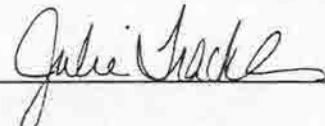
By: 

C. Scott Johnson
Director of Administrative Services

Signed in the presence of:

Sign here: 

Print here: Paul S. Lehman

Sign here: 

Print here: Julie Trackler

EXHIBIT "I"

CUYAHOGA COUNTY RECORDER
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Legal Description

Situated in the City of Cleveland, County of Cuyahoga and State of Ohio, and known as being all of Blocks 9, 22, 23, and 24 in Burton Adams Halle and West's Subdivision of a part of Original 100 Acre Lots Nos. 354, 358, and 359 as shown by the recorded plat in Volume 8, Page 32 of Cuyahoga County Map Records. Being all of Sublots Nos. 61 to 86, both inclusive, 136 to 173, both inclusive, 183 to 285, both inclusive, in H. C. McDowell, Brayton et. al. Subdivision, of part of Original 100 Acre Lot No. 354 as shown by the recorded plat in Volume 10, Page 23 of Cuyahoga County Map Records, together with that portion of East 136th Street, Maxwell Avenue, N.E., East 137th Place as shown by the vacation plat in Volume 207, Page 14 of Cuyahoga County Map Records, together with that portion of East 136th Street, East 137th Place, East 138th Place, East 139th Street and East 140th Place, as shown by the vacation plat in Volume 181, Page 33 of Cuyahoga County Records Map Records, together with that portion of East 137th Street and Topeka Avenue, N.E. as shown by the vacation plat in Volume 182, Page 42 of Cuyahoga County Map Records, together with that portion of East 136th Street, East 137th Place, East 137th Street, East 138th Place, East 139th Street, East 140th Place, Appleton Avenue, N.E., and Topeka Avenue, N.E., as recorded by the Council of the City of Cleveland by Ordinance No. 50967, together with other land in Original 100 Acre Lot No. 354, collectively forming a parcel of land bounded and described as follows: Beginning in the center line of Coit Road, N.E., 60 feet in width at its intersection with the center line of East 140th Street, 60 feet in width; Course No. 1: Thence North 64 degrees 10 minutes 17 seconds West along the center line of said Coit Road, N.E., 1519.71 feet to a point in the Southwesterly corner of Block 9 in Burton, Adams, Halle and West's Subdivision as aforementioned; Course No. 2: Thence North 62 degrees 26 minutes 50 seconds West along the center line of said Coit Road, N.E., 178.98 feet to its intersection with the Easterly line of Consolidated Rail Corporation right-of-way, being also the Easterly line of "Parcel I" of land so conveyed to the Cleveland Short Line Railway Company by deed dated March 6, 1907, and recorded in Volume 1053, Page 47 of Cuyahoga County Records; Course No. 3: Thence North 0 degrees 45 minutes 10 seconds East along the Easterly line of said Consolidated Rail Corporation right-of-way 207.32 feet to a point of curvature therein; Course No. 4: Thence Northeasterly along the Easterly line of said Consolidated Rail Corporation right-of-way being also the Easterly line of land conveyed to the Cleveland Short Line Railway Company by deed dated March 4, 1907; and recorded in Volume 1050, Page 322 of Cuyahoga County Records, being along the arc of a curve deflecting to the right, 1,170.74 feet to its intersection with the Southerly line of land conveyed to the City of Cleveland by deed dated September 19, 1932, and recorded in Volume 4312, Page 688 of Cuyahoga County Records, being also the Southerly line of the Cleveland Painesville and Eastern Railroad Company, said curved line having a radius of 1,835.08 feet and chord which bears North 19 degrees 16 minutes 17 seconds East a distance of 1,150.96 feet; Course No. 5: Thence Easterly along the Southerly line of land so conveyed to the City of Cleveland, and along the arc of a curve deflecting to the left 36.70 feet to its intersection with the Westerly line of H.C. McDowell, Brayton et. al. Subdivision as aforementioned, said curved line having a radius of 440 feet and a chord which bears North 78 degrees 24 minutes 36 seconds East a distance of 36.70 feet; Course No. 6: Thence due South along the Westerly line of said subdivision, 37.00 feet to its intersection with the Southerly line of Aspinwall Avenue, N.E., 60 feet in width; Course No. 7: Thence North 59 degrees 55 minutes 10 seconds East along the Southerly line of said Aspinwall Avenue, N.E., 525.11 feet to its intersection with the Westerly line of East 137th Street, 50 feet in width; Course No. 6: Thence South 0 degrees 14 minutes 25 seconds West along the Westerly line of said

East 137th Street 364.09 feet to a point in the Southerly line of Maxwell Avenue, N.E., 50 feet in width; Course No. 9; Thence South 89 degrees 43 minutes 00 seconds East along the Southerly line of said Maxwell Avenue N.E., 179.91 feet to a point in the Westerly line of East 138th Place, 12 feet in width; Course No. 10; Thence South 0 degrees 14 minutes 36 seconds West along the Westerly line of said East 138th Place 530.20 feet to a point in the Southerly line of Topeka Avenue, N.E., 50 feet in width; Course No. 11; Thence South 89 degrees 44 minutes 22 seconds East along the Southerly line of Topeka Avenue N.E., 479.00 feet to a point in the Westerly line of East 140th Street as aforementioned; Course No. 12; Thence South 0 degrees 14 minutes 38 seconds West along the Westerly line of said East 140th Street, 240.00 feet to the Southeastly corner of Sublot No. 66 in H.C. McDowell, Brayton et. al. Subdivision, as aforementioned; Course No. 13; Thence South 89 degrees 45 minutes 22 seconds East at right angles to last described course, 30.00 feet to a point in the center line of said East 140th Street; Course No. 14; Thence South 0 degrees 14 minutes 38 seconds West along the center line of said East 140th Street, 492.59 feet to an angle therein; Course No. 15; Thence South 2 degrees 31 minutes 43 seconds West along the center line of East 140th Street, 642.82 feet to the place of beginning, including the Northerly one-half of Coit Road, N.E. and the Westerly one-half of East 140th Street, according to a survey by Garrett and Associates, Inc., Registered Engineers and Surveyors, made in December, 1983, be the same more or less, but subject to all legal highways.

Further Reference is made to a Deed dated November 26th, 1985 of Record in Official Record, Volume 85-8659, Pages 28 through 33, Cuyahoga County Recorder's Office, Cuyahoga County, Ohio and to a Plat of Survey, Map No. 2088-D, dated December 1983, on file in the Offices of said Garrett and Associates, Inc., 2030 West 19th Street, Cleveland, Ohio.

The aföredescribed parcel contains 49.1419 Acres, more or less, according to the survey by said Garrett and Associates, Inc.

CUYAHOGA COUNTY RECORDER
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EXHIBIT 2

JOB CORPS PROPERTY

Situated in the City of Cleveland, County of Cuyahoga and State of Ohio, and known as being part of the original 100 acre Lots 354 and 359, and all of Sublots 61-86, 136-153, 211-216, 266-285, and part of Sublots 154-161, 209, 210, 217, 265 in H.C. McDowell, Brayton etal Subdivision as recorded in Volume 10 , Page 23 of the Cuyahoga County Records, together with that portion of East 138th Place, East 139th Street, and East 140th Place as vacated by instrument recorded in Volume 181 , Page 33 of the Cuyahoga County Records, and is further bounded and described as follows:

Beginning at the intersection of the centerline of Coit Road N.E., 60 feet in width, and the centerline of E. 140th Street, 60 feet in width;

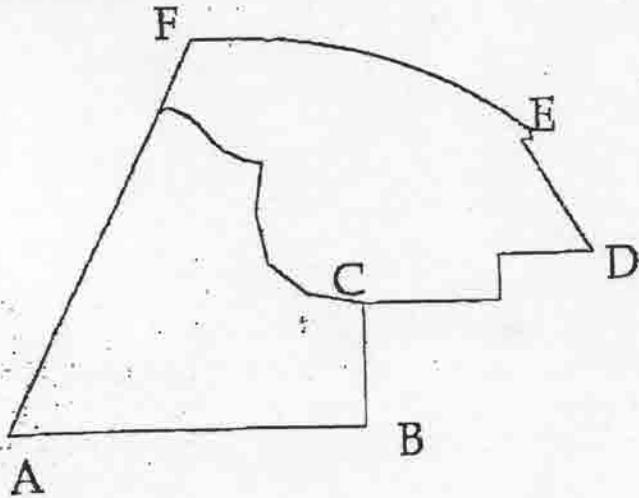
- COURSE I** Thence N.64°10'17"W., along said centerline of Coit Road, 1383.54 feet to a point;
- COURSE II** Thence N.25°49'43"E., perpendicular to said centerline of Coit Road, 30.00 feet to an iron pin set on the northerly line of said Coit Road;
- COURSE III** Thence northwesterly, along the arc of a curve deflecting to the RIGHT, the radius of which is 35.00 feet and the chord of which bears N.19°10'17"W. and is 49.50 feet in length, 54.98 feet to a point of tangency;
- COURSE IV** Thence N.25°49'43"E., perpendicular to said centerline of Coit Road, 42.35 feet to a point of curvature;
- COURSE V** Thence northeasterly, along the arc of a curve deflecting to the RIGHT, the radius of which is 220.00 feet and the chord of which bears N.40°30'32"E., and is 111.51 feet in length, 112.74 feet to a point of reverse curvature;
- COURSE VI** Thence northeasterly, along the arc of a curve deflecting to the LEFT, the radius of which is 280.00 feet and the chord of which bears N.31°18'59"E., and is 226.64 feet in length, 233.33 feet to a point of tangency;
- COURSE VII** Thence N.7°26'36"E., 32.68 feet to an iron pin set;

- COURSE VIII** Thence S.82°33'24"E., perpendicular to said Course VII, 183.00 feet to an iron pin set;
- COURSE IX** Thence N.80°24'31"E., 222.79 feet to an iron pin set;
- COURSE X** Thence N.39°09'34"E., 199.68 feet to an iron pin set;
- COURSE XI** Thence N. 9°46'23"E., 185.94 feet to an iron pin set in the southerly line of Topeka Avenue, 50 feet in width;
- COURSE XII** Thence S.89°43'39"E., along said southerly line of Topeka Avenue, 478.48 feet to an iron pin set in the westerly line of said East 140th Street;
- COURSE XIII** Thence S.0°16'21"W., along said westerly line of East 140th Street, 240.00 feet to a P.K. Nail set;
- COURSE XIV** Thence S.89°43'39"E., perpendicular to said westerly line of East 140th Street, 30.00 feet to said centerline of East 140th Street;
- COURSE XV** Thence S.0°16'21"W., along said centerline of East 140th Street, 492.39 feet to the southeasterly corner of said Original Lot 354 in the 100 acre Lots of the City of Cleveland;
- COURSE XVI** Thence S.2°30'47"W., continuing along said centerline of East 140th Street, 642.76 feet to the point of beginning and containing about 24.472 acres of land (22.769 acres excluding legal right-of-ways) as surveyed and described in December, 2001 by Nitin V. Timble, Ohio Professional Land Surveyor #7836 of Richard L. Bowen & Associates.

Be the same, more or less, but subject to all legal highways.

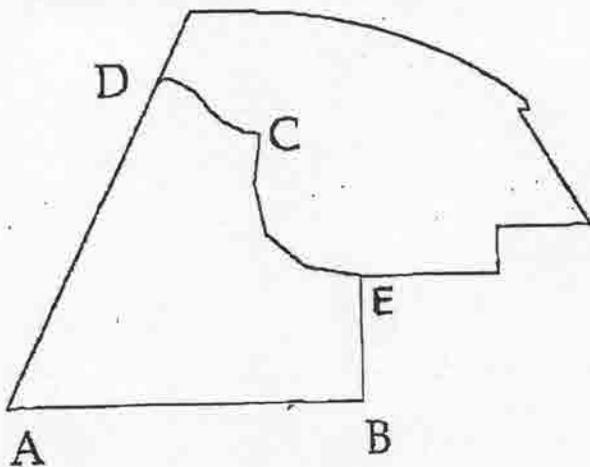
Latitude and Longitude Coordinates

Original Coit Road Site



- A = 41N 33' 02"; 81W 35' 08"
- B = 41N 33' 15"; 81W 35' 08"
- C = 41N 33' 15"; 81W 35' 14"
- D = 41N 33' 20"; 81W 35' 14"
- E = 41N 33' 22"; 81W 35' 21"
- F = 41N 33' 09"; 81W 35' 28"

Proposed Job Corps Parcel



- A = 41N 33' 02"; 81W 35' 08"
- B = 41N 33' 15"; 81W 35' 08"
- C = 41N 33' 15"; 81W 35' 14"
- D = 41N 33' 12"; 81W 35' 21"
- E = 41N 33' 08"; 81W 35' 24"

EXHIBIT 2-A

AREA RESTRICTED TO COMMERCIAL OR INDUSTRIAL LAND USE

Situated in the city of Cleveland, County of Cuyahoga and State of Ohio and known as being part of the original 100 acre Lot 359 and is further bounded and described as follows:

Beginning at the intersection of the northerly line of Coit Road, 60 feet in width, and the westerly line of E. 140th Street, 60 feet in width;

Thence N.64°10'17"W., along said northerly line of Coit Road, 762.63 feet to the principal point of beginning;

COURSE I Thence N.64°10'17"W., continuing along said northerly line of Coit Road, 60.00 feet to a point;

COURSE II Thence N.25°49'43"E., perpendicular to said northerly line of Coit Road, 60.00 feet to a point;

COURSE III Thence N.12°47'49"E., 60.00 feet to a point;

COURSE IV Thence S.64°10'17"E., parallel with said northerly line of Coit Road, 60.00 feet to a point;

COURSE V Thence S.12°47'49"W., 60.00 feet to a point;

COURSE VI Thence S.25°49'43"W., perpendicular to said northerly line of Coit Road, 60.00 feet to the principal point of beginning and containing about 0.163 of an acre of land (7107 SQ.FT.) as calculated and described in February 2002, by Nitin V. Timble Ohio Professional Surveyor number 7836 of Richard L. Bowen Associates.

BEING A PART OF
 THE ORIGINAL 100
 ACRE LOT 359 IN
 THE CITY OF CLEVELAND,
 COUNTY OF CUYAHOGA
 AND STATE OF OHIO.

RESTRICTION AREA



(PATCH B)

EXHIBIT 2-A
 7,107 S.F.
 0.163 ACRES

S 64°10'17" E
 60.00'

S 12°47'49" W
 60.00'

N 12°47'49" E
 60.00'

N 25°49'43" E
 60.00'

N 64°10'17" W
 60.00'

S 25°49'43" W
 60.00'

ROZMAN COURT 30'
 72' x 30'

(PATCH A)

EAST 140 TH PLACE 60'

EAST 138 TH PLACE 12'

EAST 139 TH PLACE 60'

EAST 140 TH PLACE 60'

EAST 140 TH PLACE 60'

100' x 45'

100' x 45'

70' x 70'

70' x 70'

P.O.B.

762.63' N 64°10'17" W
 30' x 60'



Part of Exhibit 2-A

EXHIBIT 2-B

AREA RESTRICTED TO COMMERCIAL OR INDUSTRIAL LAND USE

Situated in the city of Cleveland, County of Cuyahoga, and State of Ohio, and known as being part of the Original 100 acre Lots 354 & 359 and is further bounded and described as follows:

Beginning at the intersection of the northerly line of Coit Road, 60 feet in width, and the westerly line of E. 140th Street, 60 feet in width;

Thence N.64°10'17"W., along said northerly line of Coit Road, 762.63 feet to a point;

Thence N.25°49'43"E., along said northerly line of Coit Road, 259.30 feet to the principal point of beginning;

COURSE I Thence N.4°12'43"W., 255.78 feet to a point;

COURSE II Thence S.70°11'27"E., 164.47 feet to a point;

COURSE III Thence S.0°16'21"W., 200.00 feet to a point;

COURSE IV Thence N.89°43'39"W., 135.00 feet to the principal point of beginning and containing about 0.751 acres (32713 SQ. FT.) of land as calculated and described in February 2002 by Nitin V. Timble, Ohio Professional Surveyor No.7836 of Richard L. Bowen Associates.

BEING A PART OF
THE ORIGINAL 100 ACRE
LOTS 354 & 359 IN
THE CITY OF CLEVELAND,
COUNTY OF CUYAHOGA
AND STATE OF OHIO.

(OFF-GRID)

RESTRICTION AREA



EXHIBIT 2-B
32,713 S.F.
0.751 ACRES

255.78'
N 0°12'45" W 164.27'
S 70°11'27" E 200.00'

P.P.O.B.

259.30'

N 25°49'43" E

135.00'

W 65°39'58" E

S 00°16'21" W 200.00'

(PARCEL A)

EAST 140 TH. PLACE

EAST 138 TH. PLACE

EAST 137 TH. PLACE

EAST 140 TH. PLACE

EAST 140 TH. PLACE

WATER TOWER PARK

0 200



SCALE 1" = 200'

EXHIBIT 2-C**AREA FOR RESIDENTIAL LAND USE WITH PROHIBITION AGAINST BASEMENTS**

Situated in the city of Cleveland, County of Cuyahoga, and State of Ohio and known as being part of the original 100 acre Lots 354 & 359 and is further bounded and described as follows:

Beginning at the intersection of the southerly line of Topeka Avenue, 50 feet in width, and the westerly line of East 138th Place, 12 feet in width;

- COURSE I** Thence S.0°16'21"W., perpendicular to said southerly line of Topeka Avenue, 215.00 feet to a point;
- COURSE II** Thence S.89°43'39"E., parallel with said southerly line of Topeka Avenue, 285.00 feet to a point;
- COURSE III** Thence S.0°16'21"W., perpendicular to said southerly line of Topeka Avenue, 80.00 feet to a point;
- COURSE IV** Thence N.89°43'39"W., parallel with said southerly line of Topeka Avenue, 215.00 feet to a point;
- COURSE V** Thence S.52°06'55"W., 45.78 feet to a point;
- COURSE VI** Thence S.0°16'21"W., perpendicular to said southerly line of Topeka Avenue, 441.71 feet to a point;
- COURSE VII** Thence N.89°43'39"W., parallel with said southerly line of Topeka Avenue, 20.00 feet to a point;
- COURSE VIII** Thence N.0°16'21"E., perpendicular to said southerly line of Topeka Avenue, 200.00 feet to a point;
- COURSE IX** Thence N.70°11'27"W., 164.47 feet to a point;
- COURSE X** Thence S.4°12'43"E., 255.78 feet to a point;
- COURSE XI** Thence S.25°49'43"W., perpendicular to the northerly line of Coit Road, 60 feet in width, 199.30 feet to a point;
- COURSE XII** Thence N.12°47'49"E., 60.00 feet to a point;

COURSE XIII Thence N.64°10'17"W., parallel with said northerly line of Coit Road, 60.00 feet to a point;

COURSE XIV Thence S.12°47'49"W., parallel with said Course XI and distant 58.45 feet by normal measure therefrom, 60.00 feet to a point;

COURSE XV Thence S.25°49'43"W., perpendicular to the northerly line of Coit Road, 60.00 feet to said northerly line of Coit Road;

COURSE XVI Thence N.64°10'17"W., along said northerly line of Coit Road, 515.31 feet to a point of curvature;

COURSE XVII Thence northwesterly, along the arc of a curve deflecting to the RIGHT, the radius of which is 35.00 feet, and the chord of which bears N.19°10'17"W. and is 49.50 feet in length, 54.98 feet to a point of tangency;

COURSE XVIII Thence N.25°49'43"E., 42.35 feet to a point of curvature;

COURSE XIX Thence northeasterly along the arc of a curve deflecting to the RIGHT, the radius of which is 220.00 feet and the chord of which bears N.40°30'32"E. and is 111.51 feet in length, 112.74 feet to a point of reverse curvature;

COURSE XX Thence northeasterly along the arc of a curve deflecting to the LEFT, the radius of which is 280.00 feet and the chord of which bears N.46°20'10"E. and is 86.19 feet in length, 86.53 feet to a point;

COURSE XXI Thence S.0°16'21"W., perpendicular to said southerly line of Topeka Avenue, 117.43 feet to a point;

COURSE XXII Thence S.64°10'17"E., parallel with said northerly line of Coit Road and distant 160.00 feet by normal measure therefrom, 437.84 feet to a point;

COURSE XXIII Thence N.0°16'21"E., perpendicular to said southerly line of Topeka Avenue, 90.00 feet to a point;

COURSE XXIV Thence S.89°43'39"E., parallel with said southerly line of Topeka Avenue, 45.00 feet to a point;

COURSE XXV Thence N.0°16'21"E., parallel with said Course VI and distant 210.00 feet by normal measure therefrom, 365.00 feet to a point;

COURSE XXVI Thence S.87°04'36"W., 386.80 feet to a point;

MAR. 14. 2002 11:45AM OHIO LPA FIELD

COURSE XXVII Thence northeasterly along the arc of a curve deflecting to the LEFT, the radius of which is 280.00 feet and the chord of which bears N.08°11'34"E. and is 7.32 feet in length, 7.32 feet to a point of tangency

COURSE XXVIII Thence N.07°26'36"E., 32.68 feet to a point;

COURSE XXIX Thence S.82°33'24"E., 183.00 feet to a point;

COURSE XXX Thence N.80°24'31"E., 222.79 feet to a point;

COURSE XXXI Thence N.39°09'34"E., 199.68 feet to a point;

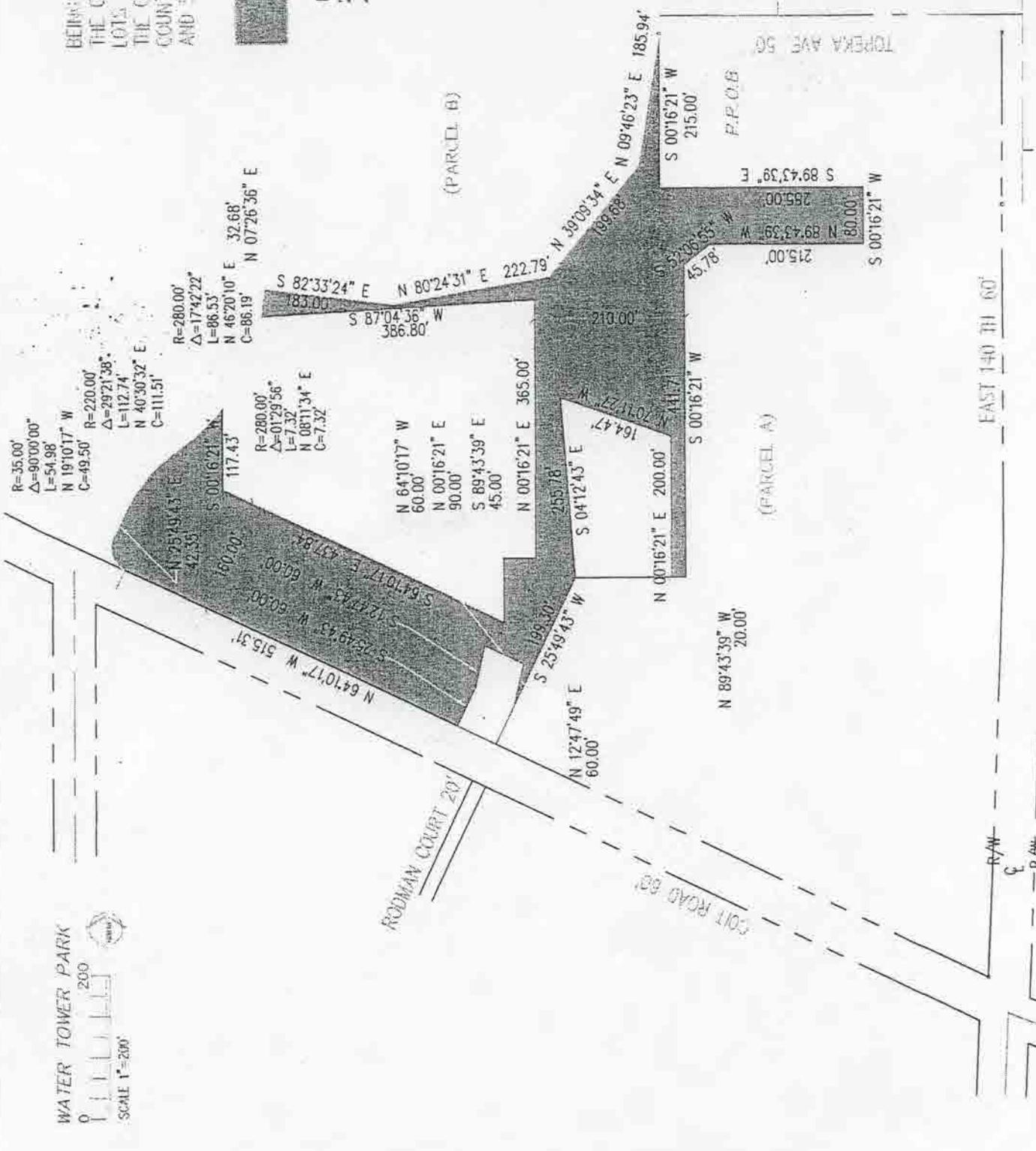
COURSE XXXII Thence N.09°46'23"E., 185.94 feet to the point of beginning and containing about 4.792 acres of land (208745 SQ.FT.) as calculated and described in February 2002 by Nitin V. Timble, Ohio Professional Surveyor No.7836 of Richard L. Bowen Associates.

BEING A PART OF
 THE ORIGINAL 100 ACRE
 LOTS 354 & 359 IN
 THE CITY OF CLEVELAND,
 COUNTY OF CUYAHOGA
 AND STATE OF OHIO.

RESTRICTION AREA

EXHIBIT 2-C
 208,745 S.F.
 4.792 ACRES

EAST 138 TH. PLACE 12'
 EAST 130TH 50'
 EAST 140 TH. PLACE 60'
 EAST 140 TH. 60'



Part of Exhibit 2-C

EXHIBIT 2-DAREA FOR RESIDENTIAL LAND USE

Situated in the city of Cleveland, County of Cuyahoga, and State of Ohio and known as being part of the original 100 acre Lots 354 & 359 and is further bounded and described as follows:

Beginning at the intersection of the northerly line of Coit Road, 60 feet in width, and the westerly line of East 140th Street, 60 feet in width;

Thence N.64°10'17"W., along said, northerly line of Coit Road, 1337.95 feet to a point of curvature;

Thence northwesterly, along the arc of a curve deflecting to the RIGHT, the radius of which is 35.00 feet and the chord of which bears N.19°10'17"W. and is 49.50 feet in length, 54.98 feet to a point of tangency;

Thence N.25°49'43"E., perpendicular to said northerly of Coit Road, 42.35 feet to a point of curvature;

Thence northeasterly along the arc of a curve deflecting to the Right, the radius of which is 220.00 feet and the chord of which bears N.40°30'32"E., and is 111.51 feet in length, 112.74 feet to a point of reverse curvature;

Thence northeasterly, along the arc of a curve deflecting to the Left, the radius of which is 280.00 feet and the chord of which bears N.46°20'10"E. and is 86.19 feet in length, 86.53 feet to the principal point of beginning;

COURSE I Thence continuing northeasterly, along the arc of a curve deflecting to the LEFT, the radius of which is 280.00 feet and the chord of which bears N.23°12'45"E. and is 138.04 feet in length, 139.48 feet to a point;

COURSE II Thence N.87°04'36"E., 386.80 feet to a point;

COURSE III Thence S.0°16'21"W., 365.00 feet to a point;

COURSE IV Thence N.89°43'39"W., 45.00 feet to a point;

COURSE V Thence S.0°16'21"W., 90.00 feet to a point;

COURSE VI Thence N.64°10'17"W., 437.84 feet to a point;

COURSE VII Thence N.0°16'21"E., 117.43 feet to the principal point of beginning and containing about 3.428 acres (149305 SQ.FT.) of land as calculated and described in February 2002, by Nitin V. Timble, Ohio Professional Surveyor No.7836 of Richard L. Bowen Associates.

WATER TOWER PARK



BEING A PART OF
THE ORIGINAL 100 ACRE
LOTS 354 & 359 IN
THE CITY OF CLEVELAND,
COUNTY OF CUYAHOGA
AND STATE OF OHIO.

RESTRICTION AREA



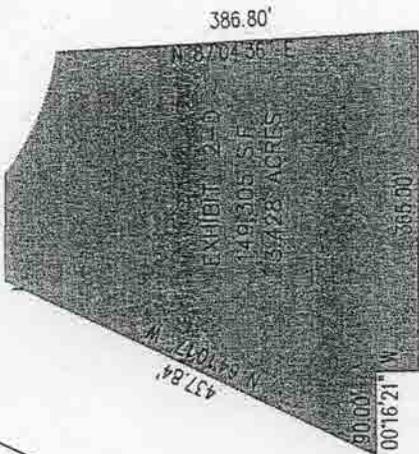
R=280.00'
Δ=1742.22"
L=86.53'
N 4620'10" E
C=86.19'
R=280.00'
Δ=3002.22"
L=139.48'
N 2312'45" E
C=138.04'

P.P.O.B.

R=220.00'
Δ=2921'38"
L=112.74'
N 40'30'32" E
C=111.51'

N 25'49'43" E
42.35'

R=35.00'
Δ=9000'00"
L=54.98'
N 19'10'17" W
C=49.50'



(PARCEL B)

(PARCEL A)

ROMAN COURT 21'

N 64°10'17" W
1337.95'

CGT ROAD 60'

P.O.B.

EAST 138 TH. PLACE 12'

EAST 139 TH. 50'

EAST 140 TH. PLACE 60'

EAST 140 TH. 60'

TOPKA AVE 30'

EAST 140 TH. 60'

EXHIBIT 2-E

AREA FOR RESIDENTIAL LAND USE

Situated in the city of Cleveland, County of Cuyahoga, and State of Ohio and known as being part of the original 100 acre Lots 354 & 359 and is further bounded and described as follows:

Beginning at the intersection of the westerly line of E. 138th Place, 12 feet in width, and the southerly line of Topeka Avenue, 50 feet in width;

- COURSE I** Thence S.89°43'39"E., along said southerly line of Topeka Avenue, 478.48 feet to the westerly line of E. 140th Street, 60 feet in width;
- COURSE II** Thence S. 0°16'21" W., along said westerly line of E. 140th Street, 731.80 feet to an angle point therein;
- COURSE III** Thence S.02°30'47"W., along said westerly line of E. 140th Street, 596.58 feet to the northerly line of Coit Road, 60 feet in width;
- COURSE IV** Thence N.64°10'17"W., along said northerly line of Coit Road, 762.63 feet to a point;
- COURSE V** Thence N.25°49'43"E., perpendicular to said northerly line of Coit Road, 259.30 feet to a point;
- COURSE VI** Thence S.89°43'39"E., parallel with said southerly line of Topeka Avenue, 155.00 feet to a point;
- COURSE VII** Thence N.0°16'21"E., perpendicular to said southerly line of Topeka Avenue, 441.71 feet to a point;
- COURSE VIII** Thence N.52°06'55"E., 45.78 feet to a point;
- COURSE IX** Thence S.89°43'39"E., parallel with said southerly line of Topeka Avenue, 215.00 feet to a point;
- COURSE X** Thence N.0°16'21"E., perpendicular to said southerly line of Topeka Avenue, 80.00 feet to a point;
- COURSE XI** Thence N.89°43'39"W., parallel with said southerly line of Topeka Avenue, 285.00 feet to a point;
- COURSE XII** Thence N.0°16'21"E., perpendicular to said southerly line of Topeka Avenue, 215.00 feet to the point of beginning and containing about 13.636 acres (593969 SQ.FT.) of land as calculated and described in February 2002, by

Nitin V. Timble, Ohio Professional Surveyor No.7836 of Richard L. Bowen Associates.

BEING A PART OF
THE ORIGINAL 100 ACRE
LOTS 354 & 359 IN
THE CITY OF CLEVELAND,
COUNTY OF CUYAHOGA
AND STATE OF OHIO.

