



**Staff Report – Mills of Watkins Preliminary Plat**

<b>Applicant:</b>	<p><b>Buxton Development Co.</b> c/o Barney Dodson/Doug Annette 7510 Merchant Road Plain City, OH 43064 <a href="mailto:doug@ohiofarmhouse.com">doug@ohiofarmhouse.com</a></p> <p><b>Diamond V, LLC</b> c/o Steve Lamphear PE PS 8205 Smith Calhoun Road Plain City, OH 43064 <a href="mailto:steve.l@diamondvllc.com">steve.l@diamondvllc.com</a></p>
<b>Request:</b>	Approval of the Mills of Watkins – Preliminary Plat.
<b>Location:</b>	Located west of Watkins Road, south and adjacent to Buxton Meadows in Dover Township, Union County.

<b>Staff Analysis:</b>	<p>This Preliminary Plat involves 17.02 acres of land and 20 single-family residential lots.</p> <p>Acreages:</p> <ul style="list-style-type: none"> <li>○ 2.76 acres of right-of-way</li> <li>○ 8.54 acres of single-family residential lots</li> <li>○ 5.71 acres of open space</li> </ul> <p>Proposed utilities:</p> <ul style="list-style-type: none"> <li>○ Individual household wells</li> <li>○ Pump station and central sewer (Union County)</li> </ul> <p>• <b>Union County Engineer’s Office</b></p> <ul style="list-style-type: none"> <li>○ The Union County Engineer’s Office submitted comments in a letter dated 09-06-18. The Engineer’s Office recommended approval with modifications. <b>Some</b> of those modifications are listed below and summarized for reference. (Please refer to letter for all comments.)</li> </ul> <ol style="list-style-type: none"> <li>1. A left turn lane must be installed on Watkins Road.</li> <li>2. A TIS will need to be submitted and approved prior to approval of the construction plans to determine right turn lane warrants.</li> <li>3. All off-site road improvements needed for opening day are to be constructed at the same time with</li> </ol>
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	<p>the internal roadway infrastructure, pending results of the TIS.</p> <ol style="list-style-type: none"><li>4. The perpendicular intersection of Watkins Road and Clifton Mill drive needs to extend at least 100’.</li><li>5. Provide a clear label and definition of all easements within the development, including who all easements are granted to.</li><li>6. Detail all flood routing swales, including 100 year water surface elevations, ensuring at least 1’ of freeboard between the 100 year water surface and the finished grade elevations of all building structures.</li><li>7. Provide a letter from the Health Department for approval of well locations.</li></ol> <ul style="list-style-type: none"><li>• <b>Union County Soil &amp; Water Conservation District</b><ul style="list-style-type: none"><li>○ No comments received as of 09-05-18.</li></ul></li><li>• <b>Union County Health Department</b><ul style="list-style-type: none"><li>○ The Health Department submitted a copy of its Preliminary Plan Checklist dated 08-20-2018. There are items marked incomplete. This includes Item #37, which notes Board of Health approval is required for more than 5 lots. (Please refer to checklist for all comments.)</li></ul></li><li>• <b>City of Marysville</b><ul style="list-style-type: none"><li>○ The City of Marysville submitted comments in a letter dated 09-07-18. The City recommended approval upon addressing its comments in the final engineering process. <b>Some</b> of those comments are listed below and summarized for reference. (Please refer to letter for all comments.)<ol style="list-style-type: none"><li>1. Please provide a 20’ utility easement along the entirety of this parcel’s frontage with Watkins Road.</li><li>2. The developer shall provide proof of the sanitary force main easement from Lot 84 (Buxton Meadows) along Hinton Mill Road.</li><li>3. Confirm the ownership and maintenance responsibility for each of the wastewater components.</li></ol></li></ul></li></ul>
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4. Backyard sanitary sewers are not permitted. The sanitary sewer alignment for Lots 1 through 5 shall be revised.
5. A larger sanitary sewer easement (30 feet) shall be provided for the proposed side yard sanitary sewer between Lots 16 and 17.

• **Dover Township**

- Dover Township submitted comments in a letter dated 09-04-2018 with questions/concerns from the Dover Township Trustees.
  1. What will become of the road connection in Phase 3?
  2. The road connection is completed when Phase 3 comes into completion.
  3. Want to make sure that the proposed green space is only for Phase 1, 2, and 3.
  4. Want to make sure the development follows the Dover Township zoning requirements.

• **ODOT District 6**

- No comments received as of 09-05-18.

• **Union Rural Electric**

- URE submitted comments in a letter dated 09-05-2018. **Some** of those comments are listed below and summarized for reference. (Please refer to letter for all comments.)
  1. UREC advised electric and gas easements must be platted and shown on the Final Plat. UREC still needs to work with developer to complete UREC electrical facility layout.
  2. URE/CERC require an easement along the northernmost section of the future phase, in order to install natural gas facilities to Phase 1. This would be the existing drainage easement for Buxton Meadows Subdivision.
  3. URE requires an easement for primary installation entering the development on the south side of Clifton Mill Drive.
  4. URE requires a 20' electric easement extension onto development of Phase 2.



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	<ol style="list-style-type: none"> <li>5. URE easement needed between lots 8 and 9 to accommodate installation for Blackhurst Mill Ct section.</li> <li>6. URE/CERC natural gas line needs an easement from drainage area easement to Phase 1 development area, extending out to Watkins Road.</li> <li>7. All easement areas must be continuous for electric and gas facilities.</li> </ol> <ul style="list-style-type: none"> <li>• <b>LUC Regional Planning Commission</b> <ol style="list-style-type: none"> <li>1. Note date of survey and zoning classification of adjoining properties (§313, 4. &amp; 9.).</li> <li>2. If the subdivider proposes individual household wells, the County Board of Health or the OEPA shall have approved the use of individual household wells prior to the Preliminary Plat approval (§314, 7.).</li> <li>3. Easements for water and sewer must be a minimum of 20’ and 10’ for other utilities (§313, 12.; §414).</li> <li>4. A letter from Dover Township certifying that the Final Plat conforms with the Township’s zoning is required before any approval of the Final Plat may be granted (§401; §412, 1.; §413, 2.).</li> <li>5. All bonds, surety, letters of credit, etc. shall be approved by the County Commissioners before any approval of the Final Plat may be granted (§326).</li> </ol> </li> </ul>
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<p><b>Staff Recommendations:</b></p>	<p>Staff recommends <b><i>DENIAL</i></b> of Mills of Watkins – Preliminary Plat at this time. This recommendation is made with the understanding that the Z&amp;S Committee may wish to make a different recommendation if the following occurs:</p> <ul style="list-style-type: none"> <li>○ Proof is provided to LUC that the use of individual household wells are approved by the County Board of Health or OEPA.</li> </ul>
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<p><b>Z&amp;S Committee Recommendations:</b></p>	
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## Mills at Watkins

Aug 21, 2018

Logan-Union-Champaign  
Regional Planning Commission  
9676 Foundry Street  
P.O. Box 219  
East Liberty, Ohio 43319

Attention L-U-C

Buxton Development Company is Submitting final Engineering for Mills of Watkins, a joint venture development with Farm to Gable LLC. the parent company of Modern Farmhouse LLC. Cooperatively we are looking to develop a total of 90 total lots with our Engineering and submission covering the first phase totaling 20 residential lots. Attached you will find:

Application & Checklist

Engineering and its Companions

Proposed Covenants and Restrictions

Proposed Zoning Changes aka Design Guidelines

Attached letter of Agreement

Filed Easement

Traffic Study Contract

Well Correspondence (Bd. of Hlth. Notes on Plan)

We are currently engaged on the Watkins Road traffic Study with MS Consultants, a signed contract that is also included. the Study should be in our hands momentarily.

Any and all correspondences should be directed through myself, Doug Annette, the Developer ((P)614.400.7072 or [doug@ohiofarmhouse.com](mailto:doug@ohiofarmhouse.com)) and/ or the Engineer, Steve Lamphear PE, PS, of Diamond V, LLC.

Sincerely yours,

Douglas C. Annette

Farm to Gable, LLC.

Please See the comments that we acknowledge, agree with, and will cooperate to from Luke Sutton:

“As I mentioned in the meeting, we will not accept any pipe larger than 8” for sanitary installation that does not require an up size for capacity. The pump station will need to be either built to Marysville standards or a bond will need to be in place for Marysville to upgrade it once they take it over. Either way, this pump station will remain privately maintained until Marysville has the facilities to accept the sanitary flow from this site. The lift station will need to have a maintenance contract between the developer and the city/county to ensure routine maintenance is taken care of. This will also help to create a point of contact for the city/county when any resident complaints arise. I did not find any reference to sanitary drop installations in Marysville’s specs, but Jeremy could probably answer the question with a quick phone call. The TIS does not need to be complete before preliminary plat approval, but we would like to at least have a MOU in place by that time.

Let me know if you have any more question.

Thanks,

**Luke Sutton, P.E.**  
Project Engineer



### Application for Preliminary Plat Approval

Date: 08/22/2018

Name of Subdivision: Mills of Watkins

Location: Watkins Road

Township: Dover Township

Military Survey: VMS 9028

Complete Parcel(s) Identification Number (PIN): 1100120010000

Have ALL Sketch Plan review letters been obtained? In Process (Engineer, SWCD, Board of Health)

Name of Applicant: Buxton Development Co., Barney Dodson/ Doug Annette

Address: 7510 Merchant Road

City: Plain City State: OH Zip: 43064

Phone: 614 400 7072 Fax: \_\_\_\_\_ Email: Douglas Annette

<doug@ohiofarmhouse.com>

Name of Owner of property to be subdivided: Buxton Development Co., Barney Dodson

Address: 7510 Merchant Road

City: Plain City State: OH Zip: 43064

Phone: 614 400 7072 Fax: \_\_\_\_\_ Email: Douglas Annette

<doug@ohiofarmhouse.com>

Name of Applicant's Surveyor or Engineer: Diamond V, LLC/ Steve lamphear

Address: 8205 Smith Calhoun Rd.

City: Plain City State: OH Zip: 43064

Phone: 614 620 0331 Fax: \_\_\_\_\_ Email: steve.l@diamondvllc.com

Proposed Acreage to be Subdivided: 51.09

Current Zoning Classification: R-1

Proposed Zoning Changes: N/A

Proposed Land Use: LOW DENSITY RESIDENTIAL

#### Development Characteristics

Number of proposed lots: 20 - PH 1/ 90 TOTAL Typical lot width (feet): 100'

Number of proposed units: 20 UNITS Typical lot area (sq. ft.): 16,000 SQ. FT.

Single Family Units: \_\_\_\_\_ Multi-Family Units: \_\_\_\_\_

Acreage to be devoted to recreation, parks or open space: 5.71



# Logan-Union-Champaign regional planning commission

Director: Dave Gulden, AICP

Recreation facilities to be provided: YES - PATH/ OPEN SPACE

Do you propose deed restrictions? (If yes, attach a copy): Yes  No

1. Proposed method of Supplying Water Service: INDIVIDUAL WELLS

2. Proposed method of Sanitary Waste Disposal: CENTRAL SEWER AND PUMP STA.  
*(If on-site disposal systems are proposed, please attach letter certifying the County Board of Health approval)*

3. Requests for Variances from Subdivision Regs: N/A  
*(If yes, please explain variances and reason for variances)*

List all proposed improvements and utilities and state your intention to install or provide a guarantee prior to final plat approval:

	Improvement	Installation	Guarantee
a.	<u>SANITARY SEWER</u>	<u>YES</u>	<u>YES</u>
b.	<u>ROAD IMPROVEMENTS</u>	<u>YES</u>	<u>YES</u>
c.	<u>STORM WATER IMPROVEMENT</u>	<u>YES</u>	<u>YES</u>
d.	<u>INDIVIDUAL WELLS</u>	<u>YES</u>	<u>YES</u>
e.	<u>PRIVATE ELEC./ GAS/ CABLE</u>	<u>YES</u>	<u>YES</u>

**For Official Use**

Date filed: \_\_\_\_\_ Filing Fee: \_\_\_\_\_

Date of Meeting of Planning Commission: \_\_\_\_\_

Action by Planning Commission: \_\_\_\_\_

If rejected, reason(s) for: \_\_\_\_\_





## Preliminary Plat Review Checklist

#	Required Item Description	Have	Need
1	Drawn at a scale not less than 1:100 and shall be on one or more sheets 24" X 36"	X	
2	Proposed name of the subdivision, which shall not duplicate or closely approximate the name of any other subdivision in the county.	X	
3	Location by section, range, and township or Virginia Military Survey (VMS).	X	
4	Names, addresses and telephone numbers of the owner, subdivider, and professional surveyor or professional engineer who prepared the plat; and the name, address and telephone number of the professional surveyor who performed the boundary survey.	X	
5	Date of survey.	X	
6	Scale of the plat, north point, and date.	X	
7	Boundaries of the subdivision and its acreage.	X	
8	Names of adjacent subdivisions, owners of record of adjoining parcels of unsubdivided land, and the location of their boundary lines.	X	
9	Locations, widths, and names of existing streets, railroad rights-of-way, easements, parks, permanent buildings, and corporation and township lines; location of wooded areas and other significant natural features; soil types and soil type limits; limits of Flood Hazard zones.	X	
10	Zoning classification of the tract and adjoining properties.	X	
11	Existing contours (USGS datum) at an interval of not greater than two feet if the slope of the ground is fifteen percent or less; and not greater than five feet where the slope is more than fifteen percent.	X	
12	Existing sewers, water and gas mains, culverts and other underground structures, and electric and telephone poles and lines and other above ground structures within and adjacent to the tract.	X	
13	Layout, names and widths of proposed streets and easements.	X	
14	Building setback lines with dimensions.	X	
15	Layout and dimensions of all proposed water and sewer lines, showing their connections with the existing systems, and all proposed easements for utility, water and sewer lines.	X	
16	Layout, numbers and approximate dimensions of each lot. When lots are located on a curve or when side lot lines are not at ninety degree angles, the width at the building line shall be shown, if it is less than the frontage width. Location of access from lots to the proposed streets shall be shown.	X	
17	Parcels of land to be reserved for public use or to be reserved by covenant for residents of the subdivision.	X	





# Logan-Union-Champaign regional planning commission

Director: Dave Gulden, AICP

18	The limits of all Flood Hazard Areas (zone A, AE, B, and X) as determined by the Federal Emergency Management Agency (show the FEMA map number and date). The Base Flood Elevation shall be determined and shown. Minimum first floor elevations shall be shown for all lots located within Flood Hazard Areas.	X	
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### Supplementary Information

19	Statement of proposed use of lots, giving the type and number of dwelling units; and type of business or industry if use is not residential.	X	
20	Description of proposed covenants and restrictions.	X	
21	Description of proposed zoning changes.	X	
22	Typical sections and tentative profiles of streets and other related improvements as required in Article 5. Calculations as required to justify horizontal and vertical curves, pipe sizes, etc. The County Engineer shall have approved the layout and design of the lots, streets and other improvements prior to the Preliminary Plat approval.	X	
23	A preliminary drainage plan which shall identify adequate drainage outlets and shall contain adequate measures for control of erosion and siltation and for surface water management in accordance with Article 5 and the Technical Design Standards. The County Soil and Water Conservation District shall have approved the preliminary drainage plan prior to Preliminary Plat approval.	X	
24	If the subdivider proposes individual household sewage systems, the County Board of Health or the OEPA shall have approved the use of individual household sewage systems prior to the Preliminary Plat approval.	X	
25	If the subdivider proposes individual household wells, the subdivider shall supply evidence acceptable to the County Board of Health of the availability of satisfactory water. The County Board of Health or the OEPA shall have approved the use of individual household wells prior to the Preliminary Plat approval.	X	
26	Letters from utility companies, as required, indicates approval of easement locations and widths prior to the Preliminary Plat approval.		
27	A vicinity map at scale of generally not more than six thousand feet to an inch shall be shown on, or shall accompany, the Preliminary Plat. This map shall show all existing subdivisions, roads, and tract lines, together with the names of the owners of land immediately adjoining the proposed subdivision and between it and the nearest existing thoroughfares. It shall also show the most advantageous connections between the roads in the proposed subdivision and those of the neighboring areas.	X	
28	Preliminary Plat Fees: Payment/Check made out to LUC Regional Planning Commission, based on the current fee schedule.	X	

9676 E. Foundry St, PO Box 219

East Liberty, Ohio 43319

• Phone: 937-666-3431 • Fax: 937-666-6203

Email: [luc\\_rpc@lucplanning.com](mailto:luc_rpc@lucplanning.com) • Web: [www.lucplanning.com](http://www.lucplanning.com)



STANDARD DEED RESTRICTIONS FOR UNION COUNTY

RESIDENTIAL and COMMERCIAL

1. THERE SHALL BE NO DISCHARGE IN TO ANY STREAMS OR STORM WATER OUTLETS OF ANY WASTE MATERIALS IN VIOLATION OF APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.
2. NO PERMANENT STRUCTURES, PLANTINGS, ETC. SHALL BE PERMITTED IN EASEMENT AREAS.
3. GRADING OF THE STORM WATER DETENTION AREAS SHALL NOT BE CHANGED.
4. MAINTENANCE OF DRAINAGE DITCHES, DETENTION AREAS, AND/OR DRAINAGE SWALES SHALL BE THE RESPONSIBILITY OF THE ADJACENT OWNERS. IF ANY OWNER DAMAGES A DITCH, DETENTION AREA, OR SWALE, THAT OWNER SHALL BE RESPONSIBLE FOR THE REPAIR. REPAIRS SHALL BE MADE IMMEDIATELY. EXISTING DRAIN TILES IN THE SUBDIVISION SHALL BE RE-ROUTED SO THAT DRAINAGE ENTERING TILES WILL CONTINUE TO FLOW FREELY.
5. THE LOT OWNER AND HIS SUCCESSORS AND ASSIGNEES AGREE TO ASSUME ANY AND ALL DITCH MAINTENANCE CHARGES WHICH ARE ESTABLISHED BY THE UNION COUNTY COMMISSIONERS FOR THIS SUBDIVISION.
6. NO CONSTRUCTION MAY BEGIN OR BUILDING STARTED WITHOUT THE INDIVIDUAL LOT OWNER OBTAINING ZONING, BUILDING, SEPTIC SEWAGE DISPOSAL, WATER WELL, AND DRIVEWAY PERMITS. ZONING PERMITS ARE OBTAINED FROM THE TOWNSHIP ZONING INSPECTOR. BUILDING PERMITS ARE OBTAINED FROM THE UNION COUNTY BUILDING REGULATION DEPARTMENT AND DRIVEWAY PERMITS ARE OBTAINED FROM THE UNION COUNTY ENGINEER'S OFFICE. SEPTIC SEWAGE DISPOSAL AND WATER WELL PERMITS ARE OBTAINED FROM THE UNION COUNTY HEALTH DEPARTMENT.
7. THE LOT OWNER AND HIS SUCCESSORS AND ASSIGNEES AGREE TO ASSUME AND AND ALL SANITARY SEWER CHARGES WHICH ARE ESTABLISHED BY THE APPLICABLE SERVICE PROVIDER.
8. ALL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE TOWNSHIP, UNION COUNTY, AND OTHER APPLICABLE CODE AUTHORITIES.
9. FOR ANY BUILDING PROPOSED TO BE BUILT WITHIN THE 100-YEAR FLOOD ZONE, THE STANDARDS OF THE UNION COUNTY FLOOD DAMAGE PREVENTION RESOLUTION MUST BE MET. NO CONSTRUCTION MAY BEGIN OR BUILDING STARTED WITHIN A DESIGNATED FLOOD HAZARD AREA PRIOR TO THE ISSUANCE OF A FLOOD HAZARD PERMIT BY THE UNION COUNTY BUILDING REGULATION DEPARTMENT.