RESTRICTION AREA

(PARCEL B)

P.P.O.B.
EAST 138 TH. PLACE 12'

EAST 138 TH. 60'

EAST 140 TH. PLACE 60'

EAST 140 TH. 60'

S 89°43'39" E

TOPERVAVE RD 478.48

N 00°16'21" E 215.00
N 89°43'39" W 265.00
S 89°43'39" E 80.00
N 00°16'21" E

(PARCEL A)

N 57°06'55" E 45.78

N 00°16'21" E 411.71'

EXHIBIT 2-E
688,888 S.F.
15.636 ACRES

CL 554
CL 559

S 00°16'21" W

EAST 140 TH. 60'

TRACT 10
TRACT 15

WATER TOWER

N 25°49'43" E 259.30'

S 89°43'39" E 155.00

N 64°10'37" E 762.63'

S 02°30'47" W 596.58'

S 02°30'47" W

RODMAN COURT 20'

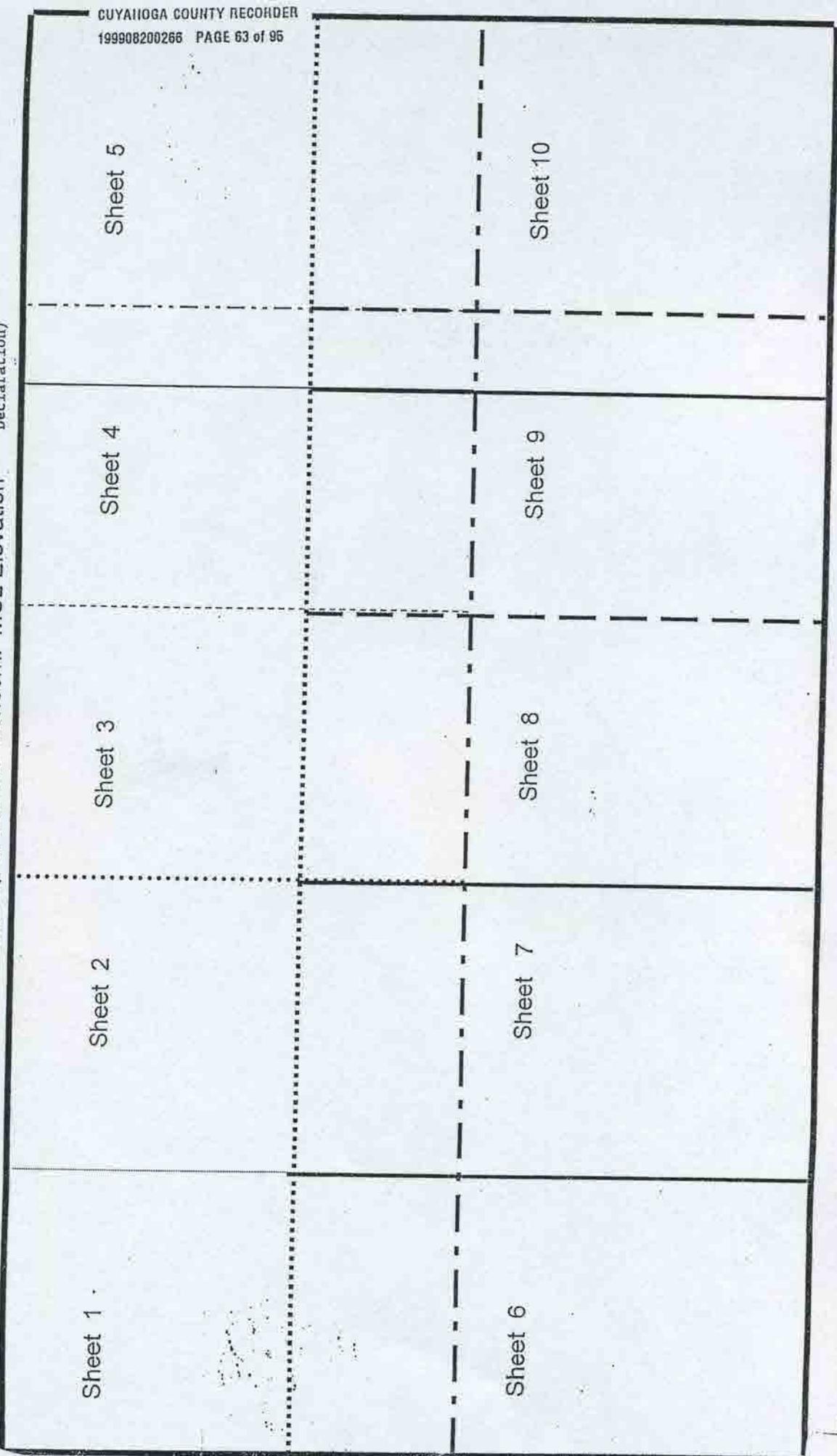
COTT ROAD 60'

WATER TOWER PARK



EXHIBIT 3-A
(Exhibit C in Prior
Declaration)

INDEX SHEET, Top of Zone of Concern: MSL Elevation



Sheet 1

Sheet 2

Sheet 3

Sheet 4

Sheet 5

Sheet 6

Sheet 7

Sheet 8

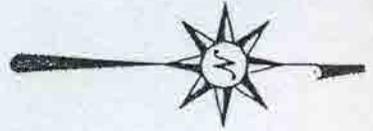
Sheet 9

Sheet 10

1

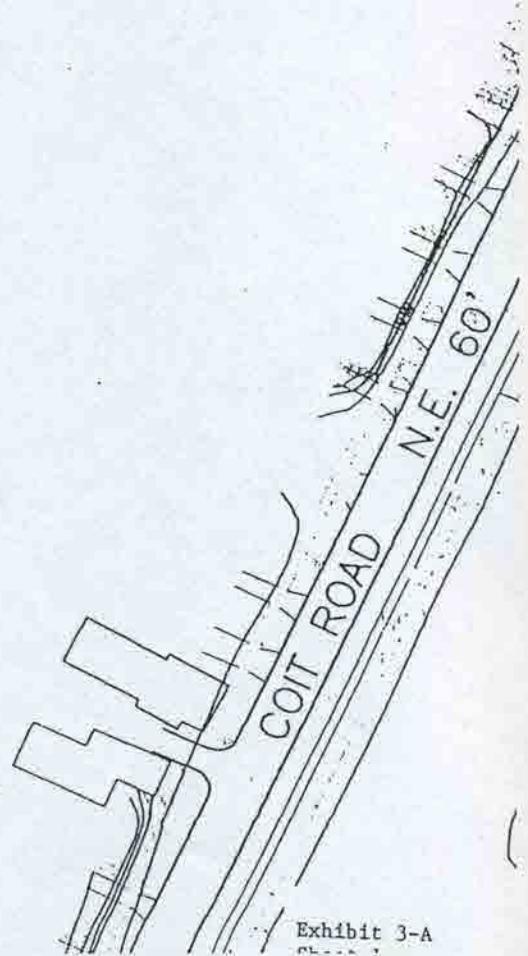
D

C



LEGEND

- UTILITY POLE
- MANHOLE
- CATCHBASIN
- RAILROAD 
- FENCE LINE
- GUARD RAIL
- TREE
- TREE LINE



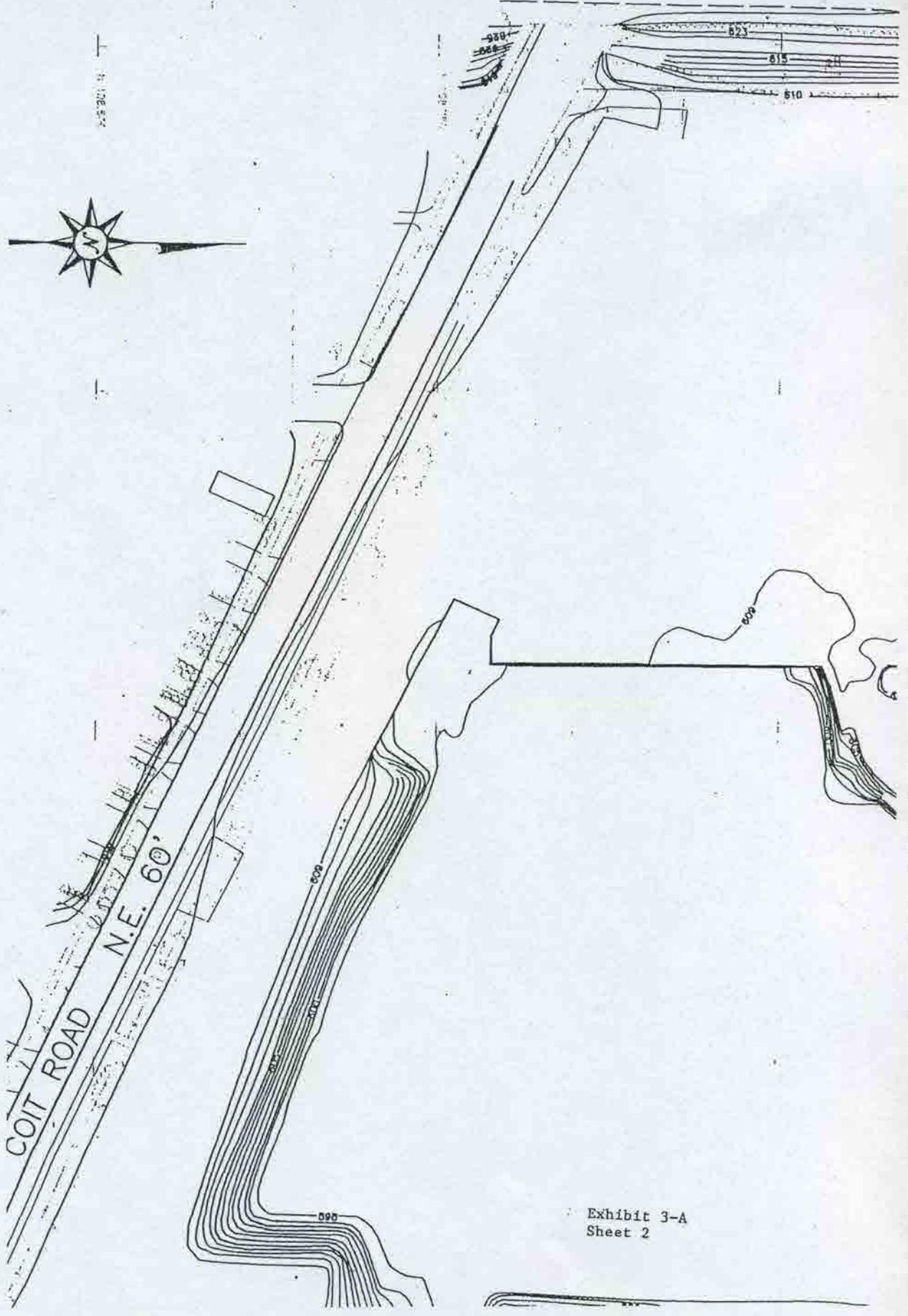
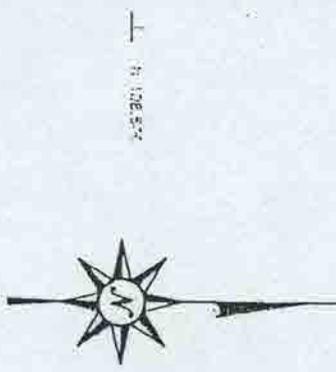


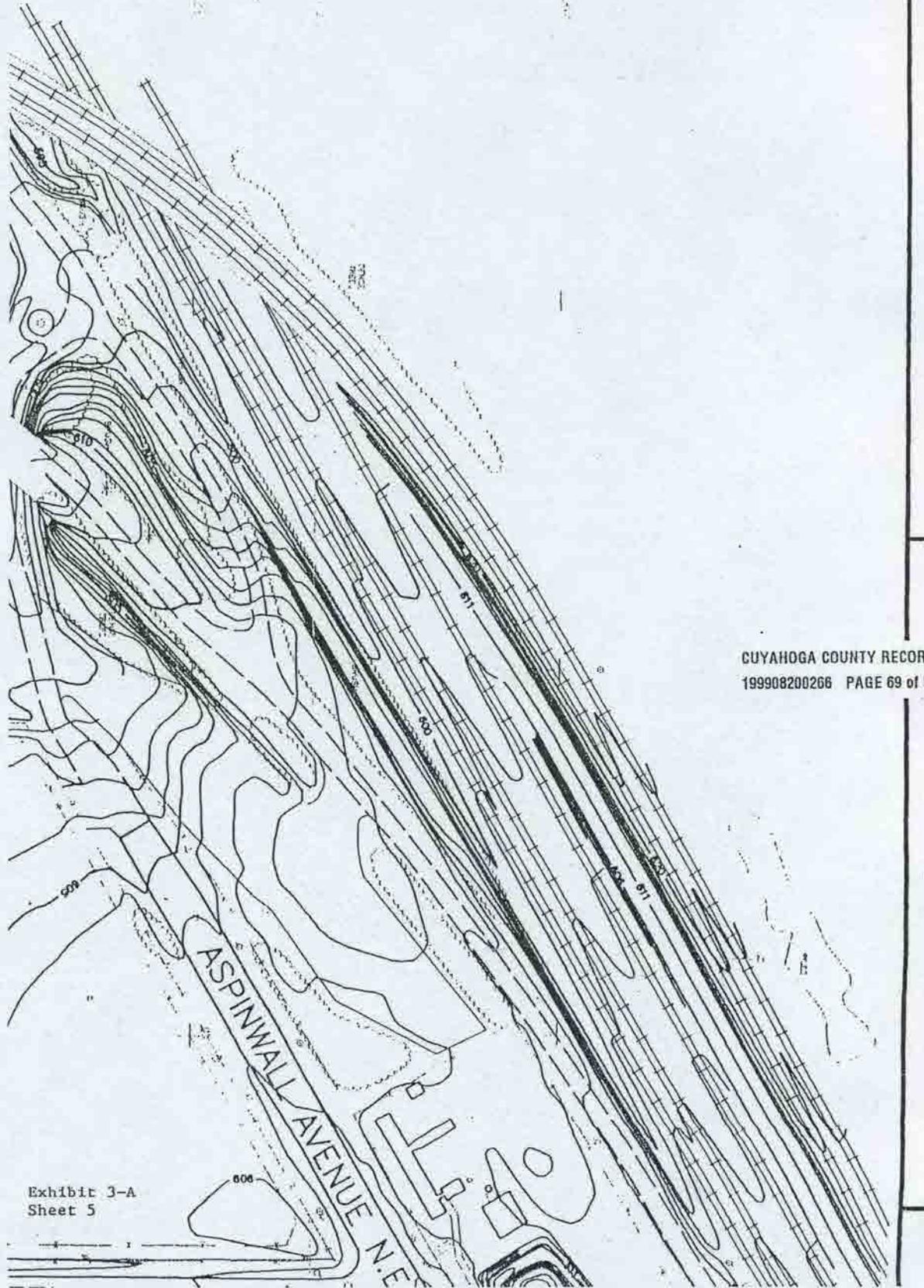
Exhibit 3-A
Sheet 2



Sheet 4

Exhibit 3-A
Sheet 4

SEWER
DISCHARGE
(HE ORSD)



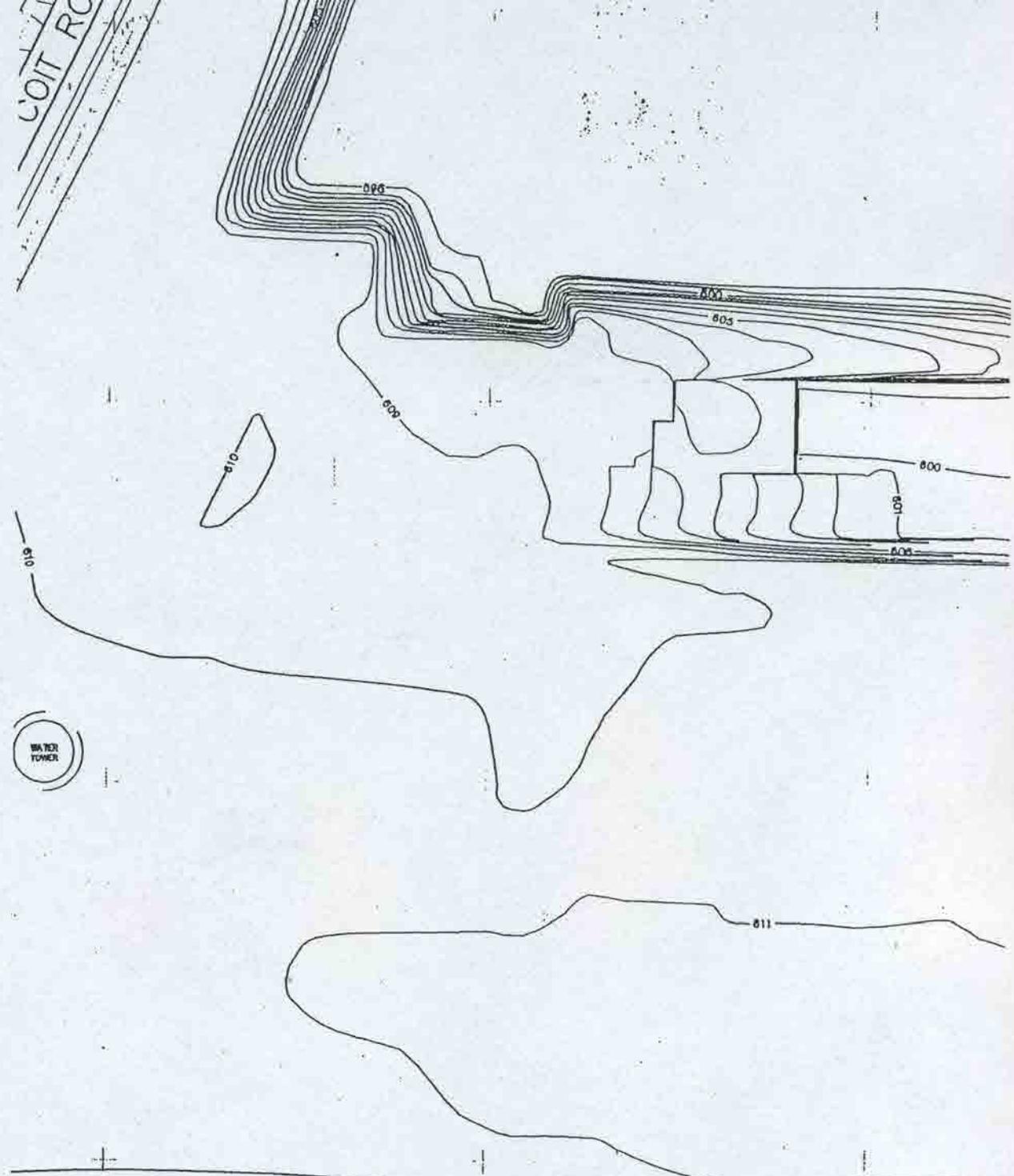
D

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C

Exhibit 3-A
Sheet 5

COIT RD



CUYAHOGA COUNTY RECORD
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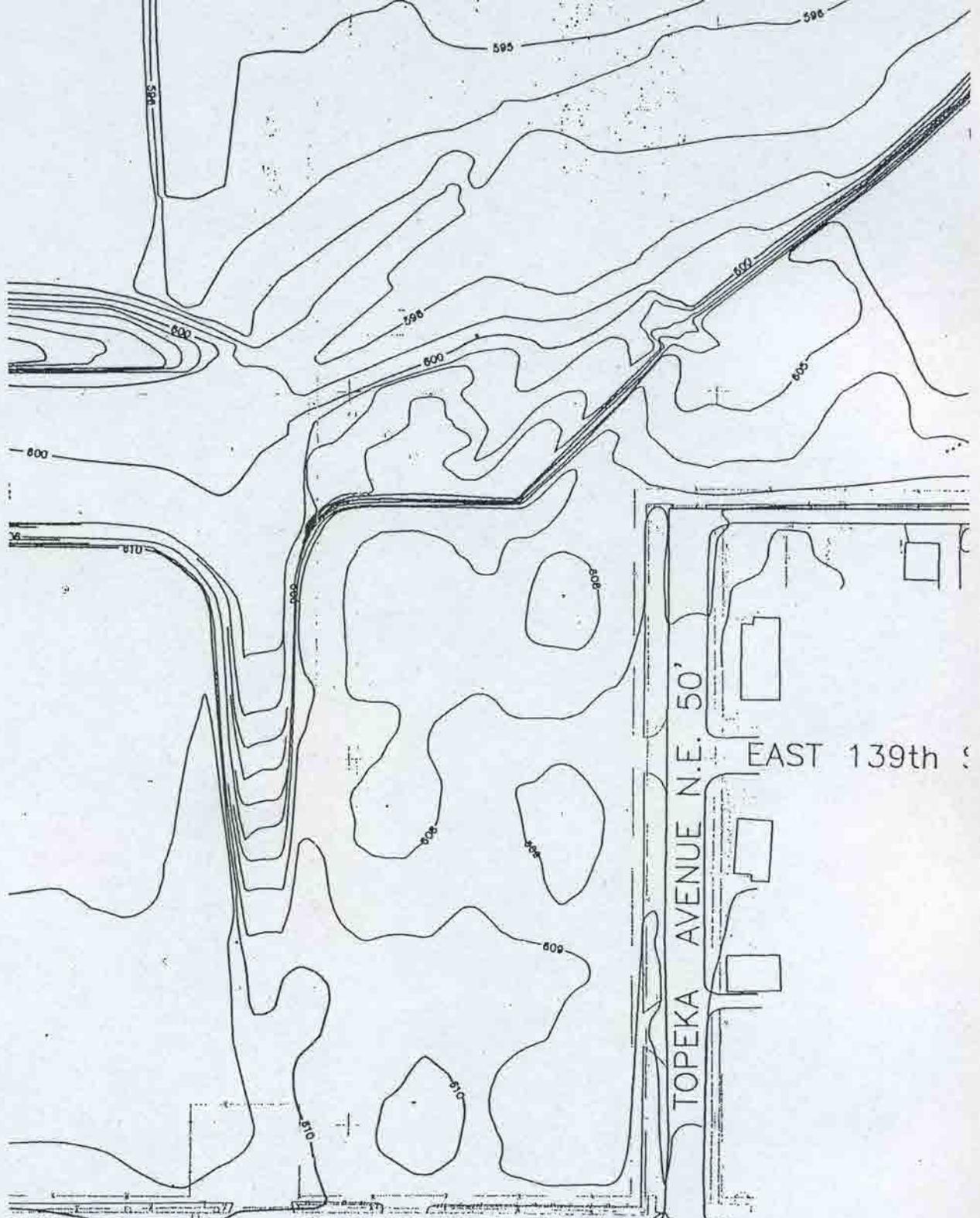
EAST 140t

	DRAWN BY	FGS
	DEPT. CHECK	TS/MW
	PROJ. CHECK	ST/GM
DESCRIPTION		



Sheet 7

Exhibit 3-A
Sheet 7



140th STREET 60'

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M&E Metcalf & Eddy

Michael A. Nulfer
REG. PROF. ENGR.

Sheet 8

9/15/98

Exhibit 3-A
Sheet 8

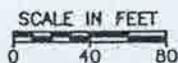
SC/
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PLO

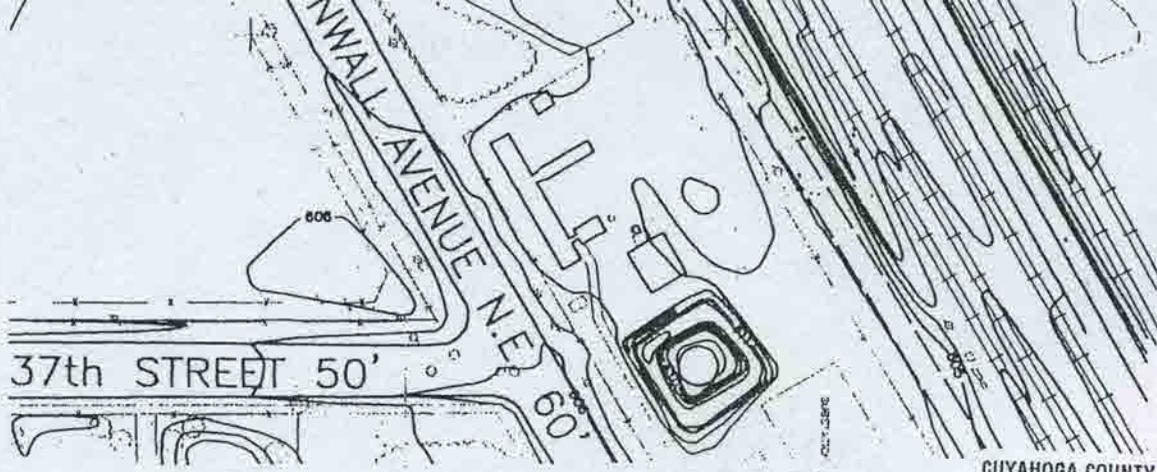


CONTOURS REPRESENT MEAN SEA LEVEL (INTERVALS). EXCAVATION OR INTRUSIVE AC REQUIRES NOTIFICATION OF THE OHIO ENV

NOTE:
CONTOURS ARE APPROXIMATE BASED ON THE MATHEMATICAL PROCEEDURE OF INTEF

MAPPING COMPILED FROM PHO

7	SCALE: 1" = 80' SCALE IN FEET 	OHIO DEPARTMENT OF AI WATER TOW TOP OF ZONE MSL ELE
98	UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION PLOT DATE: 09/04/98	Exhibit 3-A Sheet 9 CLEVELAN <i>Sheet 9</i>



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B

1 SEA LEVEL (MSL) ELEVATION IN FEET (1 FOOT INTRUSIVE ACTIVITIES BELOW THIS ELEVATION THE OHIO ENVIRONMENTAL PROTECTION AGENCY.

2 BASED ON ACCURACY OF ORIGINAL MAPPING AND USE OF INTERPOLATING THE CONTOURS.

A

COMPILED FROM PHOTOGRAPHY DATED DECEMBER 1997.

<p>DEPARTMENT OF ADMINISTRATIVE SERVICES WATER TOWER PLACE</p> <p>MAP OF ZONE OF CONCERN MSL ELEVATION</p> <p>CLEVELAND, OHIO</p> <p style="text-align: right;">Exhibit 3-A Sheet 10</p> <p style="text-align: right;"><i>Sheet 10</i></p>	<p>JOB <u>021736</u></p> <p>FILE NO. <u>98-EXOLD</u></p> <p>SHEET <u>3</u></p>
--	--

Exhibit 3 - FOREST CITY PROPERTY

REMAINDER PARCEL

Situated in the City of Cleveland, County of Cuyahoga and State of Ohio, and known as being part of the original 100 acre Lots 354 and 359, and all of Sublots 162 through 208, 218 through 264 and part of Sublots 154 through 161, 209, 210, 217, 265 in H.C. McDowell, Brayton etal Subdivision as recorded in volume 10 page 23 of the Cuyahoga County Records, and together with that portion of Topeka Avenue and East 137 Street as vacated by instrument recorded in volume 182 page 42 of the Cuyahoga County Records, and together with that portion of East 137th Place and East 136th Street as vacated by instrument recorded in volume 181 page 33 of the Cuyahoga County Records and that portion of Maxwell Avenue N.E., East 137th Place, and East 136th Street as vacated by instrument recorded in volume 207 page 14 of Cuyahoga County Records, and is further bounded and described as follows:

Beginning at the intersection of the centerline of Coit Road N.E., 60 feet in width, and the centerline of E. 140th Street, 60 feet in width;

Thence N.64°10'17"W., along said centerline of Coit Road, 1383.54 feet to the principal point of beginning and is further bounded and described as follows:

- COURSE I** Thence N.64°10'17"W., continuing along said centerline of Coit Road, 136.15 feet to a stone monument;
- COURSE II** Thence N.62°25'22"W., continuing along said centerline of Coit Road, 178.98 feet to the easterly line of land conveyed to Conrail Corp., who claims title by instrument recorded in volume 14899 page 791 of the Cuyahoga County Records;
- COURSE III** Thence N.18°03'29"E., along said easterly line of Conrail Corp., passing through an iron pin set on the northerly line of said Coit Road, 207.32 feet to a point of curvature;
- COURSE IV** Thence northeasterly along the arc of a curve deflecting to the RIGHT along said easterly line of Conrail Corp., the radius of which is 1835.08 feet and the chord of which bears N.19°18'41"E. and is 1149.56 feet in length, 1169.23 feet an iron pin set in the southerly line of land conveyed to CSX Transit Inc.;

- COURSE V** Thence northeasterly along the arc of a curve deflecting to the LEFT, the radius of which is 440.00 feet and the chord of which bears N.78824'36"E. and is 36.70 feet, 36.71 feet to an iron pin set;
- COURSE VI** Thence SOUTH, 37.00 feet to an iron pin set in the southerly line of Aspinwall Avenue, 60 feet in width;
- COURSE VII** Thence N.59851'43"E., along said southerly line of Aspinwall Avenue, 525.35 feet to an iron pin set in the westerly line of East 137th Street, 50 feet in width;
- COURSE VIII** Thence S.0816'21"W., along said westerly line of East 137th Street, 363.75 feet to an iron pin set in the southerly line of Maxwell Avenue, 50 feet in width;
- COURSE IX** Thence S.89843'39"E., along said southerly line of Maxwell Avenue, 179.70 feet to a P.K. Nail set in the westerly line of an Alley, 12 feet in width;
- COURSE X** Thence S.0816'21"W., along said westerly line of an Alley, 529.73 feet to an iron pin set in the southerly line of Topeka Avenue, 50 feet in width;
- COURSE XI** Thence S.9846'23"W., 185.94 feet to an iron pin set;
- COURSE XII** Thence S.39°09'34"W., 199.68 feet to an iron pin set;
- COURSE XIII** Thence S.80°24'31"W., 222.79 feet to to an iron pin set;
- COURSE XIV** Thence N.82°33'24"W., 183.00 feet to an iron pin set;
- COURSE XV** Thence S.7°26'36"W., 32.68 feet to a point of curvature;
- COURSE XVI** Thence southwesterly, along the arc of a curve deflecting to the RIGHT, the radius of which is 280.00 feet and the chord of which bears S.31°18'59"W., and is 226.64 feet in length, 233.33 feet to a point of reverse curvature;
- COURSE XVII** Thence southwesterly, along the arc of a curve deflecting to the LEFT, the radius of which is 220.00 feet and the chord of which bears S.40°30'32"W., and is 111.51 feet in length, 112.74 feet to a point of tangency;
- COURSE XVIII** Thence S.25°49'43"W., perpendicular to said centerline of Coit Road, 42.35 feet to a point of curvature;

COURSE XIX Thence southeasterly, along the arc of a curve deflecting to the LEFT, the radius of which is 35.00 feet and the chord of which bears S.19°10'17"E., and is 49.50 feet in length, 54.98 feet to an iron pin set on said northerly line of Coit Road;

COURSE XX Thence S.25°49'43"W., perpendicular to said centerline of Coit Road, 30.00 feet to the principal point of beginning and containing about 24.614 Acres of land as surveyed and described in December, 2001 by Nitin V. Timble, Ohio Professional Land Surveyor #7836 of Richard L. Bowen & Associates.

Be the same, more or less, but subject to all legal highways

DECLARATION OF COVENANTS, CONDITIONS & RESTRICTIONS

WHEREAS, the State of Ohio owns an approximately 49.1419 acre tract of real property, as evidenced by deed recorded in volume 85-6659, pages 28 through 33 of the Cuyahoga County Official Records, located in the State of Ohio, County of Cuyahoga, City of Cleveland, which real property is more particularly described in Exhibit A attached hereto and made a part hereof (the "Property"); and

WHEREAS, the Property is under the jurisdiction and control of the Ohio Department of Administrative Services ("Department"); and

WHEREAS, the Department, pursuant to Ohio Revised Code section 123.01(A)(12), is the general custodian of all real property owned by the State of Ohio; and

WHEREAS, the Property is the subject of the "Ohio Environmental Protection Agency Decision Document for the Coit Road Site, Cleveland, Ohio", dated March 23, 1998 ("Decision Document"), attached hereto as Exhibit B and made a part hereof, wherein the Ohio Environmental Protection Agency ("Ohio EPA") specified a remedy to permit for the use and development of the Property while addressing environmental contamination located at the Property; and

WHEREAS, the State of Ohio, through this Declaration of Covenants, Conditions & Restrictions, intends to place certain covenants, restrictions, limitations, conditions and uses on the Property for the purpose of implementing the remedies specified within the Decision Document.

NOW THEREFORE, the above recitals are hereby incorporated by reference as though fully set forth and rewritten herein, and the State of Ohio further makes the following declarations as to covenants, restrictions, limitations, conditions and uses to which the Property may be put.

1. The Property shall be used only for commercial or industrial purposes as described in Ohio Administrative Code section 3745-300-08(B)(2)(c)(ii) and (iii) and also subject to and in accordance with all federal, state and local laws, codes,

rules and ordinances. No residential use or development shall be permitted on the Property.

2. No excavation, construction or drilling operations shall be conducted, without securing prior written approval from the Ohio EPA, which (1) contravene the Decision Document or (2) exceed the allowable depths as shown on the contour maps titled "Existing Topography", "Fill Contours plus 4' of Original Surface", and "Top of Zone of Concern MSL Elevation" attached hereto as Exhibit C and hereby made a part hereof. Moreover, at least thirty (30) days prior written notice must be sent to the Ohio EPA prior to the commencement of said excavation, construction or drilling operations. All excavation, construction and drilling operations shall be conducted, and all materials generated therefrom shall be managed, handled, stored and disposed of, in accordance with all applicable federal, state and local laws, codes, rules and ordinances. Proper health and safety equipment shall be used and all necessary precautions shall be taken to limit potential exposure to soil contaminants during any such excavation, construction, or drilling operations.

Said covenants, restrictions, limitations, conditions and uses shall remain in full force and effect in perpetuity, shall run with the Property, and shall be binding on the State of Ohio, its successors and assigns, and all subsequent owners or tenants or sub-tenants of all or any part of said Property, together with their grantees, successors, heirs, executors, administrators, devisees, or assignees. All transfers, leases or other conveyances of the Property (or any portion thereof) shall contain said covenants, restrictions, limitations, conditions and uses. Failure to comply with any of said covenants, restrictions, limitations, conditions and uses shall constitute sufficient immediate and irreparable harm to allow the Ohio EPA to obtain injunctive relief or any other appropriate relief.

If the Property, or any portion thereof, is conveyed, assigned or transferred so that the State of Ohio no longer has title to the Property, then the State of Ohio shall retain an easement on behalf of the Ohio EPA for the purpose of allowing the Ohio EPA access to and over the Property to continue to monitor compliance with the covenants, restrictions, limitation, conditions and uses.

IN WITNESS WHEREOF, the Director of the Ohio Department of Administrative Services, acting on behalf of the State of Ohio pursuant to Ohio Revised Code section 123.01(A)(12), has hereunto set his hand to this Declaration of Covenants, Conditions & Restrictions on this 30th day of July, 1999.

STATE OF OHIO, acting by and through the Ohio Department of Administrative Services

CUYAHOGA COUNTY RECORDER
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Signed in the presence of:

Sign here: *Paul S. Lehman*

Print name: Paul S. Lehman

Sign here: *Karen L. Owe*

Print name: Karen L. Owe

By: *C. Scott Johnson*
C. SCOTT JOHNSON
DIRECTOR OF ADMINISTRATIVE SERVICES

ACKNOWLEDGEMENT

STATE OF OHIO :
:SS
COUNTY OF FRANKLIN :

On this 30th day of July, 1999, before me personally appeared C. SCOTT JOHNSON known to me to be the Director of Administrative Services, statutory agent, who acknowledged that he executed the foregoing Declaration of Covenants, Conditions and Restrictions for and on behalf of the Department of Administrative Services, acting on behalf of the State of Ohio, that the same is his own and the Department of Administrative Services' voluntary act and deed and that he is duly authorized to execute said Declaration of Covenants, Conditions and Restrictions for and on behalf of the Department of Administrative Services and the State of Ohio.



PAUL S. LEHMAN
NOTARY PUBLIC, STATE OF OHIO
MY COMMISSION EXPIRES MARCH 22, 2000

Paul S. Lehman
NOTARY PUBLIC

This instrument was prepared by the Ohio Department of Administrative Services, General Services Division, Real Estate Services, 4200 Surface Road, Columbus, Ohio 43228-1395.

F:\BGR\MATT\COITRDEC.DOC

EXHIBIT "A"

CUYAHOGA COUNTY RECORDER
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Legal Description

Situated in the City of Cleveland, County of Cuyahoga and State of Ohio, and known as being all of Blocks 9, 22, 23, and 24 in Burton Adams Halle and West's Subdivision of a part of Original 100 Acre Lots Nos. 354, 358, and 359 as shown by the recorded plat in Volume 8, Page 32 of Cuyahoga County Map Records. Being all of Sublots Nos. 61 to 86, both inclusive, 136 to 173, both inclusive, 183 to 285, both inclusive, in H. C. McDowell, Brayton et. al. Subdivision, of part of Original 100 Acre Lot No. 354 as shown by the recorded plat in Volume 10, Page 23 of Cuyahoga County Map Records, together with that portion of East 136th Street, Maxwell Avenue, N.E., East 137th Place as shown by the vacation plat in Volume 207, Page 14 of Cuyahoga County Map Records, together with that portion of East 136th Street, East 137th Place, East 138th Place, East 139th Street and East 140th Place, as shown by the vacation plat in Volume 181, Page 33 of Cuyahoga County Records Map Records, together with that portion of East 137th Street and Topeka Avenue, N.E. as shown by the vacation plat in Volume 182, Page 42 of Cuyahoga County Map Records, together with that portion of East 136th Street, East 137th Place, East 137th Street, East 138th Place, East 139th Street, East 140th Place, Appleton Avenue, N.E., and Topeka Avenue, N.E., as recorded by the Council of the City of Cleveland by Ordinance No. 50967, together with other land in Original 100 Acre Lot No. 354, collectively forming a parcel of land bounded and described as follows: Beginning in the center line of Coit Road, N.E., 60 feet in width at its intersection with the center line of East 140th Street, 60 feet in width; Course No. 1: Thence North 64 degrees 10 minutes 17 seconds West along the center line of said Coit Road, N.E., 1519.71 feet to a point in the Southwesterly corner of Block 9 in Burton, Adams, Halle and West's Subdivision as aforementioned; Course No. 2: Thence North 62 degrees 26 minutes 50 seconds West along the center line of said Coit Road, N.E., -178.98 feet to its intersection with the Easterly line of Consolidated Rail Corporation right-of-way, being also the Easterly line of "Parcel I" of land so conveyed to the Cleveland Short Line Railway Company by deed dated March 6, 1907, and recorded in Volume 1053, Page 47 of Cuyahoga County Records; Course No. 3: Thence North 0 degrees 45 minutes 10 seconds East along the Easterly line of said Consolidated Rail Corporation right-of-way 207.32 feet to a point of curvature therein; Course No. 4: Thence Northeasterly along the Easterly line of said Consolidated Rail Corporation right-of-way being also the Easterly line of land conveyed to the Cleveland Short Line Railway Company by deed dated March 4, 1907, and recorded in Volume 1050, Page 322 of Cuyahoga County Records, being along the arc of a curve deflecting to the right, 1,170.74 feet to its intersection with the Southerly line of land conveyed to the City of Cleveland by deed dated September 19, 1932, and recorded in Volume 4312, Page 688 of Cuyahoga County Records, being also the Southerly line of the Cleveland Painesville and Eastern Railroad Company, said curved line having a radius of 1,835.08 feet and chord which bears North 19 degrees 16 minutes 17 seconds East a distance of 1,150.96 feet; Course No. 5: Thence Easterly along the Southerly line of land so conveyed to the City of Cleveland, and along the arc of a curve deflecting to the left 36.70 feet to its intersection with the Westerly line of H.C. McDowell, Brayton et. al. Subdivision as aforementioned, said curved line having a radius of 440 feet and a chord which bears North 78 degrees 24 minutes 36 seconds East a distance of 36.70 feet; Course No. 6: Thence due South along the Westerly line of said subdivision, 37.00 feet to its intersection with the Southerly line of Aspinwall Avenue, N.E., 60 feet in width; Course No. 7: Thence North 59 degrees 55 minutes 10 seconds East along the Southerly line of said Aspinwall Avenue, N.E., 525.11 feet to its intersection with the Westerly line of East 137th Street, 50 feet in width; Course No. 6: Thence South 0 degrees 14 minutes 25 seconds West along the Westerly line of said

East 137th Street 364.09 feet to a point in the Southerly line of Maxwell Avenue, N.E., 50 feet in width; Course No. 9; Thence South 89 degrees 43 minutes 00 seconds East along the Southerly line of said Maxwell Avenue N.E., 179.91 feet to a point in the Westerly line of East 138th Place, 12 feet in width; Course No. 10: Thence South 0 degrees 14 minutes 36 seconds West along the Westerly line of said East 138th Placer 530.20 feet to a point in the Southerly line of Topeka Avenue, N.E., 50 feet in width; Course No. 11: Thence South 89 degrees 44 minutes 22 seconds East along the Southerly line of Topeka Avenue N.E., 479.00 feet to a point in the Westerly line of East 140th Street as aforementioned; Course No. 12: Thence South 0 degrees 14 minutes 38 seconds West along the Westerly line of said East 140th Street, 240.00 feet to the Southeasterly corner of Sublot No. 66 in H.C. McDowell, Brayton et. al. Subdivision, as aforementioned; Course No. 13: Thence South 89 degrees 45 minutes 22 seconds East at right angles to last described course, 30.00 feet to a point in the center line of said East 140th Street; Course No. 14: Thence South 0 degrees 14 minutes 38 seconds West along the center line of said East 140th Street, 492.59 feet to an angle therein; Course No. 15: Thence South 2 degrees 31 minutes 43 seconds West along the center line of East 140th Street, 642.82 feet to the place of beginning, including the Northerly one-half of Coit Road, N.E. and the Westerly one-half of East 140th Street, according to a survey by Garrett and Associates, Inc., Registered Engineers and Surveyors, made in December, 1983, be the same more or less, but subject to all legal highways.