RESIDENTIAL ONLY

10. UNION COUNTY IS NOT RESPONSIBLE FOR THE CURTAIN DRAIN TRUNK SEWER OR THE LATERALS LEADING TO IT. CURTAIN DRAINS SHALL NOT OUTLET DIRECTLY TO ROADSIDE DITCHES.
11. DOWNSPOUT DRAINS SHALL NOT BE CONNECTED DIRECTLY TO THE ROADWAY UNDERDRAINS.
- 14a. REGULAR MAINTENANCE OF THE STORMWATER DETENTION AREAS IS THE RESPONSIBILITY OF THE PROPERTY OWNERS UPON WHICH THE EASEMENT FOR THE DETENTION AREA IS LOCATED, UNLESS A HOMEOWNERS ASSOCIATION HAS BEEN CREATED AND HAS BEEN CHARGED WITH THE RESPONSIBILITY FOR SUCH REGULAR MAINTENANCE.
15. WHEN DRIVEWAYS FOR EACH LOT ARE CONSTRUCTED, A MINIMUM 8" DIAMETER STORM PIPE AND GRATE SHALL BE INSTALLED IN THE CENTERLINE OF THE ROADWAY DITCH, OVER THE EXISTING STORM LINE, AT THE "HIGH" SIDE OF THE DRIVEWAY. DRIVEWAY "CATCH BASINS" SHALL BE APPROVED AND INSPECTED BY THE UNION COUNTY ENGINEER'S OFFICE.

MISCELLANEOUS RESTRICTIONS/NOTES

24. THIS SUBDIVISION IS LOCATED ADJACENT TO LAND WHICH MAY BE USED FOR AGRICULTURAL/FARMING PURPOSES. LOT OWNERS CAN EXPECT NOISE FROM FARM MACHINERY, DUST FROM FARMING OPERATIONS, CHEMICALS TO THE SOIL AND CROPS, ODORS AND NOISE FROM LIVESTOCK, AND OTHER TYPICAL FARMING NUISANCES. OWNERS CAN EXPECT FARMING OPERATIONS TO HAPPEN DAY OR NIGHT. YOU CAN EXPECT HUNTING ON AGRICULTURAL LAND. DO NOT EXPECT TO USE AGRICULTURAL LAND FOR YOUR PURPOSES WITHOUT FIRST GETTING PERMISSION FROM THE LANDOWNER. DO NOT ALLOW YOUR CHILDREN OR YOUR PETS TO PLAY ON AGRICULTURAL LAND. DO NOT DISCARD CLIPPINGS AND TRIMMINGS FROM LAWNS, TREES, BUSHES, PLANTS, ETC. OR OTHER WASTES THAT YOU MAY GENERATE ON AGRICULTURAL LAND. DISPOSE OF ALL WASTES APPROPRIATELY. ADDITIONALLY, THERE MAY BE EXISTING DITCHES, SURFACE SWALES OR UNDERGROUND TILES THAT DRAIN WATER FROM ADJACENT LAND ON TO OR THROUGH YOUR PROPERTY. YOU HAVE A LEGAL RESPONSIBILITY TO MAINTAIN THE REASONABLE FLOW OF WATER ON TO OR THROUGH YOUR PROPERTY FROM UPGROUND PROPERTIES. YOU ALSO HAVE A LEGAL RESPONSIBILITY TO MAINTAIN AND REPAIR ANY EXISTING DITCHES, SURFACE SWALES OR UNDERGROUND TILE ON YOUR PROPERTY.

MISCELLANEOUS RESTRICTIONS/NOTES

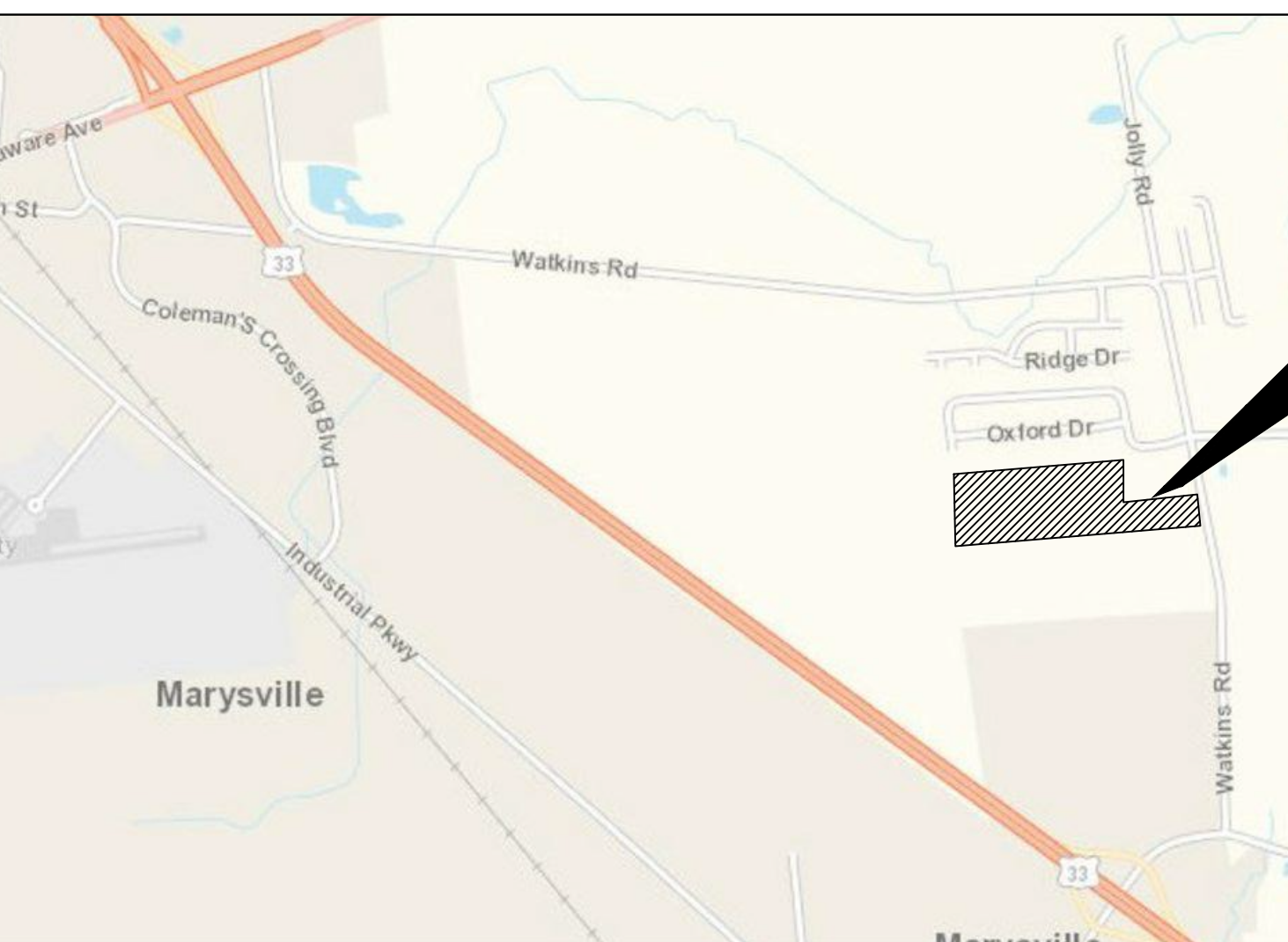
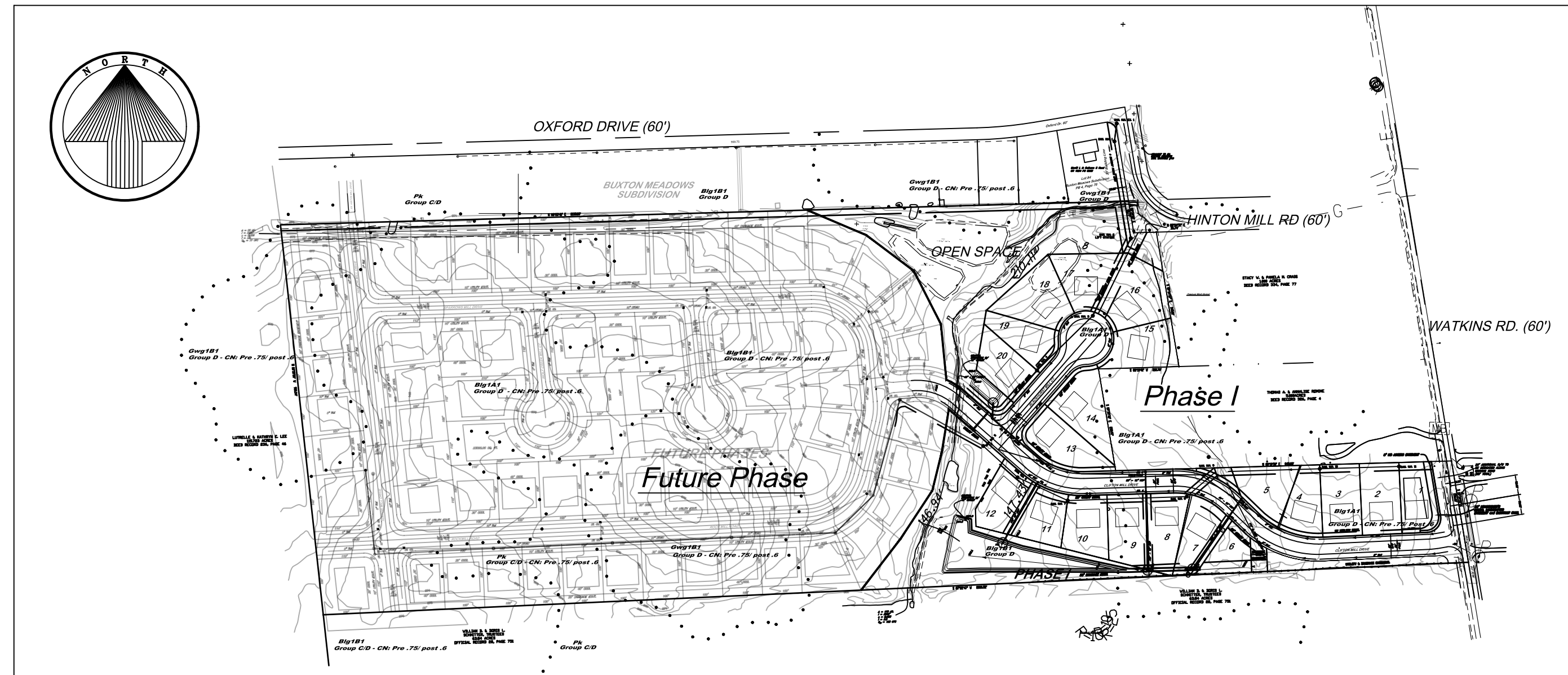
26. FEMA ZONE: AT THE TIME OF PLATTING, ALL OF THE SUBDIVISION LOTS ARE IN ZONE X (areas determined to be out of the 500-year floodplain) AS SAID ZONE IS DESIGNATED AND DELINEATED ON THE FEMA FLOOD INSURANCE RATE MAP FOR UNION COUNTY, OHIO AND UNINCORPORATED AREAS, MAP NUMBER 39159C0356D WITH EFFECTIVE DATE OF DECEMBER 16, 2008.
27. MINIMUM SETBACKS: ZONING REGULATIONS FOR THE MILLS OF WATKINS PHASE 1 SUBDIVISION IN EFFECT AT THE TIME OF PLATTING OF THE MILLS OF WATKINS PHASE 1 SUBDIVISION SPECIFY THE FOLLOWING DIMENSIONS FOR THE MINIMUM FRONT, SIDE AND REAR YARD SETBACKS FOR EACH LOT:  
FRONT 35 FEET  
SIDE 10 FEET ON EACH SIDE  
REAR 40 FEET  
SAID ZONING REGULATIONS AND ANY AMENDMENTS THERETO PASSED SUBSEQUENT TO ACCEPTANCE OF THIS PLAT, SHOULD BE REVIEWED TO DETERMINE THE THEN CURRENT REQUIREMENTS. THIS NOTICE IS SOLELY FOR THE PURPOSE OF NOTIFYING THE PUBLIC OF THE EXISTENCE, AT THE TIME OF PLATTING, OF CERTAIN ZONING REGULATIONS APPLICABLE TO THIS PROPERTY. THIS NOTICE SHALL NOT BE INTERPRETED AS CREATING PLAT OR SUBDIVISION RESTRICTIONS, PRIVATE USE RESTRICTIONS, COVENANTS RUNNING WITH THE LAND OR TITLE ENCUMBRANCES OF ANY NATURE, AND IS FOR INFORMATION PURPOSES ONLY.
28. UTILITY PROVIDERS: BUYERS OF THE LOTS IN THIS SUBDIVISION ARE HEREBY NOTIFIED THAT, AT THE TIME OF PLATTING, UTILITY SERVICE TO THIS SUBDIVISION FOR ELECTRIC POWER IS PROVIDED BY UNION RURAL ELECTRIC, TELEPHONE SERVICE IS PROVIDED BY FRONTIER COMMUNICATIONS, AND NATURAL GAS IS PROVIDED BY UNION RURAL ELECTRIC.
29. SCHOOL DISTRICT: AT THE TIME OF PLATTING, ALL OF THE SUBDIVISION IS IN THE MARYSVILLE EXEMPTED VILLAGE SCHOOL DISTRICT.
31. LANDSCAPE EASEMENT: WITHIN, OVER AND UNDER THE AREA OF LAND DESIGNATED HEREON AS "LANDSCAPE EASEMENT," A NONEXCLUSIVE EASEMENT IS HEREBY RESERVED FOR THE PURPOSE OF INSTALLING/ CONSTRUCTING, OPERATING, USING, AND MAINTAINING LANDSCAPING, LANDSCAPING FEATURES AND SUBDIVISION ENTRANCE FEATURES THEREIN. SUCH LANDSCAPING, LANDSCAPING FEATURES AND SUBDIVISION ENTRANCE FEATURES SHALL BE INSTALLED/CONSTRUCTED BY THE DEVELOPER OF THE SUBDIVISION AND OPERATED, USED AND MAINTAINED BY SAID DEVELOPER UNTIL SUCH TIME AS THE ASSOCIATION IS FORMED AND FOUNDED. THEREAFTER, SAID ASSOCIATION SHALL OPERATE, USE AND MAINTAIN SAID LANDSCAPING, LANDSCAPING FEATURES AND SUBDIVISION ENTRANCE FEATURES AND SAID ASSOCIATION SHALL HAVE AND IS HEREBY GRANTED A NONEXCLUSIVE RIGHT TO USE SAID EASEMENT AREAS FOR SAID PURPOSE. NO DEVELOPER-INSTALLED LANDSCAPING, LANDSCAPING FEATURES AND SUBDIVISION ENTRANCE FEATURES SHALL BE REMOVED FROM SAID EASEMENT AREAS WITHOUT THE APPROVAL OF SAID DEVELOPER OR SAID DEVELOPER'S DESIGNEE.

# Mills of Watkins

## Preliminary Plat

### DOVER TOWNSHIP, UNION COUNTY, OHIO

#### V.M.S. 9028



LOCATION MAP  
NO SCALE

**OWNER**  
BUXTON DEVELOPMENT CO.  
Barney Dodson  
7510 Merchant Road  
Plain City, OH 43064

**SURVEYOR**  
DIAMOND V, LLC  
STEVEN L. LAMPHEAR, PE, PS  
8205 SMITH CALHOUN ROAD,  
PLAIN CITY, OHIO 43064  
(614) 620-0331

PHASE 1  
SCALE: 1"=250'

SITE

### SURVEYOR'S CERTIFICATE

THE ACCOMPANYING PLAT REPRESENTS A SUBDIVISION OF LAND IN THE VIRGINIA MILITARY SURVEY No. 9028, DOVER TOWNSHIP, UNION COUNTY, OHIO.

THE TRACT HAS AN AREA OF 51.09 ACRES WITH 2.76 ACRES IN STREET (PHASE I), 8.54 ACRES IN LOTS (PHASE I), 5.71 ACRES IN PRESERVATIONS AREA (PHASE I & FUTURE - 11%) AND 1.30 ACRES IN PONDS MAKING A TOTAL OF 17.02 ACRES IN PHASE I. FUTURE PHASES WILL HAVE +/- 6.8 ACRES IN STREETS AND +/- 27.27 ACRES IN LOTS.

ALL MEASUREMENTS ARE IN FEET AND DECIMALS OF A FOOT. ALL MEASUREMENTS ON CURVES ARE ARC DISTANCES.