Further Reference in made to a Deed dated November 26th, 1985 of Record in Official Record, Volume 85-6659, Pages 28 through 33, Cuyahoga County Recorder's Office, Cuyahoga County, Ohio and to a Plat of Survey, Map No. 2088-D, dated December 1983, on file in the Offices of said Garrett and Associates, Inc., 2030 West 19th Street, Cleveland, Ohio.

The aforescribed parcel contains 49.1419 Acres, more or less, according to the survey by said Garrett and Associates, Inc.

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DECLARATION FOR THE DECISION DOCUMENT
Coit Road
Cleveland, Ohio

The Coit Road site (the Site) is located at 948 E. 140th Street, Cleveland, Ohio. The Site was formerly the Fisher Body Plant for the General Motors Corporation (GMC) which manufactured automotive parts. Past contamination on the site was a result of facility operations and vandalism that occurred after the facility closed. The Site is currently owned by the State of Ohio.

The Ohio EPA issued a Preferred Plan to describe its proposed strategy for the future of the site. On February 10, 1998, the Ohio EPA publicly announced the availability of the Preferred Plan for review and requested comments from interested members of the public. Copies of the preferred plan and other documents relevant to remediation of the Site were placed at the Collinwood public library. On February 26, 1998, the Ohio EPA held a public hearing regarding the preferred plan at the Greater Faith Baptist Church, 13816 St. Clair Ave., Cleveland. Written comments regarding the preferred plan were accepted until March 10, 1998.

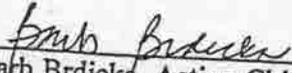
The Ohio EPA has reviewed and considered all comments submitted regarding the preferred plan. Attached to this document is a Responsiveness Summary, which describes the comments the Ohio EPA received and the Agency's response (see Appendix A).

The Decision Document describes the remedial action selected by the Ohio EPA for the Site. This Decision Document has four parts. First, it describes the site history and discovery of contamination. Second, the Decision Document summarizes the Remedial Investigation and Feasibility Study Report for the Site, which was generated under an agreement between the Ohio EPA and the Department of Administrative Services. Third, this Decision Document describes the Interim Actions that took place throughout the cleanup process. The fourth part of this Decision Document describes the final action selected by the Ohio EPA to meet the future use of the property of commercial/light industrial development. The Ohio EPA's selected remedy for the Site involves three parts: 1) Deed restrictions to prevent future developers from entering areas of residual contamination without Ohio EPA involvement. 2) Restricted site access through use of the existing fence and continuation of site security. 3) Continued operation and maintenance of the oil plume recovery system. For a more complete description of the Ohio EPA's selected remedy, see Section 8.0.

The remedy selected by the Ohio EPA is the same as the remedy proposed in the preferred plan. The remedy meets applicable, relevant and appropriate requirements. The estimated cost of the project is approximately \$190,000.00. Actual or threatened releases of hazardous substances from the Site, if not addressed by implementing the remedy selected in this Decision Document, may endanger public health, welfare or the environment. This Decision Document does not preclude the Ohio EPA from seeking other remediation at the Site in the future in a manner not inconsistent with the U.S. Environmental Protection Agency's National Contingency Plan (NCP) at Title 40 of the Code of Federal Regulations, Part 300. Procedures under the NCP call for periodic review to ensure that the remedy will protect human health and the environment.

CUYAHOGA COUNTY RECORDER

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Barb Brdicka, Acting Chief
Division of Emergency and Remedial Response

3/23/98
Date

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4 OHIO ENVIRONMENTAL PROTECTION AGENCY

6 DECISION DOCUMENT
8 FOR THE

10 COIT ROAD SITE
12 CLEVELAND, OHIO
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30 March 12, 1998
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APPENDIX B

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1.0 INTRODUCTION

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2.0 SITE HISTORY

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2.1 Site Location

The Site comprises approximately 46.71 acres on the east side of Cleveland about seven miles east of Public Square. The Site, one mile south of Lake Erie, is bounded on the south by Coit Road, on the east by East 140th Street, on the north by Topeka and Aspinwall Avenues, and on the west by the Conrail railroad tracks (Figure 1).

2.2 Facility Ownership and Operation

The Coit Road facility was built in the early 1920's as a Fisher Body Plant for the General Motors Corporation (GMC), with production starting in 1921. It was in operation until April 3, 1984. On April 2, 1984, GMC conveyed title of the plant to the National Council for Community Development, Inc., a nonprofit community development organization. On April 3, 1984, The National Council for Community Development, Inc., conveyed title to the Park Corporation. The Park Corporation leased the plant to GMC from April 3, 1984, until April 30, 1984. During the Park Corporation's ownership of the plant, most of the equipment and machinery were removed. On November 21, 1985, the State of Ohio, through the Ohio Department of Administrative Services (ODAS), purchased the property from the Park Corporation with the intent of providing a site for a prison to be built and then operated by the Ohio Department of Rehabilitation and Correction (ODRC). Due to opposition from the community and local legislators, that plan did not proceed.

While in operation, the facility included a main group of connected manufacturing buildings, a number of smaller outbuildings, a wastewater treatment plant (WWTP), and several large parking areas. There were several buildings within the main group of manufacturing buildings, the largest being buildings A and G, which were both six stories in height and constructed of reinforced concrete and brick (Figure 2). There were also several outbuildings, which included the Administration Building, Water Tower, Baler House, Clock House, and the WWTP. Much of the property that was not formerly covered by buildings or structures was covered by asphalt or concrete, including a large parking lot in the southeast part of the Site and a smaller area used for parking in the northwest corner. A chain link fence with barbed wire currently encircles the property. The current entrance to the Site is on East 140th Street where a guard trailer is located.

Throughout the facility's history as a manufacturing plant, a variety of industrial chemicals were stored and used on the property. The substances included flammable liquids, solvents, paints, acids, and cyanides. Electrical fluids containing polychlorinated biphenyls (PCBs) were contained in transformers and other electrical equipment. Asbestos was used in many of the main manufacturing buildings as pipe insulating material, boiler housings, fan and duct units, and transite panels.

Five underground and four above ground storage tanks were located on-site at the time the plant ceased operations. These tanks were used to store fuel oil, gasoline, diesel, solvents, and water. Process water used on-site was treated in the on-site wastewater treatment system prior to release into the city sanitary sewer system. Acetylene tanks and lines, used to supply gas for welding, were located in the Acetylene Building. Drums of solvents were stored in various areas on-site,

2 both inside the main manufacturing buildings and beside the baler building and wastewater
4 treatment buildings.

6 2.3 Discovery of Contamination

8 Between 1984 and 1990, repeated acts of vandalism occurred at the Site. Attempts to salvage
10 copper from transformer cores led to spillage of PCB oils from transformers and capacitors.
12 Vandalism of electrical conduit severely damaged asbestos-covered piping throughout the
14 facility. In a number of instances, PCB-contaminated wood blocks were burned, resulting in ash
16 piles, some of them containing dioxin.

18 In 1986, contractors hired by ODAS performed a preliminary survey to identify of the presence
20 and locations of potentially hazardous materials. The survey, associated with the planned
22 construction of the prison, was conducted to identify the major environmental hazardous
24 materials, recommend removal and disposal options, and provide a plan for minimizing
26 exposure. The findings of this survey were presented in a June 12, 1986 report which included
28 numerous photos and tables summarizing suspected asbestos-containing materials, transformers,
30 capacitors, and other potentially hazardous materials.

32 In response to a complaint, the Ohio EPA inspected the plant on January 28, 1988. The plant
34 was found to be unsecured, resulting in unauthorized entry. Unidentified materials were found
36 throughout the plant. Since these materials were abandoned, the Ohio EPA declared these
38 materials "wastes" by definition. At that time, the Ohio EPA notified ODRC of its findings and
40 recommended securing the site. ODRC then obtained 24-hour security at the plant.

42 On December 20 and 21, 1988, the Ohio EPA reinspected the facility and found approximately
44 140 full, partially full, or empty drums of unidentified wastes, some of which were leaking or
46 deteriorating. The Agency also noted leakage from PCB-containing transformers and oil-like
48 liquid floating on the water in some of the press pits. Sampling at that time confirmed the
presence of hazardous wastes.

34 In October and November of 1989, ODRC hired consultants to perform a preliminary site
36 inspection of the Coit Road property. In October, ODRC also submitted a proposal to Ohio
38 EPA to conduct the following Interim Actions (IAs) at the Site: removal and disposal of 11 PCB
40 transformers (there were actually eight on-site); cleaning, excavation, and disposal of three
42 underground petroleum storage tanks (there were actually five on-site); and removal of drums
44 containing hazardous wastes. In November, ODRC submitted a work plan to Ohio EPA to
46 conduct an investigation to determine the extent of contamination at the facility. This submittal
also included a more detailed plan for the IAs described earlier.

42 On November 27, 1989, an Ohio EPA site inspection revealed that eight transformers had been
44 drained of approximately 2,400 gallons of PCB fluid at various locations throughout the plant. It
46 was also noted that PCB fluids from an outdoor transformer had reached a catch basin. The
inspection documented PCB contamination in the catch basin and in water that had collected in
the buildings' basements.

2 On December 14, 1989, The Ohio EPA notified ODRC of the water pollution violations and
4 requirements to comply with the PCB management requirements set forth in the Toxic Substance
6 Control Act (TSCA). On December 29, 1989, ODRC notified the Ohio EPA that approximately
84,000 gallons of oil/water in the buildings basements had been removed, treated (utilizing on-
site treatment equipment), and discharged to the Northeast Ohio Regional Sewer District.

2.4 ODRC/ODAS Response

10 On June 8, 1990, ODRC and the Ohio EPA signed Director's Final Findings and Orders
12 requiring the completion of IAs intended to stabilize site conditions and to complete a remedial
14 investigation/feasibility study (RI/FS). These IAs include the excavation of underground storage
16 tanks (USTs) and the inventory and proper disposal of drums, transformers, and contaminated
soils removed during excavation. During these IAs, ODRC approved the installation of an
interior perimeter fence to help prevent any further vandalism.

18 In May 1992 amended Orders were signed which have ultimately resulted in this Preferred Plan.
20 The stated purpose of those Findings and Orders was to: 1) investigate the Site to determine the
22 nature and extent of environmental contamination; 2) design and implement remedial action(s) as
necessary to address environmental contamination, consistent with the law, and 3) monitor the
effectiveness of the selected remedial action.

3.0 INTERIM ACTIONS DESIGNED TO STABILIZE THE SITE (Summary of Pre-RI Interim Actions)

3.1 Existing Site Conditions

As a result of previous site inspections, the Ohio EPA documented and identified materials throughout the plant that were defined as "wastes" by rule 3745-51-02 of the Ohio Administrative Code (OAC) and section 3734.01 of the Ohio Revised Code (ORC). Deteriorating and leaking drums were observed throughout the site. Also noted on site were leaking PCB transformers in the press areas, paint sludges, and an oil-like liquid and water in the smaller press pits.

Furthermore, a November 27, 1989 inspection at the facility conducted by Ohio EPA under the authority of the Federal Toxic Substances Control Act (TSCA), revealed that eight PCB transformers had been drained of approximately 2,400 gallons of PCB fluid at various locations throughout the Site (see figure 3). Fluid from the outdoor PCB transformer had reached a catch basin of the storm sewer system at the plant. Ohio EPA sampled sediments in the storm sewer and results showed PCBs in concentrations up to 29,000 parts per million (ppm) were present. The primary room basement of Building B at the plant was flooded and Ohio EPA observed an oil layer floating on the surface of the water. Ohio EPA obtained a bi-layered sample. This sample showed 96 ppm of PCB in the oil and 224 parts per billion (ppb) of PCB in the water.

The migration or threatened migration of these PCBs wastes into the soil, groundwater and surface water at the plant constituted a substantial threat to public health or safety and caused water pollution or soil contamination.

In May of 1990, R. E. Warner and Associates (REW) was hired by the ODAS to provide environmental engineering services on behalf of ODRC to implement the IAs required by the Orders. Field and analytical services were provided by OHM Corporation and ASAP Technical Services, as sub-contractors to REW.

In July, 1990, the ODRC submitted the Phase I(a) Interim Action Plan to the Ohio EPA. This plan included staging eight transformers and all accessible drums, removal of five underground storage tanks (UST's) and staging of excavated soils (see figure 3). Staging consists of placing similar wastes in designated areas or lined containers for off-site disposal in an Agency-approved manner. A revised Interim Action plan was submitted in October, 1990, which included disposal of transformers and PCB-contaminated soils and concrete, disposal of all accessible drums, and disposal of product and contaminated soils from the removal of five UST's. This plan was approved by Ohio EPA on November 1, 1990. On November 21, 1990, Clean Harbors Incorporated (CHI), was selected to perform these IA field activities.

At the first Coit Road public meeting held in August 1990, Ohio EPA was informed of community concerns that PBC-contaminated water had traveled from the Site through the storm sewer system into surrounding residential basements. On September 10 and 11, 1990, sampling was conducted by the Ohio EPA and REW in the neighborhoods surrounding the facility. Basements of residences along East 133th Street, East 144th Street, and Coit Road were sampled for the presence of PCBs because of past flooding. Playgrounds near the site, as well as a church

2 parking lot, were also sampled. PCBs in concentrations above regulatory concern were not
4 detected in any residential or playground samples. The only sample showing detected PCBs
6 came from the church parking lot. However, the type of PCB aroclor was different than that
found at Coit Road and at a concentration lower than required for remediation.

8 At the direction of the Ohio EPA, contractors inventoried and mapped the locations of all
10 accessible drums (299) at the facility during the week of July 29, 1990 (see figure 5). Drums that
12 were sampled were placed in staging areas for future disposal. Drums were located in buildings
14 A-I, BB, and the Acetylene Building. They were also located throughout the Site grounds near
16 the baler building, wastewater treatment plant, old guard house, and fences. During this time, 87
drums were sampled and sampling was completed August 1, 1990. Other drums were previously
sampled or determined to be product. Drums that were floating in water in basements were left
alone for another phase of the remediation. Leaking drums were placed in overpack containers.
CHI completed drum removal from the site by the end of January 1991. All drums of waste were
disposed of at off-site disposal facilities permitted to accept this type of waste.

18 Five USTs and their surrounding soils was also sampled (see figure 3). Two of the tanks (5,000
20 and 1,000 gallon gasoline tanks, Excavation #1) were located just south of the Clock Building.
22 A 12,000 gallon solvent tank, Excavation #2, was located at the north end of Building I. A 5,000
24 gallon gasoline tank, Excavation #3, was located off the southwest corner of the baler building.
26 The location of the last tank, the 23,000 gallon fuel tank, Excavation #4, was located on the north
28 end of Building D. On August 2, 1990, the five tanks were sampled and eight soil borings were
30 taken around the perimeter of the tanks. In January 1991, the five underground storage tanks
were removed. The soils and water from excavations 1, 2 and 3 were tested and disposed of off-
site at approved disposal facilities. These three excavations were lined with polyvinyl and
backfilled with clean fill material. The fourth excavation was permitted to be backfilled with
excavated material and fill material from a waterline excavation to protect three nearby building
walls.

32 CHI removed seven PCB transformers and one non-PCB transformer from the site in January
34 1991. On January 29, 1991, sampling of the indoor areas where transformers were removed
36 occurred. Results indicated that the PCBs had saturated the concrete floors. The Ohio EPA
38 requested that the concrete be covered with plastic to minimize spreading of the contamination
40 until proper cleanup could be conducted. A determination of the extent of contamination and
42 remediation of these areas occurred during the RI. Excavation of soil and asphalt near the
44 outside transformer location was performed on February 11, 1991. Confirmatory soil samples
revealed residual PCB contamination in the soil. Two more rounds of excavation and
confirmatory sampling were necessary before clean-up levels were achieved on May 2, 1991.
This resulted in 530 tons of PCB-contaminated soil, flooring material, and concrete debris being
sent off-site for proper disposal. Contaminated soils were shipped off-site for appropriate
disposal on May 3, 1991, and this area near the former outside transformer was covered with
plastic and backfilled with clean fill.

46 A site inspection was conducted to prioritize items for the RI/FS from January 22 through 24,
48 1991, by Ohio EPA, ODR, and REW. This inspection resulted in the Agency requesting that
the remaining PCB-containing equipment (PCB capacitors) and outdoor, friable asbestos-
containing material be removed. On February 27, 1991, REW submitted a revised Interim
Action plan outlining steps to be taken to remediate the leaking PCB capacitors (see figure 4) and

2 transformers on-site. This work plan was approved by the Agency on May 28, 1991. CHI began
4 removing the 418 PCB capacitors on May 23, and completed the work on June 24, 1991.

6 A workplan outlining asbestos removal activities was submitted to the Cleveland Division of Air
Pollution Control (CDAPC) and the Ohio EPA on June 3, 1991. Approval was granted and work
8 began on June 11, 1991. The work included the abatement and disposal of asbestos pipe
insulation, contaminated soils, and materials associated with the insulation in buildings B, D, H,
10 BB, and the Wastewater Treatment Facility (see figure 6). Several areas around the Powerhouse
were also addressed. The work was completed by OPI Correctional Industries and included
12 1,058 linear feet of pipe insulation, including pipe fittings, and approximately 10,458 square feet
of ground clean-up. Also, 1,318 square feet of openings to the Powerhouse and the pumping
14 station, near the water tower, were sealed off. The work was completed on July 3, 1991 with
1,200 bags of friable asbestos containing materials being disposed of appropriately.

16 Due to continuous trespass by transients on the Site, a new fence was erected along the interior of
the existing fence. Approximately 6,000 linear feet of 12-foot high fence was installed. Work
18 began on October 31, 1990, and was completed on December 21, 1990. Also, holes breaching the
existing site perimeter fence were repaired at this time.

20 In a letter dated July 9, 1991, the Ohio EPA stated that interim action activities intended to
22 stabilize the Site had been successfully completed.

4.0 SUMMARY OF THE REMEDIAL INVESTIGATION

4.1 RI Scoping Activities

The consulting firm of R. E. Warner & Associates (REW) was initially hired in 1990 by DAS to characterize the Site, then conduct interim actions and a site-wide RI/FS in accordance with the Orders. They had completed the initial IA work and a portion of the RI (Phase I) at the time their contract with the State expired in 1994. The consulting firm of Metcalf & Eddy (M & E) was hired in 1994 to complete Phase II work of the RI, which included additional interim actions along with the human health and ecological risk assessments.

On February 3, 1992, REW conducted a soil gas survey of the undeveloped portions (areas without buildings) of the Coit Road Site. The objectives of this survey were to: evaluate the entire undeveloped portion of the Site for the existence of volatile and semi-volatile organic compound contamination; determine the lateral extent of such contamination; and identify and locate potential sources of contamination, including buried waste and underground storage tanks.

The survey identified three principle areas of contamination: east and southeast of Building I and north of the loading docks; the western and southern areas immediately around the Baler Building and north of Building B, extending to the western boundary of the facility.

This soil gas survey also documented the presence of a solvent, tetrachloroethene (PCE), on-site. The solvent was located in two major areas: 1) north of the Administration Building; and 2) the northwest corner of Building B. The source of the larger area by the Administration Building was believed to occur from past facility operations or migrated on-site from a source to the east of the property (a boat repair shop). The source of PCE contamination near the northwest corner of Building B was probably a result of facility operations because this area was used for maintenance in this building and parts washing was likely.

Results from this survey were later used to help place the locations of RI soil borings and monitoring wells.

4.2 Nature and Extent of Contamination

4.2(a) Site Geology

Physiography: The Site is on the Lake Plain approximately one mile south of Lake Erie and 1.25 miles north of the Allegheny Escarpment. The Lake Plain consists of the relatively flat, poorly-drained areas immediately adjacent to Lake Erie. The Lake Plain was formed by Lake Erie and its antecedent lakes during the glacial times. In Cuyahoga County, the Lake Plain ranges in width from ten miles in the west to two miles in the east. Surficial soils are poorly-drained and composed of lacustrine silt and clay.

Topography: The topography of the site was modified by construction of the manufacturing plant and parking areas. Ninemile Creek was re-routed into the buried concrete culvert that transects the site from southeast to northwest. The culvert was apparently constructed between 1915 and 1920, before or concurrently with the initial development of the plant. The abandoned

2 creek channel was filled and buildings subsequently were constructed over the channel areas.
4 The culvert and several of the former machine press pits were constructed in and slightly deeper
than the ancestral channel at several locations.

6 The approximate location of the ancestral channel of Ninemile Creek is shown on several
8 drawings in the Metcalf & Eddy (M&E) Remedial Investigation (RI) Report, December 1996.
10 Before the GMC facility was constructed and the creek was rerouted into the culvert, these
12 drawings show that the creek meandered in a valley with a northwest-southeast axis. In plan
14 view, the valley was somewhat V-shaped, broadening to the northwest. In the western part of the
16 Site, the channel was well defined. In the southeast part, the creek bifurcated into several less
well-defined channels. A pond, approximately one-half acre in area, existed just west of where
the Site access gate is now located. The lowest elevations in the channel were about 585 feet
mean sea level (msl). In the broader part of the valley, the ground was a fairly low-lying,
swampy floodplain. On upland areas along the southern and eastern portions of the Site were
the highest elevations, which were close to 615 feet msl.

18 The building ground floor elevations were approximately 600 feet msl except for parts of
20 Building A and B. The ground floor of Building A was at 615 feet msl except for part of the
north side which had a ground floor elevation of 600 feet msl. The southern part of Building B
was also at 615 feet msl and the northern part was at 600 feet msl.

22 **Soils:** The following is from the U.S.D.A. Soil Survey of Cuyahoga County (1980). The soils at
24 the Site and surrounding areas are considered "made-land" which includes reclaimed land, fill
and soil affected by disturbance. Since the entire area has been urbanized and developed, it is
26 unlikely that significant undisturbed soils remain.

28 Most of the area is artificially drained by sewer and/or tile systems. Areas of Elnora soil that are
30 not drained have a seasonally high water table at a depth of 18 to 24 inches. Runoff is slow. The
root zone is deep and the available water capacity is low. The subsoil is strongly acid or medium
acid.

32 Soils generally limit the lake plain as a site for buildings because of seasonal wetness. Because
34 of lateral movement of water in the substratum, the soil is better suited to houses without
basements. Sloughing is a hazard in excavation. Most sewage is centrally treated.

36 **Regional Bedrock Geology:** The bedrock underlying the area of the Site is the Chagrin Shale
38 member of the Ohio Shale which was deposited about 380 million years ago in a stagnant ocean
basin. The rock is black and massive where unweathered. Upon exposure, the shale weathers to
40 brown color and develops a pronounced platy structure. The Ohio Shale and the similar,
overlying Bedford Shale form a widespread and fairly thick shale sequence with an outcrop band
42 extending beyond the Lake Erie shore and about four miles south of the lake shore. The
Mississippian-age Berea Sandstone, a massive medium-grained to fine-grained sandstone, occurs
44 above these units and is the uppermost rock unit in the higher areas of the Appalachian Plateau,
46 about three miles south of the Site.

2 **Till:** Till directly overlies the shale bedrock. The approved RI document indicated that the till is
4 probably the Wisconsin Lavery Till I, a unit occurring generally beneath the Lake Plain in
6 northeast Ohio. At the Site, the till is typically dark gray and consists of cohesive clayey silt
with a variable amount of sand and angular to subangular gravel dispersed in the fine-grained
matrix. The till is stiff to very stiff and the density increased with depth. The permeability is
low.

8 **Lacustrine Sediments:** The lacustrine unit was deposited in larger ancestors of Lake Erie
10 associated with glacial times. The lacustrine deposit is composed of laminated silt and clay, with
12 some fine to very fine sand, and little or no coarse sand or gravel. The thickness ranges generally
14 between two and 10 feet with an average of about six feet. The surface of the till layer drops and
the lake material tends to thin slightly where the creek channel was present before site
development.

16 **Fluvial:** Fluvial deposits overlie the lacustrine sediments in the formerly low-lying portions of
18 the Site except where removed in construction of the plant. The fluvial deposits were formed by
ancestral Ninemile Creek before site development. Ninemile Creek was a meandering stream
20 developed on the lacustrine deposits. The fluvial material consist primarily of two types of
interbedded sediment interpreted as representing channel and floodplain deposition.

22 **Fill:** Fill occurs at or near the ground surface in almost all areas of the Site. Portions of the Site
24 received a considerable amount of fill during plant grading and construction activities. Fill from
off-site sources and on-site material from the topographically higher portions of the Site was
placed in the channel areas, resulting in fill overlying channel deposits. Where no fluvial
26 deposits occur, fill directly overlies lacustrine sediments.

28 **Regional Hydrogeology:** The groundwater resources of Cuyahoga County are described in the
30 RI report which also referenced local documents. The potential for developing groundwater
supplies from wells in the immediate area of the Site is low. The area extending about four miles
32 inland from the lake shore is an area where groundwater yields of only three gallons per minute
(gpm) or less. Impermeable deposits, basically clay over shale, result in a very poor area for
34 even minimal domestic supplies. Brackish water and dry wells are common and storage may be
necessary to supply peak demands.

36 Water yielding zones are not widely present locally in the overburden because the lake deposits
38 and till are fine-grained and of low permeability. The black shale is generally not considered an
aquifer, although the upper portion of the shale may be weathered and fractured allowing for
40 some groundwater movement. However, a short distance below the top of the rock, the shale
typically is unweathered, massive, and relatively impermeable. Potential yields from the upper
42 part of the shale are expected to be a few gallons per minute, at best. The natural water quality
within the shale is also expected to be relatively poor due to the presence of hydrocarbons,
dissolved minerals, and hydrogen sulfide.

44 M&E obtained water well records from the Ohio Department of Natural Resources (ODNR),
46 Division of Water. The logs are presented in the RI and locations of the wells are shown on
diagrams within the document. There are records of 51 wells located within four miles of the
48 site. Many of these are clustered in an area three to four miles east of the Site, in the suburb of
Richmond Heights. The remainder are sparsely distributed. Most of the wells (30) are at least

2 three miles from the Site. The local and regional direction of groundwater flow is to the
4 northwest, toward Lake Erie. None of these wells are downgradient of the Site.

6 4.3 Remedial Investigation Work, Phase I and Phase II

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8 4.3(a) Soil Borings

10 Phase I soil borings: REW installed soil borings for Phase I RI activities at the Site from June
12 1992, to October 1993. During this time, REW performed four different sampling events and
14 completed approximately 131 soil borings. These events were used to determine the nature and
16 extent of contamination at the Site, subsurface hydrogeology, number and type of hydrogeologic
18 units, and the presence of landfills on-site. Subsequent sampling events refined areas of
20 discovered contamination and provided additional data for the risk assessment (RA). In January
1994, Bennett & Williams completed 45 soil borings, Science Application International
Corporation (SAIC) installed five borings, and Lawhon & Associates drilled approximately 15
borings at the site to define the area of the oil plume in the soil and water-bearing strata below
Building C. The soil boring and analyses in the oil plume area were later used to design a
remediation system for this area.

22 Phase II soil borings: Metcalf & Eddy (M&E) was hired in 1994 to complete the RI at the Site
24 and implement the selected final remedy. M&E performed an additional 130 borings on the Site.
The focus of this work was to identify the information needed to finish the RI and to support the
design of site cleanup activities including the oil plume remediation system.

26 Detailed descriptions of the borings procedures, logs, diagrams, sampling techniques, and
28 records and sampling results can be found in the approved RI report and associated documents at
the Ohio EPA or the public records repository. These documents are available for public review.

30 **Background Soil Studies:** Samples of surface and subsurface soil were collected from various
32 locations in the neighborhood surrounding the Site, but which had not been influenced by site
34 activities. Samples of surface water and sediment were also collected from Ninemile Creek
upstream of where it enters the Site. On November 3, 1992, surficial soil samples were collected
36 at 18 locations within a two-mile radius of the Site. Samples were collected from a two-inch
depth and analyzed for Target Analyte List (TAL) and Target Compound List (TCL) chemicals
38 and dioxin. On June 10, 1993, offsite background subsurface soil samples were collected.
Fourteen samples were collected from seven borings at locations within a two-mile radius of the
Site. Samples were analyzed for full TAL, and full TCL parameters.

40 Based on the results of that study, there is evidence that baseline levels of some contaminants
42 such as metals and hydrocarbons exist in the Greater Cleveland area due to historic industrial
44 activity. The background sampling was conducted to aid in determining whether concentrations
of potential chemicals of concern on-site were above those found in the local area. The
46 background analyses were conducted in accordance with Ohio EPA's "How Clean Is Clean"
Guidance (Ohio EPA, 1991). In the Coit Road Human Health Risk Assessment to determine the
48 chemicals of concern, only the naturally-occurring (i.e. inorganic chemicals) on-site chemicals
were compared to off-site background concentrations. Organic chemicals were not included in

the background comparison and were all retained for further evaluation in the risk assessment.

M&E on-site analysis of soil samples: Information from the soil borings demonstrated that total petroleum hydrocarbons (TPH) and polynuclear aromatic hydrocarbons (PAHs) are the most wide spread contaminants in the soil. On-site analyses for TPH and total PAHs were used to guide delineation of soil impact. In addition, several small locations of elevated PCBs were known to exist in the soil, so total PCB analyses were also performed to delineate "hot spots" and verify that PCBs were not more widely present.

TPH: Concentrations were determined in soils for depth intervals 0 to 4 feet, 4 to 8 feet, 8 to 12 feet, 12 to 16 feet and over 16 feet. Three primary areas were found on the site with TPH in the soil above 500 mg/kg (ppm). One area of the highest TPH was the northwest corner of Pit 3, where concentrations exceeded 2,000 ppm. A second area was under the northern area of former Building C and D extending north to the culvert. This also coincided with the area of the oil plume. The highest TPH concentrations were found primarily over or near the ancestral channel. The third area of high TPH concentration was found south of the pits in RI Area 9.

Total PAH data: PAH concentrations were evaluated for the same depth intervals as the TPH listed above. The results verified that PAHs were widely present in the soil at the Site, are locally present at elevated levels, and are primarily limited to depths above 16 feet. The highest concentrations were associated with the ancestral channel areas below the central and northern portion of the former buildings, the northwest corner of Pit 3, and south of the former pits in RI Area 9.

Total PCB data: Once again, the same depth intervals were evaluated. Very few samples documented detectable concentrations of PCBs. Only two locations were found above the 10 mg/kg action level established for PCB clean-up at the Site under federal law. One location was near the northwest corner of Pit 3. The second location was south of the pits in RI Area 9. Low-level PCBs, were also detected by field screening at soil boring 232 near the "PCB Trench" (northwest of WWTP) to approximately 16 feet deep.

4.3(b) Primary Areas of Soil Impact and Potential Sources:

The soil data indicate that there were six primary areas of impacted soil at the Site. The primary contaminants present in these areas, the extent of impact, and potential sources for the impact are discussed below.

Northwest Corner of Pit 3: Elevated PCBs, PAHs, and TPH were found in the soil near the northwest corner of Pit 3. Features in this area included pits 17 and 18, and portions of buildings B and C. Other structures included a sump in Pit 3, wastewater lines, and a nearby manhole. The releases to soils may have occurred through the sump in the northwestern part of Pit 3. Sludge from this sump was removed as TSCA waste in August 1994. The sump and pit were decontaminated and were filled with clean backfill by M&E.

Oil Plume/Ancestral Channel North of Pit 3: Ground water sampling results from early in 1992 indicated that free-phase TPH was located on top of the water table in areas underneath the Site. Additional investigations through 1994 delineated the boundaries of this oil layer, or

2 plume, and indicated the need for remedial action. Elevated TPH and PAHs were found to be
4 present in the soil in the area of the ancestral Ninemile Creek Channel north of Pit 3. Impact was
6 most pronounced west of Pit 2 and extended north to the culvert, coincident with the primary
area of the oil plume. A single source for the oil and soil impact was not identified. However,
M&E discovered a considerable amount of oil in Manhole 192 and Sump 4.

8 **South of Pits in RI Area 9:** Elevated TPH, PAHs, PCBs, and PCB-related semi-volatile organic
10 compounds (SVOCs) were found in the soil in a small area south of Pit 9 in RI Area 9. A dense
12 non-aqueous phase liquid (DNAPL) layer, up to one foot thick, consisting of high levels of PCBs
14 and 1,2,4-trichlorobenzene is present at the location of MW-259. There were several phases of
16 study to investigate the extent and source of impact near well MW-259. Various approaches
18 from monitoring well and soil boring installations to exploratory trenching were taken to locate
the source of the DNAPLs. Features in the area of MW-259 include the west-central portion of
Building F and the east-central portion of Building D South. The source of the PCB impact was
not clear; however, information from the approved RI noted the presence of a capacitor near soil
boring S73 which was thought to have contained PCBs.

20 **Ancestral Channel South of Pit 3:** Samples from borings S75 and S126, which were drilled
22 south of the southwest corner of Pit 3, showed high levels of PCBs, 1,2,4-trichlorobenzene and
24 TPH. Historical information did not reveal a likely source for the contamination. The borings
were located in the north-central portion of building C South, a former press shop. A 1971 GM
drawing illustrated a sump pump, a floor drain, and their associated lines within 50 feet of the
borings.

26 **RI Area 13:** This area, northwest of the wastewater treatment plant, was investigated by REW
28 with a rather dense cluster of about 10 borings surrounding a former catch basin that was
contaminated with PCBs. The PCBs entered the catch basin from a surface release from an
30 outdoor transformer. Contamination by PCBs also existed in a drain line/trench that ran
southeast from the catch basin toward the pump house. Some removal of PCB-contaminated
32 soil was completed by REW in the course of removing the catch basin. Given the small volume
of soil containing PCB contamination, these soils were removed by excavation. Following
34 removal, confirmation samples were collected at each location.

36 **Northwest Corner of Former Building C:** Elevated TPH and PAHs occurred in the soil in the
38 area of former Building C north of the culvert. A portion of the oil plume was also found in this
area. This area was formerly occupied by a 1954 building addition used for steel storage, and the
older Building C used for the same purpose. Release to soils may have come from one or both of
40 two sump outflow lines running west to east across this area.

42 **Other Potential Sources:** It was difficult to pinpoint sources for most of the soil impact due to
44 the long operational history of the plant and the complexity of the subsurface features. Many of
the impacts were probably attributable to routine operation of the manufacturing facility over
46 long periods before environmental regulations existed. Releases of oil from hydraulic equipment
were inevitable. Similarly, small spills of petroleum products undoubtedly occurred at various
48 locations on the property. Such releases could have entered the subsurface by infiltration and
through poorly sealed drain lines.

Numerous areas on the Site were used for steel, die parts, and equipment storage. Parts may

2 have been stored in or coated with oil to eliminate the potential for corrosion. Slow seepage of
4 oil may have occurred from these type of sources through cracks in the building foundations.

6 Leakage from USTs may have contributed to hydrocarbon impact; however, documentation by
8 M&E indicate that this soil impact was localized. Some of the instances of PAH contamination
10 may have been related to the use and handling of coal at the Site. Much of the PCB impact was a
12 result of surface spills of electrical fluid due to vandalism which occurred after the Site was
14 vacated; however, spills of electrical fluid during plant operations cannot be ruled out.

12 4.3(c) Groundwater Within the Geologic Units at the Site:

14 In the area where the main manufacturing buildings were located, the top of the zone of
16 saturation is approximately five feet below grade, within the fill. The zones at the site that can
18 transmit groundwater most readily are the coarse-grained fill and sandy deposits associated with
20 the channel portions of the fluvial unit. Site investigations revealed these units are
22 discontinuous. This coarse fill was placed in various areas of the Site but not over large areas.
24 The more abundant, finer-grained fill abuts or surrounds the coarser fill layers. Coarser fill zones
26 were likely placed around drain lines, below building foundations, or around the press pits. The
28 occurrence of sandy channel sediment is primarily limited to areas where the ancestral Ninemile
30 Creek channel existed, as shown in diagrams found within the approved RI. The channel
32 material was also locally removed when the culvert and deep press pits were constructed.

34 The majority of the unconsolidated material at the Site, including almost all the material below
36 the level of the fluvial deposits, is fine-grained and has low hydraulic conductivity. Silty clay
38 and clayey silt are the dominant sediment types comprising the fill materials. The vertical
40 hydraulic conductivity of the fine-grained fill is low, in the range of 10^{-8} to 10^{-7} cm/sec,
42 demonstrating that this material is relatively impermeable. The fine-grained, floodplain portions
44 of the fluvial unit and the lacustrine deposits have similarly low conductivities. The horizontal
46 hydraulic conductivity of the lake sediments is probably about an order of magnitude higher than
48 its vertical conductivity, due to the presence of siltier laminations. The till also has low
conductivity, 10^{-8} to 10^{-7} cm/sec, due to its fine-grained texture.

34 The low hydraulic conductivity of each of the fine-grained units listed above indicated that
36 groundwater flow or contaminant migration through these deposits can occur only at extremely
38 low rates.

38 4.3(d) Monitoring and Exploratory Wells, Phase I and Phase II:

40 Forty-one monitoring and exploratory wells were installed by REW and its contractors during
42 Phase I of the RI. This work was designed to assess if contamination existed in the groundwater,
44 determined mechanisms controlling the flow of groundwater, and identified the sources of any
46 potential contamination.

46 Forty-one monitoring and exploratory wells were installed by M&E during Phase II of the RI.
48 M&E did not plan to install monitor wells specifically for completion of the RI. Some of the
wells were installed as replacements or repairs to existing REW wells. Twenty-five
wells/piezometers were installed under the M&E oil plume IA for delineating the extent of the

2 free product. The remainder of the wells were installed in areas where additional information

4
6 was necessary to delineate source areas. Also, vertical standpipes were installed in the corners of
6 some of the press pits before they were backfilled so that water levels in the pits could be
monitored.

8
10 **Slug Testing:** Slug testing by both REW and M&E was used to estimate the horizontal hydraulic
10 conductivity of various deposits at the Site. Specifics of the methods and procedures were
12 provided in the approved RI. The results indicated the coarse fill has a conductivity in the range
12 of 10^{-4} to 10^{-3} centimeters per second (cm/sec). The conductivity of the channel deposits was
14 between 10^{-5} to 10^{-3} cm/sec.

14
16 **Potentiometric Maps/Groundwater Flow Directions:** Water levels were monitored at least
16 monthly by REW and M&E in monitor wells, piezometers, recovery wells, and pit standpipes.
18 Potentiometric maps which can be found in the approved RI report, were constructed for water
18 levels measured. The potentiometric contours have the shape of a broad, shallow trough, slightly
20 inclined to the northwest, with groundwater moving northwest toward and along the culvert on
both sides. There was little indication of seasonal variation in groundwater flow directions.

22
24 The primary conclusions were that groundwater flow in the lacustrine material and till occurred
24 at an extremely slow rate. Active groundwater flow at the Site occurred only within the coarse
26 fill and channel material which occurred at shallow depths. The underlying lacustrine sediment
and till layers act as confining layers which greatly limited vertical connection between these
shallow deposits and the shale bedrock.

28
30 **Groundwater System and Historic Influences:** Although the potentiometric maps give a site-
30 wide picture of groundwater flow directions, there were many small-scale influences on
32 groundwater flow. Most of these were man-made drainage features and subsurface structures
such as drain lines and sewers. The Site was crossed by an extensive system of these, which for
34 the most part, drained to Ninemile Creek Culvert or the oil-water separators. Coarse fill around
these facilities locally influenced groundwater.

34
36 The machinery pits ranged in depth from approximately 10 to 25 feet. Sumps were used to keep
36 them free of infiltrating groundwater. When plant operations ceased, the pits filled. During
demolition activities the pits were dewatered, cleaned and backfilled with clean fill.

38
40 ¹Because most of the Site was covered by concrete or asphalt, recharge locally to the groundwater
40 system through surface infiltration was limited. Much of the rain that fell on the Site ran off into
42 catch basins and storm sewers, which discharged to the culvert. Urbanization in the area had
42 greatly increased storm runoff to Ninemile Creek and periodic Site flooding through an access
portal in the top of the culvert was known to occur.

44
46 **Oil Plume Pumping Tests:** During the oil plume IA investigation, pumping tests were
46 conducted for three recovery wells completed in the channel deposits to obtain data for the
48 selection of remedial alternatives. The tests provided information on the productive capacity of
the deposits, the degree of interconnection within the deposits, and the potential for dewatering
deposits by pumping recovery wells. These tests showed the channel deposits were not very

2 productive. The drawdown measured in observation wells demonstrated the hydraulic
conductivity of the deposits within the channel. Also, none of the pit standpipes showed clear
4 response to the pumping tests. This indicated a poor connection between the pits and the
groundwater in the channel sediments. The important conclusion from the pumping tests was
6 that water level in the channel deposits could be controlled using a small number of recovery
wells pumped at relatively low rates.

8 4.3(e) Groundwater Quality

10 **REW Sampling:** Six rounds of groundwater sampling were conducted by REW between July
12 1992 and February 1994. Analysis for the first four rounds included: VOCs, SVOCs, PCBs,
pesticides, total and dissolved TAL metals, phenolics, cyanide, pH (field and laboratory),
14 conductivity (field), temperature (field), and dissolved oxygen (field). Samples from selected
wells were also analyzed for ammonia, total Kjeldahl nitrogen (TKN), and fecal coliform.
16 Dioxins/furans were included in the first two events but were discontinued, with Ohio EPA
approval, because it was concluded that they were not present in the groundwater.

18 **M&E Sampling:** REW planned a total of eight rounds of groundwater sampling for wells A
20 through M. To complete the eight events, M&E performed two additional samplings of these
wells. These events were completed in November 1995 and January/February 1996. The M&E
22 samples were analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TCL pesticides, total and
dissolved TAL metals, cyanide, phenolics, ammonia, TKN, fecal coliform, pH (field and
24 laboratory), conductivity (field), temperature (field), and dissolved oxygen (field).

6 The wells sampled represented the most likely groundwater pathways within the Site. Two of
the well sites, A and B, were located on the upgradient portion of the Site and provided data on
28 the background quality of groundwater as it entered the Site. Several of the wells were located
on the downgradient side of the Site and provide samples of groundwater that has passed below
30 the Site.

32 **Results:** Groundwater data collected in the eight rounds of sampling were summarized in the
approved RI. A large number of VOCs and SVOCs were not present in the groundwater at
34 detectable levels. Also, six of the seven PCB aroclors were not detected in groundwater.

36 Listed with the data in the RI were primary and secondary maximum contaminant levels for
drinking water (MCLs and SMCLs). There was no known local use of groundwater as a
38 drinking water source. The MCLs and SMCLs were listed only for comparison and are not
intended to imply risk.

40 The data summary illustrated the infrequency and low levels of the VOC detections. The highest
42 concentrations of VOCs, just slightly above the detection limit of 0.002 mg/l, occurred at the
wells within or near the oil plume. Low concentrations of these VOCs were also detected in
44 background wells A2 and B2, which suggested that some of these occur naturally in
groundwater, or were entering the site from upgradient sources. None of the VOCs detected
46 exceeded applicable MCLs.

2 The SVOCs (which include PAHs) were also detected infrequently and found for the most part in
4 and around the oil plume. It must be noted that although PAHs were likely present in the soil,
the presence in groundwater was minimal. This was likely attributable to the low solubility and
6 mobility of the PAH compounds.

8 The only PCB aroclor detected in the groundwater was Aroclor 1260 with the highest
concentrations of 1.2 and 4.2 mg/L at MW-259. This was consistent with the DNAPL found
10 within this monitoring well.

12 Seven metals (arsenic, lead, antimony, thallium, beryllium, cadmium, and nickel) exceeded their
MCLs in at least one groundwater sample. In general the levels were very low, at or near the
14 applicable MCLs, and near a source area. Only lead appeared to show up site-wide. Some of
these parameters were also detected in the background wells.

16 Ammonia, TKN, and fecal coliform were analyzed primarily to determine where sewerage
18 impact may exist in the groundwater. The data indicated that sewerage impact existed at Well H
and, to a lesser extent, at several of the other wells. Well H was located adjacent to the culvert
20 on the upgradient (east) edge of the Site. Contamination in this well indicated that the culvert
was leaking storm water at sewerage at high-flow events through its walls, resulting in localized
22 biological contamination.

24 The groundwater investigation determined that the oil plume was largely confined to three
segments of the ancestral Ninemile Creek channel, as shown the appropriate map in Appendix I.
Earlier investigations concluded that the "oil plume" area existed south of the culvert. The RI
26 further delineated this to two small, separate areas within the previous "oil plume" area. The
more southern area was defined by oil observed in former Well J (now Recovery Well RW-211),
28 piezometer nests P-318 and P-317, and Recovery Well RW-311. The oil in this area was
restricted to the channel deposits. The more northern area of oil, south of the culvert, was
30 defined by oil observed in piezometers P-3, P-315, and P-334, and recovery wells RW-316 and
RW-333. The large thickness and lateral extent of the sand in this area, and the proximity to the
32 culvert, suggested that the sand was both channel deposits and construction backfill from the
culvert installation.

34 A small area of oil was delineated in the channel deposits north of the Ninemile Creek culvert, as
36 detected in Recovery Well RW-250. This small area was not identified until the RI
investigation.

38 Chemical analyses of two oil samples suggested that multiple sources have contributed to the
40 accumulation of oil. Fingerprinting of the oil found in RW-211 revealed roughly 50% motor oil-
range hydrocarbons and 50% unknown hydrocarbons, where oil from the P-3/RW-316 area had
42 roughly 50% motor oil-range hydrocarbons and 50% mineral spirit (naphtha) range hydrocarbons.
The oil samples were non-detect for PCBs, and contained consistent and moderate levels of
44 metals.

46 4.4 Surface Water and Sediment Sampling:

48 The ultimate surface water receptor for the Site runoff, through storm drains and oil/water

4 separators, is Ninemile Creek. Direct surface runoff to adjacent properties is minimal or
5 nonexistent due to the routing of Ninemile Creek through the culvert for the entire length of the
6 site. Surface water and sediment in Ninemile Creek was sampled at upstream, on-site, and
7 downstream locations. Sampling of Ninemile Creek during low flow was performed by REW
8 and M&E. The data for the M&E and REW samplings were combined to investigate the surface
9 water and sediment migration pathway, to determine background concentrations, and to develop
10 the exposure assessment.

11 **REW Sampling:** REW conducted low-flow surface water and sediment sampling on May 20-21,
12 1993. Two sampling locations were located upstream of the Ninemile Creek culvert, one where
13 the creek entered the culvert, and one 100 feet upstream of that point. These two sites were
14 adjacent to Iyanhoe Road. A third upstream sampling location was located in a culvert manhole
15 across East 140th Street, in the driveway of Manley Marine, 995 E. 140th St. An on-site sample
16 location was collected at the culvert portal, located approximately in the center of the Site. Two
17 sample locations were located downstream of the Site, one where the creek exited the culvert and
18 one approximately 100 yards downstream of this point. Surface water and sediment samples
19 were analyzed for complete TCL, TAL metals, and TAL cyanide. Surface water was also
20 analyzed for total and dissolved metals, and laboratory pH. Field tests for surface water included
21 pH, specific conductance, and temperature.

22 **M&E Sampling:** M&E conducted low-flow surface water and sediment sampling September 6-
23 7, 1995. Moderate flow surface water and sediment sampling was conducted on December 15,
24 1995. The M&E data was utilized to supplement the REW data for both low and moderate flow.
25 The M&E upstream and downstream sampling stations were identical to those of REW. The
26 only exception was the upstream culvert manhole at Manley Marine, which was sampled only
27 during the moderate flow event (it could not be located during the low flow event). Sediment
28 samples were collected downstream of the Site, but not on-site or upstream since no suitable
29 substrate could be located in the concrete culvert on-site or shale bottom upstream of the Site.
30 Surface water and sediment samples were analyzed for complete TCL, TAL metals, and TAL
31 cyanide. Surface water samples were also analyzed for pH, and hardness. Sediment samples
32 were also analyzed for simultaneously-extracted metal/acid volatile sulfide (SEMs/AVS) and
33 total organic carbon (TOC).

34 **Surface Water/Sediment Conclusions:** Details of the sampling procedures and analytical
35 results can be found in the approved RI. The investigation revealed Ninemile Creek to be a
36 combined sewer for approximately two dozen approved industrial discharges upstream of the
37 site. These discharges are approved under the Federal National Pollution Discharge Elimination
38 System (NPDES), and contribute to the pollutant loading of this creek. A complete pathway of
39 PCB contamination from an on-site PCB transformer into Ninemile Creek was determined in
40 sampling conducted in 1991. PCBs in the Ninemile Creek sediment were attributable to
41 activities at the Coit Road site. Based on that conclusion, Ohio EPA required that a removal
42 action of contaminated sediments be conducted by ODAS. That action was conducted in
43 December 1997. All sumps, drainage pipes, oil/grease separators, and any other site contributors
44 were also cleaned and removed from the site proper in 1995 and 1996.

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2 **4.5 Ambient Air Quality Monitoring:**

4 This section discusses four rounds of seasonal air sampling conducted by REW in 1993, and
6 sampling conducted by M&E in 1995 associated with PCB removal actions. The primary goal of
8 air monitoring at the Coit Road Site was to ensure that potential off-site impacts of ambient air
quality were identified and mitigated in a timely, effective manner. Fugitive emissions from the
Site had the potential to create both a public perception problem and a public health risk.

10 **Ambient Air Monitoring:** The air quality studies involved the collection of meteorological data
12 at the Site, high volume ambient air quality sampling, and analysis of the results. Equipment
14 sampling locations and monitoring frequency were chosen based on EPA guidelines for air
16 monitoring, engineering judgment, and site characteristics. Wind direction and velocity were
monitored continuously using an on-site weather station throughout the sampling events. The
resultant wind vectors were then used to designate each REW sampling location as either
background (upwind) or on-site (downwind).

18 The presence of PCBs on the Site has been well documented. Air monitoring was performed to
20 assess the risk that site emissions of PCBs could pose to downwind receptors during removal
22 actions. Construction activities during removal and abatement actions could potentially increase
fugitive dust emissions. Therefore, particles in the inhalable size range were sampled. Lead,
24 chromium, cadmium and mercury were sampled by REW only as potential contaminants of
concern because they were detected in soil at the Site and because of their toxic nature. Large
26 quantities of asbestos-containing materials (ACMs) were observed within the former site
buildings during the asbestos survey by REW. Air samples were collected to determine the
28 presence and concentration of possible asbestos releases to the ambient air, particularly during
building demolition.

30 The initial work plan, established by REW, specified a quarterly schedule for 24-hour ambient
32 air quality monitoring. The frequency of monitoring was modified by M&E for the interim
remedial actions to once a week during those periods when PCB remedial actions were
underway.

34 **REW Air Quality Study:** High-volume air sampling was performed by REW in conjunction
36 with remedial activities at approximately 90-day intervals at the sampling locations. Six
locations were located along the perimeter of the property and two were located on the interior of
38 the property. Four rounds of seasonal air sampling were conducted as follows:

40	Round I	Winter	March 2-3, 1993
	Round II	Spring	May 3, 5-6, 1993
42	Round III	Summer	September 16-17, 1993
	Round IV	Fall	October 19-20, 1993

44 **M&E Interim Action Air Quality:** Removal actions for PCB-contaminated areas were
46 performed by M&E beginning in Summer 1995. During the actions, M&E, monitored for PCBs
and dust, which had the potential to be significantly higher during the remedial actions. Samples
48 for metals were also not analyzed because excess risk from these compounds was not anticipated.
Four air stations were utilized, one background and three downwind, and locations were set

2 utilizing prevailing wind directions and remedial activities. Samples were collected once a week
4 during PCB removal activities.

6 **Air Quality Conclusions:** Data for all rounds of sampling revealed only three minor
8 exceedances of air quality, and one of those displayed elevated levels in the background
10 monitors. Results from both the REW and the M&E air quality monitoring efforts indicated that
air quality impacts as a result of the Coit Road remedial actions were negligible. The mitigation
activities undertaken during remedial efforts were effective and the remedial actions posed no
significant air quality threat to the surrounding community.

12 4.6 Risk Assessment

14 A risk assessment was performed for the Site to evaluate potential threats to human health and
the environment. The risk assessment for the Coit Road site has two components: the Human
16 Health Risk Assessment (HHRA) and the Ecological Risk Assessment (ERA). The HHRA
assessed the potential human health risks associated with exposure to the concentrations of
18 chemicals detected in environmental media associated with the site, e.g. people in contact with
soil, sediment and surface water at the Site. The ERA presented a similar type of evaluation for
20 ecological receptors, e.g. plants and animals, that may come into contact with chemicals in
environmental media associated with the Site.

22 Information about the types, concentrations and distribution of chemicals present in the soil on
24 the Site, and in the water and sediment in Ninemile Creek was used as the basis for the risk
assessment. The remedial investigation for the Site has generated a substantial amount of data
6 which were used to characterize the distribution of chemicals associated with the Site, and to
characterize potential human exposures to those chemicals. Both the volume and quality of the
28 available analytical data were more than adequate for the purposes of evaluating potential risks to
people who may have contact with the Site.

30 Samples collected from soils on the Coit Road property and from water and sediment in
32 Ninemile Creek were analyzed for an extensive list of chemicals by a certified analytical
laboratory. In many of the samples, a large proportion of these chemicals were not detected by
34 the laboratory. Those chemicals which were found in a number of samples, and which are
potentially the most important from a human health perspective, were quantitatively evaluated in
36 the risk assessment. The chemicals which were of the greatest potential significance were
polycyclic aromatic hydrocarbons (PAHs), specifically benzo(a)pyrene, PCBs, and inorganic
38 chemicals, specifically arsenic. Three groups of potentially exposed individuals were examined
in the HHRA: 1) an occupational/industrial worker exposed to surface soils 0 - 4 feet in depth; 2)
40 a construction/excavation worker exposed to both surface and subsurface soils at a depth of 0 -
16 feet; and 3) a juvenile receptor who may have contact with the surface water and sediment in
42 Ninemile Creek downgradient from the Site.

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2 The following clean-up goals were used to delineate areas for remediation:

Parameter	Clean-up Goal (mg/kg)
4 PCBs	10
6 PAHs:	
--Benzo(a)anthracene	3.9
--Benzo(a)pyrene	0.39
8 --Benzo(b)fluoranthene	3.9
--Dibenz(a,h)anthracene	0.39
10 --Ideno(1,2,3-cd)pyrene	3.9
12 TPH	15,000-39,000

14 4.7 Ecological Risk Assessment

16 The ecological media of concern (those with complete exposure pathways) for this Site were
18 surface water, sediment, and surface and subsurface soil. The soils of concern were on the Site
20 itself, while the sediment and surface water concerns were focused on Ninemile Creek, which
22 flows through a culvert underneath the site. Realistically, soils on-site were not expected to
24 contribute significantly to the existing ecological impacts in the area, due to a lack of habitat on-
site and in the vicinity. The surrounding land use is residential, commercial and industrial, with
very little open space for resident or migratory wildlife. Current conditions on the Site afford
very little appropriate habitat for plants and animals. Under the proposed future use of the Site,
there will continue to be very little habitat, and human activity will also discourage wildlife use
of the property.

26 Ninemile Creek, due to its location, and the fact that it drains an urban and industrial watershed,
28 has been degraded. Biological assessment of Ninemile Creek, including the calculation of the
30 Index of Biotic Integrity (IBI) scores based on Ohio EPA (1987) methods of the downstream
32 sampling station, indicated "poor" stream health and probable contaminant impacts to the aquatic
communities. There was no IBI score for the upstream station because no fish were present.
There was no on-site station because this portion of Ninemile Creek flows through a culvert.
The biological results were consistent with the chemical results, which indicated potential
toxicity to aquatic receptors.

34 The potential ecological risks in Ninemile Creek were significant, and degradation was
36 evidenced through biological sampling in this creek. However, the specific sources of this
38 degradation cannot be discerned based on the information available. There continue to be
40 numerous potential discharges into the Ninemile Creek culvert upstream of the Site. Many of the
chemicals of potential ecological concern (COPECs) in Ninemile Creek were detected in surface
water and sediment upstream of the Site, as well as in background (off-site) soils. The primary
potentially site-related contributors to aquatic ecological risk from sediment were methoxychlor,

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Aroclor 1254, and PAHs. As a result, the conclusion of the Ecological Assessment was that Site contaminants posed no significant ecological threat to on-site biological receptors, but did pose risk to aquatic receptors in Ninemile Creek.

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5.0 INTERIM ACTIONS PERFORMED FOLLOWING THE RI

4 While RI field studies were being conducted, discussions were held among the local citizens,
5 elected officials, Ohio EPA and DAS regarding the potential future uses of the site following
6 completion of the environmental clean-up. In 1994, with the concurrence of the interested
7 parties, DAS stated that future use scenarios would focus on development for commercial/light
8 industrial use.

10 Preliminary results of field studies indicated that a number of localized areas of contamination
11 existed at the Site. These areas were contaminated with PCBs, PAHs, TPH or metals.
12 Preliminary remediation goals (PRGs) developed as a part of the human health risk assessment
13 process provided clean-up standards for these areas. In the interest of expediting final site clean-
14 up and redevelopment, M & E developed a series of interim action work plans for the areas
15 described below. Those work plans were reviewed and approved by Ohio EPA. The
16 investigations and removals described in the work plans were conducted and are summarized in
17 reports that can be reviewed in the public repository or at Ohio EPA.

18 BUSTR Confirmation of UST Removal

20 On August 6, 1996, M&E submitted to BUSTR a site assessment report regarding the two
21 remaining areas, "BUSTR Area 6" and "BUSTR Sump 15". After review of the data, it was
22 concluded that "BUSTR Area 6" had been addressed and that any remaining issues of residual
23 soil contamination from TPHs would be addressed by the continuing operation of the bioslurping
24 system that is currently addressing the oil plume. "BUSTR Sump 15" (see figure 7) was found to
25 have approximately 10 cubic yards of soil in excess of the clean-up standard. This area was
26 eventually removed along with PCB-contaminated soil from a nearby catch basin.

28 On January 22, 1998, DAS received a letter from BUSTR that required additional work at the
29 site known as BUSTR Area 5 (Excavation #3). DAS was required to take a soil sample from the
30 excavation itself and two groundwater samples from within 15 feet of the boundaries of the
31 excavation. That work was conducted with BUSTR oversight on February 3, 1998. On February
32 12, 1998, ODAS received a "No Further Action" letter from BUSTR, documenting completion of
33 all UST removal actions at the Site.

36 TSCA/PCB Removal

38 M&E performed a survey of the TSCA/PCB areas to determine if residual PCBs in these media
39 exceeded TSCA cleanup levels. The survey included the collection and analyzing of soil,
40 concrete core, and concrete wipe samples. Sampling was done in accordance with the "U.S. EPA
41 Field Manual for Grid Sampling of PCB Sites to Verify Cleanup" (U.S.EPA, 1986).

42 Upon receipt of the PCB analytical results, the data were evaluated and removal actions were
43 performed by M&E to remediate PCBs from several TSCA/PCB Areas (see figure 8). The
44 removal actions were implemented to expeditiously and cost-effectively remove PCB
45 contaminants from the TSCA/PCB Area soils and concrete. Power washing of concrete, grit
46 blasting of concrete, scarifying of concrete, and excavation and disposal of concrete and soil
47 were included among the removal actions performed by M&E at several of the TSCA/PCB
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2 Areas. A detailed description of these removal actions is provided in the Site documents located
/ in the public repository and in the Ohio EPA files.

4 Ninemile Creek Culvert Actions

6 During physical inspections of Ninemile Creek beneath the Site, areas of suspected oil staining
8 were identified in the culvert. Low-level PCBs were detected in two wipe samples collected by
REW. In July 1994, REW developed a plan to clean the oil stained areas and plug or remove the
10 lateral drains to the culvert.

12 M&E was tasked to complete the Ninemile Creek Culvert IA (see figure 14). A reinspection and
videotape of the culvert was performed. The sampling showed the oil had seeped into the culvert
14 at two locations. At the time of the inspection, the seeps were not active and the oil gave
evidence of being deposited a number of years ago. Recovery wells were installed by M&E near
16 the culvert at these two locations as a part of the oil plume IA. Analytical results of other stained
areas of the culvert's interior indicated that oil was not the cause of the staining. Additional
18 work of the culvert included patching of culvert cracks and sealing of lateral connections that no
longer transported stormwater.

20 Oil Plume Interim Action

22 As a result of field work conducted by REW and its consultants, along with Lawhon and
24 Associates, the extent of subsurface TPH contamination determined there was a concern that oil
might be released into the Ninemile Creek culvert. An Interim Action Oil Plume Investigation
26 was performed by M&E. Thirty-one investigative soil borings and five large diameter recovery
wells were installed in 1995 to determine design parameters for an oil recovery system and to
28 evaluate the most efficient technology to employ. Field investigations revealed that the oil was
generally limited to the ancestral channel deposits; however, the oil was laterally discontinuous
30 and the oil did not originate from a single source. While TPH compounds were found in the
samples, no PCBs were detected.

32 This investigation included aquifer testing and a short-term "bioslurping" pilot test. Bioslurping
34 is a term used to describe a treatment process whereby a vacuum pump is used to extract
groundwater, oil, and vapors from extraction wells. The following overall conclusions are based
36 on the aquifer tests:

- 38 1) Hydraulic control within the channel deposits in the oil plume area could be
40 maintained using a minimum of two recovery wells pumped at relatively low
rates. This low flow rate would result in slow dewatering of the deposit and
would provide hydraulic control while the deposit was being dewatered.
- 42 2) The potential for the flow of oil from the channel deposits to Ninemile Creek
44 contained in the culvert should be controllable by maintaining hydraulic control
over the groundwater in the deposits.
- 46 3) Significant interconnection existed within the channel deposits.
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- 2 4) Dewatering of the channel deposits recovery wells appeared to be possible to
4 distances in excess of 50 feet. Greater distances would be possible with long-term
6 pumping and vacuum enhancement, which also would improve recovery of
 groundwater and free product. Air flow through the channel deposits appeared
 possible following dewatering.

8 An interim recovery system for collection of oil and remediation of the soils was designed and
10 installed at the Site in April 1996 (see figures 9-12). Details concerning the interim recovery
12 system design are provided in the report entitled "Oil Plume Interim Action Basis of Design
14 Report" (Metcalf & Eddy, Inc., 1996d) in the Ohio EPA files.

12 Sewer/Drain System Delineation

14 In 1994, REW conducted smoke testing and camera surveys, and partially mapped the drainage
16 system at the Site. M&E reviewed work by REW and completed delineation of the drainage
18 system. During 1996 and 1997, M&E performed closure activities at the Site. Accumulated
20 debris from sewer lines and catch basins was removed. The interior of all sewer lines was
22 scoured. Five oil-water separators were removed and piping rerouted appropriately (see figure
24 13). All associated wastes from the work were disposed of at off-site facilities. The oil-water
26 separators were cleaned by removing sludges and power washing. The walls were sampled to
28 confirm clean-up goals were achieved. The tanks were then filled with approved material, and
30 closed in place.

24 Pit 3 Actions

26 Pit 3 was the only press pit not decontaminated and backfilled by REW. When M&E began
28 work, Pit 3 contained several feet of water and a small amount of floating oil. M&E performed
30 the following tasks: additional sampling of the water and other materials within the pit; removed
32 and properly disposed of the water and other materials; cleaned the pit floor and walls; sealed
34 cracks; and backfilled the pit with clean, recompact clayey material. An investigation was
36 conducted around Pit 3 to determine the possibility of contaminant migration. While some
38 contamination was noted, it could not be directly attributable to Pit 3. The Pit 3 closure details
40 were documented in a February 1996, M&E report at the Ohio EPA.

36 Summary of REW Decontamination and Demolition Activities

38 A large percentage of the work that was directed by REW involved decontamination and
40 demolition of structures on site. Known and discovered sources of contamination were removed
42 to the extent that the removals were practical, cost effective, and consistent with all State and
44 Federal regulations. The types of materials removed include asbestos, lead paint, woodblock
46 floors, concrete, contaminated water, oil, and sludge.

44 REW collected a significant amount of data to characterize materials for proper handling and
46 disposal. A data summary of liquid, sludge, and sediment sampling performed during demolition
48 activities is available in Ohio EPA records. Samples of wood flooring were tested for PCB
 content. Wipe volumetric samples for PCB analyses were collected from concrete flooring and
 steel structures. Materials in sumps, press pits, and oil water separators were characterized,

2 removed, and properly disposed. Where needed, structures were decontaminated by power
4 washing or other means. Water, oil, and sludge were removed from the pit areas. Samples were
6 then collected to verify that the pits were clean. Vertical standpipes were installed in the pit
8 corners for potentiometric mapping. The pits were filled with clean concrete building debris
from the Site. To investigate possible downward migration of contaminants, soil samples were
collected below the floors of the pits. Data collected during this phase of the project was also
used M&E by to identify potential contaminant sources at the Site.

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6.0 SUMMARY OF THE FEASIBILITY STUDY

The Feasibility Study (FS) report addressed the future needs for the remediation of contaminated soil areas at the Coit Road Site. The FS was approved by the Ohio EPA on January 13, 1997. The FS identified and screened technologies and alternatives for the Site.

Based on the results of the RI, discrete areas were identified at the Coit Road Site where soil contaminants were present at concentrations which may have presented human health risks and/or exceed regulatory limits. Specifically, the following soil contaminants were identified as a potential concern: total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), antimony, arsenic, beryllium, and lead. Site areas where these contaminants were identified were evaluated on a chemical-specific basis.

The FS evaluated methods to meet the remedial action objectives. The TPH soils at the Site were broken down into five different categories based on the soil type and depth of TPH relative to the groundwater table. The categories listed below were derived by calculating the type of soil, whether it was in the water table or above it, and the concentration of contaminants in the specific area. The proposed actions for the Coit Road soils included:

- Only the Category I and V TPH soils and the PCB soils outside of the MW-259 and TSCA/PCB Areas at the Site were selected for FS actions.
- No action was deemed necessary for soils contaminated with arsenic. Arsenic concentrations were found to be generally consistent with local background soils samples and within the established range for non-industrial Ohio soils. There are no distinct areas of significantly elevated arsenic and no historical site information to indicate a spill or release had occurred at the Site.
- Category II, and IV TPH soils; and the antimony, beryllium, lead, and PAH soils were selected for Interim Actions (IA). The fact that there was an extremely small quantity of soil supported the selection of excavation to site clean-up standards and off-site landfill disposal as a cost-effective interim action.
- The PCB soils in the MW-259 area were addressed as part of an interim action at the site. Remediation of that area was completed under that interim action.
- Category III TPH soils were found to be well-suited for treatment with the existing bioslurping system based on their moderate to high permeability, contaminant type, and their proximity to the existing oil recovery system.

Based on the results of the remedial action alternative identification, screening, and evaluation processes, excavation and disposal were selected as the best course of remedial action for the Category I and V TPH soils and the PCB soils outside MW-259 and TSCA/PCB Areas. The excavation and disposal alternative was selected because it provided a high level of overall protection of human health and the environment that was both practical and cost effective for the relatively small quantity of impacted soils requiring action. In addition, excavation and disposal were implemented in a short period of time and permanently removed the impacted soils from

2 the Coit Road property, thereby accommodating and simplifying any redevelopment plans that
4 may be chosen for the Site.

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2 **7.0 INTERIM ACTIONS PERFORMED FOLLOWING THE FS**

4 As stated above, the RI identified the contaminants of concern and their distribution at the Site.
6 The FS examined the distribution of contaminants in soils that exceeded clean-up goals and
8 evaluated remedial technologies and alternatives to address these specific exceedences. The FS
then determined the best remediation method for each area of contamination. The Interim
Actions below describe the remediation efforts taken to address these areas.

10 **Polycyclic Aromatic Hydrocarbons (PAHs) Remediation:** M&E identified 20 areas in the FS
12 that exceeded target risk cleanup goals for carcinogenic PAHs (see figure 15). With the
14 exception of one area, M&E excavated to a prescribed depth, based on the risk assessment study,
and disposed of the impacted soil off-site at a permitted landfill. At each PAH location, the
16 excavation was dug to an eight-foot radius outward from the boring. After completion of the
18 excavation, confirmatory samples were taken to assure the cleanup levels were achieved. M&E
excavated approximately 1,264 tons of soil above the risk-based cleanup goals for off-site non-
hazardous disposal. Each of the excavated PAH areas was backfilled to grade with Ohio EPA-
approved clean shale.

20 **Metals Remediation:** Based on the risk assessment, M&E identified three areas at the Site
22 which had metal concentrations above risk levels: S31, S35, and S106 (see figure 15). M&E
remediated S35 and S106 during remediation of PAHs at these locations. Upon removal of all
24 impacted soils, confirmatory samples were collected. Based on the results from this data,
excavation continued until the analytical results indicated the respective metal concentrations
26 were at or below the risk-based levels or an impermeable boundary (i.e. concrete wall) was
encountered. Approximately 186 tons of metals contaminated soils were disposed off-site as
28 non-hazardous waste. M&E backfilled to grade each of the areas with shale.

30 **Total Petroleum Hydrocarbon (TPH) Remediation:** M&E identified nine areas where TPH
32 concentrations in the soils exceeded the cleanup goals (see figure 15). Four of the nine areas
were excavated to the applicable depths and outward to an eight-foot radius from the bore
34 locations. After removal of the impacted soils, M&E collected confirmatory soil samples. These
soils were submitted to an off-site laboratory for analysis. The laboratory results documented
that all the soils above the cleanup goals for TPH had been excavated.

36 At the remaining five areas, M&E installed extraction wells. These areas are located near the
38 M&E oil plume remediation system. Based on the soil type and the proximity to the
bioremediation system, M&E and Ohio EPA agreed that these areas could be remediated "in-
40 situ" by the oil plume remediation system.

42 **RI-Related PCB Remediation:** M&E reviewed all data collected during the RI/FS that was
44 available in REW's files. Based on the data M&E identified four areas, not including the
originally identified TSCA spill areas, where total PCB concentrations exceeded the action
46 levels (see figure 15). To confirm the reported results at PCB trenches #14 and #34, along with
S75, M&E collected confirmation samples at the prescribed intervals. Off-site laboratory data
48 revealed all but boring location S75 had total PCB concentrations above the action level. M&E
excavated and remediated the remaining three areas until total PCB concentrations were at or
below the TSCA action level of 10 mg/kg (ppm). The excavated soil was shipped off-site for

2 proper disposal. M&E excavated approximately 882 tons of PCB-contaminated waste soils
3 during the FS remediation.

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5 **RI Area 9:** Work in RI Area 9 began April 15, 1997 (see figure 15). Clean overburden to a
6 depth of six feet was removed and staged east of RI Area 9 to be used later as fill. Groundwater
7 was a concern throughout this excavation. Groundwater was pumped to the WWTP tanks
8 located at the north end of the Site. The material delineated from on-site investigations was
9 removed and confirmatory samples were taken. Over the course of the next three months
10 numerous excavations to remove subsurface tile drains and additional contamination were
11 performed. M&E continued removals until all TSCA materials from this area was removed,
12 resulting in 2,826.69 tons of PCB contaminated soil shipped to an off-site TSCA disposal
13 facility.

14
15 **PCB Catch Basin:** After review of all available data, M&E began excavation of the PCB catch
16 basin in July 1997 (see figure 7). The same approach was taken as above. Excavation took place
17 until confirmatory samples demonstrated all contamination had been removed. Approximately
18 882 tons of PCB material were shipped off site for disposal.

19
20 **Ninemile Creek Sediment Remediation:** The Ohio EPA approved the remediation plan for
21 Ninemile Creek on February 7, 1997, and permitted the disposal of material as solid waste, if
22 verified by waste characterization and analysis and results. The plan called for the Ninemile
23 Creek to be remediated to the appropriate risk-based limits, which would constitute
24 approximately 100 cubic yards of sediment (see figure 14). This activity took place in
25 December, 1997, following negotiations to secure access to the area between Conrail and ODAS.
26 Contaminated waters were handled through the on-site treatment facilities. Approximately 86
27 tons of sediments were removed and shipped off-site for disposal at an approved facility
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8.0 OHIO EPA'S SELECTED REMEDY

This chapter sets out the Ohio EPA's selected remedy for the Coit Road Site.

Alternative II - Institutional Controls (Deed Restrictions/Site Access)

Under Alternative II, the Ohio EPA's selected remedy, future land use and property deed restrictions will be implemented to reduce the potential for future exposure to the Site soil contaminants. Future land use restrictions will be imposed to prevent future residential development on the Coit Road property. Property deed restrictions will require that proper health and safety equipment be used and precautions be taken by site workers to limit potential exposure to soil contaminants during any future excavation or construction activities. The deed restriction will include a final Site map with graded contours and supporting analytical data, a statement that the Site will be restricted to industrial/commercial reuse, a requirement for prior notification of Ohio EPA in the event excavation below four feet is anticipated and protocols for handling and disposal of exhumed soils. No other remedial actions will be performed under Alternative II.