THE SUBDIVISION IS WITHIN FLOOD ZONE X PER FIRM RATE MAP 39159C0356D, EFFECTIVE DATE DECEMBER 16, 2008 UNLESS OTHERWISE SHOWN.

I HEREBY CERTIFY THAT THE ACCOMPANYING PLAT IS A CORRECT REPRESENTATION OF THE MILLS OF WATKINS PHASE I AS SURVEYED \_\_\_\_\_ 20\_\_\_\_.

MONUMENTS HAVE BEEN PLACED AS INDICATED. MONUMENTS SHOWN THUS "O" WILL BE SET AT ALL LOT CORNERS AND ALL POINTS OF CURVATURE AND TANGENCY ALONG THE STREET RIGHT-OF-WAY LINE AFTER CONSTRUCTION AND PRIOR TO THE SALE OF ANY LOTS.

Steven L. Lamphear, PE, PS  
PROFESSIONAL SURVEYOR #7876  
DATE \_\_\_\_\_

### DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT BUXTON DEVELOPMENT CO., OWNER OF THE LAND INDICATED ON THE ACCOMPANYING PLAT, HAS AUTHORIZED THE PLATTING THEREOF AND DOES HEREBY DEDICATE THE STREETS, EASEMENTS AND RESERVE AREAS TO THE PUBLIC USE FOREVER.

WITNESS: \_\_\_\_\_ OWNER

STATE OF OHIO  
COUNTY OF UNION  
BEFORE ME A NOTARY PUBLIC IN AND FOR SAID COUNTY PERSONALLY CAME

WHO ACKNOWLEDGED THE SIGNING OF THE FOREGOING INSTRUMENT TO BE THEIR VOLUNTARY ACT AND DEED FOR THE USE AND PURPOSES THEREIN EXPRESSED. IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND AFFIXED MY OFFICIAL SEAL THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2018.

BY \_\_\_\_\_  
NOTARY PUBLIC  
MY COMMISSION EXPIRES \_\_\_\_\_

RIGHTS-OF-WAY FOR PUBLIC STREETS AND ROADS HEREIN DEDICATED TO PUBLIC USE ARE HEREBY APPROVED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2018 FOR THE COUNTY OF UNION, STATE OF OHIO. STREET IMPROVEMENTS WITHIN SAID DEDICATED RIGHTS-OF-WAY SHALL NOT BE ACCEPTED FOR PUBLIC USE UNLESS AND UNTIL CONSTRUCTION IS COMPLETED AND ACCEPTED AS SUCH BY UNION COUNTY. IN ADDITION, STREET IMPROVEMENTS WITHIN SAID DEDICATED RIGHTS-OF-WAY SHALL NOT BE ACCEPTED FOR PUBLIC MAINTENANCE UNTIL THE MAINTENANCE PERIOD TRANSPIRES AND THE STREET IMPROVEMENTS ARE ACCEPTED FOR PUBLIC MAINTENANCE BY UNION COUNTY.

### AUDITOR'S PARCEL ACREAGE

THIS PLAT CONSISTS OF 54.09 ACRES FROM AUDITOR'S PARCEL NO. 1100120010000 (BUXTON DEVELOPMENT CO., O.R. 527, PAGE 782)

### BASIS OF BEARINGS

Bearings indicated hereon are based on an assumed meridian with all others based on angles turned.

### APPROVALS

CHAIRMAN, DOVER TOWNSHIP TRUSTEES \_\_\_\_\_ DATE \_\_\_\_\_

UNION COUNTY ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

UNION COUNTY BOARD OF HEALTH \_\_\_\_\_ DATE \_\_\_\_\_

LUC REGIONAL PLANNING COMMISSION \_\_\_\_\_ DATE \_\_\_\_\_

UNION COUNTY COMMISSIONER \_\_\_\_\_ DATE \_\_\_\_\_

UNION COUNTY COMMISSIONER \_\_\_\_\_ DATE \_\_\_\_\_

UNION COUNTY COMMISSIONER \_\_\_\_\_ DATE \_\_\_\_\_

TRANSFERRED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2018.

UNION COUNTY AUDITOR \_\_\_\_\_ DATE \_\_\_\_\_

FILED FOR RECORD THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2018, AT \_\_\_\_\_ M.

RECORDED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2018, IN PLAT BOOK \_\_\_\_\_, PAGE(S) \_\_\_\_\_

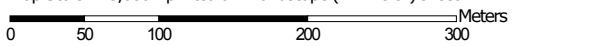
UNION COUNTY RECORDER \_\_\_\_\_ DATE \_\_\_\_\_



Soil Map—Union County, Ohio  
(Buxton Mews)



Map Scale: 1:5,080 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

6/18/2018  
Page 1 of 3


## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Union County, Ohio

Survey Area Data: Version 16, Oct 5, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 12, 2009—Dec 26, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	20.4	38.1%
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	23.8	44.6%
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	7.0	13.1%
Pk	Pewamo silty clay loam, 0 to 1 percent slopes	2.3	4.2%
<b>Totals for Area of Interest</b>		<b>53.5</b>	<b>100.0%</b>





United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **Union County, Ohio**

**WATKINS ROAD, UNION CO, OH**



July 2, 2018

# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

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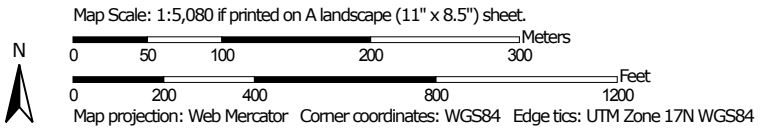
The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



# Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.



### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**

 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Union County, Ohio  
 Survey Area Data: Version 16, Oct 5, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 12, 2009—Dec 26, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	18.3	37.4%
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	22.6	46.2%
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	6.1	12.4%
Pk	Pewamo silty clay loam, 0 to 1 percent slopes	2.0	4.1%
<b>Totals for Area of Interest</b>		<b>49.0</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

## Custom Soil Resource Report

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Union County, Ohio

### Blg1A1—Blount silt loam, ground moraine, 0 to 2 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2skcv  
*Elevation:* 700 to 1,300 feet  
*Mean annual precipitation:* 34 to 42 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 140 to 180 days  
*Farmland classification:* Prime farmland if drained

#### Map Unit Composition

*Blount, ground moraine, and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Blount, Ground Moraine

##### Setting

*Landform:* Ground moraines on till plains  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Wisconsin till derived from limestone and shale

##### Typical profile

*Ap - 0 to 10 inches:* silt loam  
*Bt - 10 to 33 inches:* silty clay  
*BC - 33 to 39 inches:* clay loam  
*Cd - 39 to 79 inches:* clay loam

##### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* 31 to 54 inches to densic material  
*Natural drainage class:* Somewhat poorly drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately high (0.01 to 0.20 in/hr)  
*Depth to water table:* About 6 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 35 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Moderate (about 6.2 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* D  
*Hydric soil rating:* No

### Minor Components

#### **Pewamo, ground moraine**

*Percent of map unit:* 9 percent  
*Landform:* Ground moraines on till plains  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave, linear  
*Hydric soil rating:* Yes

#### **Glynwood, ground moraine**

*Percent of map unit:* 6 percent  
*Landform:* Ground moraines on till plains  
*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Side slope, nose slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

### **Blg1B1—Blount silt loam, ground moraine, 2 to 4 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 2s1j6  
*Elevation:* 700 to 1,300 feet  
*Mean annual precipitation:* 34 to 42 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 140 to 180 days  
*Farmland classification:* Prime farmland if drained

#### **Map Unit Composition**

*Blount, ground moraine, and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Blount, Ground Moraine**

##### **Setting**

*Landform:* Ground moraines on till plains  
*Landform position (two-dimensional):* Summit, backslope  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Wisconsin till derived from limestone and shale

##### **Typical profile**

*Ap - 0 to 9 inches:* silt loam  
*Bt - 9 to 32 inches:* silty clay  
*BC - 32 to 37 inches:* clay loam  
*Cd - 37 to 79 inches:* clay loam

## Custom Soil Resource Report

### Properties and qualities

*Slope:* 2 to 4 percent  
*Depth to restrictive feature:* 30 to 54 inches to densic material  
*Natural drainage class:* Somewhat poorly drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately high (0.01 to 0.20 in/hr)  
*Depth to water table:* About 6 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 35 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 5.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* D  
*Hydric soil rating:* No

### Minor Components

#### Pewamo, ground moraine

*Percent of map unit:* 9 percent  
*Landform:* Ground moraines on till plains  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### Glynwood, ground moraine

*Percent of map unit:* 6 percent  
*Landform:* Ground moraines on till plains  
*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Side slope, nose slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

## Gwg1B1—Glynwood silt loam, ground moraine, 2 to 6 percent slopes

### Map Unit Setting

*National map unit symbol:* 2v4bl  
*Elevation:* 700 to 1,300 feet  
*Mean annual precipitation:* 34 to 42 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 140 to 180 days  
*Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Glynwood, ground moraine, and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Glynwood, Ground Moraine

#### Setting

*Landform:* Ground moraines on till plains

*Landform position (two-dimensional):* Shoulder, backslope

*Landform position (three-dimensional):* Side slope, nose slope

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear, convex

*Parent material:* Wisconsin till derived from limestone and shale

#### Typical profile

*Ap - 0 to 9 inches:* silt loam

*Bt - 9 to 29 inches:* clay

*BC - 29 to 34 inches:* clay loam

*Cd - 34 to 79 inches:* clay loam

#### Properties and qualities

*Slope:* 2 to 6 percent

*Depth to restrictive feature:* 28 to 45 inches to densic material

*Natural drainage class:* Moderately well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately high (0.01 to 0.20 in/hr)

*Depth to water table:* About 12 to 24 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 35 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Low (about 5.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2e

*Hydrologic Soil Group:* D

*Hydric soil rating:* No

### Minor Components

#### Blount, ground moraine

*Percent of map unit:* 9 percent

*Landform:* Ground moraines on till plains

*Landform position (two-dimensional):* Summit, backslope

*Landform position (three-dimensional):* Interfluvium

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### Pewamo

*Percent of map unit:* 6 percent

*Landform:* Ground moraines on till plains



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*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

### **Pk—Pewamo silty clay loam, 0 to 1 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 2t6lv  
*Elevation:* 700 to 1,300 feet  
*Mean annual precipitation:* 32 to 42 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 140 to 180 days  
*Farmland classification:* Prime farmland if drained

#### **Map Unit Composition**

*Pewamo and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Pewamo**

##### **Setting**

*Landform:* Depressions on till plains, drainageways on till plains  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave  
*Parent material:* Wisconsin till derived from limestone and shale

##### **Typical profile**

*Ap - 0 to 11 inches:* silty clay loam  
*Btg1 - 11 to 34 inches:* silty clay  
*Btg2 - 34 to 47 inches:* silty clay  
*BCg - 47 to 57 inches:* clay loam  
*Cg - 57 to 79 inches:* clay loam

##### **Properties and qualities**

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Very poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Calcium carbonate, maximum in profile:* 30 percent

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*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 8.5 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2w

*Hydrologic Soil Group:* C/D

*Hydric soil rating:* Yes

### **Minor Components**

#### **Blount**

*Percent of map unit:* 9 percent

*Landform:* End moraines on till plains, ground moraines on till plains

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Interfluvium

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### **Minster**

*Percent of map unit:* 6 percent

*Landform:* Depressions on till plains

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Base slope

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

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# Glossary

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Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the following National Soil Survey Handbook link: "[National Soil Survey Handbook](#)."

## **ABC soil**

A soil having an A, a B, and a C horizon.

## **Ablation till**

Loose, relatively permeable earthy material deposited during the downwasting of nearly static glacial ice, either contained within or accumulated on the surface of the glacier.

## **AC soil**

A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

## **Aeration, soil**

The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

## **Aggregate, soil**

Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

## **Alkali (sodic) soil**

A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

## **Alluvial cone**

A semiconical type of alluvial fan having very steep slopes. It is higher, narrower, and steeper than a fan and is composed of coarser and thicker layers of material deposited by a combination of alluvial episodes and (to a much lesser degree) landslides (debris flow). The coarsest materials tend to be concentrated at the apex of the cone.

**Alluvial fan**

A low, outspread mass of loose materials and/or rock material, commonly with gentle slopes. It is shaped like an open fan or a segment of a cone. The material was deposited by a stream at the place where it issues from a narrow mountain valley or upland valley or where a tributary stream is near or at its junction with the main stream. The fan is steepest near its apex, which points upstream, and slopes gently and convexly outward (downstream) with a gradual decrease in gradient.

**Alluvium**

Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.

**Alpha,alpha-dipyridyl**

A compound that when dissolved in ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction implies reducing conditions and the likely presence of redoximorphic features.

**Animal unit month (AUM)**

The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

**Aquic conditions**

Current soil wetness characterized by saturation, reduction, and redoximorphic features.

**Argillic horizon**

A subsoil horizon characterized by an accumulation of illuvial clay.

**Arroyo**

The flat-floored channel of an ephemeral stream, commonly with very steep to vertical banks cut in unconsolidated material. It is usually dry but can be transformed into a temporary watercourse or short-lived torrent after heavy rain within the watershed.

**Aspect**

The direction toward which a slope faces. Also called slope aspect.

**Association, soil**

A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

**Available water capacity (available moisture capacity)**

The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

*Very low:* 0 to 3

*Low:* 3 to 6

*Moderate:* 6 to 9

*High:* 9 to 12

*Very high:* More than 12

**Backslope**

The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

**Backswamp**

A flood-plain landform. Extensive, marshy or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

**Badland**

A landscape that is intricately dissected and characterized by a very fine drainage network with high drainage densities and short, steep slopes and narrow interfluves. Badlands develop on surfaces that have little or no vegetative cover overlying unconsolidated or poorly cemented materials (clays, silts, or sandstones) with, in some cases, soluble minerals, such as gypsum or halite.

**Bajada**

A broad, gently inclined alluvial piedmont slope extending from the base of a mountain range out into a basin and formed by the lateral coalescence of a series of alluvial fans. Typically, it has a broadly undulating transverse profile, parallel to the mountain front, resulting from the convexities of component fans. The term is generally restricted to constructional slopes of intermontane basins.

**Basal area**

The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

**Base saturation**

The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

**Base slope (geomorphology)**

A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

**Bedding plane**

A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology)

from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.

**Bedding system**

A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

**Bedrock**

The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

**Bedrock-controlled topography**

A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

**Bench terrace**

A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

**Bisequum**

Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

**Blowout (map symbol)**

A saucer-, cup-, or trough-shaped depression formed by wind erosion on a preexisting dune or other sand deposit, especially in an area of shifting sand or loose soil or where protective vegetation is disturbed or destroyed. The adjoining accumulation of sand derived from the depression, where recognizable, is commonly included. Blowouts are commonly small.

**Borrow pit (map symbol)**

An open excavation from which soil and underlying material have been removed, usually for construction purposes.

**Bottom land**

An informal term loosely applied to various portions of a flood plain.

**Boulders**

Rock fragments larger than 2 feet (60 centimeters) in diameter.

**Breaks**

A landscape or tract of steep, rough or broken land dissected by ravines and gullies and marking a sudden change in topography.



**Breast height**

An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

**Brush management**

Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

**Butte**

An isolated, generally flat-topped hill or mountain with relatively steep slopes and talus or precipitous cliffs and characterized by summit width that is less than the height of bounding escarpments; commonly topped by a caprock of resistant material and representing an erosion remnant carved from flat-lying rocks.

**Cable yarding**

A method of moving felled trees to a nearby central area for transport to a processing facility. Most cable yarding systems involve use of a drum, a pole, and wire cables in an arrangement similar to that of a rod and reel used for fishing. To reduce friction and soil disturbance, felled trees generally are reeled in while one end is lifted or the entire log is suspended.

**Calcareous soil**

A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

**Caliche**

A general term for a prominent zone of secondary carbonate accumulation in surficial materials in warm, subhumid to arid areas. Caliche is formed by both geologic and pedologic processes. Finely crystalline calcium carbonate forms a nearly continuous surface-coating and void-filling medium in geologic (parent) materials. Cementation ranges from weak in nonindurated forms to very strong in indurated forms. Other minerals (e.g., carbonates, silicate, and sulfate) may occur as accessory cements. Most petrocalcic horizons and some calcic horizons are caliche.

**California bearing ratio (CBR)**

The load-supporting capacity of a soil as compared to that of standard crushed limestone, expressed as a ratio. First standardized in California. A soil having a CBR of 16 supports 16 percent of the load that would be supported by standard crushed limestone, per unit area, with the same degree of distortion.

**Canopy**

The leafy crown of trees or shrubs. (See Crown.)

**Canyon**

A long, deep, narrow valley with high, precipitous walls in an area of high local relief.

**Capillary water**

Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

**Catena**

A sequence, or “chain,” of soils on a landscape that formed in similar kinds of parent material and under similar climatic conditions but that have different characteristics as a result of differences in relief and drainage.

**Cation**

An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

**Cation-exchange capacity**

The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

**Catsteps**

See Terracettes.

**Cement rock**

Shaly limestone used in the manufacture of cement.

**Channery soil material**

Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

**Chemical treatment**

Control of unwanted vegetation through the use of chemicals.

**Chiseling**

Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

**Cirque**

A steep-walled, semicircular or crescent-shaped, half-bowl-like recess or hollow, commonly situated at the head of a glaciated mountain valley or high on the side of a mountain. It was produced by the erosive activity of a mountain glacier. It commonly contains a small round lake (tarn).

**Clay**

As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

**Clay depletions**

See Redoximorphic features.

**Clay film**

A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

**Clay spot (map symbol)**

A spot where the surface texture is silty clay or clay in areas where the surface layer of the soils in the surrounding map unit is sandy loam, loam, silt loam, or coarser.

**Claypan**

A dense, compact subsoil layer that contains much more clay than the overlying materials, from which it is separated by a sharply defined boundary. The layer restricts the downward movement of water through the soil. A claypan is commonly hard when dry and plastic and sticky when wet.

**Climax plant community**

The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

**Coarse textured soil**

Sand or loamy sand.

**Cobble (or cobblestone)**

A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

**Cobbly soil material**

Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

**COLE (coefficient of linear extensibility)**

See Linear extensibility.

**Colluvium**

Unconsolidated, unsorted earth material being transported or deposited on side slopes and/or at the base of slopes by mass movement (e.g., direct gravitational action) and by local, unconcentrated runoff.