Under this alternative, continued operation and maintenance of the existing oil recovery system will occur until the clean-up standard of 1,500 ppm is achieved. Site-wide groundwater monitoring will be implemented to ensure that residual contamination above clean-up standards remain in place.

As mentioned above, numerous interim actions have previously been completed at the Site. Interim actions designed to stabilize the site included: removal of drums, underground storage tank removals, PCB transformer and capacitor removals, friable asbestos removal, residential sampling for PCBs, and perimeter fence repair and installation. Post-RI interim actions included: TSCA/PCB removals, Ninemile Creek Culvert actions, installation of the oil plume recovery system, sewer/drain system delineation, Pit 3 decontamination and closure, and demolition of all on-site structures. Post-FS interim actions were: TPH-, PAH- and heavy metals-contaminated soils removals, PCB soil and debris removal, RI Area 9 decontamination and closure, the PCB catch basin removal, and the Ninemile Creek sediment remediation.

The costs associated with Alternative II will be limited to the administrative costs associated with the writing and implementation of land use and property deed restrictions and are not expected to exceed \$10,000. In addition, there will \$180,000 in yearly costs incurred for site-wide monitoring, along with maintenance of the fence, security personnel, and the continued operation and maintenance of the oil plume recovery system. The total cost to implement Alternative II is not expected to exceed \$190,000.

8.1 Selection Criteria

In selecting a remedy for a contaminated site, Ohio EPA considers the following eight criteria as outlined under the National Contingency Plan (NCP) promulgated under CERCLA (40 CFR 300):

- 2 1. Overall protection of human health and the environment addresses whether or not a
4 remedy provides adequate protection and describes how risks are eliminated, reduced, or
controlled through treatment, engineering controls, and/or institutional controls;
- 6 2. Compliance with all State, Federal and Local laws and regulations addresses whether or
8 not a remedy will meet all of the applicable State, Federal, and Local environmental
statutes;
- 10 3. Long-Term effectiveness and permanence refers to the ability of a remedy to maintain
12 reliable protection of human health and the environment over time once pollution has
been abated and clean-up goals have been met;
- 14 4. Reduction of toxicity, mobility, or volume through treatment is the anticipated
16 performance of the treatment technologies to yield a permanent solution. This includes
the ability of the selected alternative to reduce the toxic characteristics of the chemicals of
18 concern or remove the quantities of those chemicals to an acceptable risk concentration or
regulatory limit and/or decrease the ability of the contaminants to migrate through the
environment;
- 20 5. Short-term effectiveness involves the period of time needed to achieve protection and any
22 adverse impacts on human health and the environment that may be posed during the
construction and implementation period until pollution has been abated and clean-up
24 goals are achieved;
- 26 6. Implementability is the technical and administrative feasibility of a remedy, including the
28 availability of goods and services need to implement the chosen solution;
- 30 7. Cost includes capital, operation and maintenance costs;
- 32 8. Community acceptance will be assessed in the Decision Document following review of
the public comments received on the Remedial Investigation/Feasibility Study (RI/FS)
report and the Preferred Plan.

34 8.2 Analysis of Selected Remedy

36 This section evaluates Alternative II, the Ohio EPA's selected remedy against the eight (8)
38 criteria outlined above in Section 8.2.

40 Alternative II appears to meet the requirements for the protection of human health and the
42 environment because it will provide protection to all receptors, through institutional controls,
such as maintenance of the Site fencing and the implementation of a deed restriction. This
44 alternative will insure that any excavation will not occur with prior notification to Ohio EPA and
will take place with adequate precautions to minimize exposure to on-site workers and to prevent
46 any releases to the environment. Future use of the Site will be limited to commercial/industrial.
Interim action activities have properly addressed site contaminants to a level deemed protective
48 for this use.

2 Compliance with applicable State law can be achieved with this remedy. The deed will be
4 amended to include the deed restriction and the revised deed will be filed with the county
recorder's office. This will provide notice of the restrictions to any future owners of the Site.

6 Alternative II appears to meet the requirement for short-term effectiveness through the use of
8 institutional controls, which will minimize Site access to unauthorized persons, and prevent
exposure to residual contamination without adequate notification and precautions.

10 Long-term effectiveness and permanence are also addressed by this remedy. The implementation
12 of the oil plume recovery system was designed to remove the source and remediate associated
contamination in soil and groundwater, along with mitigating the release to Ninemile Creek. In
14 addition, naturally-occurring bacteria will degrade localized areas of residual subsurface
contaminants until the concentrations are below the clean-up standard. Ohio EPA will insure the
16 permanence of the Site clean-up through monitoring and operation and maintenance of the oil
plume recovery system which is expected to last for approximately five years.

18 A reduction of toxicity, mobility and volume will occur under this remedy. Throughout the
20 project, this has been the goal of the interim action removals that have been conducted at the
Site. In addition to addressing surficial contamination through post-FS removals, the grading of
22 a large portion of the Site with compacted, clean fill has placed an additional barrier between
residual subsurface contamination and any person, either working or visiting the Site. Through
24 natural attenuation, the remaining contaminants will degrade and be reduced in volume.
Through institutional controls, the potential for exposure to subsurface contamination has been
reduced.

26 This remedy also appears to meet the criteria for implementability. The use of institutional
28 controls at remedial sites has been in use for a number of years. Conditions of the deed
restriction will require prior notification of Ohio EPA in the event development activities that
30 include excavation are planned for the contaminated area.

32 As previously stated, the cost estimate for Alternative 2 is approximately \$190,000.

34 Community acceptance of this selected remedy appears to be positive. No letters were received
36 during the public comment period and only a few concerns were raised during the public hearing.
Questions from the public focused on clarifying the results of the Remedial Investigation and
38 understanding the Proposed Plan. A summary of the issues and questions raised during the
public hearing can be found in the Responsiveness Summary (see Appendix A). A complete
40 transcript of the hearing may be found in the Coit Road file at the Northeast District Office and is
available for review.

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APPENDIX A - RESPONSIVENESS SUMMARY

The following concerns were raised by citizens during the public hearing regarding the Coit Road site which took place on February 26, 1998. They have been paraphrased for clarity. Anyone desiring to review the transcript from the hearing is invited to contact the Northeast District Office to schedule a file review.

Q: What is the risk to the community posed by the residual contamination that remains on the site?

A: All surface soil contamination was removed to meet the clean-up levels specified by the human health risk assessment. The surface soils were remediated to ensure that there would be no adverse health effects from exposure to noncarcinogens, chemicals that do not cause cancer but can cause other adverse health effects such as liver or kidney damage at elevated levels. In addition, cancer causing contaminants were remediated to ensure that the excess lifetime cancer risk from exposure to surface soils would not exceed one excess cancer in 100,000 people. This risk level is considered to be very protective of human health. Contaminants that remain in the subsurface soils are at depth, will not generally be contacted by people, and are in the types of soils that minimize their movement. These subsurface contaminants do not pose a threat to on-site personnel, the public drinking water supply, nor to Ninemile Creek. In the event that future development would potentially disturb the subsurface soils in these areas, the deed restriction outlines the specific procedures required of a developer/future site owner to insure proper handling and disposal of contaminated soil. The only off-site contaminants were documented in Ninemile Creek immediately downstream from the site and were addressed through a removal action completed in December 1997.

Q: With all of the construction activities that have been conducted and will occur in the future, should the playground area be routinely tested for contamination?

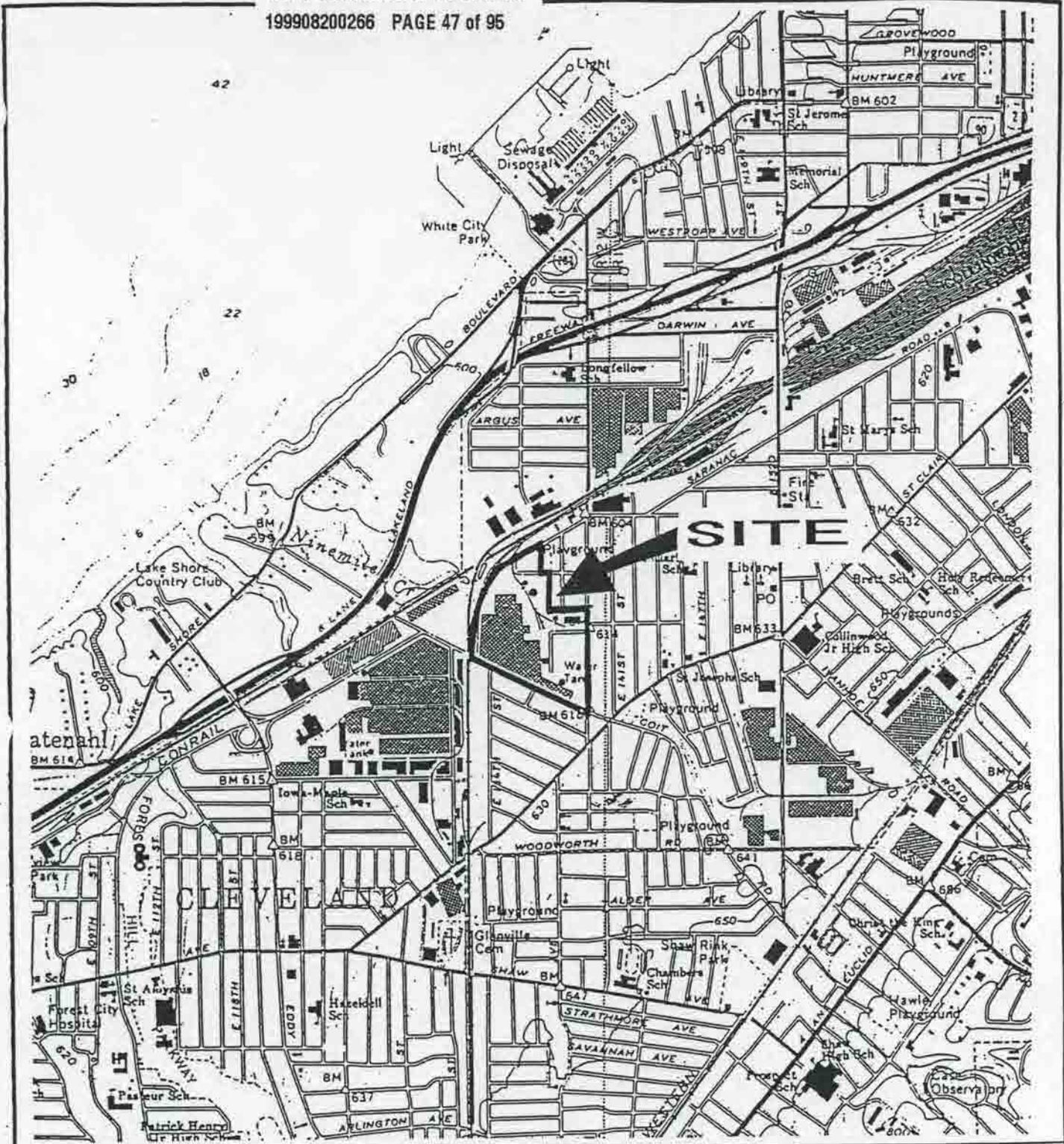
A: In response to concerns that PCB-contaminated oil from a nearby transformer had traveled off-site, Ohio EPA and a State contractor took a number of samples from the playground in 1991. There was no contamination from Coit Road found in any of the samples. Air monitoring during demolition documented that no contaminants traveled from the site to the playground. Future developers will be subject to Ohio EPA permitting procedures that will require monitoring and other assurances that releases from the site are minimized and any wastes generated during construction are handled in accordance with all applicable State laws.

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Q: The method used to demolish buildings at the site created strong vibrations that caused damage to nearby residences.

A: The Ohio EPA provided oversight and approval through an Administrative Order for the environmental investigation and clean-up. The demolition activities were outside the scope of our Order and did not require Ohio EPA approval. As mentioned at the public hearing, all concerns related to the demolition activities will be addressed by the Department of Administrative Services. Further inquiries should be directed to the attention of Mr. George Kaitsa, Deputy Director, Ohio Department of Administrative Services.

APPENDIX B - List Of Figures



OHIO

QUADRANGLE LOCATION

SOURCE: EAST CLEVELAND, OHIO
7.5 MIN. QUADRANGLE, 1979



SCALE IN FEET
0 1000 2000

M&E
Metcalf & Eddy

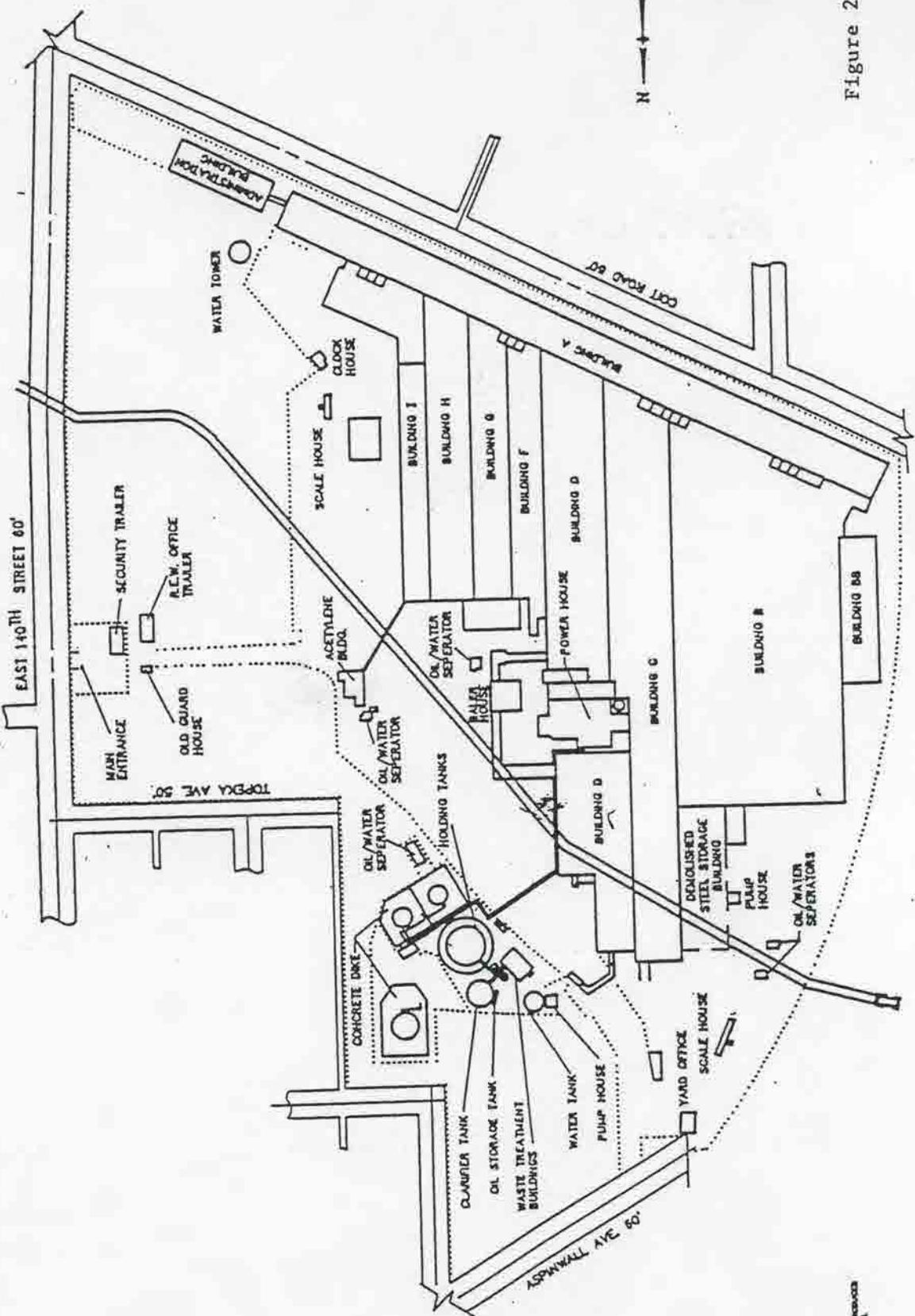
COIT ROAD
LOCATION MAP
CLEVELAND, OHIO

Project Number:
017148

Figure 1

PROPOSED FOR
 ACCELERATED PROJECT APPROACH
 6800 COT ROAD, CLEVELAND, OH 44130-1616
 CUYAHOGA PARCEL # 103091-002

Figure 2



NOTE:
 THIS PLAN IS NOT TO BE USED FOR CONSTRUCTION
 WITHOUT THE APPROVAL OF THE LOCAL HEALTH DEPARTMENT

OVERALL SITE LAYOUT

DATE	BY

R.E. WARNER & ASSOCIATES
 Engineers
 2001 CROOKDALE ROAD
 CLEVELAND, OHIO

NO.	DATE	DESCRIPTION
1	10/1/99	PRELIMINARY LAYOUT
2	10/15/99	REVISED LAYOUT
3	11/1/99	FINAL LAYOUT



DRUM LOCATION LEGEND			
LOCATION NO.	LOCATION DETAILS	DRUM NUMBERS	LOCATION DETAILS
1.	A-3-17	28-29	OUTSIDE
2.	A-3-17	30-31	OUTSIDE
3.	A-1-46	1-8,281	BASEMENT
4.	DOCK	27	PLATFORM
5.	STAGING	9-28	PLATFORM
6.	H-1-7	183-190	BALENS, 2ND FLR.
7.	0-1-3	148-63	BALENS, 1ST FLR.
8.	0-3-12	36,38	OUTSIDE
9.	H-3-13	40	OUTSIDE
10.	BUDG. 1	192-203	BALENS, 2ND FLR.
11.	0-2-19	41	FIELD
12.	0-1-15	42-45	C-17
13.	0-1-20	181	FENCE LINE
14.	F-18	85-72	WHPP, 2ND FLR.
15.	D-17	64	WHPP, 1ST FLR.
16.	0-18	73-83	OUTSIDE
17.	C-16	84,85	SHED
18.	A-4-8	37	FENCE LINE
19.	BUDG. 80	89-91	ACETAL. BLDG.
20.	B-24	84-88	OUTSIDE

NOTE: A-2-17 MEANS BUILDING A, 2ND FLOOR, COLUMN ROW 47
 0-17 MEANS BUILDING D, COLUMN ROW 17

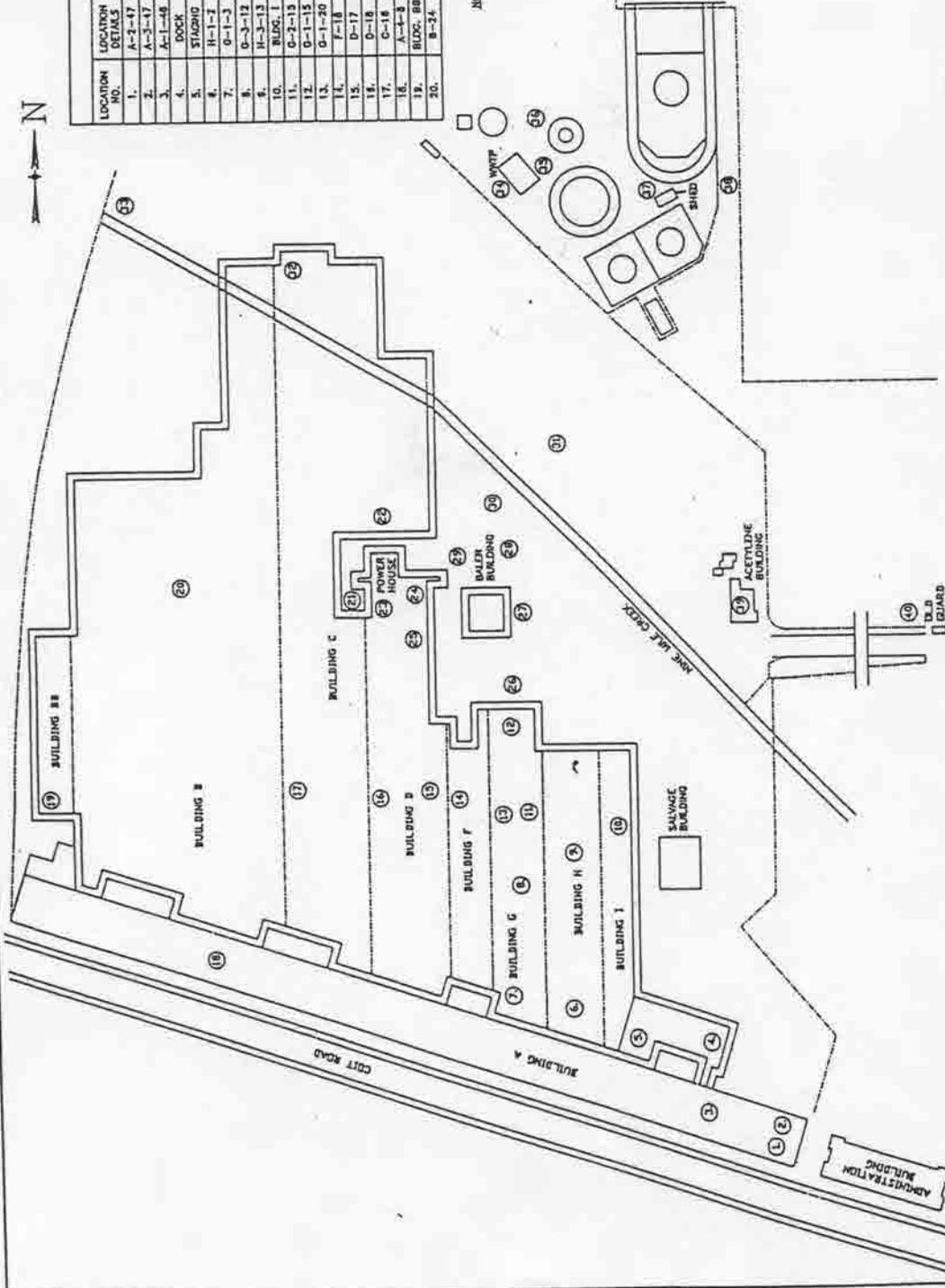


Figure 5

PREPARED FOR COIT ROAD CLEAN-UP CONC. PROJECT NO. 301-89-248 DRAWING NUMBER 119090-4	
COIT ROAD FACILITY DRUM LOCATIONS	
DR. BY _____ DATE BY _____ DATE _____ SCALE _____	R.E. VARNER & ASSOCIATES Engineers 307 W. 119TH EASE CROCKER ROAD VENTNAGE OHIO
NO. _____ DATE _____ BY _____ CHECKED BY _____	SURFACE MATERIALS IT

ASBESTOS ABATEMENT OBJECTIVES BY WORK AREA

- ① REMOVAL OF DAMAGED PIPE AND GROUND CLEAN-UP (BUILDING 8)
- ② TEMPORARY CLOSURE OF THE FAN UNIT LEADING TO THE BASEMENT (BUILDING 9)
- ③ REMOVAL OF DAMAGED PIPIC INSULATION AND GROUND CLEAN-UP (BUILDING 9)
- ④ REMOVAL OF PIPE INSULATION, REMOVAL OF THERMAL INSULATION FOR THE VERTICAL TANK AND GROUND CLEAN-UP ON THE ROOF (PODORHOUS ROOF)
- ⑤ GROUND CLEAN-UP OF ASBESTOS INSULATION FROM THREE VERTICAL TANKS AND CORRIDOR BEHIND THE POWDERHOUSE
- ⑥ TEMPORARY CLOSURE OF OPENINGS TO THE POWDERHOUSE (POWDERHOUSE)
- ⑦ REMOVAL AND COVERING OF DAMAGED PIPE INSULATION PASSAGEWAY NEAR POWDERHOUSE
- ⑧ REMOVAL OF DAMAGED PIPE INSULATION AND GROUND CLEAN-UP FROM THE SIDE BY SIDE HORIZONTAL PIPE RAYS (PIPES LEADING FROM THE POWDERHOUSE TO BUILDING 10)
- ⑨ REMOVAL OF IMPROPERLY CONTAINERIZED BAGS OF ASBESTOS PIPE INSULATION (CLOCK HOUSE)
- ⑩ GROUND CLEAN-UP OF ASBESTOS INSULATION OPEN AREA NORTHEAST OF POWDERHOUSE
- ⑪ REMOVAL OF DAMAGED PIPE INSULATION AND GROUND CLEAN-UP OF PIPE TRAILER LEADING FROM BUILDING 10 TO WASTEWATER TREATMENT FACILITY
- ⑫ REMOVAL OF DAMAGED PIPE INSULATION AND GROUND CLEAN-UP (WASTEWATER TREATMENT FACILITY)

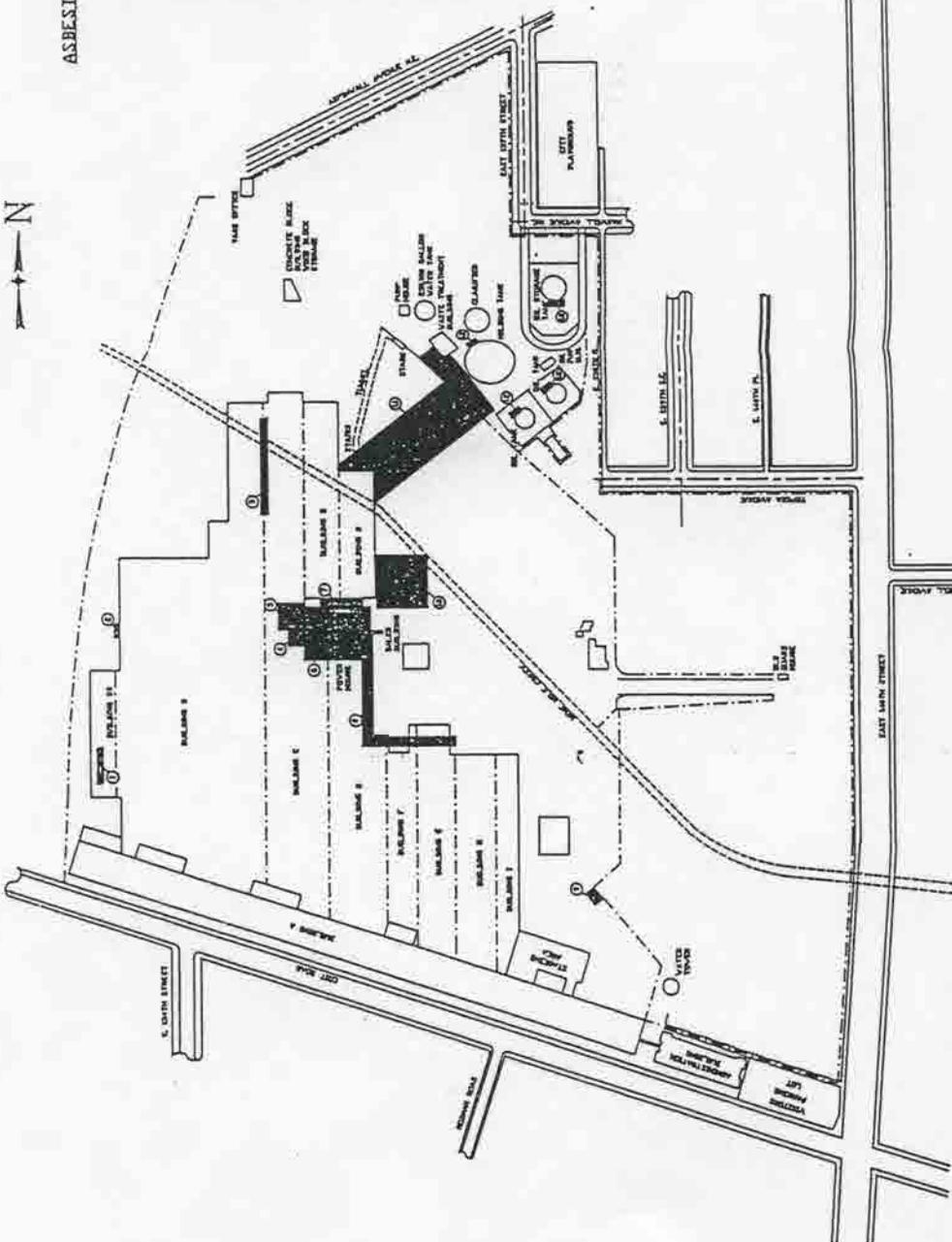


Figure 6

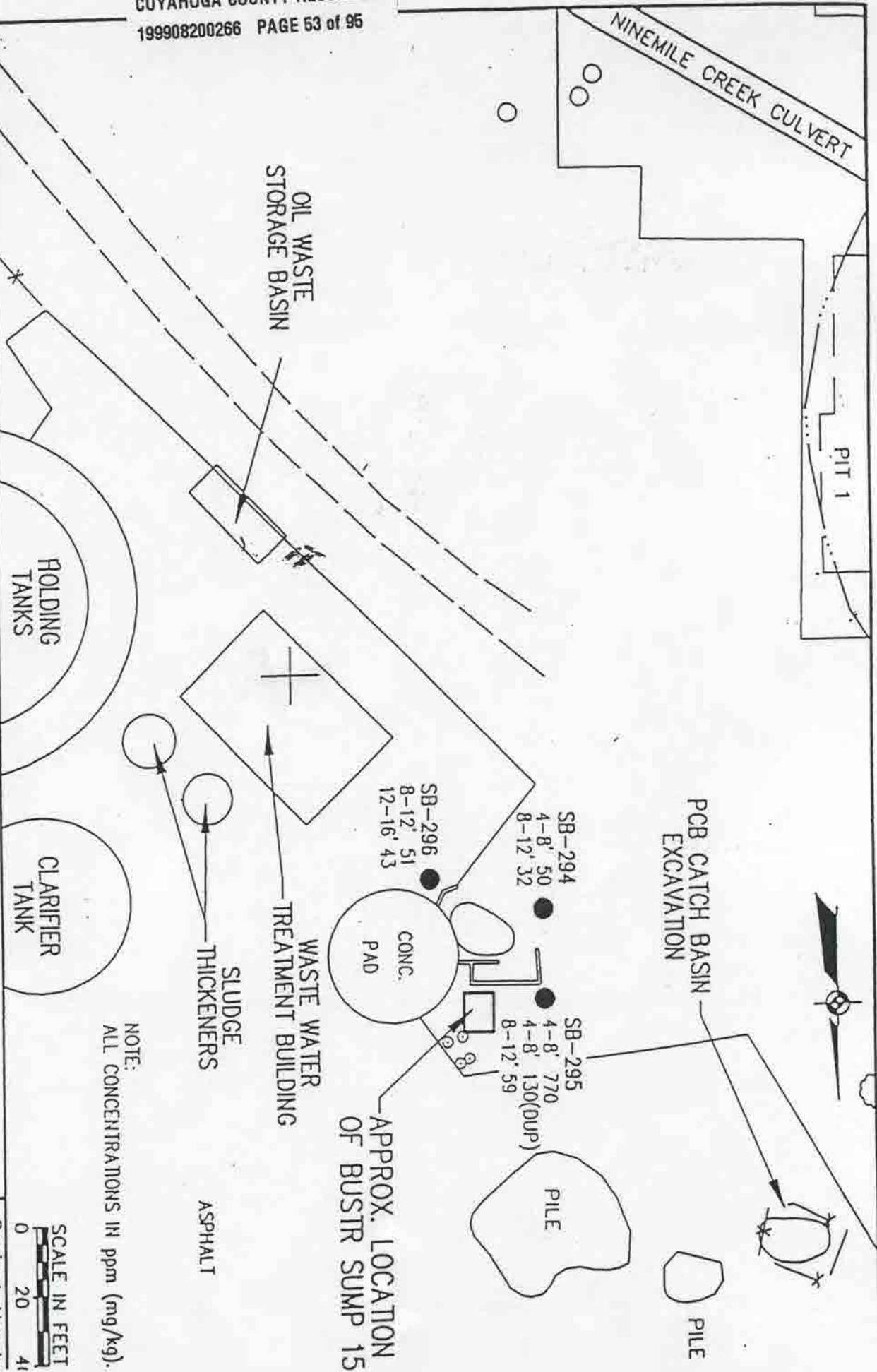
PREPARED FOR COIT ROAD CLEAN-UP DRAC PROJECT NO. 98-09-044 DRAWING NUMBER 119090-1	
COIT ROAD SITE LAYOUT ASBESTOS REMEDIATED AREAS	
SHEET NO. 001 SHEET NO. 002 SHEET NO. 003 SHEET NO. 004 SHEET NO. 005	SHEET NO. 006 SHEET NO. 007 SHEET NO. 008 SHEET NO. 009 SHEET NO. 010
R.E. WARNER & ASSOCIATES Engineers 8345 CROCKER ROAD WESTLAKE, OHIO TEL: 216/491-1319	
TOTAL NO. OF SHEETS: 10 SHEET NO.: 001 DATE:	SHEET NO.: 010 DATE:

M&E
 Metcalf & Eddy

ANALYTICAL RESULTS FOR PETROLEUM HYDROCARBONS

COIT ROAD SITE

CLEVELAND, OHIO



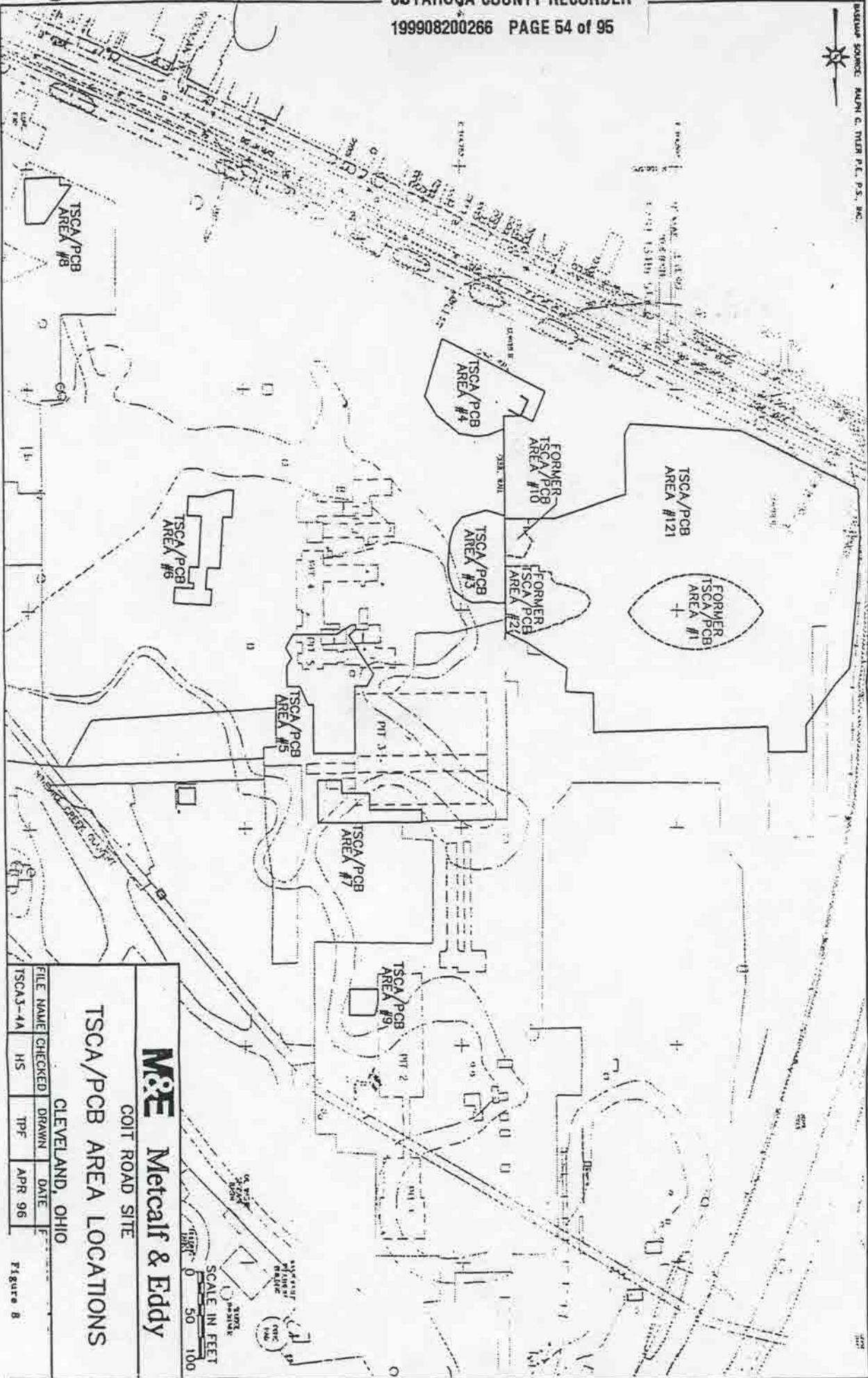
NOTE:
 ALL CONCENTRATIONS IN ppm (mg/kg).

SCALE IN FEET
 0 20 40

Project Number
 017148
 File Name | Figu

Figure 7

BARTLETT SOURCE MAPIN G. TIERN P.L. P.S., INC.