**Complex slope**

Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

**Complex, soil**

A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

**Concretions**

See Redoximorphic features.

**Conglomerate**

A coarse grained, clastic sedimentary rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.

**Conservation cropping system**

Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

**Conservation tillage**

A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

**Consistence, soil**

Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

**Contour stripcropping**

Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

**Control section**

The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

**Coprogenous earth (sedimentary peat)**

A type of limnic layer composed predominantly of fecal material derived from aquatic animals.

**Corrosion (geomorphology)**

A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.

**Corrosion (soil survey interpretations)**

Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

**Cover crop**

A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

**Crop residue management**

Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

**Cropping system**

Growing crops according to a planned system of rotation and management practices.

**Cross-slope farming**

Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

**Crown**

The upper part of a tree or shrub, including the living branches and their foliage.

**Cryoturbate**

A mass of soil or other unconsolidated earthy material moved or disturbed by frost action. It is typically coarser than the underlying material.

**Cuesta**

An asymmetric ridge capped by resistant rock layers of slight or moderate dip (commonly less than 15 percent slopes); a type of homocline produced by differential erosion of interbedded resistant and weak rocks. A cuesta has a long, gentle slope on one side (dip slope) that roughly parallels the inclined beds; on the other side, it has a relatively short and steep or clifflike slope (scarp) that cuts through the tilted rocks.

**Culmination of the mean annual increment (CMAI)**

The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

**Cutbanks cave**

The walls of excavations tend to cave in or slough.

**Decreasers**

The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.

**Deferred grazing**

Postponing grazing or resting grazing land for a prescribed period.

**Delta**

A body of alluvium having a surface that is fan shaped and nearly flat; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

**Dense layer**

A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

**Depression, closed (map symbol)**

A shallow, saucer-shaped area that is slightly lower on the landscape than the surrounding area and that does not have a natural outlet for surface drainage.

**Depth, soil**

Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

**Desert pavement**

A natural, residual concentration or layer of wind-polished, closely packed gravel, boulders, and other rock fragments mantling a desert surface. It forms where wind action and sheetwash have removed all smaller particles or where rock fragments have migrated upward through sediments to the surface. It typically protects the finer grained underlying material from further erosion.

**Diatomaceous earth**

A geologic deposit of fine, grayish siliceous material composed chiefly or entirely of the remains of diatoms.

**Dip slope**

A slope of the land surface, roughly determined by and approximately conforming to the dip of the underlying bedrock.

**Diversion (or diversion terrace)**

A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

**Divided-slope farming**

A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.

**Drainage class (natural)**

Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained*. These classes are defined in the “Soil Survey Manual.”

**Drainage, surface**

Runoff, or surface flow of water, from an area.

**Drainageway**

A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.

**Draw**

A small stream valley that generally is shallower and more open than a ravine or gulch and that has a broader bottom. The present stream channel may appear inadequate to have cut the drainageway that it occupies.

**Drift**

A general term applied to all mineral material (clay, silt, sand, gravel, and boulders) transported by a glacier and deposited directly by or from the ice or transported by running water emanating from a glacier. Drift includes unstratified material (till) that forms moraines and stratified deposits that form outwash plains, eskers, kames, varves, and glaciofluvial sediments. The term is generally applied to Pleistocene glacial deposits in areas that no longer contain glaciers.



**Drumlin**

A low, smooth, elongated oval hill, mound, or ridge of compact till that has a core of bedrock or drift. It commonly has a blunt nose facing the direction from which the ice approached and a gentler slope tapering in the other direction. The longer axis is parallel to the general direction of glacier flow. Drumlins are products of streamline (laminar) flow of glaciers, which molded the subglacial floor through a combination of erosion and deposition.

**Duff**

A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

**Dune**

A low mound, ridge, bank, or hill of loose, windblown granular material (generally sand), either barren and capable of movement from place to place or covered and stabilized with vegetation but retaining its characteristic shape.

**Earthy fill**

See Mine spoil.

**Ecological site**

An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.

**Eluviation**

The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

**Endosaturation**

A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

**Eolian deposit**

Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

**Ephemeral stream**

A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

**Episaturation**

A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

**Erosion**

The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

**Erosion (accelerated)**

Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

**Erosion (geologic)**

Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

**Erosion pavement**

A surficial lag concentration or layer of gravel and other rock fragments that remains on the soil surface after sheet or rill erosion or wind has removed the finer soil particles and that tends to protect the underlying soil from further erosion.

**Erosion surface**

A land surface shaped by the action of erosion, especially by running water.

**Escarpment**

A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Most commonly applied to cliffs produced by differential erosion. Synonym: scarp.

**Escarpment, bedrock (map symbol)**

A relatively continuous and steep slope or cliff, produced by erosion or faulting, that breaks the general continuity of more gently sloping land surfaces. Exposed material is hard or soft bedrock.

**Escarpment, nonbedrock (map symbol)**

A relatively continuous and steep slope or cliff, generally produced by erosion but in some places produced by faulting, that breaks the continuity of more gently sloping land surfaces. Exposed earthy material is nonsoil or very shallow soil.

**Esker**

A long, narrow, sinuous, steep-sided ridge of stratified sand and gravel deposited as the bed of a stream flowing in an ice tunnel within or below the ice (subglacial) or between ice walls on top of the ice of a wasting glacier and left

behind as high ground when the ice melted. Eskers range in length from less than a kilometer to more than 160 kilometers and in height from 3 to 30 meters.

**Extrusive rock**

Igneous rock derived from deep-seated molten matter (magma) deposited and cooled on the earth's surface.

**Fallow**

Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

**Fan remnant**

A general term for landforms that are the remaining parts of older fan landforms, such as alluvial fans, that have been either dissected or partially buried.

**Fertility, soil**

The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

**Fibric soil material (peat)**

The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

**Field moisture capacity**

The moisture content of a soil, expressed as a percentage of the oven-dry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity*, *normal moisture capacity*, or *capillary capacity*.

**Fill slope**

A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

**Fine textured soil**

Sandy clay, silty clay, or clay.

**Firebreak**

An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

**First bottom**

An obsolete, informal term loosely applied to the lowest flood-plain steps that are subject to regular flooding.

**Flaggy soil material**

Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

**Flagstone**

A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

**Flood plain**

The nearly level plain that borders a stream and is subject to flooding unless protected artificially.

**Flood-plain landforms**

A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, flood-plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.

**Flood-plain splay**

A fan-shaped deposit or other outspread deposit formed where an overloaded stream breaks through a levee (natural or artificial) and deposits its material (commonly coarse grained) on the flood plain.

**Flood-plain step**

An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and/or deposition. May occur individually or as a series of steps.

**Fluvial**

Of or pertaining to rivers or streams; produced by stream or river action.

**Foothills**

A region of steeply sloping hills that fringes a mountain range or high-plateau escarpment. The hills have relief of as much as 1,000 feet (300 meters).

**Footslope**

The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

**Forb**

Any herbaceous plant not a grass or a sedge.

**Forest cover**

All trees and other woody plants (underbrush) covering the ground in a forest.

**Forest type**

A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

**Fragipan**

A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

**Genesis, soil**

The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

**Gilgai**

Commonly, a succession of microbasins and microknolls in nearly level areas or of microvalleys and microridges parallel with the slope. Typically, the microrelief of clayey soils that shrink and swell considerably with changes in moisture content.

**Glaciofluvial deposits**

Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur in the form of outwash plains, valley trains, deltas, kames, eskers, and kame terraces.

**Glaciolacustrine deposits**

Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are bedded or laminated.

**Gleyed soil**

Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

**Graded stripcropping**

Growing crops in strips that grade toward a protected waterway.

**Grassed waterway**

A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

**Gravel**

Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

**Gravel pit (map symbol)**

An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel.

**Gravelly soil material**

Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

**Gravelly spot (map symbol)**

A spot where the surface layer has more than 35 percent, by volume, rock fragments that are mostly less than 3 inches in diameter in an area that has less than 15 percent rock fragments.

**Green manure crop (agronomy)**

A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

**Ground water**

Water filling all the unblocked pores of the material below the water table.

**Gully (map symbol)**

A small, steep-sided channel caused by erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage whereas a rill is of lesser depth and can be smoothed over by ordinary tillage.

**Hard bedrock**

Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

**Hard to reclaim**

Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

**Hardpan**

A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

**Head slope (geomorphology)**

A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.

**Hemic soil material (mucky peat)**

Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

**High-residue crops**

Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

**Hill**

A generic term for an elevated area of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.

**Hillslope**

A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.

**Horizon, soil**

A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:



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*O horizon:* An organic layer of fresh and decaying plant residue.

*L horizon:* A layer of organic and mineral limnic materials, including coprogenous earth (sedimentary peat), diatomaceous earth, and marl.

*A horizon:* The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

*E horizon:* The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

*B horizon:* The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

*C horizon:* The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

*Cr horizon:* Soft, consolidated bedrock beneath the soil.

*R layer:* Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

*M layer:* A root-limiting subsoil layer consisting of nearly continuous, horizontally oriented, human-manufactured materials.

*W layer:* A layer of water within or beneath the soil.

### **Humus**

The well decomposed, more or less stable part of the organic matter in mineral soils.

### **Hydrologic soil groups**

Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties include depth to a seasonal high water table, the infiltration rate, and depth to a layer that significantly restricts the downward movement of water. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

### **Igneous rock**

Rock that was formed by cooling and solidification of magma and that has not been changed appreciably by weathering since its formation. Major varieties include plutonic and volcanic rock (e.g., andesite, basalt, and granite).

### **Illuviation**

The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

**Impervious soil**

A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

**Increasesers**

Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasesers commonly are the shorter plants and the less palatable to livestock.

**Infiltration**

The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

**Infiltration capacity**

The maximum rate at which water can infiltrate into a soil under a given set of conditions.

**Infiltration rate**

The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

**Intake rate**

The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

- Very low:* Less than 0.2
- Low:* 0.2 to 0.4
- Moderately low:* 0.4 to 0.75
- Moderate:* 0.75 to 1.25
- Moderately high:* 1.25 to 1.75
- High:* 1.75 to 2.5
- Very high:* More than 2.5

**Interfluve**

A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.

**Interfluve (geomorphology)**

A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.

**Intermittent stream**

A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

**Invaders**

On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

**Iron depletions**

See Redoximorphic features.

**Irrigation**

Application of water to soils to assist in production of crops. Methods of irrigation are:

*Basin:* Water is applied rapidly to nearly level plains surrounded by levees or dikes.

*Border:* Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

*Controlled flooding:* Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

*Corrugation:* Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

*Drip (or trickle):* Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

*Furrow:* Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

*Sprinkler:* Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

*Subirrigation:* Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

*Wild flooding:* Water, released at high points, is allowed to flow onto an area without controlled distribution.

**Kame**

A low mound, knob, hummock, or short irregular ridge composed of stratified sand and gravel deposited by a subglacial stream as a fan or delta at the margin of a melting glacier; by a supraglacial stream in a low place or hole on the surface of the glacier; or as a ponded deposit on the surface or at the margin of stagnant ice.

**Karst (topography)**

A kind of topography that formed in limestone, gypsum, or other soluble rocks by dissolution and that is characterized by closed depressions, sinkholes, caves, and underground drainage.

**Knoll**

A small, low, rounded hill rising above adjacent landforms.

**Ksat**

See Saturated hydraulic conductivity.

**Lacustrine deposit**

Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

**Lake plain**

A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

**Lake terrace**

A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

**Landfill (map symbol)**

An area of accumulated waste products of human habitation, either above or below natural ground level.

**Landslide**

A general, encompassing term for most types of mass movement landforms and processes involving the downslope transport and outward deposition of soil and rock materials caused by gravitational forces; the movement may or may not involve saturated materials. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

**Large stones**

Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

**Lava flow (map symbol)**

A solidified, commonly lobate body of rock formed through lateral, surface outpouring of molten lava from a vent or fissure.

**Leaching**

The removal of soluble material from soil or other material by percolating water.

**Levee (map symbol)**

An embankment that confines or controls water, especially one built along the banks of a river to prevent overflow onto lowlands.

**Linear extensibility**

Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at  $1/3$ - or  $1/10$ -bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

**Liquid limit**

The moisture content at which the soil passes from a plastic to a liquid state.

**Loam**

Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

**Loess**

Material transported and deposited by wind and consisting dominantly of silt-sized particles.

**Low strength**

The soil is not strong enough to support loads.

**Low-residue crops**

Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

**Marl**

An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal proportions; formed primarily under freshwater lacustrine conditions but also formed in more saline environments.

**Marsh or swamp (map symbol)**

A water-saturated, very poorly drained area that is intermittently or permanently covered by water. Sedges, cattails, and rushes are the dominant vegetation in marshes, and trees or shrubs are the dominant vegetation in swamps. Not used in map units where the named soils are poorly drained or very poorly drained.

**Mass movement**

A generic term for the dislodgment and downslope transport of soil and rock material as a unit under direct gravitational stress.

**Masses**

See Redoximorphic features.

**Meander belt**

The zone within which migration of a meandering channel occurs; the flood-plain area included between two imaginary lines drawn tangential to the outer bends of active channel loops.

**Meander scar**

A crescent-shaped, concave or linear mark on the face of a bluff or valley wall, produced by the lateral erosion of a meandering stream that impinged upon and undercut the bluff.

**Meander scroll**

One of a series of long, parallel, close-fitting, crescent-shaped ridges and troughs formed along the inner bank of a stream meander as the channel migrated laterally down-valley and toward the outer bank.

**Mechanical treatment**

Use of mechanical equipment for seeding, brush management, and other management practices.

**Medium textured soil**

Very fine sandy loam, loam, silt loam, or silt.

**Mesa**

A broad, nearly flat topped and commonly isolated landmass bounded by steep slopes or precipitous cliffs and capped by layers of resistant, nearly horizontal rocky material. The summit width is characteristically greater than the height of the bounding escarpments.

**Metamorphic rock**

Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement at depth in the earth's crust. Nearly all such rocks are crystalline.

**Mine or quarry (map symbol)**

An open excavation from which soil and underlying material have been removed and in which bedrock is exposed. Also denotes surface openings to underground mines.

**Mine spoil**

An accumulation of displaced earthy material, rock, or other waste material removed during mining or excavation. Also called earthy fill.

**Mineral soil**

Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

**Minimum tillage**

Only the tillage essential to crop production and prevention of soil damage.

**Miscellaneous area**

A kind of map unit that has little or no natural soil and supports little or no vegetation.

**Miscellaneous water (map symbol)**

Small, constructed bodies of water that are used for industrial, sanitary, or mining applications and that contain water most of the year.

**Moderately coarse textured soil**

Coarse sandy loam, sandy loam, or fine sandy loam.

**Moderately fine textured soil**

Clay loam, sandy clay loam, or silty clay loam.

**Mollic epipedon**

A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.

**Moraine**

In terms of glacial geology, a mound, ridge, or other topographically distinct accumulation of unsorted, unstratified drift, predominantly till, deposited primarily by the direct action of glacial ice in a variety of landforms. Also, a general term for a landform composed mainly of till (except for kame moraines, which are composed mainly of stratified outwash) that has been deposited by a glacier. Some types of moraines are disintegration, end, ground, kame, lateral, recessional, and terminal.

**Morphology, soil**

The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

**Mottling, soil**

Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few*, *common*, and *many*; size—*fine*, *medium*, and *coarse*; and contrast—*faint*, *distinct*, and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium*, from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse*, more than 15 millimeters (about 0.6 inch).

**Mountain**

A generic term for an elevated area of the land surface, rising more than 1,000 feet (300 meters) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can

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occur as a single, isolated mass or in a group forming a chain or range. Mountains are formed primarily by tectonic activity and/or volcanic action but can also be formed by differential erosion.

### **Muck**

Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

### **Mucky peat**

See Hemic soil material.

### **Mudstone**

A blocky or massive, fine grained sedimentary rock in which the proportions of clay and silt are approximately equal. Also, a general term for such material as clay, silt, claystone, siltstone, shale, and argillite and that should be used only when the amounts of clay and silt are not known or cannot be precisely identified.

### **Munsell notation**

A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

### **Natric horizon**

A special kind of argillic horizon that contains enough exchangeable sodium to have an adverse effect on the physical condition of the subsoil.

### **Neutral soil**

A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

### **Nodules**

See Redoximorphic features.

### **Nose slope (geomorphology)**

A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent. Nose slopes consist dominantly of colluvium and slope-wash sediments (for example, slope alluvium).

### **Nutrient, plant**

Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

### **Organic matter**

Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:



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*Very low:* Less than 0.5 percent

*Low:* 0.5 to 1.0 percent

*Moderately low:* 1.0 to 2.0 percent

*Moderate:* 2.0 to 4.0 percent

*High:* 4.0 to 8.0 percent

*Very high:* More than 8.0 percent

### **Outwash**

Stratified and sorted sediments (chiefly sand and gravel) removed or “washed out” from a glacier by meltwater streams and deposited in front of or beyond the end moraine or the margin of a glacier. The coarser material is deposited nearer to the ice.

### **Outwash plain**

An extensive lowland area of coarse textured glaciofluvial material. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

### **Paleoterrace**

An erosional remnant of a terrace that retains the surface form and alluvial deposits of its origin but was not emplaced by, and commonly does not grade to, a present-day stream or drainage network.

### **Pan**

A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan*, *fragipan*, *claypan*, *plowpan*, and *traffic pan*.

### **Parent material**

The unconsolidated organic and mineral material in which soil forms.

### **Peat**

Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

### **Ped**

An individual natural soil aggregate, such as a granule, a prism, or a block.

### **Pedisediment**

A layer of sediment, eroded from the shoulder and backslope of an erosional slope, that lies on and is being (or was) transported across a gently sloping erosional surface at the foot of a receding hill or mountain slope.

### **Pedon**

The smallest volume that can be called “a soil.” A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

**Percolation**

The movement of water through the soil.

**Perennial water (map symbol)**

Small, natural or constructed lakes, ponds, or pits that contain water most of the year.

**Permafrost**

Ground, soil, or rock that remains at or below 0 degrees C for at least 2 years. It is defined on the basis of temperature and is not necessarily frozen.

**pH value**

A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

**Phase, soil**

A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

**Piping**

Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

**Pitting**

Pits caused by melting around ice. They form on the soil after plant cover is removed.

**Plastic limit**

The moisture content at which a soil changes from semisolid to plastic.

**Plasticity index**

The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

**Plateau (geomorphology)**

A comparatively flat area of great extent and elevation; specifically, an extensive land region that is considerably elevated (more than 100 meters) above the adjacent lower lying terrain, is commonly limited on at least one side by an abrupt descent, and has a flat or nearly level surface. A comparatively large part of a plateau surface is near summit level.

**Playa**

The generally dry and nearly level lake plain that occupies the lowest parts of closed depressions, such as those on intermontane basin floors. Temporary flooding occurs primarily in response to precipitation and runoff. Playa deposits are fine grained and may or may not have a high water table and saline conditions.

**Plinthite**

The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.

**Plowpan**

A compacted layer formed in the soil directly below the plowed layer.

**Ponding**

Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

**Poorly graded**

Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

**Pore linings**

See Redoximorphic features.

**Potential native plant community**

See Climax plant community.

**Potential rooting depth (effective rooting depth)**

Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

**Prescribed burning**

Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

**Productivity, soil**

The capability of a soil for producing a specified plant or sequence of plants under specific management.

**Profile, soil**

A vertical section of the soil extending through all its horizons and into the parent material.

**Proper grazing use**

Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and

promotes the accumulation of litter and mulch necessary to conserve soil and water.

**Rangeland**

Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

**Reaction, soil**

A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

*Ultra acid:* Less than 3.5

*Extremely acid:* 3.5 to 4.4

*Very strongly acid:* 4.5 to 5.0

*Strongly acid:* 5.1 to 5.5

*Moderately acid:* 5.6 to 6.0

*Slightly acid:* 6.1 to 6.5

*Neutral:* 6.6 to 7.3

*Slightly alkaline:* 7.4 to 7.8

*Moderately alkaline:* 7.9 to 8.4

*Strongly alkaline:* 8.5 to 9.0

*Very strongly alkaline:* 9.1 and higher

**Red beds**

Sedimentary strata that are mainly red and are made up largely of sandstone and shale.

**Redoximorphic concentrations**

See Redoximorphic features.

**Redoximorphic depletions**

See Redoximorphic features.

**Redoximorphic features**

Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

## Custom Soil Resource Report

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:
  - A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; *and*
  - B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*
  - C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.
2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:
  - A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; *and*
  - B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).
3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

### **Reduced matrix**

See Redoximorphic features.

### **Regolith**

All unconsolidated earth materials above the solid bedrock. It includes material weathered in place from all kinds of bedrock and alluvial, glacial, eolian, lacustrine, and pyroclastic deposits.

### **Relief**

The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

### **Residuum (residual soil material)**

Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.

### **Rill**

A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.

**Riser**

The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.

**Road cut**

A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

**Rock fragments**

Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

**Rock outcrop (map symbol)**

An exposure of bedrock at the surface of the earth. Not used where the named soils of the surrounding map unit are shallow over bedrock or where "Rock outcrop" is a named component of the map unit.

**Root zone**

The part of the soil that can be penetrated by plant roots.

**Runoff**

The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

**Saline soil**

A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

**Saline spot (map symbol)**

An area where the surface layer has an electrical conductivity of 8 mmhos/cm more than the surface layer of the named soils in the surrounding map unit. The surface layer of the surrounding soils has an electrical conductivity of 2 mmhos/cm or less.

**Sand**

As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

**Sandstone**

Sedimentary rock containing dominantly sand-sized particles.

**Sandy spot (map symbol)**

A spot where the surface layer is loamy fine sand or coarser in areas where the surface layer of the named soils in the surrounding map unit is very fine sandy loam or finer.

**Sapric soil material (muck)**

The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

**Saturated hydraulic conductivity (Ksat)**

The ease with which pores of a saturated soil transmit water. Formally, the proportionality coefficient that expresses the relationship of the rate of water movement to hydraulic gradient in Darcy's Law, a law that describes the rate of water movement through porous media. Commonly abbreviated as "Ksat." Terms describing saturated hydraulic conductivity are:

*Very high:* 100 or more micrometers per second (14.17 or more inches per hour)

*High:* 10 to 100 micrometers per second (1.417 to 14.17 inches per hour)

*Moderately high:* 1 to 10 micrometers per second (0.1417 inch to 1.417 inches per hour)

*Moderately low:* 0.1 to 1 micrometer per second (0.01417 to 0.1417 inch per hour)

*Low:* 0.01 to 0.1 micrometer per second (0.001417 to 0.01417 inch per hour)

*Very low:* Less than 0.01 micrometer per second (less than 0.001417 inch per hour).

To convert inches per hour to micrometers per second, multiply inches per hour by 7.0572. To convert micrometers per second to inches per hour, multiply micrometers per second by 0.1417.

**Saturation**

Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

**Scarification**

The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.

**Sedimentary rock**

A consolidated deposit of clastic particles, chemical precipitates, or organic remains accumulated at or near the surface of the earth under normal low temperature and pressure conditions. Sedimentary rocks include consolidated equivalents of alluvium, colluvium, drift, and eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.

**Sequum**

A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

**Series, soil**

A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

**Severely eroded spot (map symbol)**

An area where, on the average, 75 percent or more of the original surface layer has been lost because of accelerated erosion. Not used in map units in which "severely eroded," "very severely eroded," or "gullied" is part of the map unit name.

**Shale**

Sedimentary rock that formed by the hardening of a deposit of clay, silty clay, or silty clay loam and that has a tendency to split into thin layers.

**Sheet erosion**

The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

**Short, steep slope (map symbol)**

A narrow area of soil having slopes that are at least two slope classes steeper than the slope class of the surrounding map unit.

**Shoulder**

The convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.

**Shrink-swell**

The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

**Shrub-coppice dune**

A small, streamlined dune that forms around brush and clump vegetation.

**Side slope (geomorphology)**

A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.

**Silica**

A combination of silicon and oxygen. The mineral form is called quartz.



**Silica-sesquioxide ratio**

The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

**Silt**

As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

**Siltstone**

An indurated silt having the texture and composition of shale but lacking its fine lamination or fissility; a massive mudstone in which silt predominates over clay.

**Similar soils**

Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

**Sinkhole (map symbol)**

A closed, circular or elliptical depression, commonly funnel shaped, characterized by subsurface drainage and formed either by dissolution of the surface of underlying bedrock (e.g., limestone, gypsum, or salt) or by collapse of underlying caves within bedrock. Complexes of sinkholes in carbonate-rock terrain are the main components of karst topography.

**Site index**

A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

**Slickensides (pedogenic)**

Grooved, striated, and/or glossy (shiny) slip faces on structural peds, such as wedges; produced by shrink-swell processes, most commonly in soils that have a high content of expansive clays.

**Slide or slip (map symbol)**

A prominent landform scar or ridge caused by fairly recent mass movement or descent of earthy material resulting from failure of earth or rock under shear stress along one or several surfaces.

**Slope**

The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance.

**Slope alluvium**

Sediment gradually transported down the slopes of mountains or hills primarily by nonchannel alluvial processes (i.e., slope-wash processes) and characterized by particle sorting. Lateral particle sorting is evident on long slopes. In a profile sequence, sediments may be distinguished by differences in size and/or specific gravity of rock fragments and may be separated by stone lines. Burnished peds and sorting of rounded or subrounded pebbles or cobbles distinguish these materials from unsorted colluvial deposits.

**Slow refill**

The slow filling of ponds, resulting from restricted water transmission in the soil.

**Slow water movement**

Restricted downward movement of water through the soil. See Saturated hydraulic conductivity.

**Sodic (alkali) soil**

A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

**Sodic spot (map symbol)**

An area where the surface layer has a sodium adsorption ratio that is at least 10 more than that of the surface layer of the named soils in the surrounding map unit. The surface layer of the surrounding soils has a sodium adsorption ratio of 5 or less.

**Sodicity**

The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of  $\text{Na}^+$  to  $\text{Ca}^{++} + \text{Mg}^{++}$ . The degrees of sodicity and their respective ratios are:

*Slight:* Less than 13:1

*Moderate:* 13-30:1

*Strong:* More than 30:1

**Sodium adsorption ratio (SAR)**

A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

**Soft bedrock**

Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

**Soil**

A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

**Soil separates**

Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

*Very coarse sand:* 2.0 to 1.0

*Coarse sand:* 1.0 to 0.5

*Medium sand:* 0.5 to 0.25

*Fine sand:* 0.25 to 0.10

*Very fine sand:* 0.10 to 0.05

*Silt:* 0.05 to 0.002

*Clay:* Less than 0.002

**Solum**

The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

**Spoil area (map symbol)**

A pile of earthy materials, either smoothed or uneven, resulting from human activity.

**Stone line**

In a vertical cross section, a line formed by scattered fragments or a discrete layer of angular and subangular rock fragments (commonly a gravel- or cobble-sized lag concentration) that formerly was draped across a topographic surface and was later buried by additional sediments. A stone line generally caps material that was subject to weathering, soil formation, and erosion before burial. Many stone lines seem to be buried erosion pavements, originally formed by sheet and rill erosion across the land surface.

**Stones**

Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

**Stony**

Refers to a soil containing stones in numbers that interfere with or prevent tillage.

**Stony spot (map symbol)**

A spot where 0.01 to 0.1 percent of the soil surface is covered by rock fragments that are more than 10 inches in diameter in areas where the surrounding soil has no surface stones.

**Strath terrace**

A type of stream terrace; formed as an erosional surface cut on bedrock and thinly mantled with stream deposits (alluvium).

**Stream terrace**

One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream; represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.

**Stripcropping**

Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

**Structure, soil**

The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are:

*Platy*: Flat and laminated

*Prismatic*: Vertically elongated and having flat tops

*Columnar*: Vertically elongated and having rounded tops

*Angular blocky*: Having faces that intersect at sharp angles (planes)

*Subangular blocky*: Having subrounded and planar faces (no sharp angles)

*Granular*: Small structural units with curved or very irregular faces

Structureless soil horizons are defined as follows:

*Single grained*: Entirely noncoherent (each grain by itself), as in loose sand

*Massive*: Occurring as a coherent mass

**Stubble mulch**

Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

**Subsoil**

Technically, the B horizon; roughly, the part of the solum below plow depth.

**Subsoiling**

Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

**Substratum**

The part of the soil below the solum.

**Subsurface layer**

Any surface soil horizon (A, E, AB, or EB) below the surface layer.

**Summer fallow**

The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

**Summit**

The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

**Surface layer**

The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the "plow layer," or the "Ap horizon."

**Surface soil**

The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

**Talus**

Rock fragments of any size or shape (commonly coarse and angular) derived from and lying at the base of a cliff or very steep rock slope. The accumulated mass of such loose broken rock formed chiefly by falling, rolling, or sliding.

**Taxadjuncts**

Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

**Terminal moraine**

An end moraine that marks the farthest advance of a glacier. It typically has the form of a massive arcuate or concentric ridge, or complex of ridges, and is underlain by till and other types of drift.

**Terrace (conservation)**

An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field

generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

**Terrace (geomorphology)**

A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.

**Terracettes**

Small, irregular steplike forms on steep hillslopes, especially in pasture, formed by creep or erosion of surficial materials that may be induced or enhanced by trampling of livestock, such as sheep or cattle.

**Texture, soil**

The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, and clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

**Thin layer**

Otherwise suitable soil material that is too thin for the specified use.

**Till**

Dominantly unsorted and nonstratified drift, generally unconsolidated and deposited directly by a glacier without subsequent reworking by meltwater, and consisting of a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders; rock fragments of various lithologies are embedded within a finer matrix that can range from clay to sandy loam.

**Till plain**

An extensive area of level to gently undulating soils underlain predominantly by till and bounded at the distal end by subordinate recessional or end moraines.

**Tilth, soil**

The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

**Toeslope**

The gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

**Topsoil**

The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

**Trace elements**

Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

**Tread**

The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.

**Tuff**

A generic term for any consolidated or cemented deposit that is 50 percent or more volcanic ash.

**Upland**

An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

**Valley fill**

The unconsolidated sediment deposited by any agent (water, wind, ice, or mass wasting) so as to fill or partly fill a valley.

**Variiegation**

Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

**Varve**

A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.

**Very stony spot (map symbol)**

A spot where 0.1 to 3.0 percent of the soil surface is covered by rock fragments that are more than 10 inches in diameter in areas where the surface of the surrounding soil is covered by less than 0.01 percent stones.

**Water bars**

Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

**Weathering**

All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.

**Well graded**

Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

**Wet spot (map symbol)**

A somewhat poorly drained to very poorly drained area that is at least two drainage classes wetter than the named soils in the surrounding map unit.

**Wilting point (or permanent wilting point)**

The moisture content of soil, on an oven-dry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

**Windthrow**

The uprooting and tipping over of trees by the wind.







**AUG 16 2018**  
*Andrea L Weaver*  
 ANDREA L WEAVER, AUDITOR  
 BY *Janice Cowell*

**EASEMENT**

It is hereby agreed that Merrill Reed, widower, hereinafter called Grantor, for the sum of \$1.00 and other valuable consideration paid by BUXTON DEVELOPMENT COMPANY, hereinafter called Grantee, does grant, sell, and convey unto Grantee and Grantee's heirs, legal representatives, successors and assigns, forever, a nonexclusive perpetual easement and right-of-way upon and across the north twenty (20) feet of the following described property of the Grantor:

See Exhibit A

The easement is for the benefit of the land described herein, and shall be deemed to run with the land.

The right-of-way, easement, rights, and privileges herein granted shall be used for the purpose of placing, constructing, operating, repairing, maintaining, rebuilding, replacing, relocating, and removing utility services including without limitation, a sewer line, appurtenances, couplings, connections and access points.

The easement, rights, and privileges shall be perpetual. Grantor hereby warrants that Grantor has full power and authority to grant this easement and has a good and indefeasible fee simple title to the above-described easement premises, free and clear of all liens and encumbrances except those portions that have already been dedicated to the Buxton Meadows Subdivision, and agrees to forever defend the above-described easement and rights unto Grantee, Grantee's heirs, legal representatives, successors, and assigns, against every person or entity lawfully claiming or to claim the easement property or any part of it, except as noted above.

The easement, rights, and privileges are exclusive, and Grantor covenants that he will not convey any other easement or conflicting rights within the area covered by this grant.

The easement granted by this instrument shall be binding on, and shall inure to the benefit of, the heirs, legal representatives, successors, and assigns of the parties hereto. Wherever the term Grantor or Grantee is used herein, the term shall be deemed to include the heirs, legal representatives, successors and assigns of that party.

In addition to the easement, rights, and privileges conveyed in this instrument, Grantee shall have the right to use as much of the surface of the property of Grantor as may be reasonably necessary to construct and install within the right-of-way granted hereby the facilities contemplated by this grant. On the completion of the construction and installation, Grantee shall replace and restore all fences, walls, or other structures that have been relocated or removed during the construction period. Grantee shall pay Grantor reasonable compensation for the fences, walls, or structures that are not replaceable, and for any vegetation and crops that are damaged or destroyed during the construction.

Grantor also retains, reserves, and shall continue to enjoy use of the surface of the property for any and all purposes that do not interfere with and prevent the use by Grantee of the easement, including the right to build and use the surface of the granted easement.

Grantor reserves the right, at Grantor's expense, to relocate the easement premises and the facilities installed therein provided the relocated easement can reasonably be used for its intended purpose by Grantee.

IN WITNESS WHEREOF, this instrument is executed this 16<sup>th</sup> day of August, 2018.

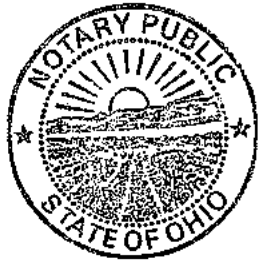
Merrill Reed  
Merrill Reed, Grantor

**ACKNOWLEDGMENT**

State of Ohio  
County of Union, SS:

BE IT REMEMBERED, That on this 16<sup>th</sup> day of August, 2018, before me, the subscribed, a Notary Public in and for said state, personally, came Merrill Reed, who executed the foregoing easement and acknowledged the signing thereof, to be his voluntary act and deed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my official seal on the day and year last aforesaid.



Kimberly Godfrey  
Notary Public

KIMBERLY GODFREY, Notary Public  
Union County, State of Ohio  
My commission expires 5-8-2022

This instrument was prepared by:  
Kevin R. Nose, Esq.  
471 East Broad Street, -19<sup>th</sup> Floor  
Columbus, Ohio 43215-3872  
(614) 228-5151

Exhibit "A"

Permanent Easement

FROM: Merrill L. Reed and Ruthann S. Reed

Situated in the State of Ohio, County of Union, Township of Dover, and being a 20' wide strip of land with an area of 0.009 acres with said strip of land within a 0.661 acres parcel. Said parcel being lot 84, Buxton Meadows, Plat Book 4, Page 76. Said parcel being conveyed to Merrill L. Reed and Ruthann S. Reed, of record in Deed Book 1024, Page 0933 (all references to the records of the Recorder's Office, Union County, Ohio) and being within Union County Auditor's Parcel Number 1100161290000. Said 20' wide strip of land being more particularly described as follows:

Commencing at a found iron pipe located at the Southeasterly corner of said lot 84, with said corner also being on the westerly right of way line of Hinton Mill Rd (60') and the Northeast corner of a 51.69 acres tract conveyed to Buxton Development Co., OR 527, Page 782;

Thence South 88° 21' 00" West - 20.19 feet along the south line of said lot 84 and the north line of said 51.69 acres tract;

Thence North 9°34' 00" West - 201.71 feet through said lot 84 to the south right of way line of Oxford Drive (60') of said Buxton Meadows Subdivision;

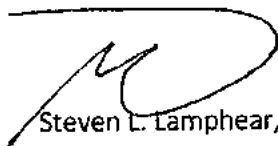
Thence with said Oxford Drive right of way line along a curve to the right with an arc distance of 34.24 feet, with said curve also having a delta of 229° 10' 58", a radius of 25.00 feet and a chord bearing and distance of North 48° 47' 53" West, 31.62';

Thence along the westerly right of way line of Hinton Mill Road (60') of said Buxton Meadows Subdivision, South 9° 34' 00" West, 180.00 feet to the place of beginning and containing 0.009 acres.