M&E
 Metcalf & Eddy

COIT ROAD SITE

TSCA/PCB AREA LOCATIONS

CLEVELAND, OHIO

FILE NAME	CHECKED	DRAWN	DATE
TSCA3-1A	HS	TPF	APR 96

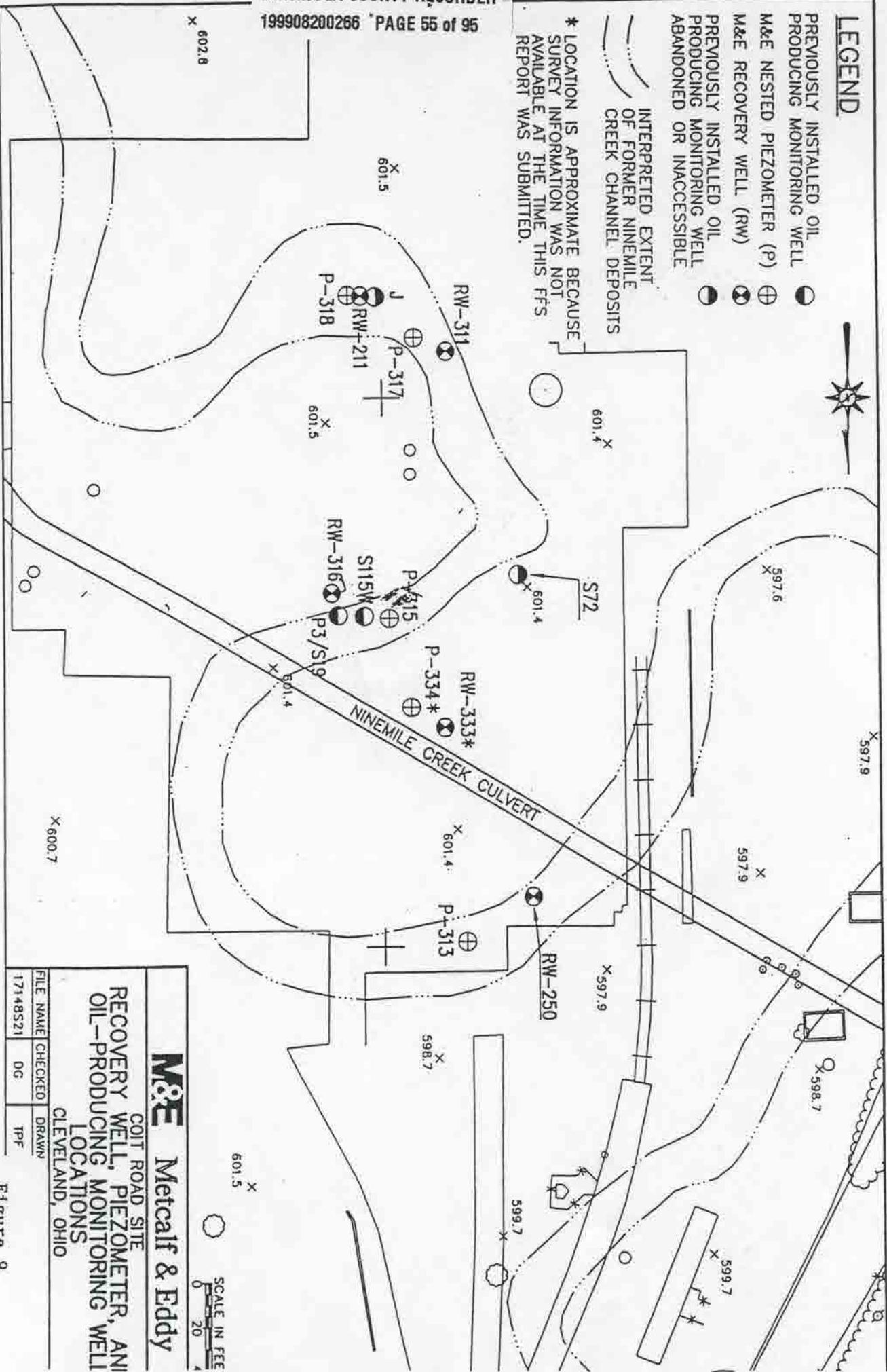
Figure 8

LEGEND

- PREVIOUSLY INSTALLED OIL PRODUCING MONITORING WELL
- ⊕ M&E NESTED PIEZOMETER (P)
- ⊗ M&E RECOVERY WELL (RW)
- PREVIOUSLY INSTALLED OIL PRODUCING MONITORING WELL ABANDONED OR INACCESSIBLE

INTERPRETED EXTENT OF FORMER NINEMILE CREEK CHANNEL DEPOSITS

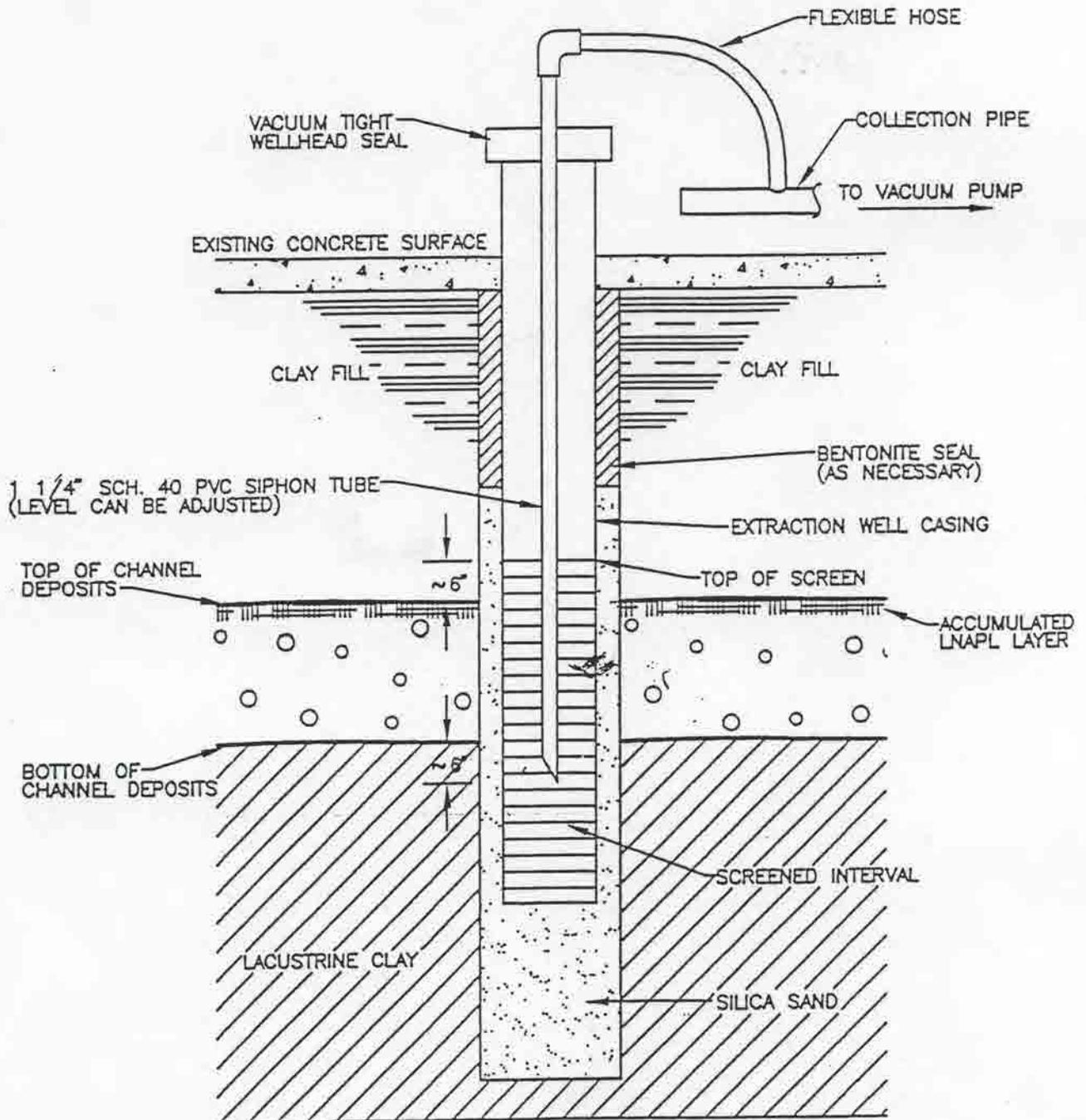
* LOCATION IS APPROXIMATE BECAUSE SURVEY INFORMATION WAS NOT AVAILABLE AT THE TIME THIS FFS REPORT WAS SUBMITTED.



M&E Metcalf & Eddy
 COIT ROAD SITE
 RECOVERY WELL, PIEZOMETER, AND
 OIL-PRODUCING MONITORING WELL
 LOCATIONS
 CLEVELAND, OHIO

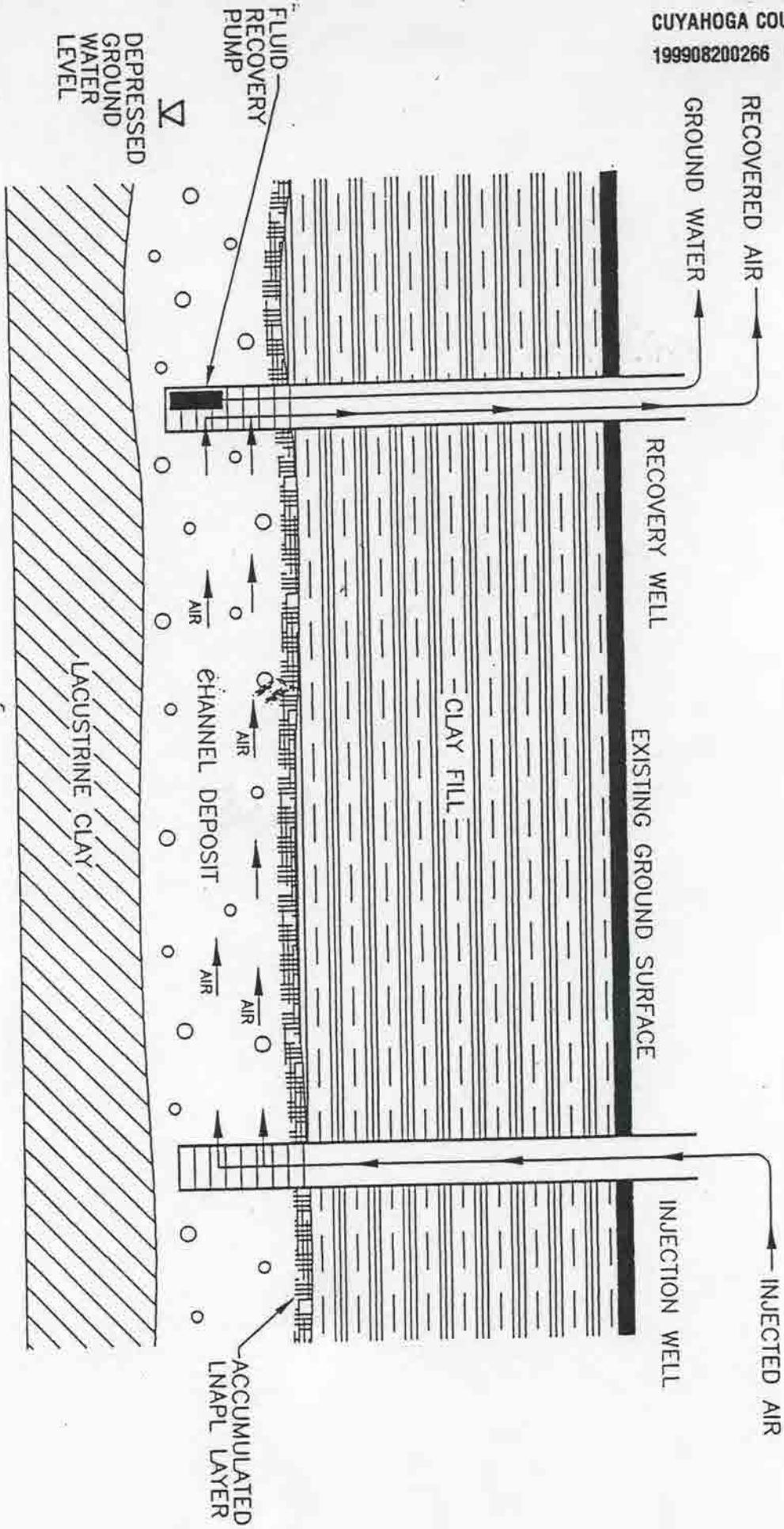
FILE NAME	CHECKED	DRAWN
17148521	DC	TPF

Figure 9



COIT ROAD SITE
BIOSLURPING EXTRACTION
WELL ILLUSTRATION
CLEVELAND, OHIO

Figure 10



M&E
Metcalf & Eddy

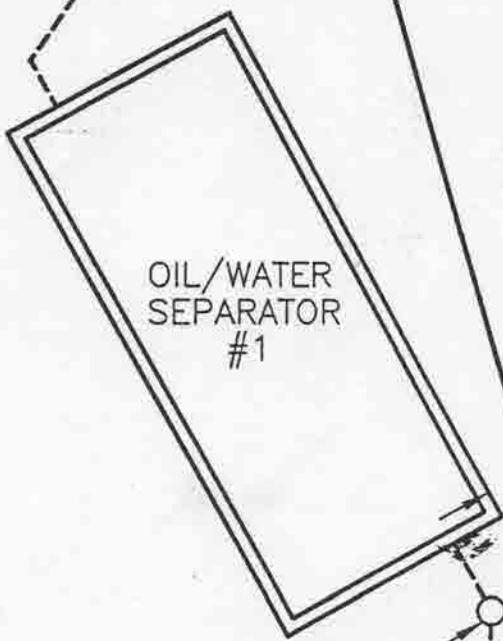
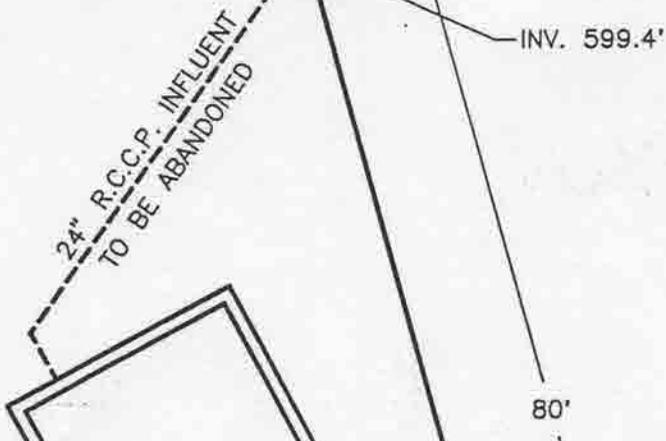
BIOVENTING SYSTEM ILLUSTRATION

COIT ROAD SITE

CLEVELAND, OHIO

Figure 11

EXISTING M.H. #60
INV. 599.4'



OIL/WATER
SEPARATOR
#1

INV. 597.87'

PROPOSED
NEW
M.H. #1A

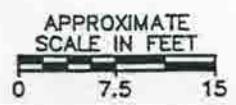
EXISTING M.H. #117
INV. 595.4'



INV.
597.87'

INV. 597.3'

EXISTING M.H. #58
INV. 597.3'

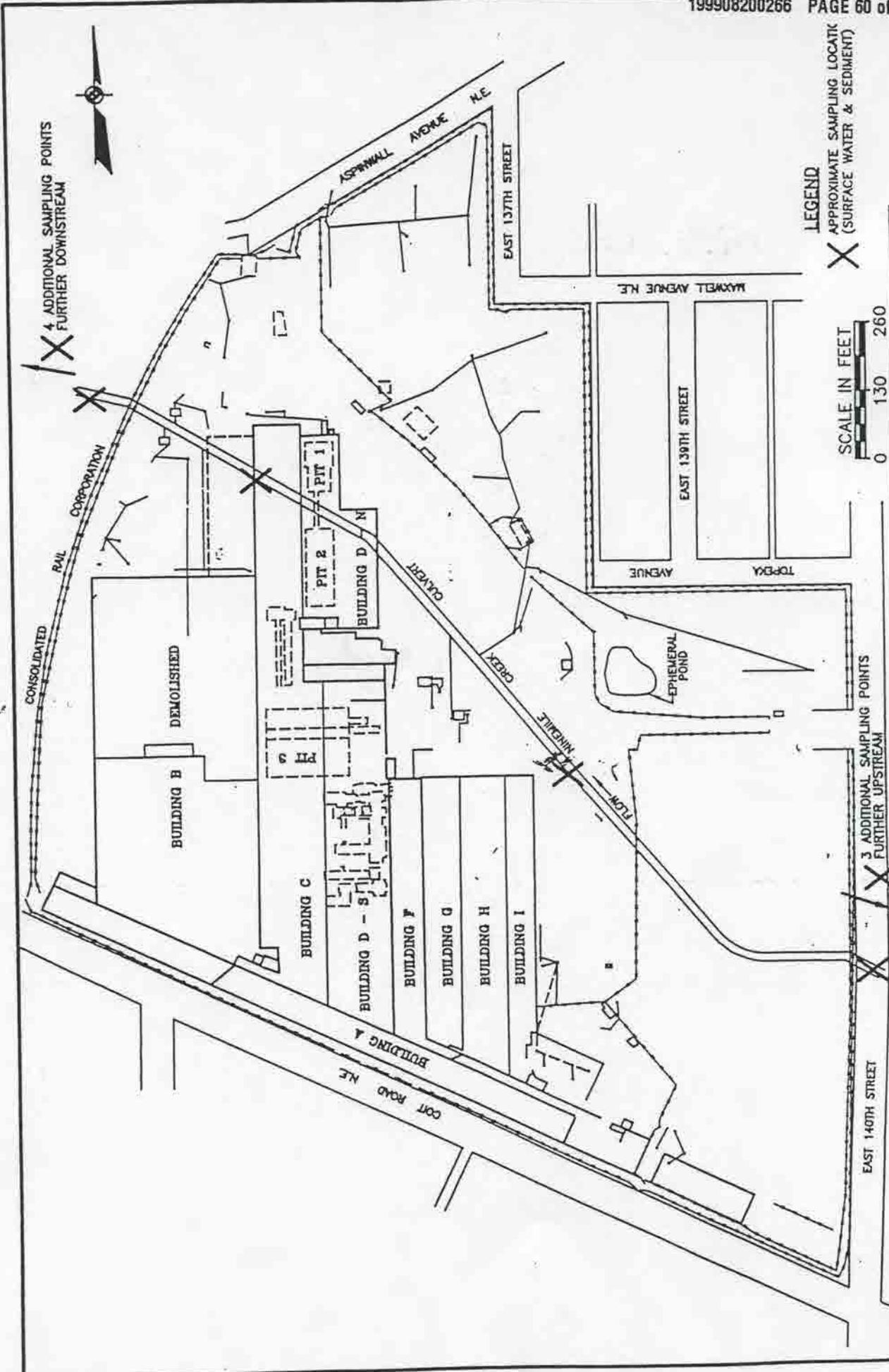


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COIT ROAD SITE
O/W SEPARATOR #1 DIVERSION PIPE
PLAN VIEW
CLEVELAND, OHIO

Figure 13



COIT ROAD PROJECT

PROPOSED SURFACE WATER & SEDIMENT SAMPLE LOCATIONS

CLEVELAND, OHIO



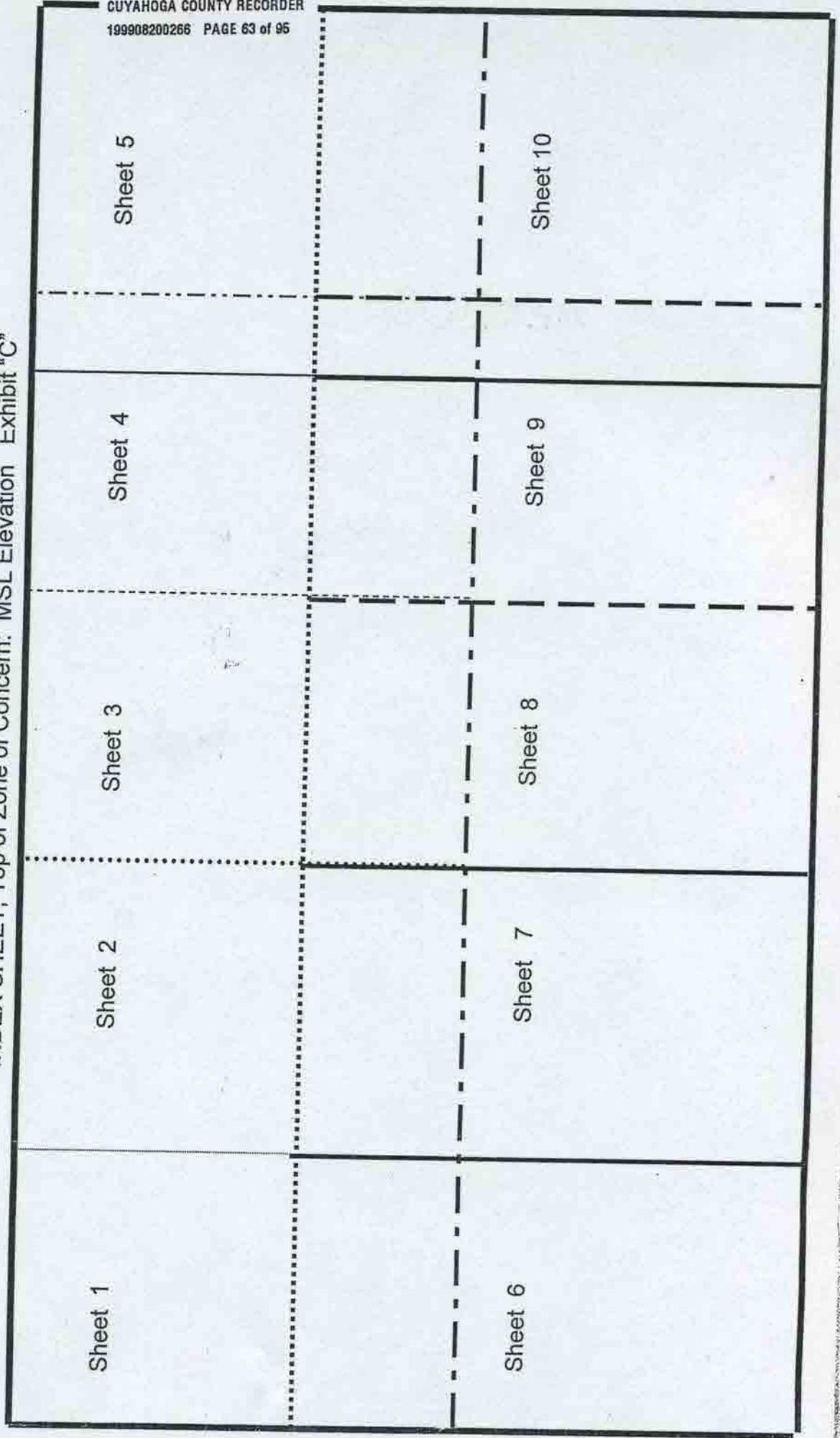
Figure 14

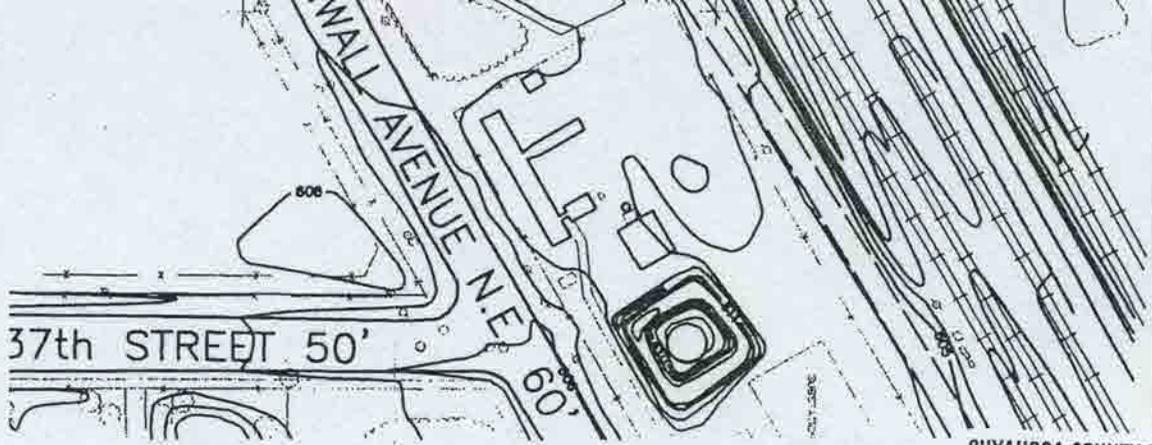
**TABLE 1
FEASIBILITY STUDY TREATMENT AREAS**

Location ID	Contaminants	Removal Interval (feet bgs)	Removal Area (feet ²)	Comments
S35	Antimony, Lead, BAP	4'	256	Stepped out E, concrete wall, no sample.
S106	Beryllium, BAP	4'	256	
S31	Beryllium	4'	256	
SB323	BAA, BAP, BBF, ICDP	4'	256	
SB332	BAP	4'	256	
S74	BAP	4'	256	
S75W	BAP	4'	256	
S76	BAP	4'	256	
P3	BAP	Not accessible	N/A	Adjacent to RW-316. Area being remediated by bioslurping system.
S115	BAP, C-3-TPH(10-16)	Not accessible	N/A	Adjacent to RW-316. Area being remediated by bioslurping system.
S132	BAA, BAP, DAHA	4'	288	Stepped out S (1X) for BAP only.
S133	BAP	4'	288	Stepped out W (1X) for BAP only.
SB206	BAP, BBF, DAHA, ICDP	3'	400	Stepped out E (3X), S (2X) for BAP only.
S43	BAA, BAP	12'	320	Stepped out N, concrete walk, no sample.
S83	BAA, BAP	4'	256	
SB279	BAP	4'	256	
SB12	BAP, BBF	4'	440	Stepped out W (1X) for BBF, BAP. Stepped out N (3X), S (1X), W (1X) for BAP only.
SB4	BAA, BAP, BBF	4'	432	Stepped out S, E, W (1X) for BAP, BAA, BBF. Stepped out E (3X), W (2X) for BAP only.
SB3	BAP	4'	256	Stepped out W, concrete wall, no sample.
PCB Trench #14	PCBs	2.5'	256	See Summary Report for PCB Cleanup Actions.
PCB Trench #34	PCBs	0-2.5'	8	See Summary Report for PCB Cleanup Actions.
S47	PCBs	14-18'	8	See Summary Report for PCB Cleanup Actions.
S75	PCBs	2-11'	8	See Summary Report for PCB Cleanup Actions.
S85/S86	C1-TPH, BAA (S85 only)	N/A	N/A	Area being remediated by bioslurping system at RW-343.
S61	C2-TPH, C4-TPH, C3-TPH	15'	256	
MW-201	C1-TPH, C3-TPH	N/A	N/A	Area being remediated by bioslurping system at RW-201
S52	C1-TPH, C3-TPH, BAP	N/A	N/A	Area being remediated by bioslurping system at RW-346
217	C1-TPH, C3-TPH	N/A	N/A	Area being remediated by bioslurping system at RW-217.
S41	C2-TPH, C4-TPH	6'	256	
SB203	C4-TPH	15'	256	
S64	C2-TPH	9.5'	226	Excavated along with soils containing PCBs in Catch Basin area.

BAP = Benzo(a)pyrene
 BAA = Benzo(a)anthracene
 BBF = Benzo(b)fluoranthene
 DAHA = Dibenzo(a,h)anthracene
 ICDP = Indeno (1,2,3-cd)pyrene

INDEX SHEET, Top of Zone of Concern: MSL Elevation Exhibit "C"





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B

SEA LEVEL (MSL) ELEVATION IN FEET (1 FOOT
 INTRUSIVE ACTIVITIES BELOW THIS ELEVATION
 THE OHIO ENVIRONMENTAL PROTECTION AGENCY.

BASED ON ACCURACY OF ORIGINAL MAPPING AND
 CARE OF INTERPOLATING THE CONTOURS.

COMPILED FROM PHOTOGRAPHY DATED DECEMBER 1997.

A

DEPARTMENT OF ADMINISTRATIVE SERVICES
 WATER TOWER PLACE

MAP OF ZONE OF CONCERN
 MSL ELEVATION

CLEVELAND, OHIO

JOB 021736

FILE NO. 98-EXOLD

SHEET 3

Sheet 10 Exhibit "C"

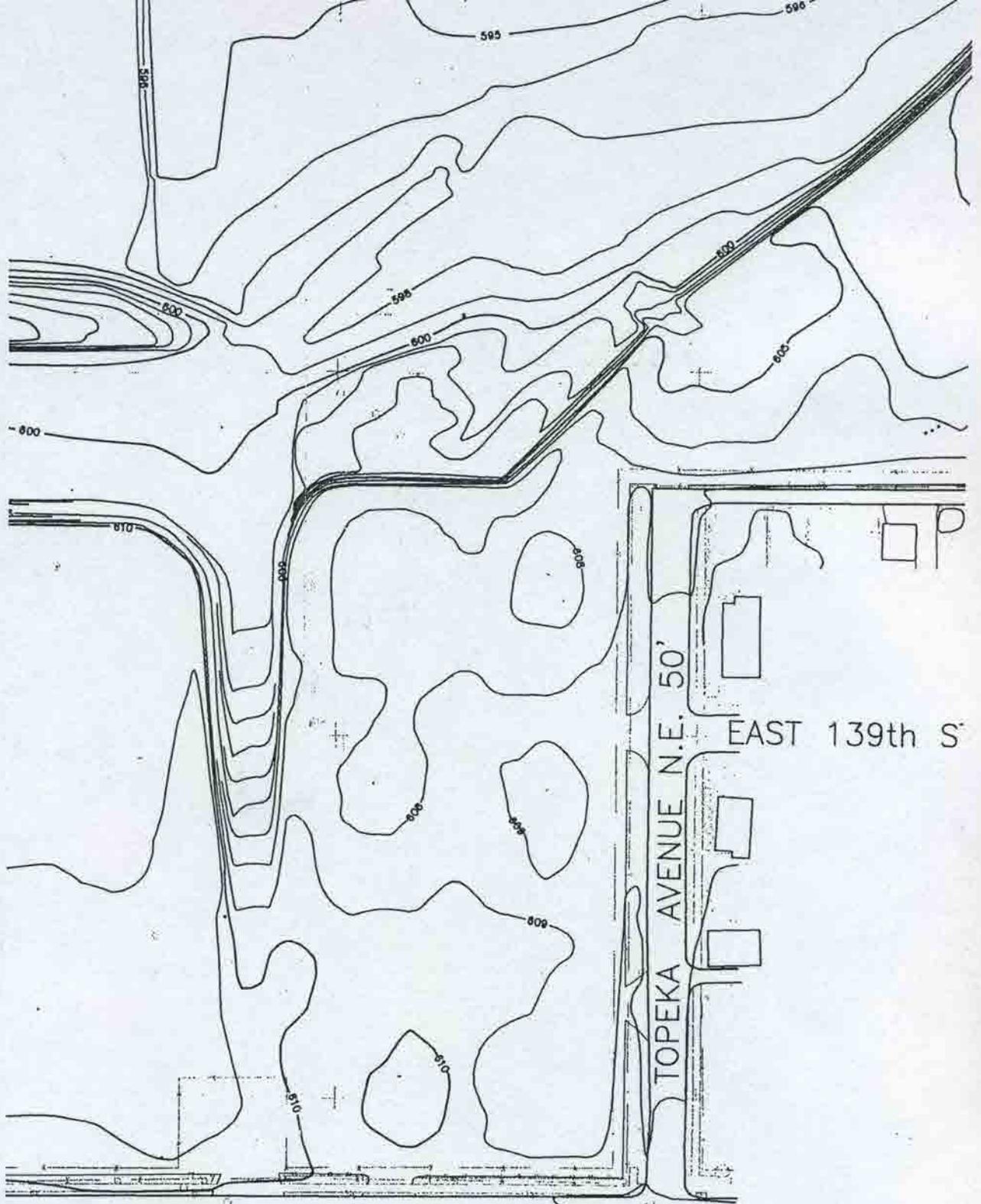


CONTOURS REPRESENT MEAN SEA LEVEL (1 INTERVALS). EXCAVATION OR INTRUSIVE ACT REQUIRES NOTIFICATION OF THE OHIO ENVII

NOTE:
CONTOURS ARE APPROXIMATE BASED ON A THE MATHEMATICAL PROCEEDURE OF INTERI

MAPPING COMPILED FROM PHOTO

<p>SCALE: 1" = 80'</p> <p>SCALE IN FEET</p> <p>UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION</p> <p>PLOT DATE: 09/04/98</p>	<p>OHIO DEPARTMENT OF ADI WATER TOWE</p> <p>TOP OF ZONE MSL ELE'</p> <p>CLEVELAND</p> <p>Sheet 9 Exhibit "C"</p>
---	--



140th STREET 60'

TOPEKA AVENUE N.E. 50'

EAST 139th S

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M&E Metcalf & Eddy

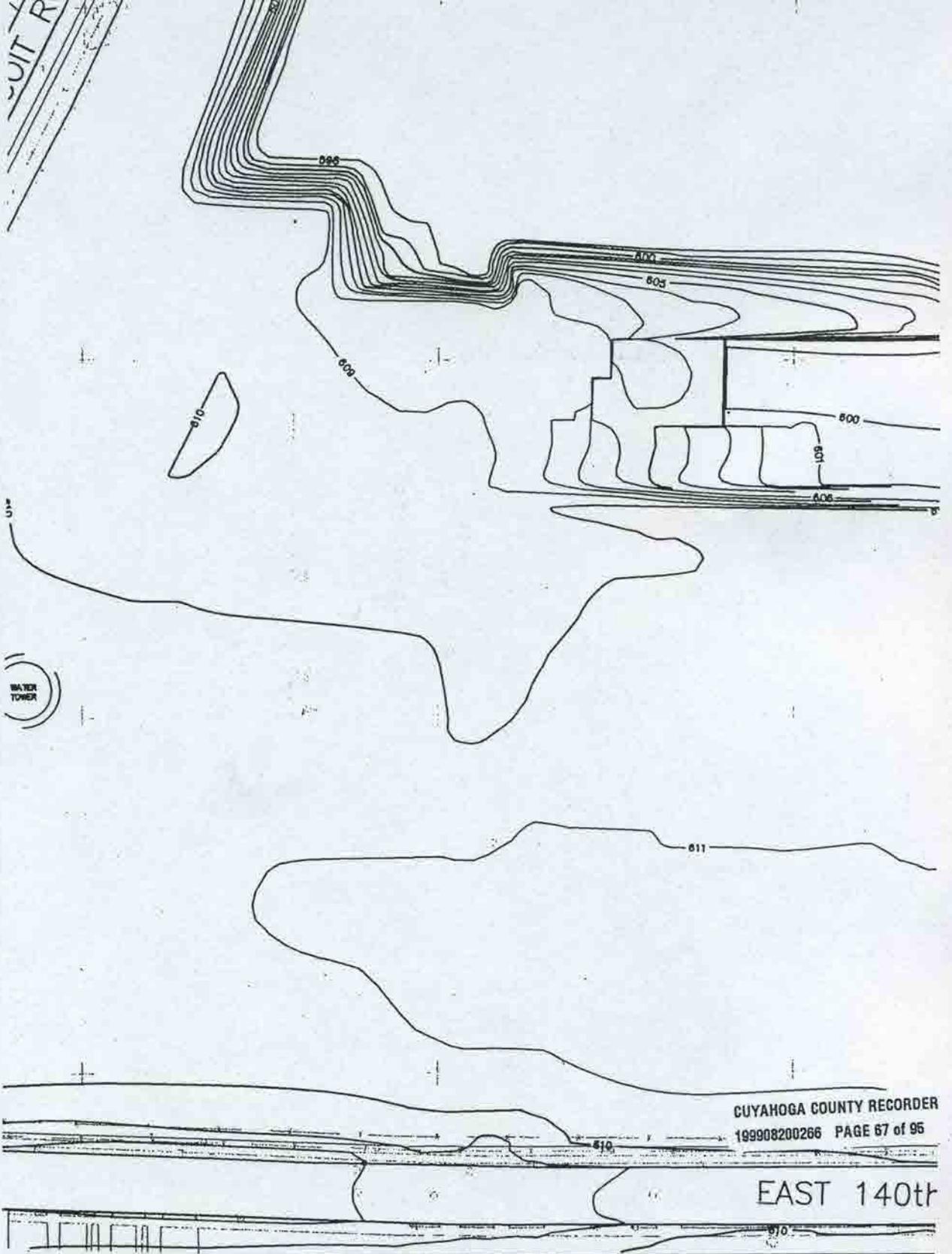
Michael A. Nuffer
REG. PROF. ENGR.