Bearings are based on the south line of the Buxton Meadows Subdivision, PB 4, Pg. 76, with said bearing being: South 88°21'00" West

This is to certify that this map or plat and the survey on which it is based is based on an actual field survey performed in July 2018 by registered surveyor Steven L. Lamphear. A drawing of this description is attached hereto and made a part hereof.

Diamond V, LLC



Steven L. Lamphear, PS 7876

Date: 8/13/2018





**DIAMOND V, LLC**

Surveyors & Engineers

8205 Smith Calhoun Rd., Plain City, Ohio 43084 - (614) 620-0331

**SANITARY SEWER EASEMENT PLOT PLAN**

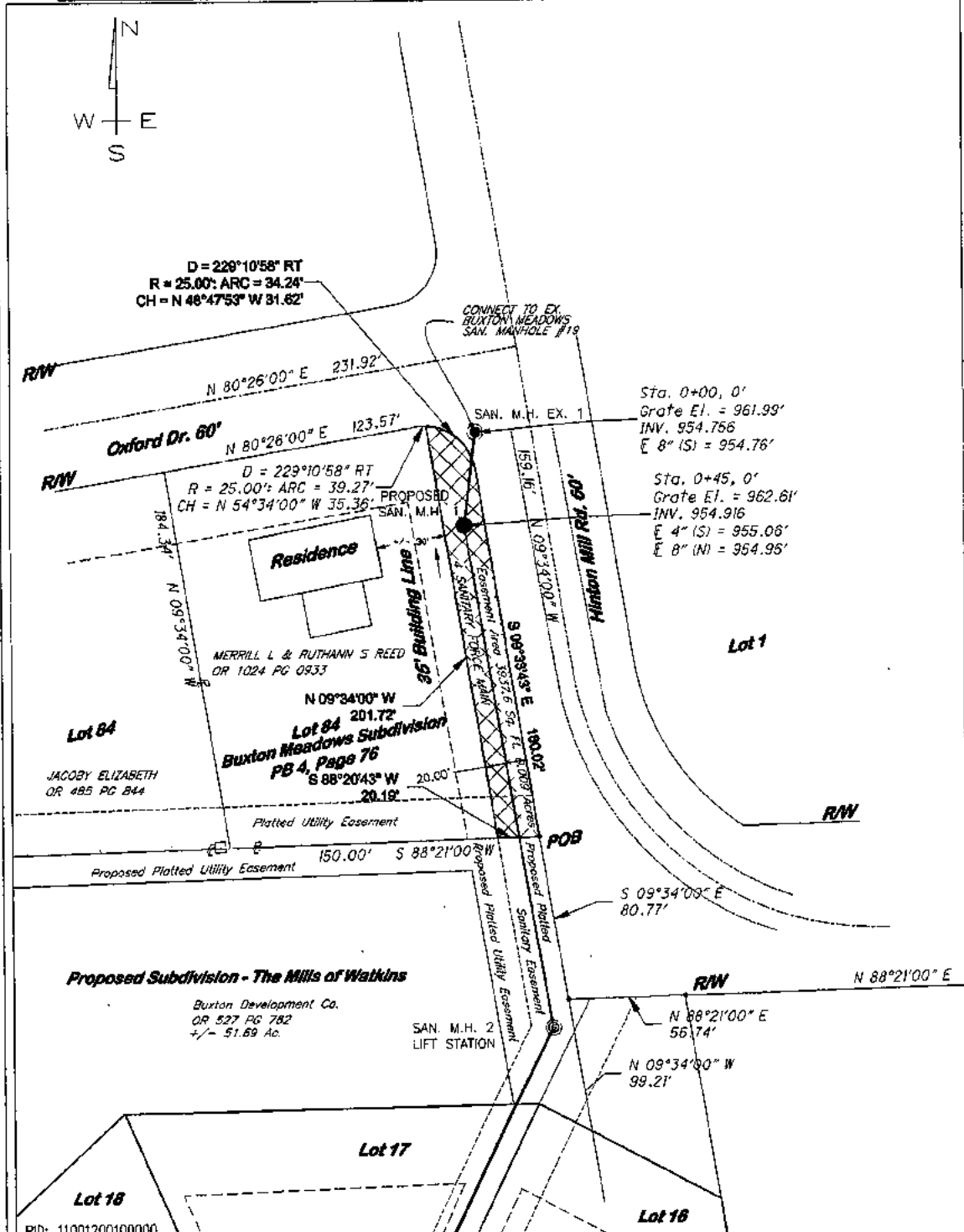
for

**BUXTON MEWS CO. and MERRILL L. and RUTHANN S REED, MARYSVILLE, OH**

Lot No. 84, pid 1100161290000  
OR. 1024 Pg 933

Buxton Meadows Subdivision; PB 4 PG.76  
13983 Oxford Dr., Marysville, OH 43040-8884

Union Co. Recorders Office  
Date of Survey: 07-09-2018



Bearings are based on the south line of the Buxton Meadows Subdivision, PB 4, Pg. 76, with said bearing being: S 88°21'00" W.

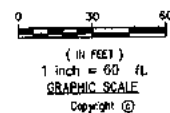
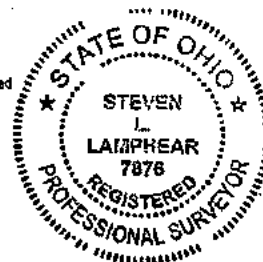
Easement contains 0.009 Acres.

This is to certify that this map or plat and the survey on which it is based is based on an actual field survey performed in July, 2018 by registered surveyor Steven L. Lamphear

*Steven L. Lamphear*

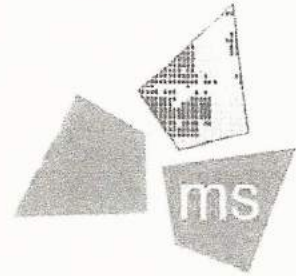
08/18/2018

STEVEN L. LAMPHEAR DATE  
REGISTERED PROFESSIONAL SURVEYOR NO. 7876



**ms consultants, inc.**  
engineers, architects, planners

2221 Schrock Road  
Columbus, Ohio 43229-1547  
p 614.898.7100  
f 614.898.7970  
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August 20, 2018

Mr. Steve Lamphear, PE, PS  
Diamond V, LLC  
8205 Smith-Calhoun Road  
Plain City, OH 43064

**RE: Traffic Impact Study  
Buxton Mews Subdivision  
Dover Township, Union County, Ohio**

Dear Mr. Lamphear:

**ms consultants** is pleased to submit this proposal to prepare a Traffic Impact Study for the proposed athletic field complex located on Watkins Road north of Scottslawn Road in Dover Township, Union County, Ohio. The following assumptions have been made in developing study costs:

- The proposed site will consist of 89 single-family dwelling units.
- One analysis year will be used – a Design Year 20 years out from opening year.
- Two analysis hours will be used – a weekday AM and weekday PM peak hour.
- The study area will consist of the following public street intersections:
  - Watkins Road & site access drive
  - Watkins Road & Hinton Mill Road

The following tasks are anticipated to be necessary to accomplish this study:

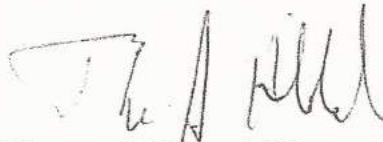
- Weekday AM & PM peak hour turning movement counts at the Watkins Road/Hinton Mill Road intersection.
- Development of Background (No-Build) traffic volumes for the Design Year peak hour.
- Development of Site traffic volumes, including Trip Generation, Trip Distribution, and Trip Assignment activities for the proposed site/access plan.
- Combine Background and Site volumes and prepare total Build volume plates for Opening Year and Design Year PM peak hours (Background + Site).
- The need for turn lanes at study area intersections will be determined by turn lane warrant graphs provided in the *ODOT Access Management Manual* for unsignalized locations.
- Turn lane sizing will be performed for any recommended turn lanes.

- A Traffic Impact Study report will be prepared that documents all procedures, findings, and recommendations. The study will be provided to Union County Engineer's Office.

The fee for the scope of services described above will be a lump sum of Forty Six Hundred Dollars (\$4,600.00). The fee does not include any review fees imposed by the Union County Engineer's Office. You will be invoiced monthly based on progress of the study. The Traffic Impact Study will be completed within four (4) weeks of authorization.


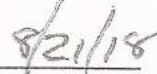
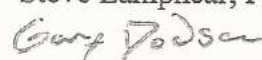
**ms consultants** is eager to assist you with this project. If you have any questions regarding this Scope of Services and Cost Proposal, do not hesitate to contact Ryan Bush or me at any time at 614-898-7100 or via email at [thibbard@msconsultants.com](mailto:thibbard@msconsultants.com).

Sincerely,



Thomas J. Hibbard, PE  
Transportation Business Manager

TJH:REB

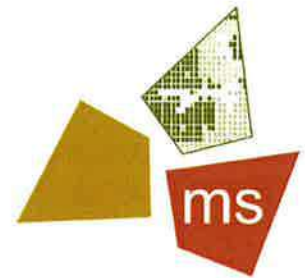
	
<del>Steve Lamphear, PE, PS</del>	Date
	

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**ms consultants, inc.**  
engineers, architects, planners

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August 20, 2018

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Diamond V, LLC  
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Sincerely,



Thomas J. Hibbard, PE  
Transportation Business Manager

TJH:REB

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Steve Lamphear, PE, PS      Date

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GEOTECHNICAL  
CONSULTANTS INC.



GCI PROJECT #18-E-21962-A

## Report of Jurisdictional Waters Delineation

Proposed Buxton Mews Residential Development  
Watkins Road  
Marysville, Union County, Ohio

**Prepared for:**  
Mr. Gary T. Dodson

July 23, 2018

---



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CONSULTANTS INC.

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[www.gci2000.com](http://www.gci2000.com)

**REPORT OF  
JURISDICTIONAL WATERS DELINEATION**

**PROPOSED BUXTON MEWS RESIDENTIAL DEVELOPMENT  
WATKINS ROAD  
MARYSVILLE, UNION COUNTY, OHIO**

**GCI PROJECT NO. 18-E-21962-A**

*Prepared for:*

**Mr. Gary T. Dodson  
7510 Merchant Rd.  
Plain City, Ohio 43064**

*Prepared by:*

**GEOTECHNICAL CONSULTANTS, INC. (GCI)  
720 Greencrest Dr.  
Westerville, OH 43081**

**July 23, 2018**

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**APPENDIX INFORMATION**

Union County Auditor Parcel Information Sheet

General Property Location Map

Property Location Map

Union County Auditor's GIS Map

1961, 1973, and 2016 USGS Topographic Maps

USDA Web Soil Survey Map

National Wetlands Inventory (NWI) Map

FEMA Flood Insurance Rate Map

Aerial Photographs Dated:

- 1940,
- 1953,
- 1959,
- 1964,
- 1966,
- 1971,
- 1981,
- 1988,
- 1994,
- 2004,
- 2009,
- 2011, and
- 2015

Jurisdictional Waters Location Map

Photo Key

Photographs (Photo 1 through Photo 26)

Midwest Region Wetland Determination Data Forms (2 pages)

ORAM Scoresheet (10 pages)

## 1.0 INTRODUCTION

---

Mr. Gary T. Dodson retained Geotechnical Consultants, Inc. (GCI) to perform a jurisdictional waters delineation of the proposed Buxton Mews residential development property located west of Watkins Road and southwest of Hinton Mill Road in Marysville, Union County, Ohio (the "property"). The property consists of 54± acres of vacant land identified by Union County parcel number 1100120010000. The property is vacant land used for agricultural purposes.

The delineation consists of three parts: 1) preliminary off-site determination (research of existing published data), 2) on-site delineation, and 3) data compilation/report preparation.

The purpose of the delineation was to locate and delineate the quantity and quality of jurisdictional waters on the property, as outlined in the agreement dated April 2, 2018 between GCI and Mr. Gary T. Dodson. GCI performed this delineation for specific application to the property described herein, in accordance with the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987) and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region.

This report is an instrument of professional service prepared by GCI for the sole use of Mr. Gary T. Dodson and other parties that may be designated jointly by Mr. Gary T. Dodson and GCI. Any other party that wishes to use or rely upon this report, or that wishes to duplicate, otherwise reproduce or copy, or excerpt from, or quote this report must apply for authorization to do so. Any unauthorized use of or reliance on this report shall release GCI from any liability resulting from such use or reliance. Any unauthorized duplication, other reproduction or copying, or excerption or quotation of this report shall expose the violator to all legal remedies available to GCI. This report will become public information upon submittal to the USACE.

## 2.0 PROPERTY DESCRIPTION AND PROJECT SCOPE

---

The property is located in a rural-residential area west of Watkins Road and southwest of Hinton Mill Road in Marysville, Union County, Ohio. The property comprises 54± acres of land identified Union County parcel number 1100120010000. The property is predominately agricultural land with a wooded area comprising the northwest part of the property. A wooded stream corridor crosses the central part of the property in a general north/south direction. Areas surrounding the property are used for residential and agricultural purposes. Approximate latitude / longitude coordinates for the center of the property are 40.226856 / -83.309726.

The property is generally flat to gently sloping agricultural land with a wooded area comprising the northwest portion. Dominant tree and sapling species observed in the interior of the wooded northwest portion of the property included hickory, white oak, red oak, green ash, white ash, basswood, red maple, silver maple, and hackberry. The northeast part of the property contained weeds, grasses, and other non-woody plants. The property was bound by an existing residential development to the north, sparse residences to the east along Watkins Road, and vacant farmland to the west and south. Property location maps, a Union County Auditor's GIS Map, USGS (Marysville, Ohio) topographic maps, and aerial photographs showing the approximate property area are attached to this report. Photographs showing representative vegetation, property features, and views from several locations around the property are also included.

GCI identified one (1) wetland area (Wetland 1) totaling **0.14± acre**, one (1) stream (Stream 1) totaling **1,261± linear feet**, and three (3) ponds (Pond 1 through Pond 3) totaling **0.78± acre** within the property boundary. Attached to the report is a **Jurisdictional Waters Location Map** showing the location of the delineated wetland, ponds, and stream. The wetland, stream, and ponds were surveyed Diamond V, LLC with mapping completed by GCI.

The following report provides additional information, and should be read entirely.

### 3.0 RECORDS REVIEW AND DETERMINATION

The preliminary off-site determination consisted of a desktop review of published information including USGS topographic maps, US Department of Agriculture (USDA) soils map, US Fish & Wildlife Service (USFWS) National Wetland Inventory (NWI) map, and aerial photographs from local governmental agencies. GCI used this information to determine the geo-morphological setting at the property, soil types present, whether disturbed conditions existed at the property, and to determine the appropriate field delineation method to be used.

#### 3.1 TOPOGRAPHY

GCI reviewed the 1961, 1973, and 2016 *Marysville, Ohio* United States Geological Survey (USGS) 7.5-minute series topographic maps. According to the maps, surface elevations range from approximately 960 feet above mean sea level (AMSL) to approximately 970 feet AMSL. Surface elevations in the general vicinity of the property decrease to the east, toward Mill Creek, located approximately 1,400 feet east of the property. An unnamed tributary of Mill Creek is shown crossing the central portion of the property in a general north/south direction. The confluence of the on-site stream with Mill Creek is located approximately 2,500 feet northeast of the property. The maps indicate no other streams, drainages, ponds, wetlands, or other surface waters within the property boundary.

GCI uses USGS topographic maps as an indicator of watershed characteristics on the property. USGS maps should not be relied upon to identify wetlands, ponds, or streams because the maps are created from widely scattered spot elevations averaged across an area. The maps may not identify small depressional areas or streams and are not updated frequently. The appendix of this report includes photocopies of portions of these USGS maps showing the property area.

#### 3.2 SOILS

GCI reviewed information from the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), the USDA Web Soil Survey website<sup>1</sup> for the property area, and the list of Hydric Soils of the United States (published by NRCS in cooperation with the National Technical Committee for Hydric Soils). These sources indicate soils underlying the property consist of the following:

**TABLE 1**  
Property Soil Designation

Map ID	Map Unit Name	% Slope	Hydric Classification
Blg1A1	Blount silt loam, ground moraine	0-2	Non-hydric with hydric components
Blg1B1	Blount silt loam, ground moraine	2-4	Non-hydric with hydric components
Gwg1B1	Glynwood silt loam, ground moraine	2-6	Non-hydric
Pk	Pewamo silty clay loam	0-2	Hydric

Blount silt loam (Blg1A1 and Blg1B1) is described as a very deep, nearly level to gently sloping, somewhat poorly drained soil with slow permeability and moderate available

<sup>1</sup> <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

water capacity.

Glynwood silt loam (Gwg1B1) is described as a very deep, gently sloping, moderately well drained soil with slow to very slow permeability and low available water capacity.

Pewamo silty clay loam (Pk) is described as a very deep, level, very poorly drained soil with moderately slow permeability and high available water capacity.

According to the soil map, hydric Pewamo soil is located on the southwest part of the property.

Mineral based soils (as opposed to carbon- or organic-based soils) generally contain significant amounts of iron and manganese. As the iron component of the soil matrix comes into contact with the atmosphere, the iron tends to oxidize giving soils a high “chroma” or rust-like color. This characteristic is typically observed in upland (i.e., non-wetlands) areas where oxygen is abundant. On the contrary, mineral soils that are saturated for extended periods (e.g., hydric soils) tend to have oxygen ions stripped, chemically reducing iron and giving these soils bluish-grayish coloring or low chroma. This reduced condition in mineral soils is known as “gleying” and is typically observed in wetlands, where soil oxygen contents are generally lower relative to upland soils. Low oxygen levels in reduced soils also tend to slow decomposition, leading to increased organic content. (Note: high organic levels in soils can present construction challenges and thus should be geotechnically assessed by a soils engineer for load bearing capacities if construction is planned in areas having organic soils.)

### **3.3 NATIONAL WETLANDS INVENTORY (NWI) MAP**

GCI reviewed the NWI Map for wetlands information in the property area. The United States Fish and Wildlife Service (USFWS) produced NWI mapping as an attempt to document wetlands in the United States. The USFWS drafted NWI maps using high-altitude infrared aerial photography to identify areas with saturated or inundated soils. Areas that are saturated or inundated are typically lower in temperature than dryer areas, giving wet areas unique heat signatures compared with surrounding upland areas. The USFWS mapped these cooler areas as wetlands without field verification.

GCI uses NWI maps as a desk top determination tool. NWI maps may not reflect actual field conditions due to meteorological or seasonal conditions that may have existed at the time of data collection. GCI typically uses NWI maps to plan field reconnaissance and as an indicator of areas that may support wetlands; however, USACE-approved delineations often deviate significantly from the NWI Maps.

Review of the NWI map identifies one wetland mapping symbol within a stream corridor on the south central part of the property, and two pond symbols on the northeast part of the property. The two pond symbols have PUBGx designations. The PUBGx designation signifies an area that is palustrine (non-tidal wetlands dominated by trees, shrubs, persistent emergents, or emergent mosses or lichens), has an unconsolidated bottom, is intermittently exposed, and is excavated. The wetland symbol on the south central part of the property has a PEM1C designation, indicating an area that is palustrine, contains emergent, persistent vegetation (characterized by erect, rooted, herbaceous vegetation which is present for most of the growing season and remains standing at least until the beginning of the next growing season), and has surface water (seasonally flooded) present for extended periods, especially early in the growing season.



The appendix of this report includes a copy of the NWI map for the property area.

### **3.4 FEMA FLOOD INSURANCE RATE MAP (FIRM)**

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for the property area indicates the majority of the property is within Zone X, which is an area determined to be of minimal flood hazard. The exception is the central part of the property, where a stream (Unnamed Tributary to Mill Creek) is shown crossing the property. This stream corridor is depicted as Zone A; an area subject to inundation by the 1% annual flood. Base flood elevations have not been determined in Zone A.

### **3.5 AERIAL PHOTOGRAPHS**

Current regulations require that wetland delineations be performed in accordance with the 1987 USACE Wetland Delineation Manual and the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region. These manuals specify two primary methods of delineation: the *routine method* and the *disturbed condition method*. The *routine method* is used on undisturbed properties and is preferred by USACE because wetland boundaries can be accurately identified by a wetland professional based on actual field boundaries. The *disturbed condition method* is used on properties that have had previous land disturbance. Disturbed properties often require reliance on historical aerial photography, soil maps, and NWI maps, and can result in an over-estimation of jurisdictional water area size.

GCI reviewed aerial photographs dated 1940, 1953, 1959, 1964, 1966, 1971, 1981, 1988, 1994, 2004, 2009, 2011, and 2015. GCI uses aerial photographs as an indicator to determine historical uses of the property, whether the property had been significantly disturbed within the past few years, and for visual evidence of ponds, streams, or saturated or inundated soils and wetlands on the property.

Throughout the reviewed aerial photographs, the property appears to be agricultural land with a wooded area on the northwest portion. A stream is apparent crossing the central portion of the property in a general north/south direction. A second stream/drainage can be seen converging with this stream on the northeast portion of the property in the 1940 through 1964 aerial photographs. This second stream/drainage appears to drain agricultural areas to the north, and becomes less visible in the 1966 through 1971 aerial photographs. The north adjoining property appears developed with a residential neighborhood beginning in the 1981 aerial photograph.

Two ponds are visible on the northeast part of the property in the 2009 and 2011 aerial photograph. A third pond is visible in this area in the 2015 aerial photograph.

The 2015 aerial photograph indicates the property is similar in appearance to what was observed during our site visit on June 27, 2018.

Copies of the aerial photographs showing the assessed area are attached to this report.

### **3.6 RECORDS REVIEW DETERMINATION CONCLUSIONS**

The published information reviewed indicated property conditions were generally unchanged for several years prior to this delineation, such that the property was considered undisturbed for data collection. Therefore, the routine method was used in this assessment.

Information obtained from USGS topographic maps and aerial photographs indicate the potential for one stream crossing the central part of the property and three ponds located on the northeast part of the property. The NWI map indicates the potential for a wetland within the stream corridor on south central part of the property.

Two of the ponds on the northeast portion of the property appear to have been constructed sometime between 2004 and 2009. A third pond was constructed further east of the two original ponds sometime between 2011 and 2015. No other streams, ponds, or potential wetland areas are apparent on the property from review of the published information.

The potential for wetlands and streams within an area cannot be determined solely from a records review determination; therefore, an on-property investigation is required to verify on-property conditions.

#### **4.0 JURISDICTIONAL WATERS DELINEATION**

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GCI performs their field visits for Jurisdictional Waters Delineations using criteria and guidance in the Corps of Engineers' Wetland Delineation Manual (USACE, 1987) and the 2010 Midwest Regional Supplement to the 1987 Wetland Delineation Manual. In this method, vegetation, hydrology, and soil criteria are used to identify jurisdictional wetlands. The delineation method and vegetation sampling methodology uses the procedures for Routine Determinations found in the 1987 and 2010 manuals.

The property was assessed in accordance with guidelines from the USACE pertaining to potential jurisdictional waters of the United States. All potential wetlands, streams, and drainage ditches were followed to determine the flow regime and whether a significant nexus to a jurisdictional water of the U.S. could be established.

The field investigation was conducted by walking and visually surveying the subject property, and in the vicinity, to collect wetland and stream data, as necessary.

Photographic documentation of the potential wetlands, vegetation, streams, and general landscape photographs are attached. GCI recorded observations concerning soils, hydrology, and vegetation in potential wetland areas on the attached data forms.

#### **5.0 PROPERTY VISIT AND ON-PROPERTY DETERMINATION**

---

Mr. Matthew R. Kaminski with GCI conducted the Jurisdictional Waters Delineation during the morning hours on Wednesday June 27, 2018. The atmospheric conditions during the property reconnaissance included clear skies with a temperature of approximately 70 degrees Fahrenheit.

Section 404 of the Clean Water Act requires a pre-discharge notification to the USACE for approval, prior to placing dredged or fill material into jurisdictional waters connected to navigable waters. Connection to navigable waters is characterized as any surface water connection with a defined bed and bank to streams or other open waters. House Bill 231 requires an Ohio Isolated Wetland Permit (OIWP) from Ohio EPA prior to impacting isolated wetlands not determined to be connected to navigable waters.

Three wetland criteria are required to be present to establish the presence of wetlands: hydric soils, hydrophytic vegetation, and wetland hydrology; and, all three criteria must be present for an

area to be identified as wetland. These three criteria are defined and explained in detail in the Corps of Engineers' Wetland Delineation Manual (USACE, 1987) and the 2010 Midwest Regional Supplement to the 1987 Wetland Delineation Manual. The Wetlands Research Program of the USACE Waterways Experiment Station developed the manual in 1987. GCI followed the methods described in these manuals in performing the delineation. No other warranty is expressed or implied.

After collecting pertinent information through the preliminary off-site determination, GCI used the routine method to determine if wetland areas existed on property. The approach used for the routine determination was the plant community assessment procedure. This approach required initial identification of representative plant community types in the subject area followed by characterization of vegetation, soils, and hydrology for each community type.

Upon identification of hydrophytic (wetland) and non-wetland communities, the wetland boundary was flagged. Field notes were taken at points where the dominant vegetation species changed from wetland to upland or hydrologic indicators became transitional. GCI recorded observations concerning hydrology and vegetation on the attached data forms.

### **5.1 HYDRIC SOILS CRITERIA**

GCI performs shovel test pits to characterize soil conditions and to evaluate the presence or absence of hydric soil features. A drain spade is used to collect soil samples from a maximum depth of approximately 20 inches below ground surface. GCI determines the presence or absence of hydric soils by comparing soil samples to a Munsell soil color chart, as soil colors often reveal whether a soil is hydric or non-hydric. The standardized Munsell soil colors consist of three components: hue, value, and chroma. Soil in hydric soil areas typically show yellow-red hues, varying gray color values, and chromas of one or two. Chromas of two or less are considered low, and are often diagnostic of hydric soils. Soils are considered hydric if at least one primary indicator or at least one problematic hydric soil indicator is present, as defined by the USACE.

Hydric mineral soils saturated for long periods of the growing season, but unsaturated for some time, often develop mottles and/or a low chroma matrix. GCI observed these soil characteristics at the property. Therefore, the property satisfied the hydric soil criteria for jurisdictional wetlands.

### **5.2 WETLAND HYDROLOGY CRITERIA**

Wetland hydrology is determined present in areas that are periodically inundated or have soils saturated to the surface sometime during the growing season. This is a dynamic characteristic and is usually not present during drier periods of the year. Primary wetland hydrology indicators include, but are not limited to, surface water, high water table, inundation, soil saturation in the upper 12 inches of the soil, water marks, sediment deposits, drift deposits, and water-stained leaves. Secondary wetland hydrology indicators include surface soil cracks, drainage patterns, dry-season water table, crayfish burrows, saturation visible on aerial imagery, stunted or stressed plants, geomorphic position, and FAC-Neutral Test of vegetation. One primary indicator or two or more secondary indicators are required to establish a positive indication of hydrology.

GCI performed a site walkover on June 27, 2018. At that time, GCI observed primary and secondary hydrology indicators on the property; therefore, the property satisfied the hydrology criteria for jurisdictional wetlands.

### 5.3 HYDROPHYTIC VEGETATION CRITERIA

Hydrophytic vegetation is present if more than 50 percent of plant species within a plant community have an indicator status of obligate wetland (OBL), facultative wetland (FACW), and/or facultative (FAC). The indicator status of plant species found in wetlands is listed in the Midwest 2012 Final Regional Wetland Plant List published by the USACE. GCI used this data, and determined hydrophytic vegetation dominance was present in several areas of the property. Therefore, the property satisfied the vegetation criteria for jurisdictional wetlands.

### 5.4 ON-PROPERTY DETERMINATION CONCLUSIONS

The field investigation confirmed:

- One (1) potentially jurisdictional stream located on the central portion of the property,
- One (1) potentially jurisdictional wetland located within the stream corridor/floodplain on the central portion of the property, and
- Three (3) isolated ponds on the northeast part of the property.

Refer to the Jurisdictional Waters Location Map attached to this report for the locations and identities of the wetland, ponds, and stream delineated on the property.

## 6.0 JURISDICTIONAL WATERS

According to Section 404 of the Clean Water Act (CWA), the USACE asserts jurisdiction over Traditional Navigable Waters, which includes all waters as outlined in 33 C.F.R. § 328.3(a)(I), and 40 C.F.R. § 230.3 (s)(I). This includes non-navigable tributaries of traditional navigable waters that flow relatively permanently for at least 3 months of the year. Moreover, the USACE will also assert jurisdiction over non-navigable, not relatively permanent tributaries, where such tributaries have a significant nexus to traditional navigable waters.

GCI identified one (1) wetland area (Wetland 1) totaling **0.14± acre**, one (1) stream (Stream 1) totaling **1,261± linear feet**, and three (3) ponds (Pond 1 through Pond 3) totaling **0.78± acre** within the property boundary. Attached to this report is a **Jurisdictional Waters Location Map** showing the location of the delineated wetland, ponds, and stream.

**TABLE 2**  
Stream Information

Stream ID	Length of Stream On-Site	Classification	Start Location	End Location
Stream 1	1,261	Perennial	40.225573 -83.309242	40.228257 -83.307792
<b>Total</b>	<b>1,261</b>			

Stream 1 is a perennial stream that crosses the central portion of the property from south to north. Stream 1 appears to have a direct surface water connection to Mill Creek; therefore, is likely jurisdictional.

**TABLE 3**  
Wetland Information

Wetland ID	Acreage	Description	Classification	Location
Wetland 1	0.14	Emergent	Jurisdictional	40.226723 -83.308795
<b>Total</b>	<b>0.14</b>			

Wetland 1 is an emergent wetland located within the floodplain of Stream 1. This wetland is generally dominated by reed canary grass. It is GCI's opinion that Wetland 1 is likely a considered waters of the U.S due to its close proximity to Stream 1, therefore, is likely jurisdictional.

**TABLE 4**  
Pond Information

Pond ID	Acreage	Description	Classification	Location
Pond 1	0.39	Deep Water Habitat	Isolated	40.227946 -83.308839
Pond 2	0.21	Excavation	Isolated	40.227767 -83.309209
Pond 3	0.18	Excavation	Isolated	40.227790 -83.308006
<b>Total</b>	<b>0.78</b>			

Review of aerial photographs indicate Pond 1 and Pond 2 were constructed sometime between 2004 and 2009. Pond 3 was constructed sometime between 2011 and 2015. Information from the property owner indicates Pond 2 and Pond 3 were originally created due to excavation and use of the soils elsewhere for construction purposes.

Pond 1, Pond 2, and Pond 3 have no apparent surface water connection to nearby streams. Pond 1 meets the criteria for deep water habitat and lacks a wetland fringe. GCI observed emergent vegetation (cattails) growing around the perimeter of Pond 2 and Pond 3.

#### **6.1 OHIO RAPID ASSESSMENT METHOD (ORAM)**

GCI completed ORAM score sheets for the wetland area delineated on the property. The ORAM score for Wetland 1 was calculated at **38.0**. This puts Wetland 1 in Category 2, according to Ohio EPA standards. Copies of the ORAM forms are appended.

## **7.0 PERMITS**

The USACE administers Nationwide Permits (NWP) under the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (CWA). Section 404 deals with the physical aspects of ground modification or "impacts" (e.g., draining, dredging, and filling). Mucking out a wetland and culverting a stream for a road crossing are examples of such impacts. The USACE must generally be involved in all jurisdictional wetland, pond, or stream related activities.

Ohio EPA issues section 401 permits of the CWA. Section 401 deals with how a specific activity will affect water quality. Parameters such as sedimentation and nutrients are

considered in 401 permitting. Wetlands are able to trap sediment and convert nutrients; hence, negative wetland or stream impacts effectively may lower water quality downstream. The Ohio EPA has jurisdiction over wetlands or other waters the USACE has determined to be “isolated” and not connected to navigable waters by direct surface water drainage.

The USACE Districts for the State of Ohio have imposed regional, general, and specific conditions on NWP for the entire state. Specific conditions imposed on NWP for the State of Ohio include Ohio EPA 401 Water Quality Certification (WQC). Impacts to jurisdictional waters must meet the Ohio EPA eligibility criteria for 401 WQC for NWP to be valid. If 401 WQC eligibility requirements are not met, individual 401 WQC or Director’s Authorization is required.

Individual section 401 and 404 permits generally are costly and often take several months to receive complete regulatory agency review. Under the CWA, NWP are issued to speed up the permitting process and reduce administrative burdens for minor activities. Whether filling, re-routing, or enhancing jurisdictional waters, the USACE must be notified at a minimum under most NWP.

Under the NWP, stream impacts are generally limited to 300 linear feet, while wetland impacts are generally limited to ½ acre. Limitations and conditions vary from permit to permit and are dependent on property development plans. Mitigation may be necessary for impacts to jurisdictional waters. The NWP cannot be used if any the following are to be impacted:

- high quality, isolated, or rare wetlands,
- wetlands within the 100 year flood plain,
- state or National Scenic Rivers,
- navigable waterways,
- areas where endangered species are known to exist,
- areas where historic or archeological sites or structures are known to exist,
- areas containing a large concentration of shellfish beds,
- areas where water quality will be significantly degraded, and
- Critical Resource Waters.

## 8.0 CLOSING

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GCI identified one (1) wetland area (Wetland 1) totaling 0.14± acre, one (1) stream (Stream 1) totaling 1,261± linear feet, and three (3) ponds (Pond 1 through Pond 3) totaling 0.78± acre within the property boundary. Attached to this report is a Jurisdictional Waters Location Map showing the location of the delineated wetland, ponds, and stream.

It is GCI’s opinion that Wetland 1 and Stream 1 are potentially jurisdictional waters of the U.S. Pond 1, Pond 2, and Pond 3 have no apparent surface water connection to nearby streams and were created by excavation for construction purposes within the last 5 to 10 years. Pond 1 meets the criteria of deep water habitat and lacks a wetland fringe; therefore, appears to be a non-jurisdictional open-water feature. Pond 2 and Pond 3 have emergent vegetation (cattails) growing around their perimeter; therefore, may be considered isolated waters of the State of Ohio.

Section 404 of the CWA requires pre-construction notification (PCN) to the USACE and a Department of the Army (DA) permit prior to discharging dredged or fill material into waters of the U.S., including wetlands. Wetlands determined by the USACE to be isolated are regulated by the Ohio EPA.


GCI recommends obtaining USACE verification of this delineation prior to development of the property to determine permitting requirements for proposed wetland, pond, and stream impacts. With your authorization, GCI will supply a copy of this report to the USACE, Huntington, WV District Office for verification. With this reported information and/or a property visit, the USACE will make the official determination on jurisdiction.

GCI appreciates the opportunity to serve you on this project. Please contact our office with any questions or concerns regarding our report.

## 9.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

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**Prepared by:**



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Matthew R. Kaminski, EP  
Senior Project Manager – Environmental Services  
Wetland Scientist, 401/404 Specialist

**Reviewed by:**



---

Kevin J. Fulk, MBA, EP  
Senior Project Manager – Environmental Services





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**Matthew R. Kaminski, EP**  
**Senior Project Manager**

▪ **Education:**

2003 BS Environmental Geography, Ohio University

▪ **Active Registration & Certification:**

2006 38 Hour Army Corps of Engineers Wetland Delineation & Management Training Program

2011 OSHA 40-hour Hazardous Waste Operations

2017 GBA's *Fundamentals of Professional Practice (FOPP)*

Mr. Kaminski is qualified as an Environmental Professional as defined by U.S. EPA's All Appropriate Inquiry legislation, and by ASTM Practice E1527-13.

▪ **Experience & Qualifications:**

Since joining GCI in 2005, Mr. Kaminski has been responsible for conducting numerous Phase I environmental site assessments (Phase I ESAs) of residential, commercial, industrial, and agricultural properties in Ohio, Michigan, West Virginia, and Pennsylvania.

Mr. Kaminski is responsible for preparing reports required to meet compliance under the American Society for Testing and Materials (ASTM), and federal, state, and local regulations including the National Environmental Policy Act (NEPA), Ohio Department of Development (ODOD), Ohio Housing Finance Agency (OHFA), and the U.S. Department of Housing and Urban Development (HUD).