9/15/98
Sheet 8 Exhibit "C" DATE

SCALE

UNLESS

PLOT



CUYAHOGA COUNTY RECORDER
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EAST 140th

DESCRIPTION <i>Sheet 7 Exhibit C</i>	DRAWN BY FGS	
	DEPT. CHECK TS/MW	
	PROJ. CHECK ST/GM	
	2	



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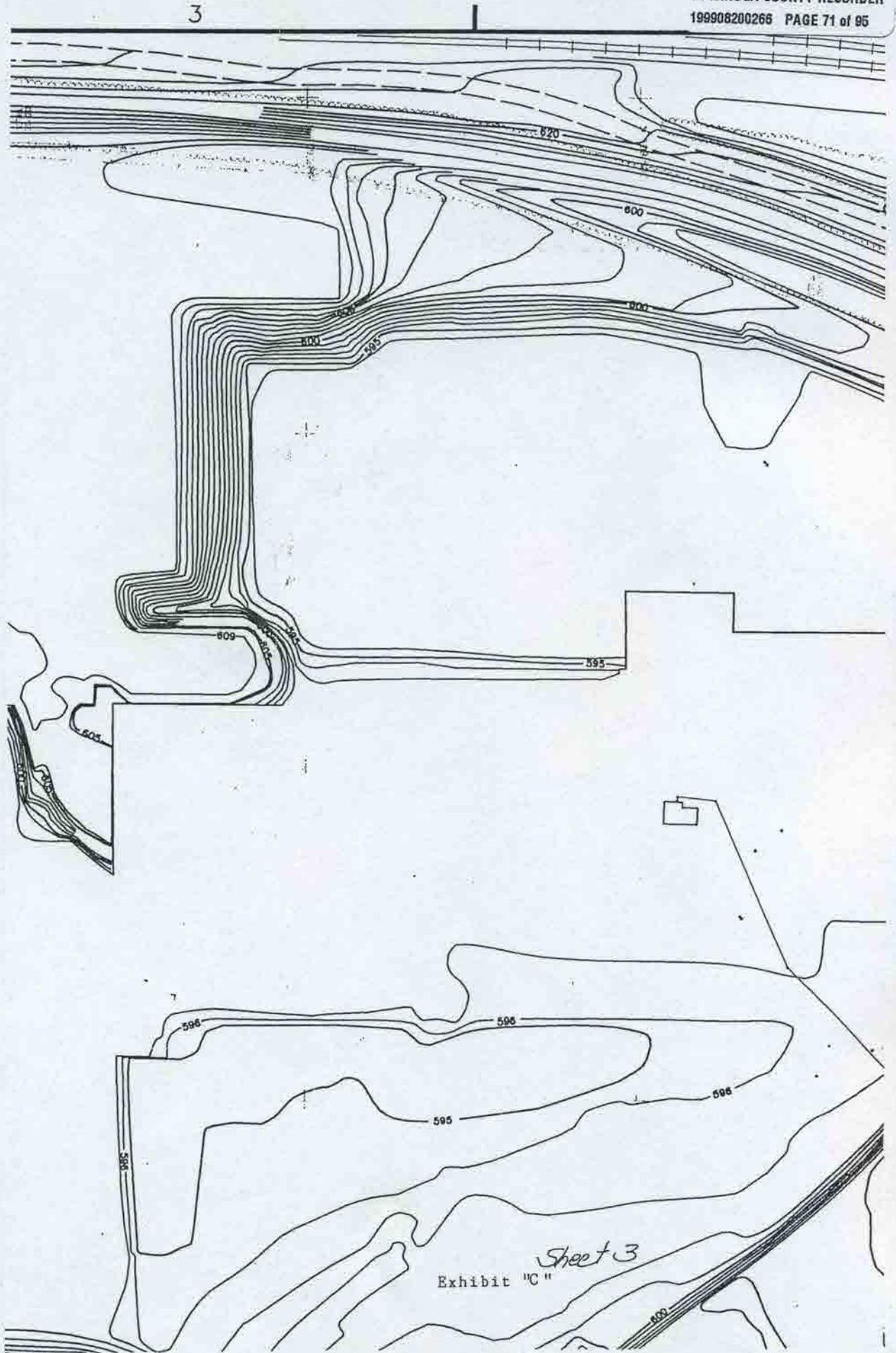
Sheet 5
xhibit "C,"

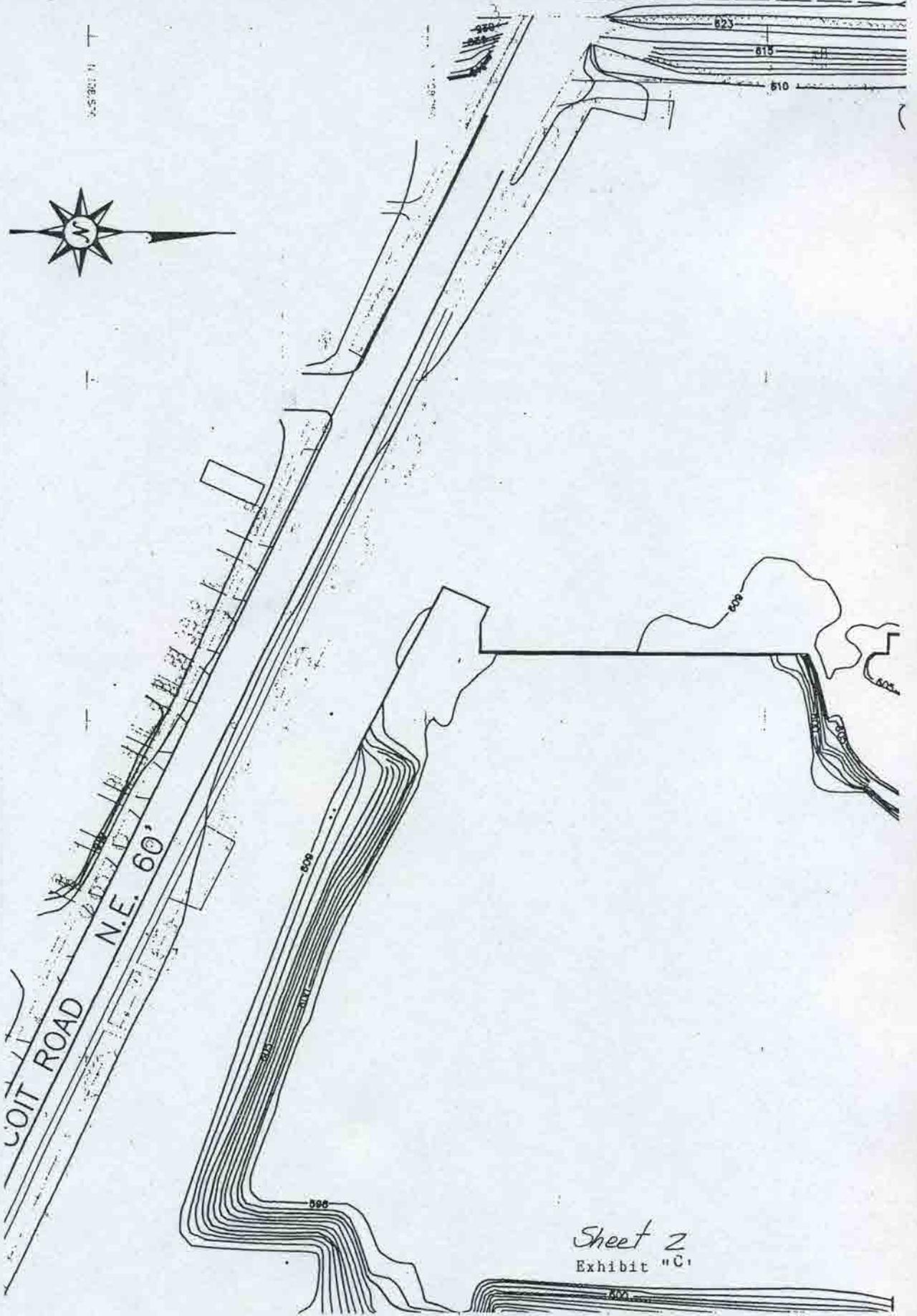
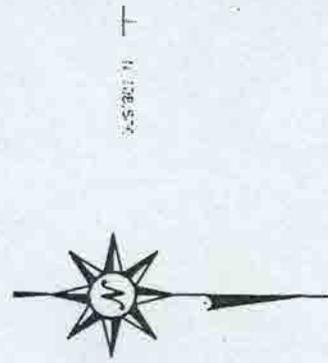
37th STREET 50'



Sheet 4 Exhibit "G"

EAST 137th STREET





Sheet 2
Exhibit "C"

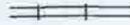
1

D



LEGEND

- UTILITY POLE
- MANHOLE
- CATCHBASIN
- RAILROAD
- FENCE LINE
- GUARD RAIL
- TREE
- TREE LINE



C

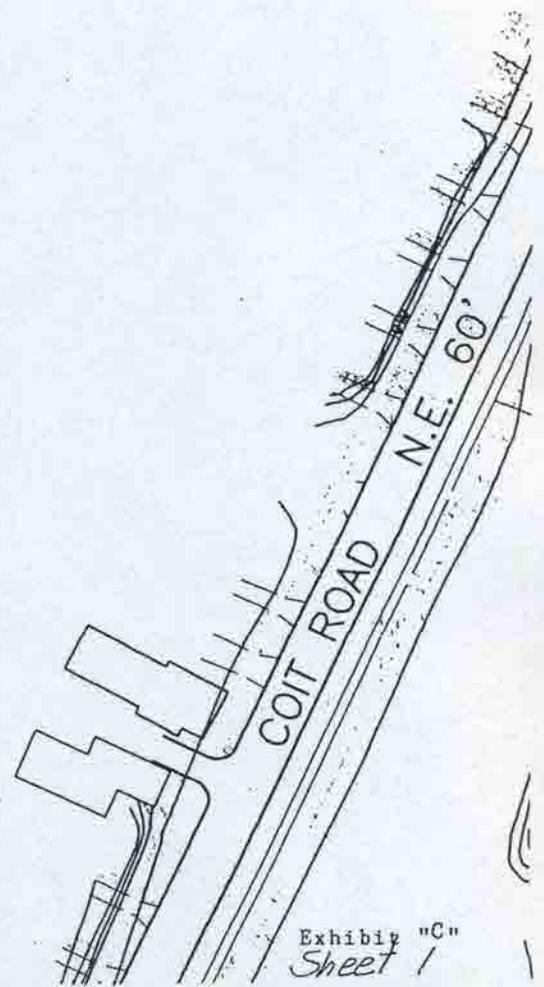
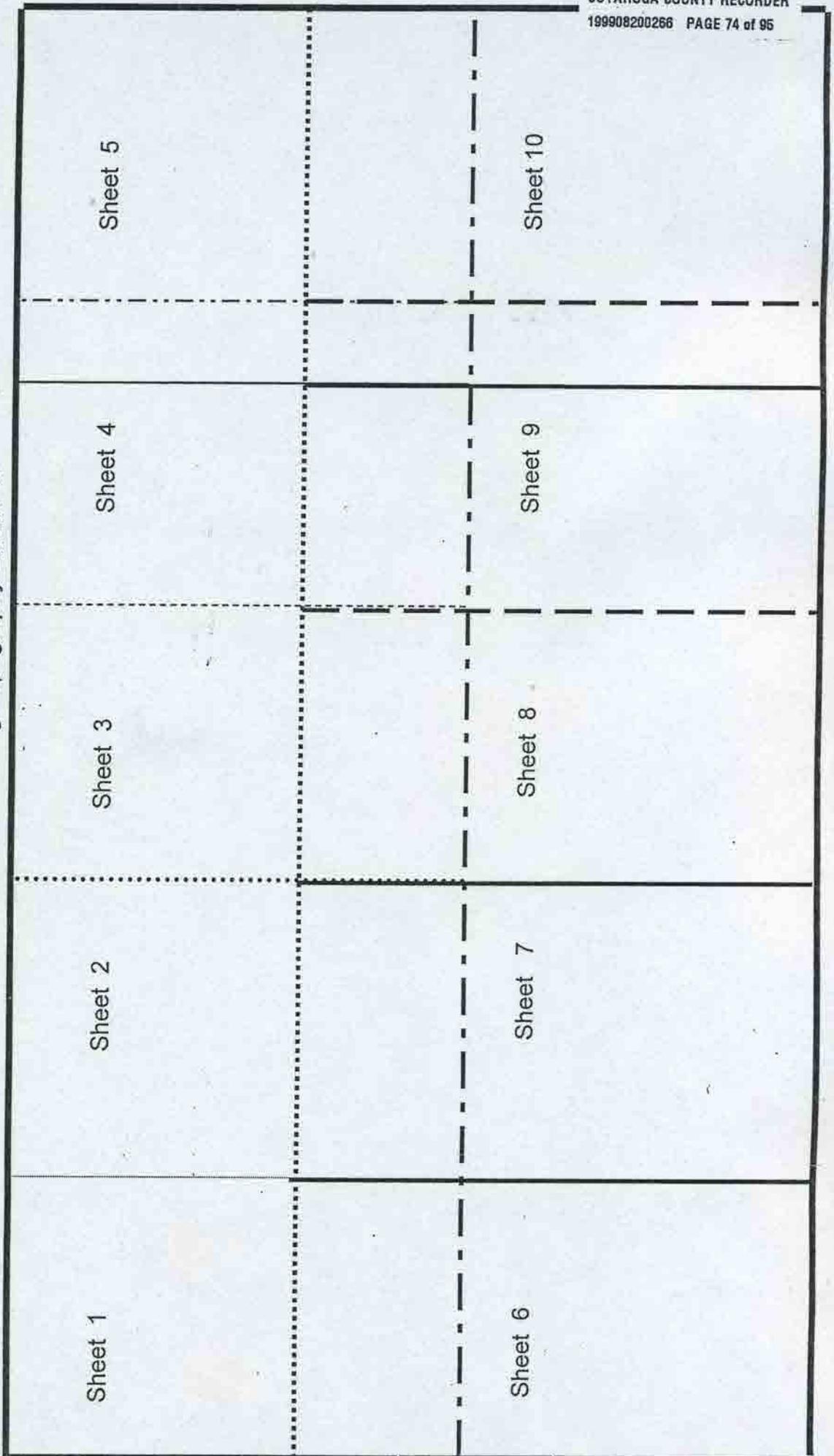


Exhibit "C"
Sheet 1

INDEX SHEET Existing Topography Exhibit "C"



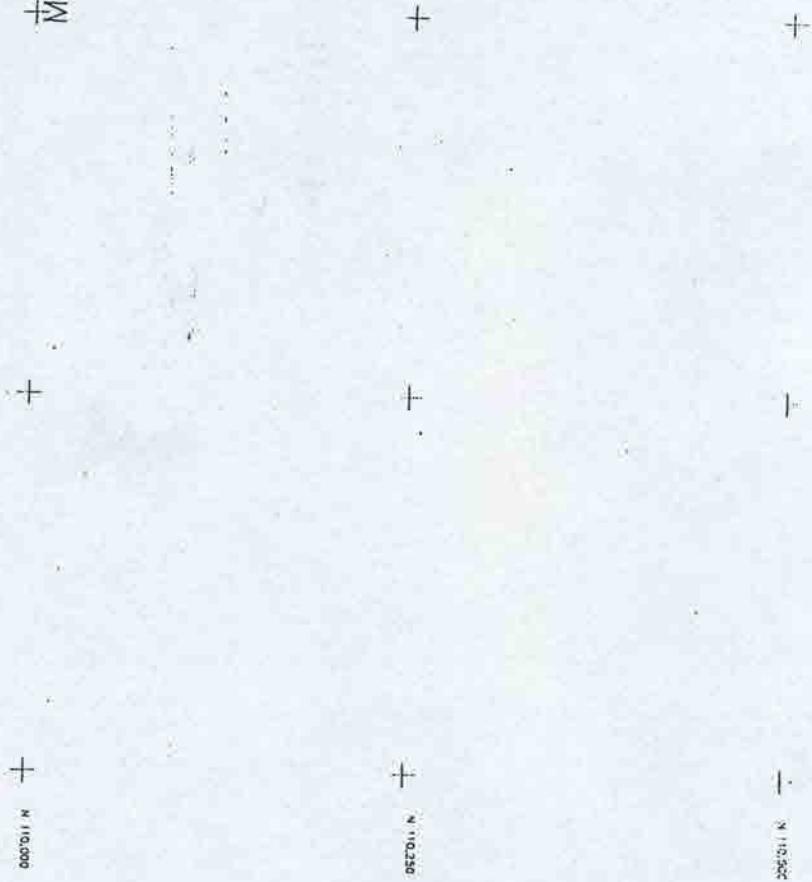
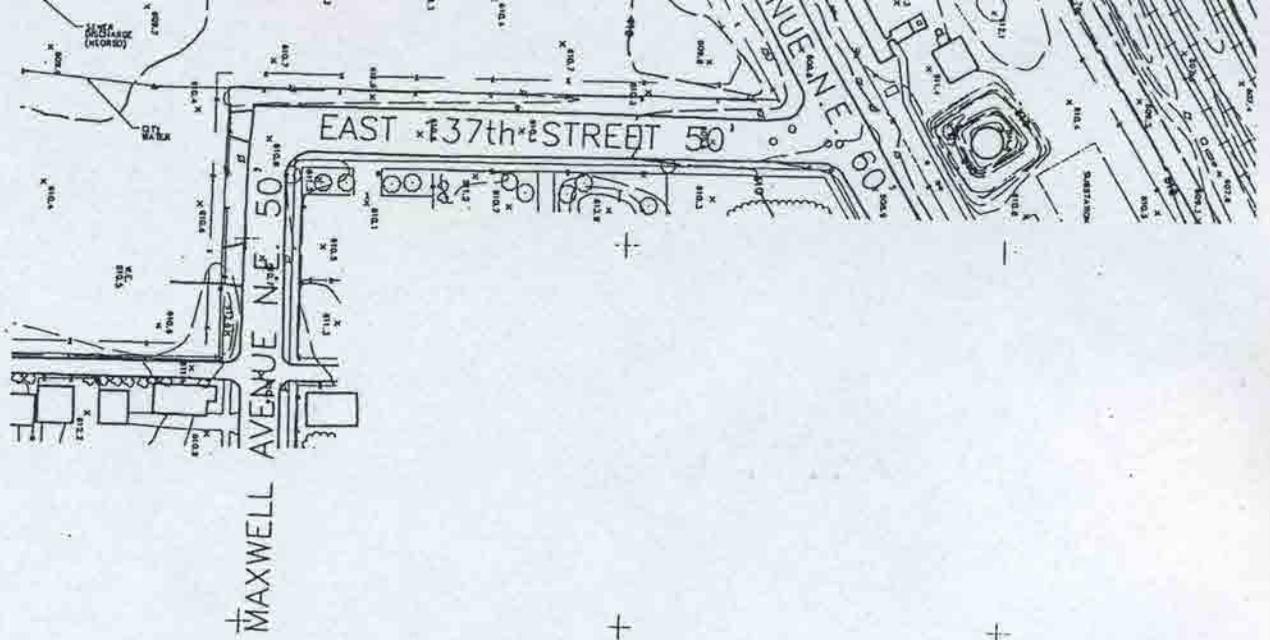


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DENSE TREE AREAS AND EVERGREEN AREAS INDICATE WHERE GROUND IS OBSCURED AND ACCURACY OF THE CONTOURS MAY NOT BE RELIABLE. IT IS RECOMMENDED THAT A FIELD CHECK BE MADE IN THESE AREAS BEFORE ANY DESIGN OR WORK IS PERFORMED.



PARTMENT OF ADMINISTRATIVE SERVICES WATER TOWER PLACE EXISTING TOPOGRAPHY CLEVELAND, OHIO	JOB <u>021736</u>
	FILE NO. <u>AERIAL</u>
	SHEET <u>1</u>



DENSE
GROUND
MAY NOT
CHECK
OR WOF

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ly

SCALE: 1" = 100'

SCALE IN FEET
0 50 100

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

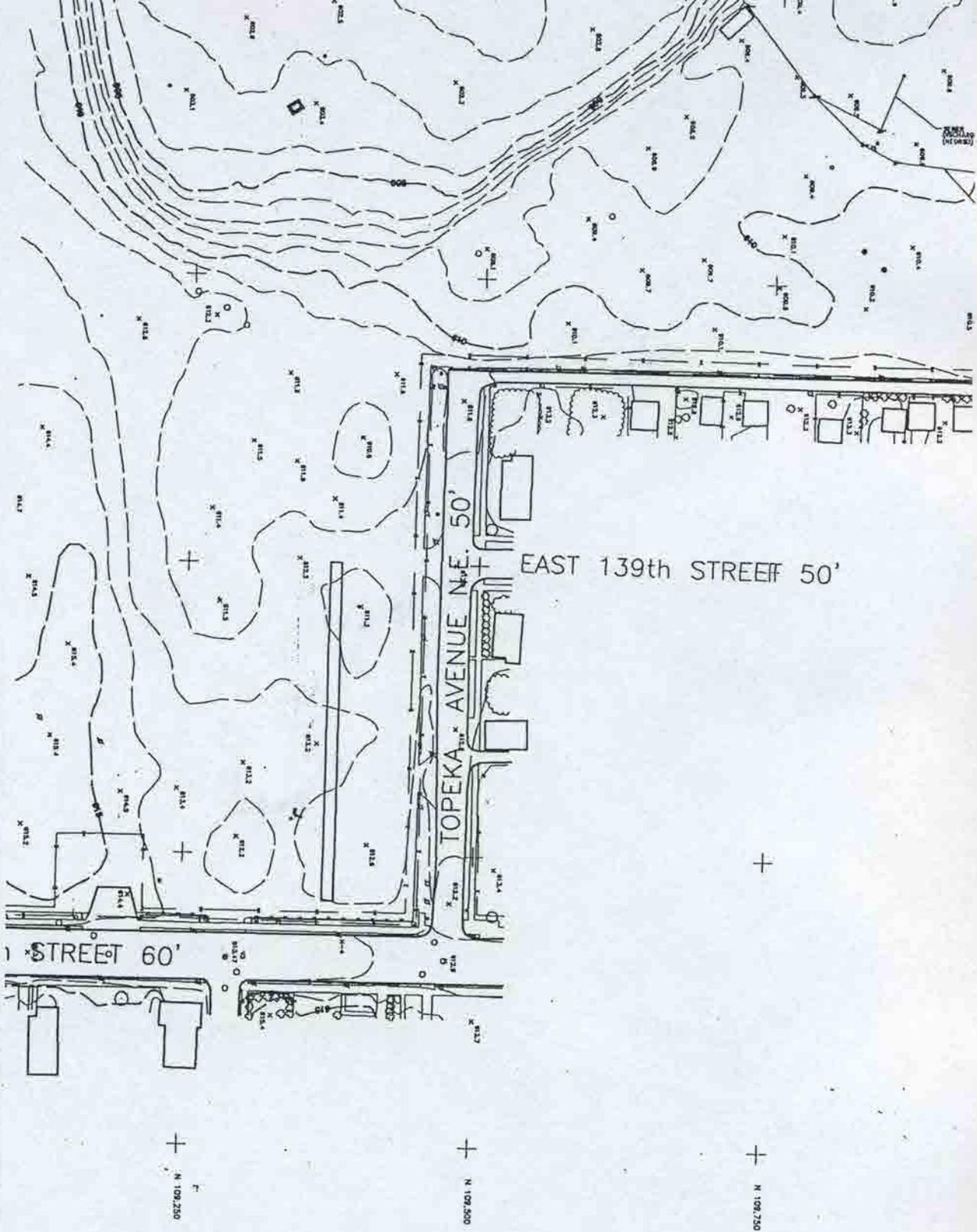
PLOT DATE: 09/04/98

198
E

OHIO DEPARTMENT OF ADI
WATER TOWE

EXISTING TO

CLEVELAND



M&E Metcalf & Eddy

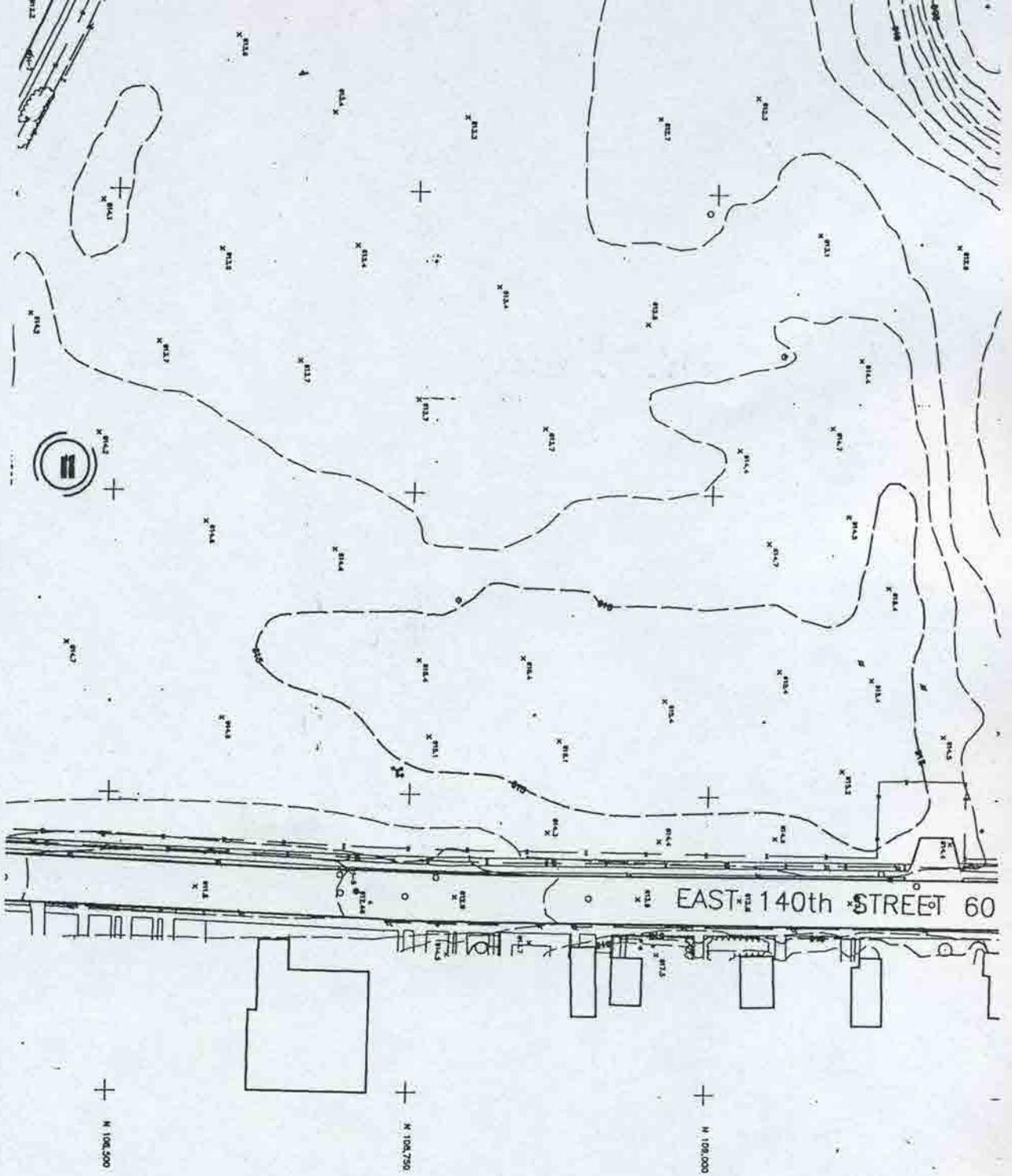
CUYAHOGA COUNTY RECORDER
199908200266 PAGE 77 of 95

Sheet 8 Exhibit "C"

Michael A. Ruffer
REG. PROF. ENGR.

9/15/98
DATE

ST
UN
PI



R 1997.

DESCRIPTION	DRAWN BY	FGS
	DEPT. CHECK	TA/MN
	PROJ. CHECK	MDW/ST

CUYAHOGA COUNTY RECORDER
199908200266 PAGE 78 of 95



2

Sheet 7

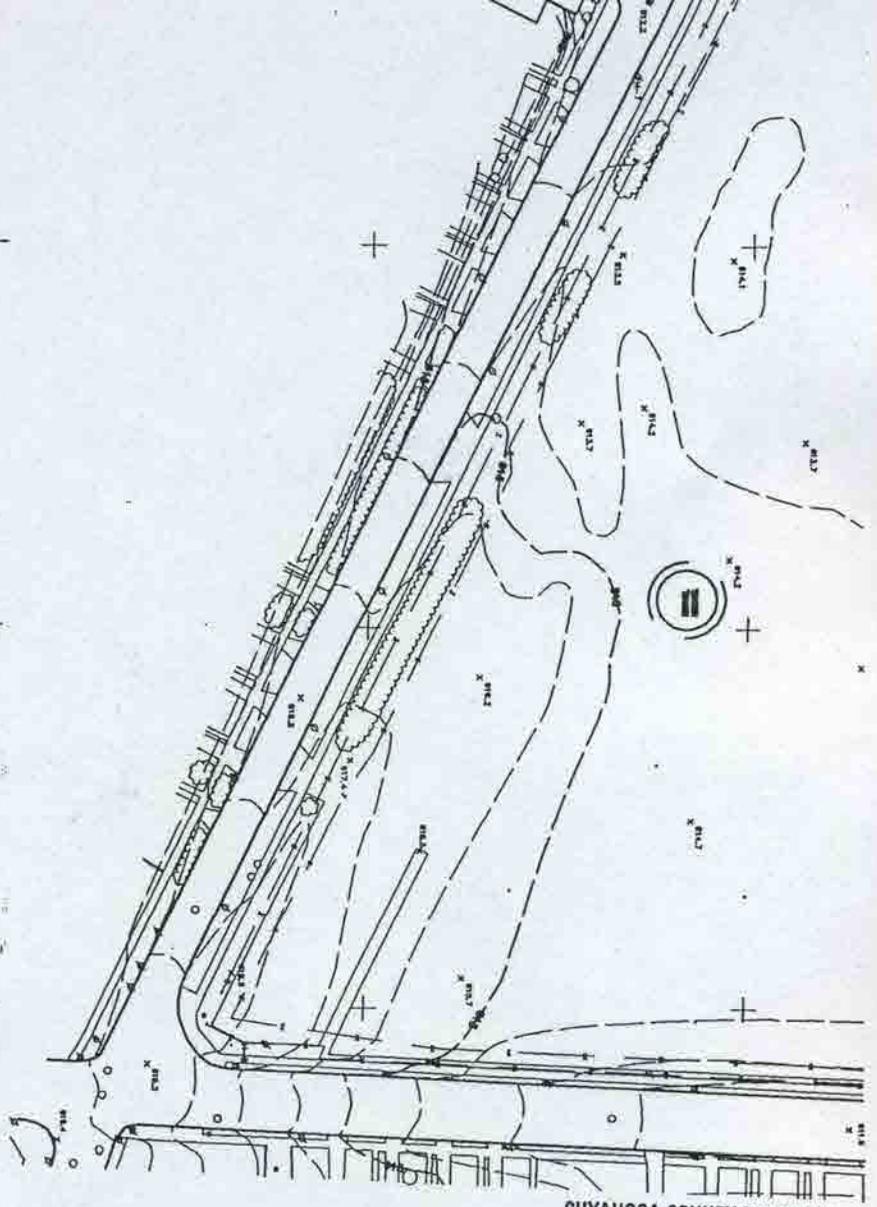
Exhibit "G"

B

E 115,200 +

E 115,900 +

E 115,700 +



CUYAHOGA COUNTY RECORDER
199908200268 PAGE 79 of 95

A

E 116,000 +

N 104,000 +

+
N 104,250 +

+
N 104,500 +

NOTE: MAPPING COMPILED FROM PHOTOGRAPHY DATED DECEMBER 1997.

NUMBER	DATE	MADE BY	CHECKED BY	DESCRIPTION

REVISIONS

1

Sheet 6

Exhibit "C"

N 110,750

N 111,000

+

+

D

+

+

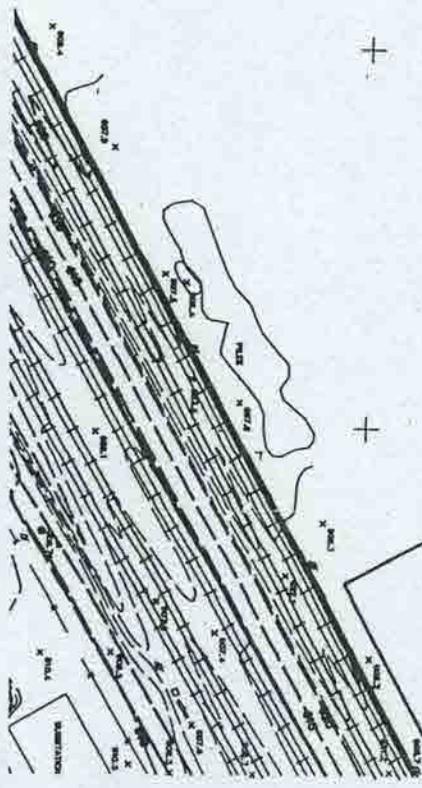
E 114,500

+

+

E 114,750

C



+

+

E 110,000

CUYAHOGA COUNTY RECORDER
199908200266 PAGE 80 of 95

+

+

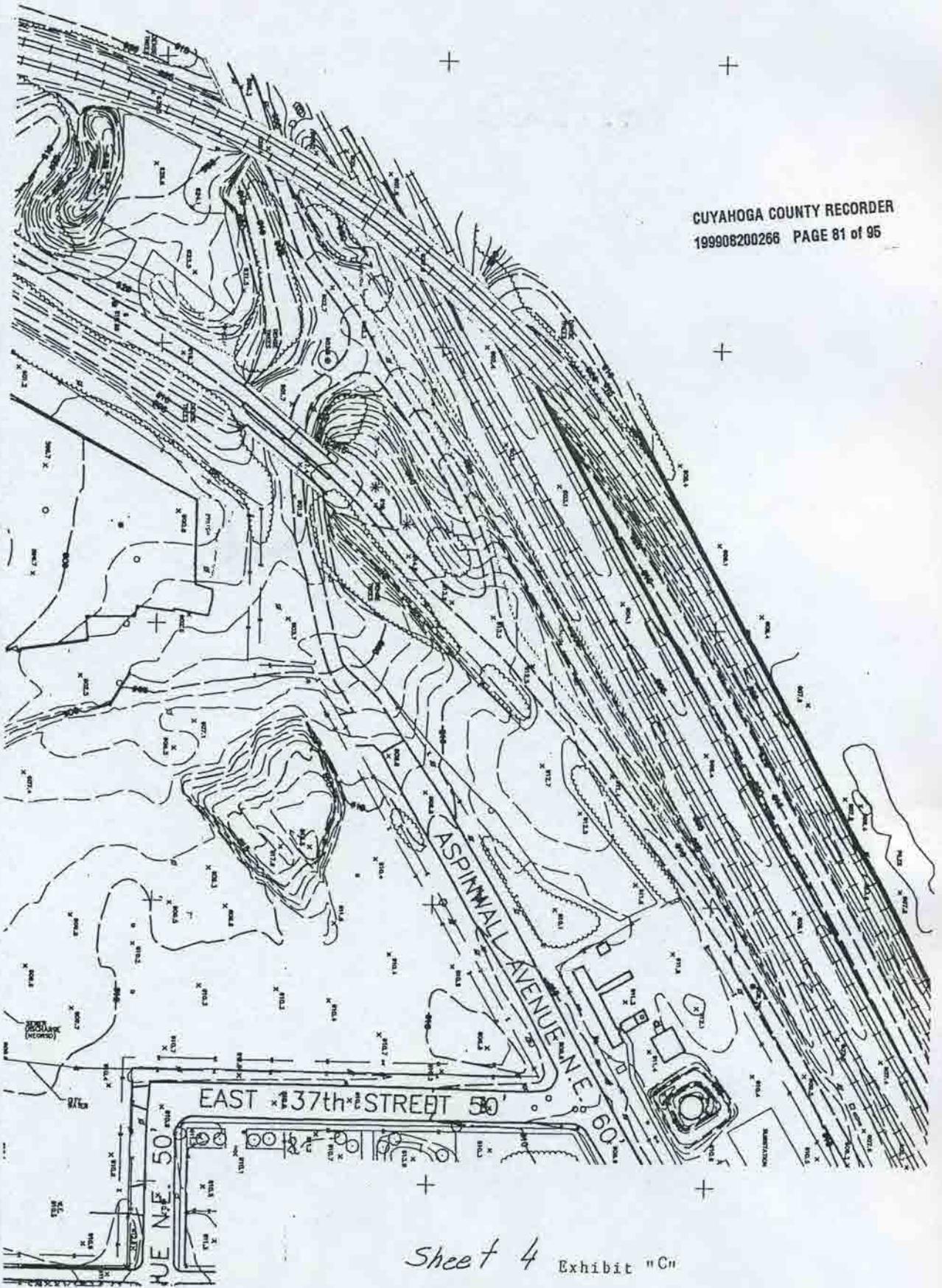
E 110,250

Handwritten notes: d + e

N 110.250'

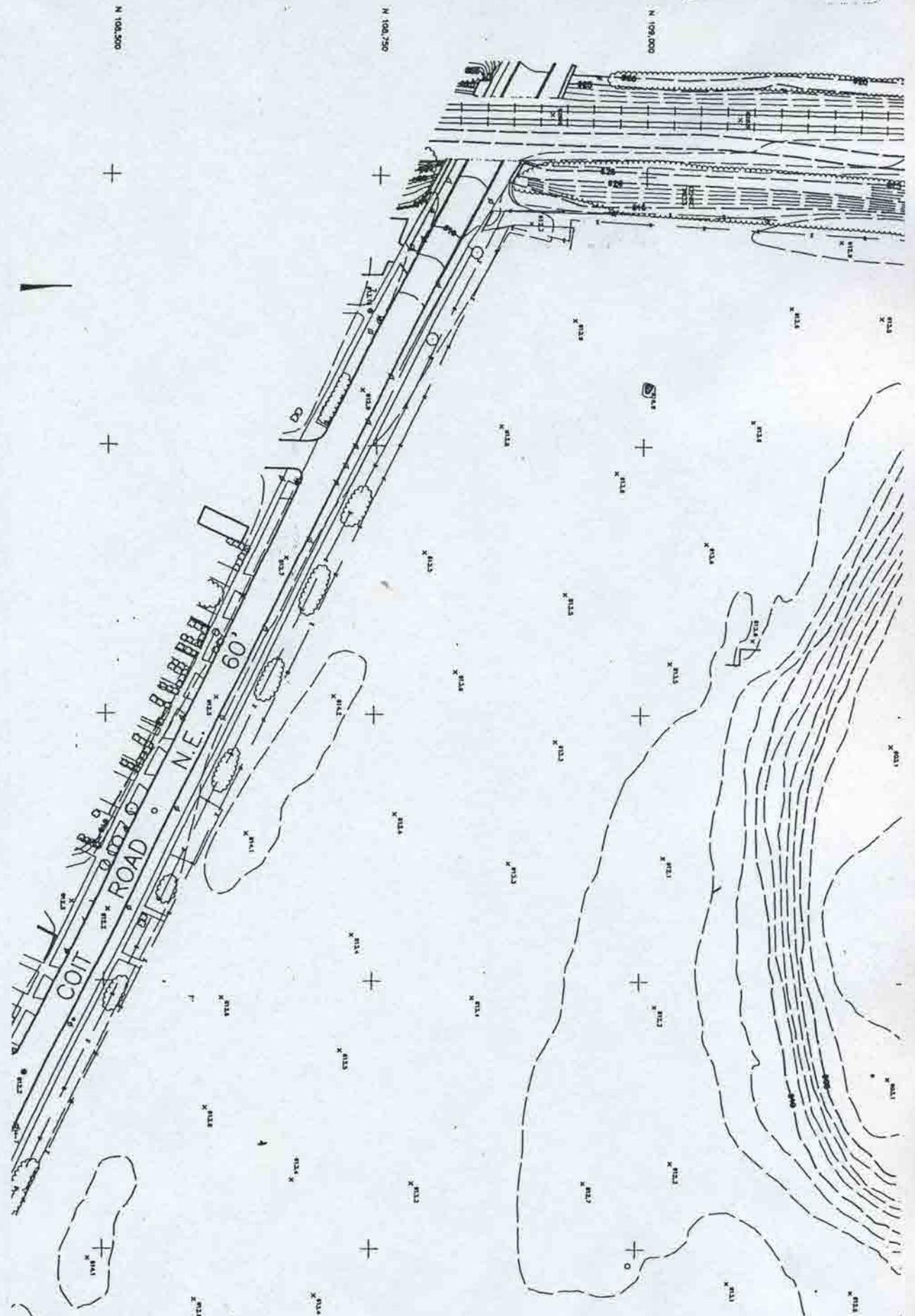
N 110.250'

N 110.250'



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Sheet 4 Exhibit "C"



Sheet 2 Exhibit "C"

000'00" N

002'00" N

004'00" N

E 114,250

+

+

D



LEGEND

- UTILITY POLE 
- MANHOLE 
- CATCHBASIN 
- RAILROAD 
- FENCE LINE 
- GUARD RAIL 
- TREE 
- TREE LINE 
- CONTOUR 
- SPOT ELEVATION 

E 114,500

+

C

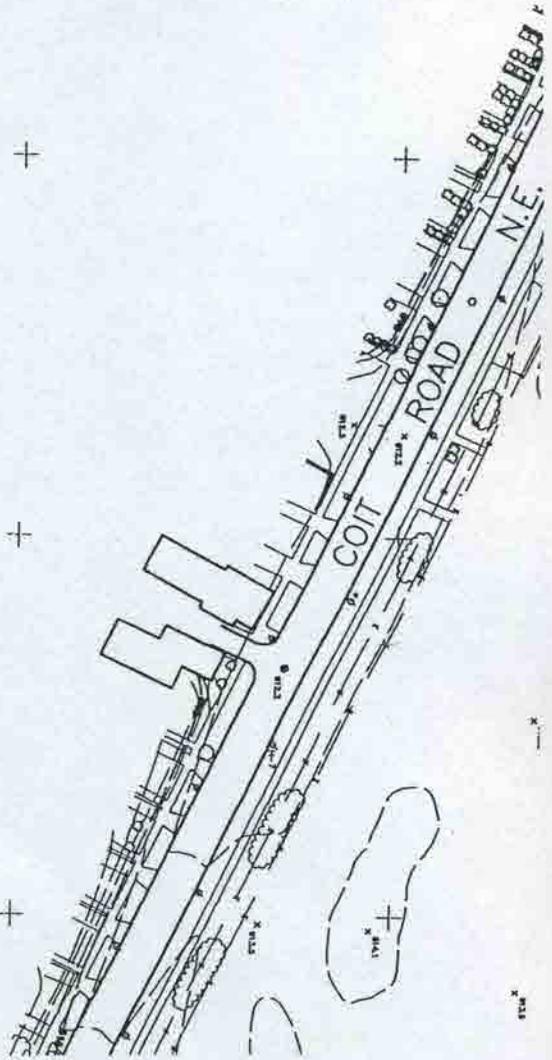
E 114,750

+

+

E 115,000

+

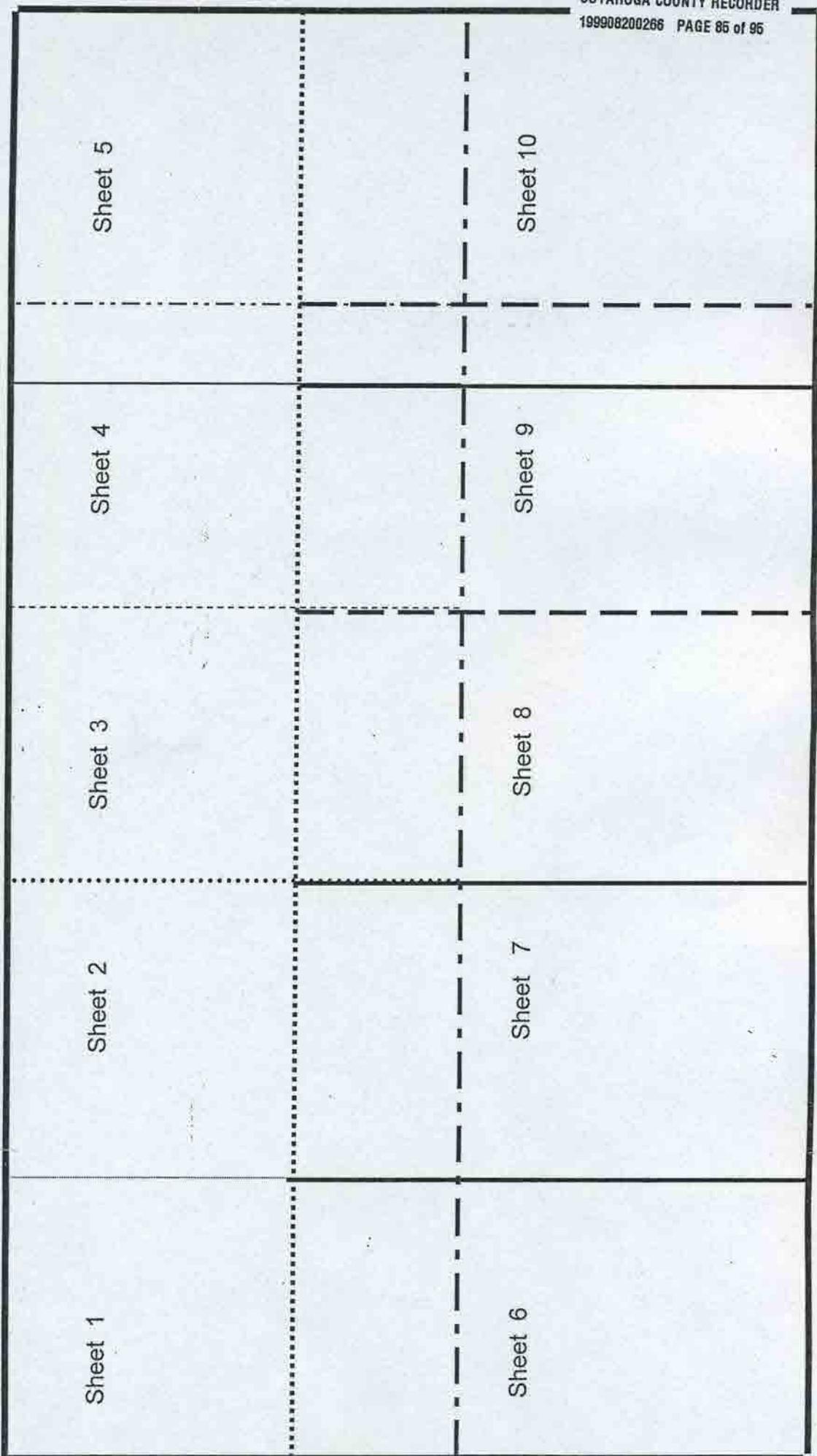


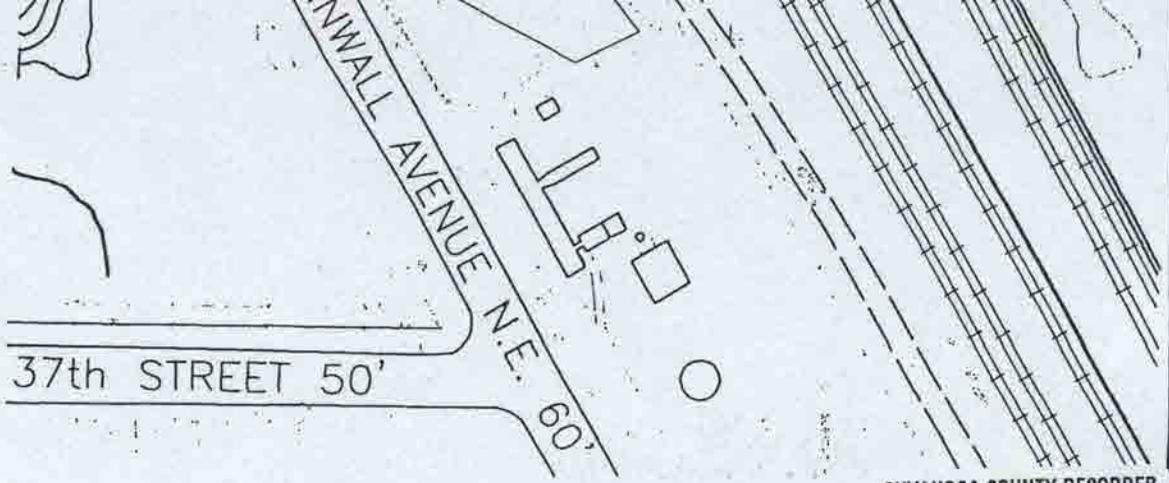
E 115,250

+

Sheet 1 Exhibit "C"

INDEX SHEET Fill Contours + 4' Original Surface Exhibit "C"





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B

JM EXCAVATION DEPTH IN FEET (1 FOOT INTERVALS).
 THIS REQUIRES NOTIFICATION OF THE OHIO
 AGENCY.

BASED ON ACCURACY OF ORIGINAL MAPPING AND
 METHOD OF INTERPOLATING THE CONTOURS.

A

DATE: DECEMBER 1997.

DEPARTMENT OF ADMINISTRATIVE SERVICES
 WATER TOWER PLACE

PROJECT: SURFACE PLUS 4' OF ORIGINAL SURFACE

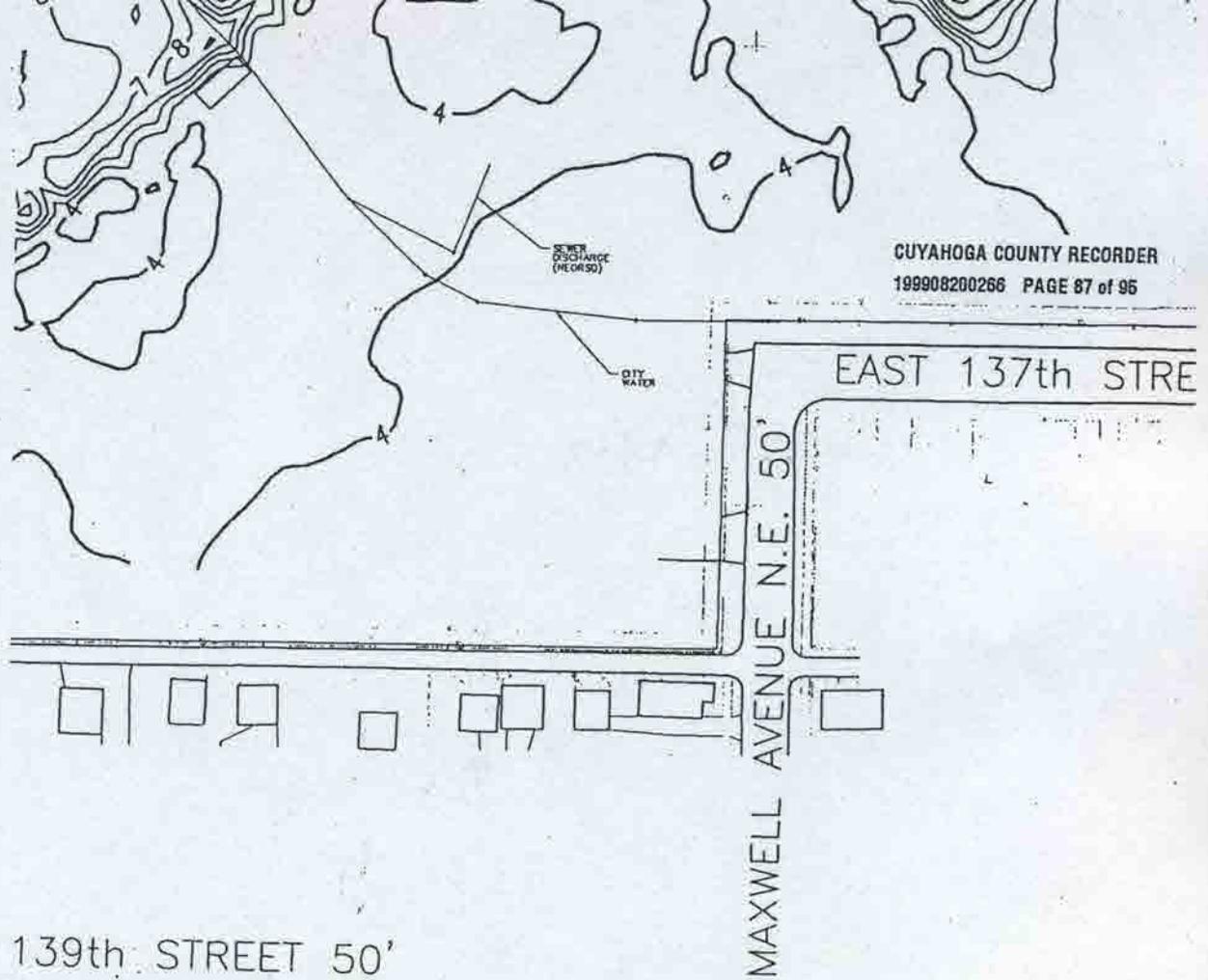
CLEVELAND, OHIO

JOB _____ 021736 _____

FILE NO. _____ 98-FILL4 _____

SHEET _____ 2 _____

BY: [Signature] DATE: [Date]

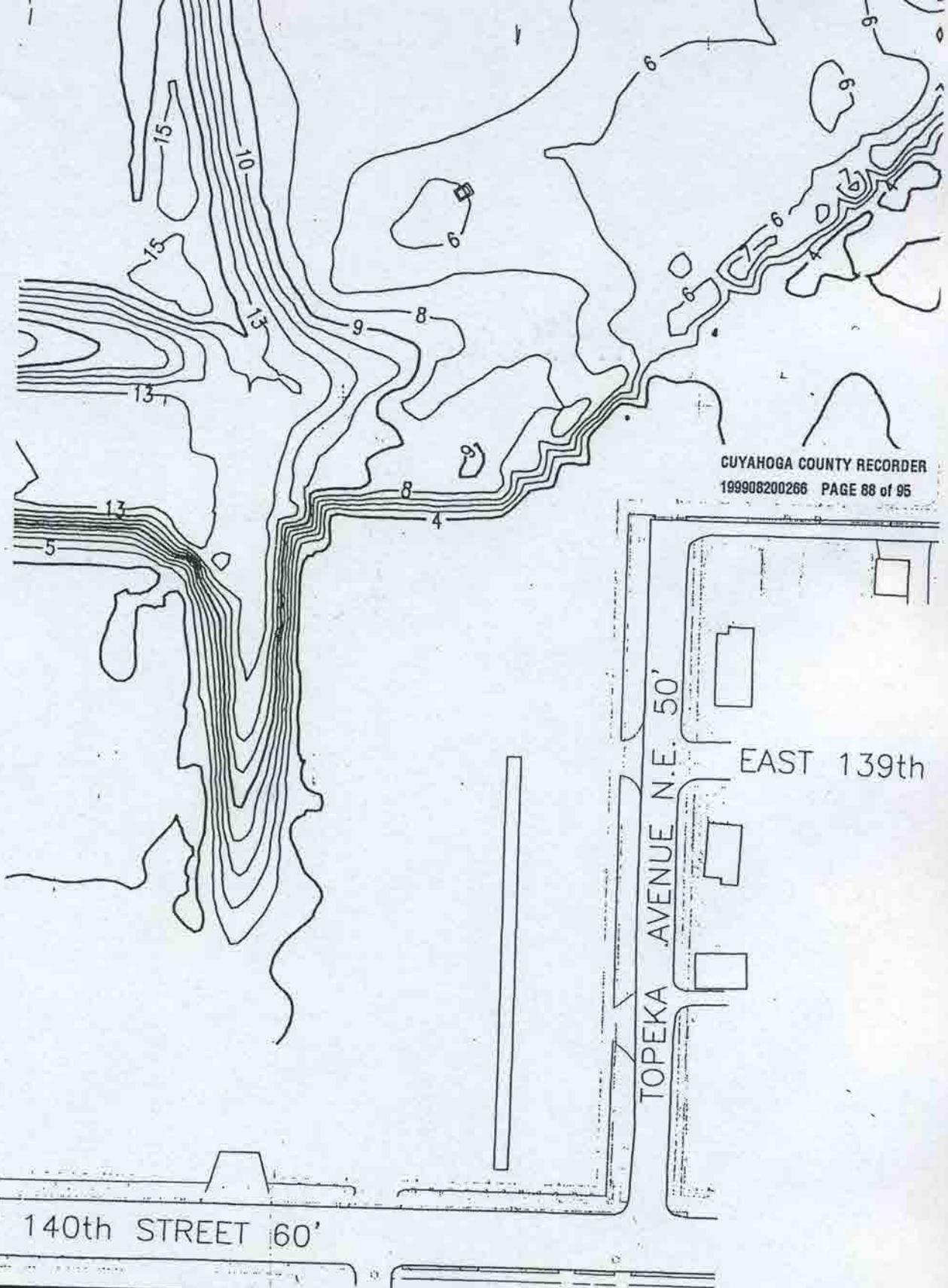


CONTOURS REPRESENT MAXIMUM EXCAVATION
EXCAVATION BEYOND THIS DEPTH REQUIRES
ENVIRONMENTAL PROTECTION AGENCY.

NOTE:
CONTOURS ARE APPROXIMATE BASED ON A
THE MATHEMATICAL PROCEDURE OF INTERPOLATION

MAPPING COMPILED FROM PHOTOGRAPHY DATED DECEMBER 1997.

<p>SCALE: 1" = 80'</p> <p>SCALE IN FEET</p> <p>UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION</p> <p>PLOT DATE: 09/04/98</p>	<p>OHIO DEPARTMENT OF A WATER TOV</p> <p>FILL CONTOURS PLUS 4'</p> <p>CLEVELAND</p>
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TOPEKA AVENUE N.E. 50'

EAST 139th

140th STREET 60'



M&E Metcalf & Eddy

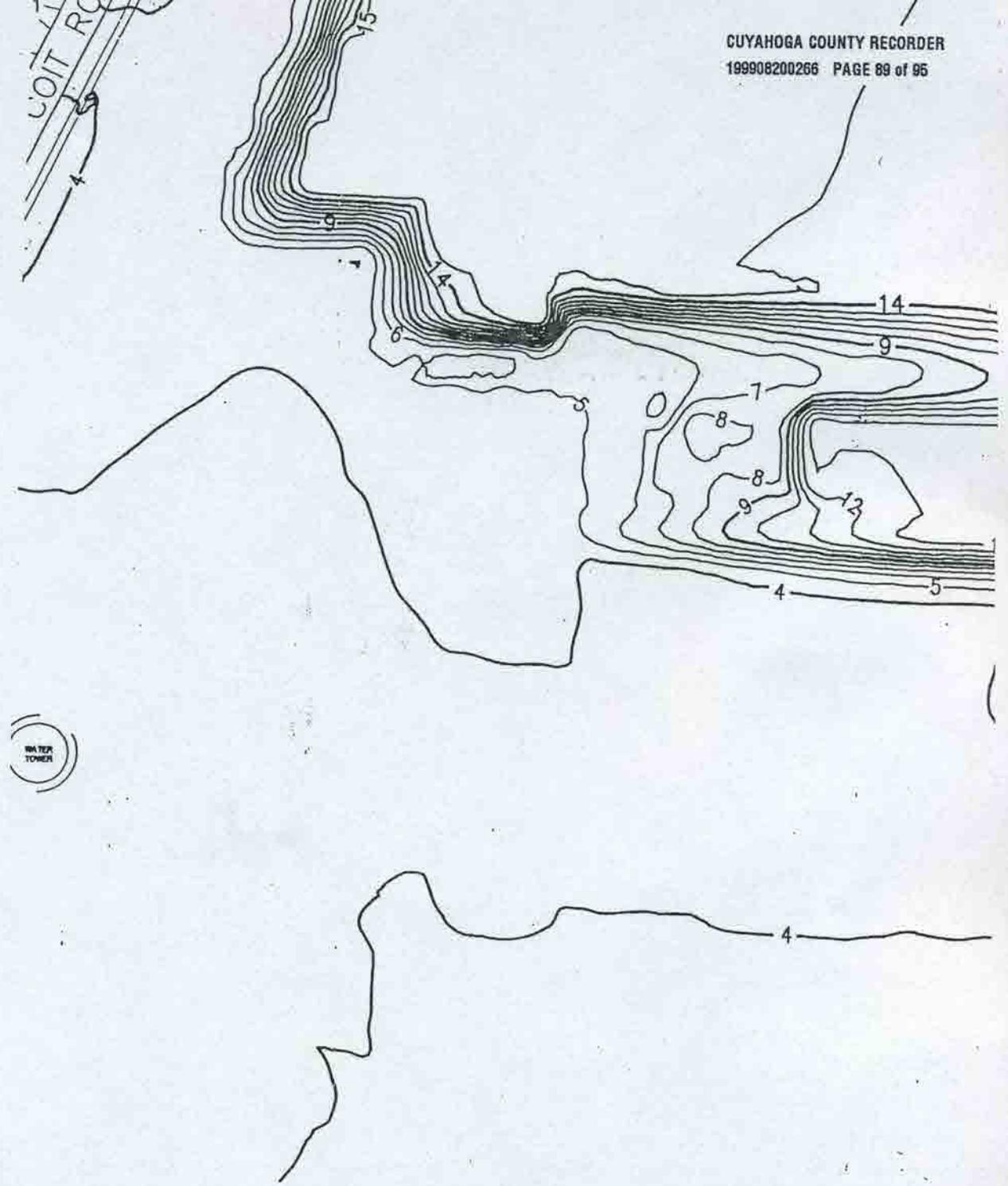
Michael A. Nuber
 REG. PROF. ENGR.

9/15/98
 DATE

SCAL

UNLESS

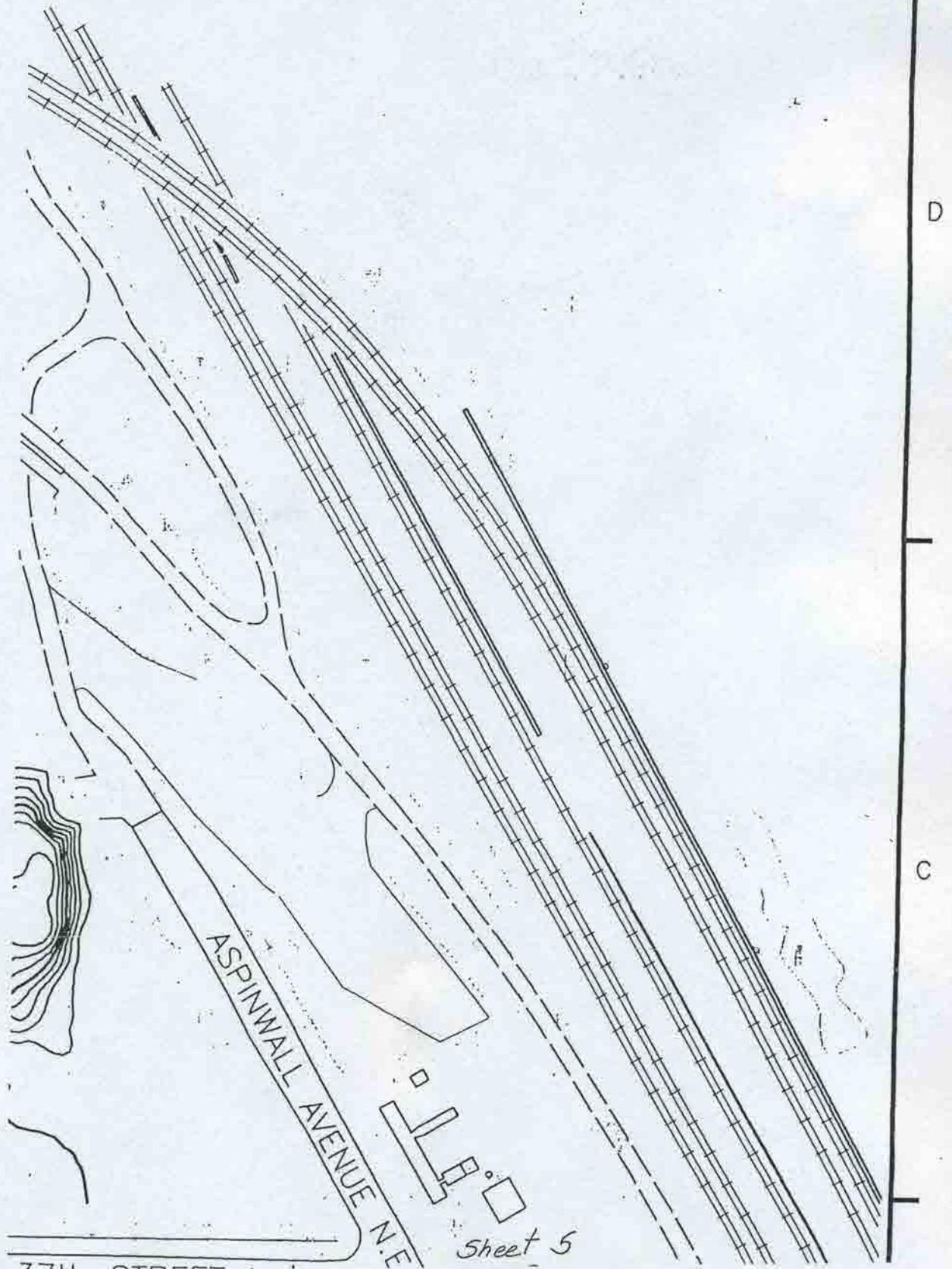
PLOT



WATER TOWER

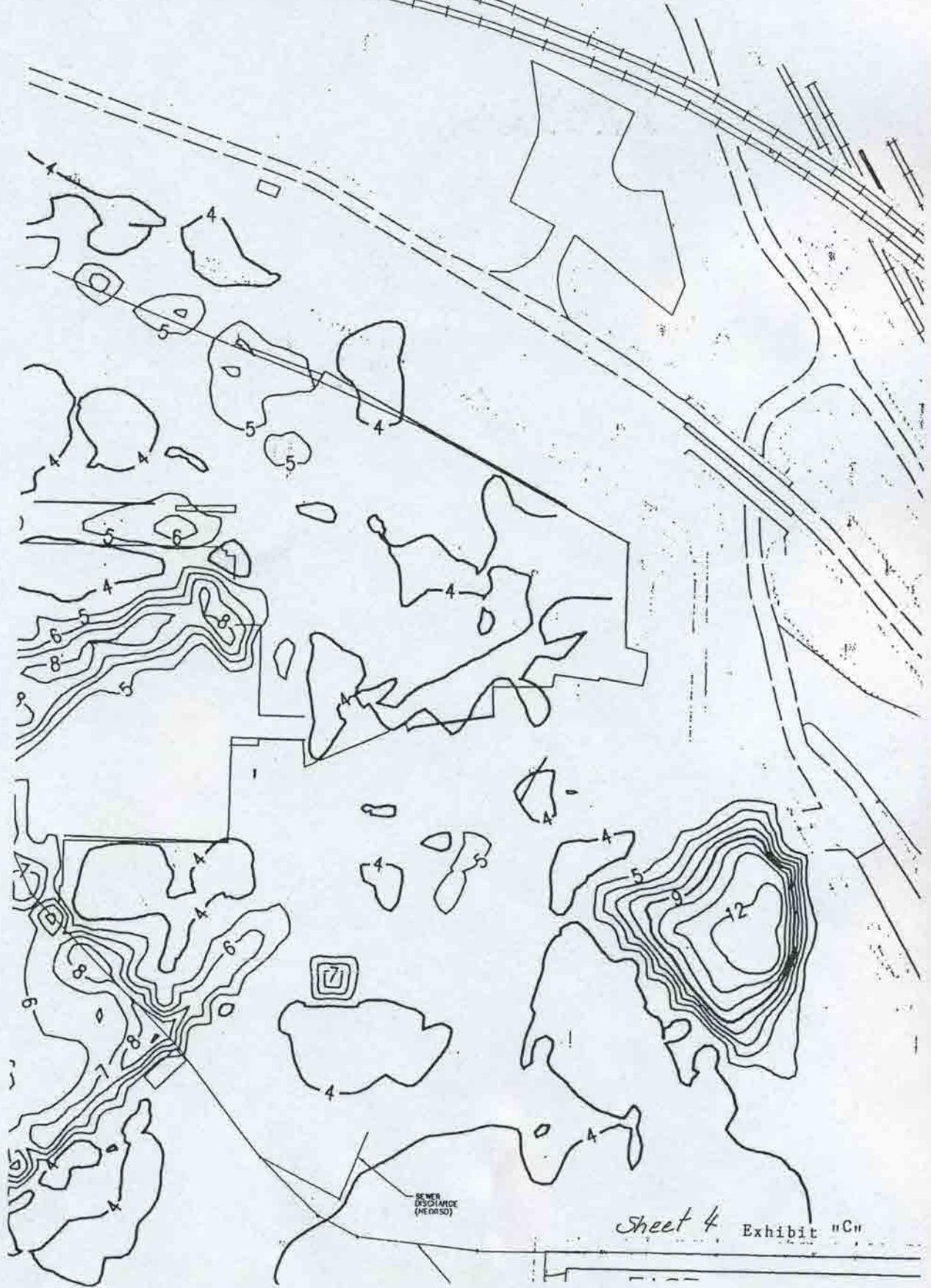
EAST 140th

DESCRIPTION	DRAWN BY	FGS
	DEPT. CHECK	MW
	PROJ. CHECK	GM
		

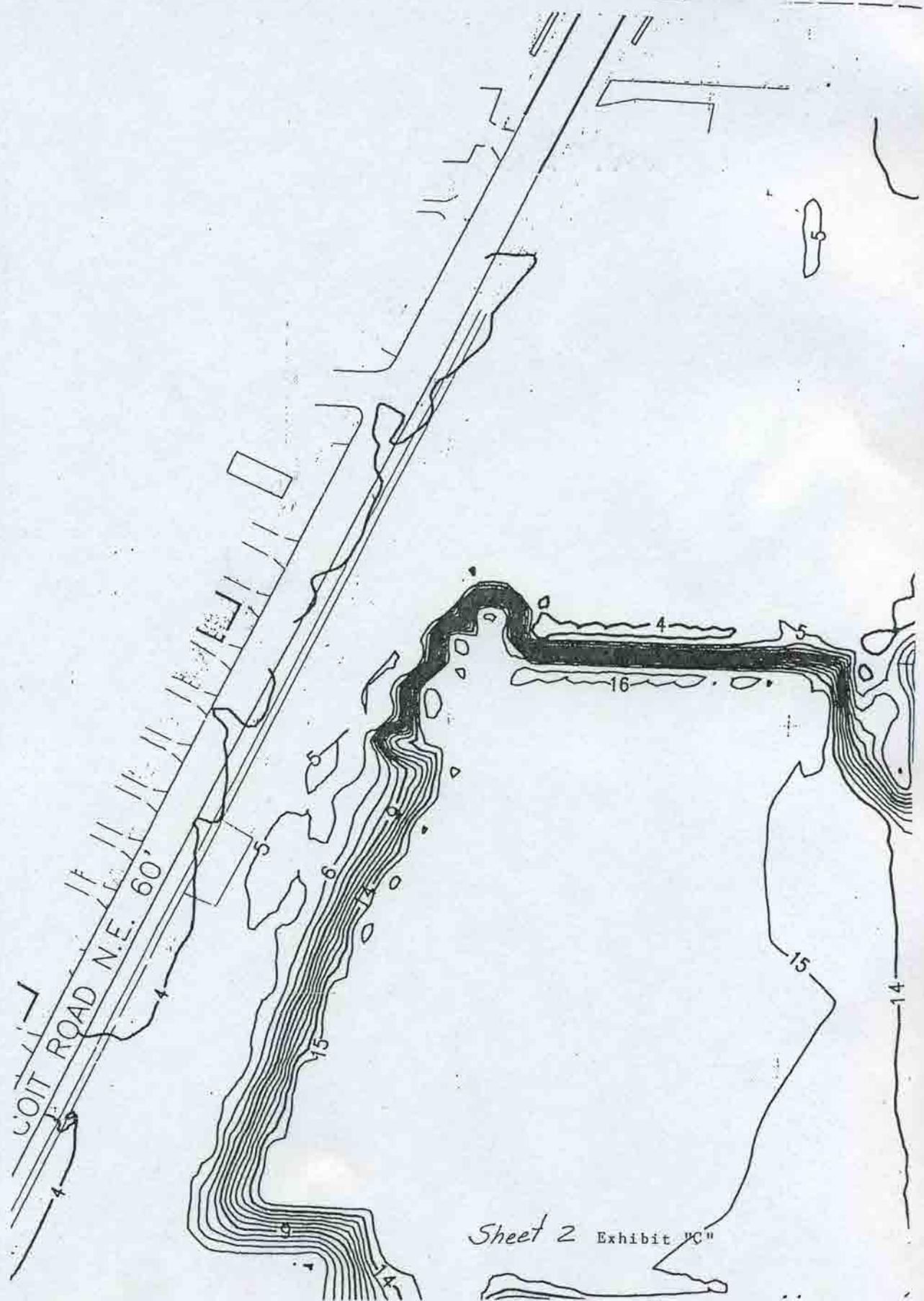


ASPINWALL AVENUE N.E.

Sheet 5







Sheet 2 Exhibit "C"