Mr. Kaminski's experience includes managing and performing multidisciplinary environmental projects including Phase I ESAs, Ohio Voluntary Action Program (Ohio VAP) Phase I property assessments, wetland delineations, stream evaluations, 401/404 permit applications, groundwater sampling, and hazardous materials surveys.

▪ **Selected Projects**

- Performed ground water well development and sampling using low-flow methods in accordance with Ohio EPA requirements for numerous Ohio Voluntary Action Program (VAP) projects.
- Multiple hazardous materials surveys and Phase I ESAs for the Grandview Yard project, Grandview Heights, OH
- Phase I ESA Nine Brookside Corporate Center Office Buildings, Westerville, OH
- Phase I ESA Shell Station, Bexley, Franklin County, OH
- Jurisdictional Water Delineation 25-Acre Property, Mansfield, OH
- Phase I ESA and Preliminary Wetland and Stream Assessment 7+ Acre Proposed Office/Warehouse Property, Delaware, Delaware County, OH
- Jurisdictional Water Delineation 735-Acre Property, Sunbury, OH





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**Kevin J. Fulk, MBA, EP, LEED AP**  
**Senior Project Manager**

▪ **Education:**

BS Architectural / Environmental Design – Bowling Green State University.  
Bowling Green, OH (1992)  
MBA Business Administration – Capital University, Columbus, OH (2000)

▪ **Active Registration & Certification:**

Evaluation Specialist No. 31832 – Ohio Certified Asbestos Hazard (1989)  
Construction Documents Technologist (1993)  
OSHA 40-Hr. Hazardous Waste Operations (1996)  
LEED Accredited Professional (2009)  
Vapor Encroachment Screening (2012)

Mr. Fulk graduated from GBA's *Fundamentals of Professional Practice (FOPP)* course in 2006.

▪ **Experience & Qualifications:**

Mr. Fulk's experience includes project management of environmental studies including Phase I & II Environmental Site Assessments, asbestos surveys, operations and maintenance plans for buildings with asbestos containing materials, hazardous materials surveys, and wetland assessments.

With more than 21 years' experience as an environmental consultant, Mr. Fulk has provided field monitoring of asbestos abatement projects collected water and soil samples for laboratory analysis from monitoring wells, manholes, discharge pits, soil borings and test pits; environmental proposal/report preparation; and in-house report reviews. Environmental reporting includes satisfying HUD, FHA, and OHFA lending requirements for federal and state funded projects.

Since joining GCI in 1995, Mr. Fulk has been responsible for conducting more than 800 environmental studies and more than 400 asbestos studies for projects throughout Ohio and neighboring states.

Mr. Fulk is qualified as an Environmental Professional as defined by U.S. EPA's All Appropriate Inquiry legislation and ASTM Practice E1527-13. Mr. Fulk is a member of the Building Environment Council of Ohio.

▪ **Selected Projects:**

- Phase I & II ESAs of more than 30 parcels at The Waterfront, a redevelopment of a former steel mill into a mixed-use development, Pittsburgh, PA.
- Provided asbestos abatement monitoring for the Ohio Statehouse renovation projects, various government institutions and utility facilities, and school buildings.
- Performed asbestos surveys of numerous Central Ohio projects including Morse Centre, Town & Country Shopping Center and the Worthington Mall.
- Performed hazardous materials and asbestos surveys for the Grandview Yard project, Grandview Heights, OH.



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APPENDIX INFORMATION



Enter Parcel or Map Number  
Search

**NOTICE:** All PROPERTY VALUE information reflects Tax Year 2017 CERTIFIED VALUES. To obtain any 2018 value information, such as New Construction value, please call the Auditor's Office at 937-645-3003 or email at auditor@co.union.oh.us.

Submit

Parcel 1100120010000

2017 VALUES AND TAXES DUE IN 2018

Owner Name	Market Taxable Value	Starting Value	Balance	Real Estate Net Tax	Other Charges and Credits	Receipts	Parcel Balance
BUXTON DEVELOPMENT CO	153,530	53,740	24,831.63	2,810.32	477.52	(3,883.42)	24,236.05
Property Location	WATKINS RD						

Main Menu

- General Information
- Land Detail
- Buildings Detail
- Value History
- Sales History
- Tax Charges and Payments
- Current Tax Rates
- Where Your Taxes Go
- Tax Estimator
- Map
- Sketch
- Property Record Card
- Photo Gallery
- Deed Record
- New Search

GENERAL INFORMATION

Neighborhood 1111100-DOVER/MARYSVILLE RES/AG  
Map Number 1030000053000

Parcel Number*	Land Use	Market Land	Market Buildings	Market Total	Taxable Land	Taxable Buildings	Taxable Total**
<a href="#">1100120010000</a>	100 - Agricultural Vacant Land				153,530	0	153,530
		Totals: 153,530	0	153,530	53,740	0	53,740

**Owners**  
BUXTON DEVELOPMENT CO

**DELINQUENT TAX STATUS**

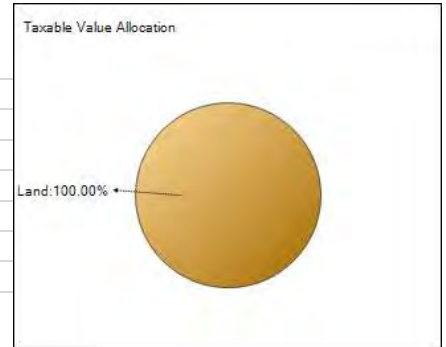
Delinquent Since	2009
Advertised Delinquent	Yes
Under Payment Contract	Yes
Certified Delinquent	Yes
In Bankruptcy	No
In Foreclosure	No
In Dispute	No
Last Delinquent	n/a

**Legal Description**

VMS 9028  
OR 527 PG 782

Pie Chart Summary Level

All Parcels

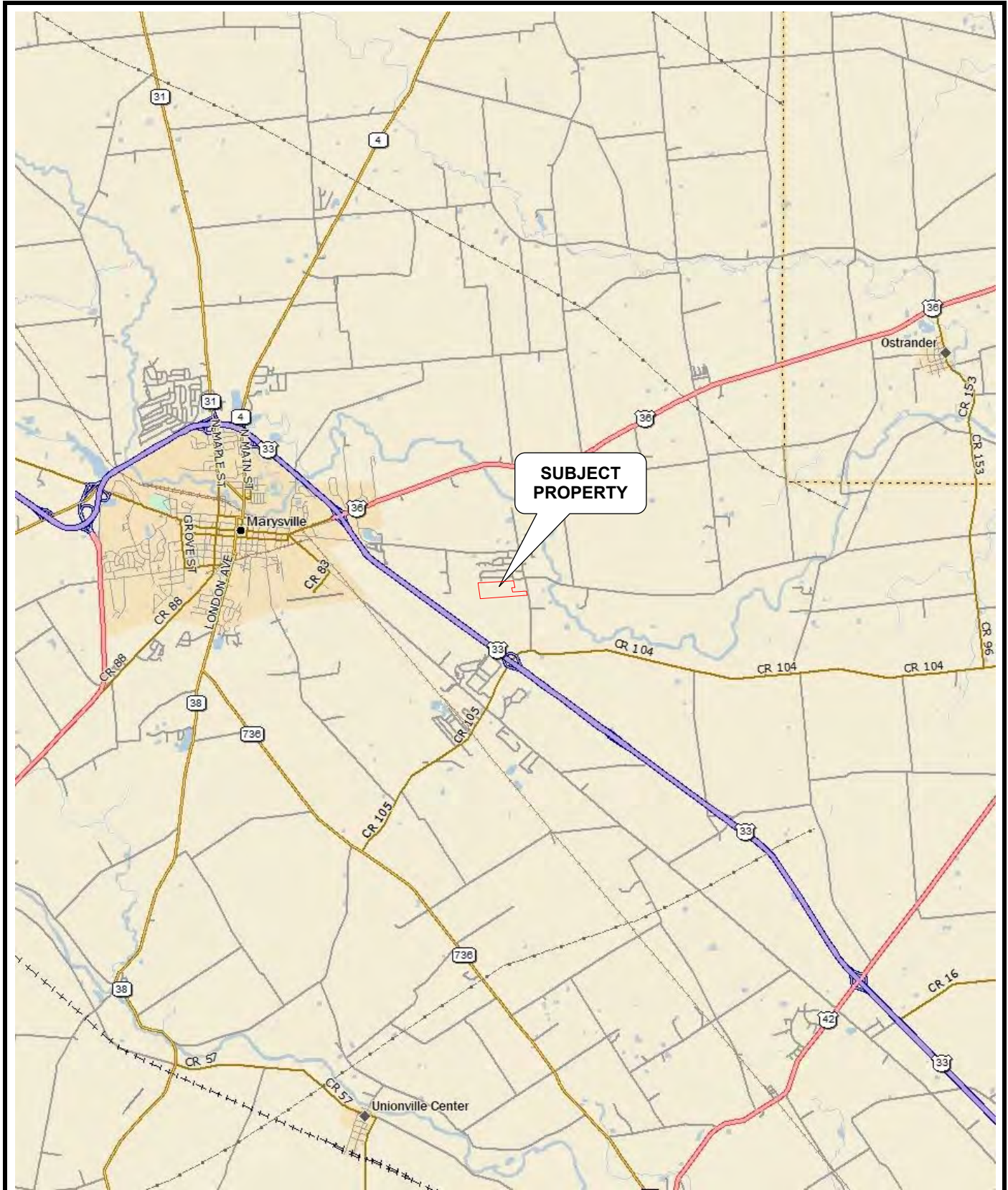


\* Value may be allocated to more than one parcel. Examples: (1) The value basis for Homestead Credit may be shared between a mobile home parcel and its situs land parcel. (2) Property under one or more Tax Incentive Programs (e.g. TIF district, Enterprise Zone, etc.) may have a base parcel with pre-program values and one or more parcels with values subject to the terms of the program agreements.

\*\* Taxable Value is 35% of Market Value for most taxpayers. The rate is 40% for mobile homes purchased prior to 2000 whose Market Value is based on a depreciation schedule. Taxable Value for Public Utility (PU) parcels is set by the State. The State does not report PU Market Value to the County, so PU Market Value is set equal to Taxable Value.

MOST RECENT TAX SAVINGS	Qualified	Tax Basis Value	Savings
Non-Business Credit	Yes	53,740	294.38
Owner Occupancy Credit	No	0	0.00
Homestead Credit	No	0	0.00
Other	No	0	0.00
			<b>Total: 294.38</b>





**PROPOSED BUXTON MEWS RESIDENTIAL DEVELOPMENT  
WATKINS ROAD  
MARYSVILLE, UNION COUNTY, OHIO**

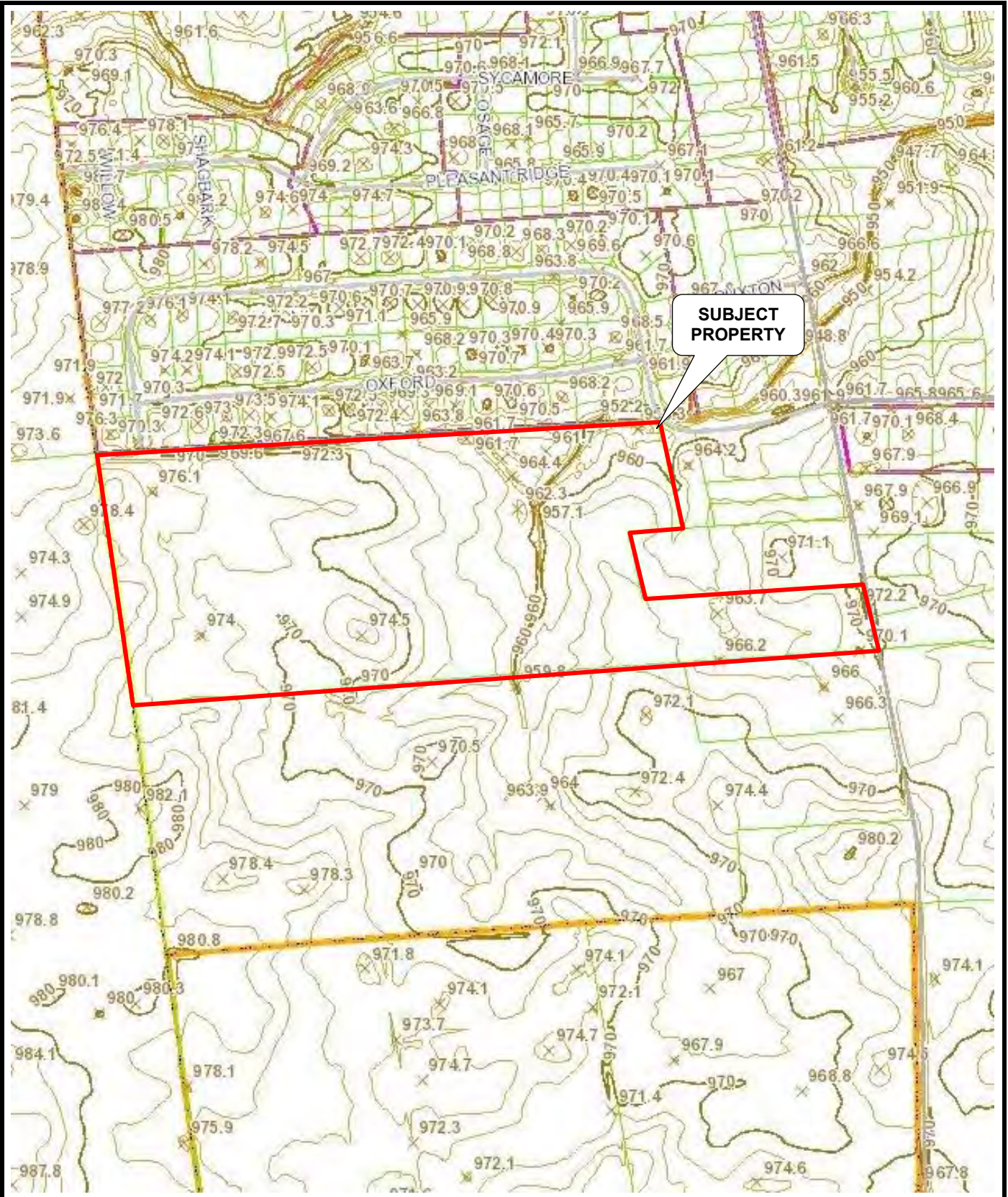




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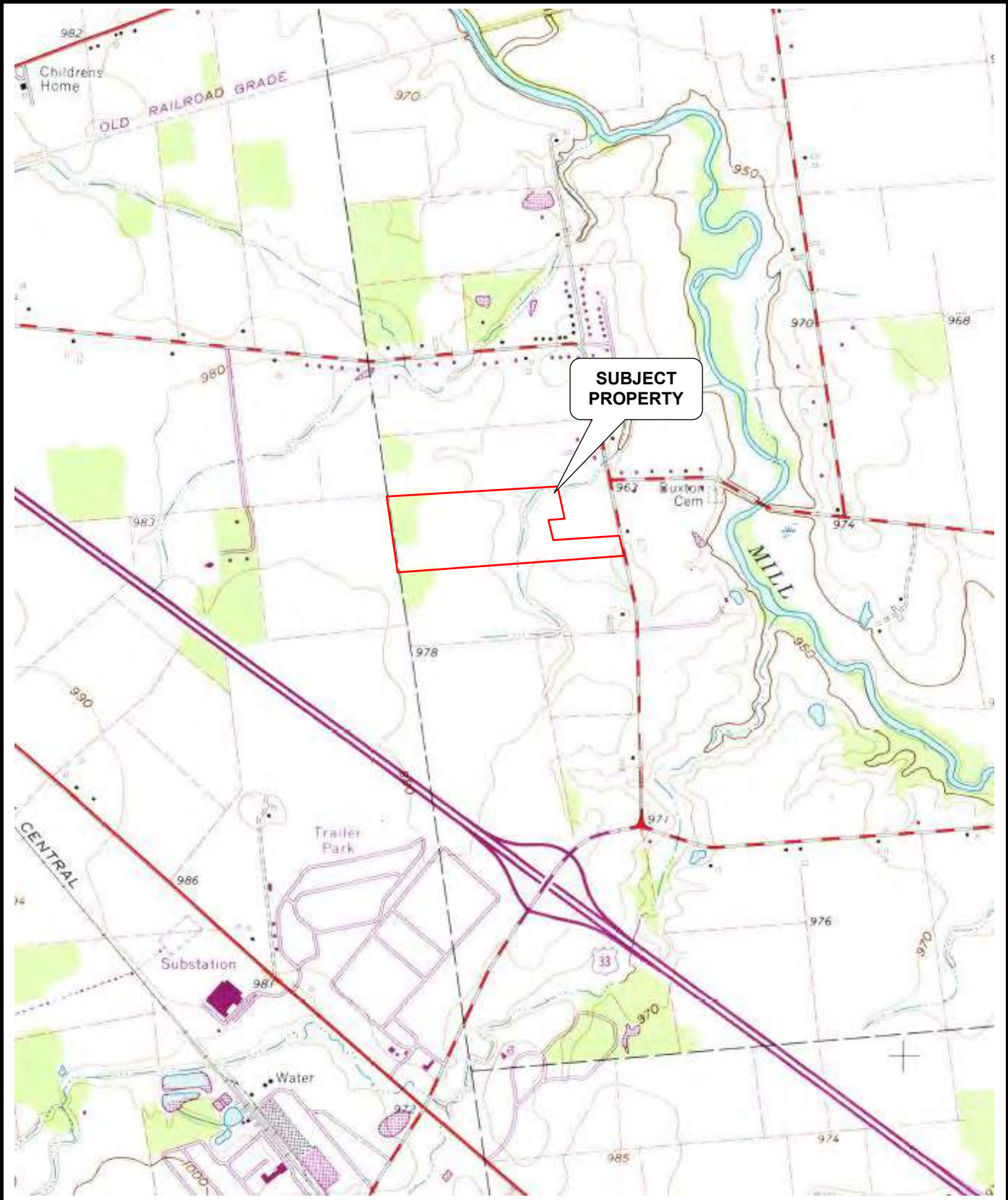




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WATKINS ROAD  
MARYSVILLE, UNION COUNTY, OHIO**



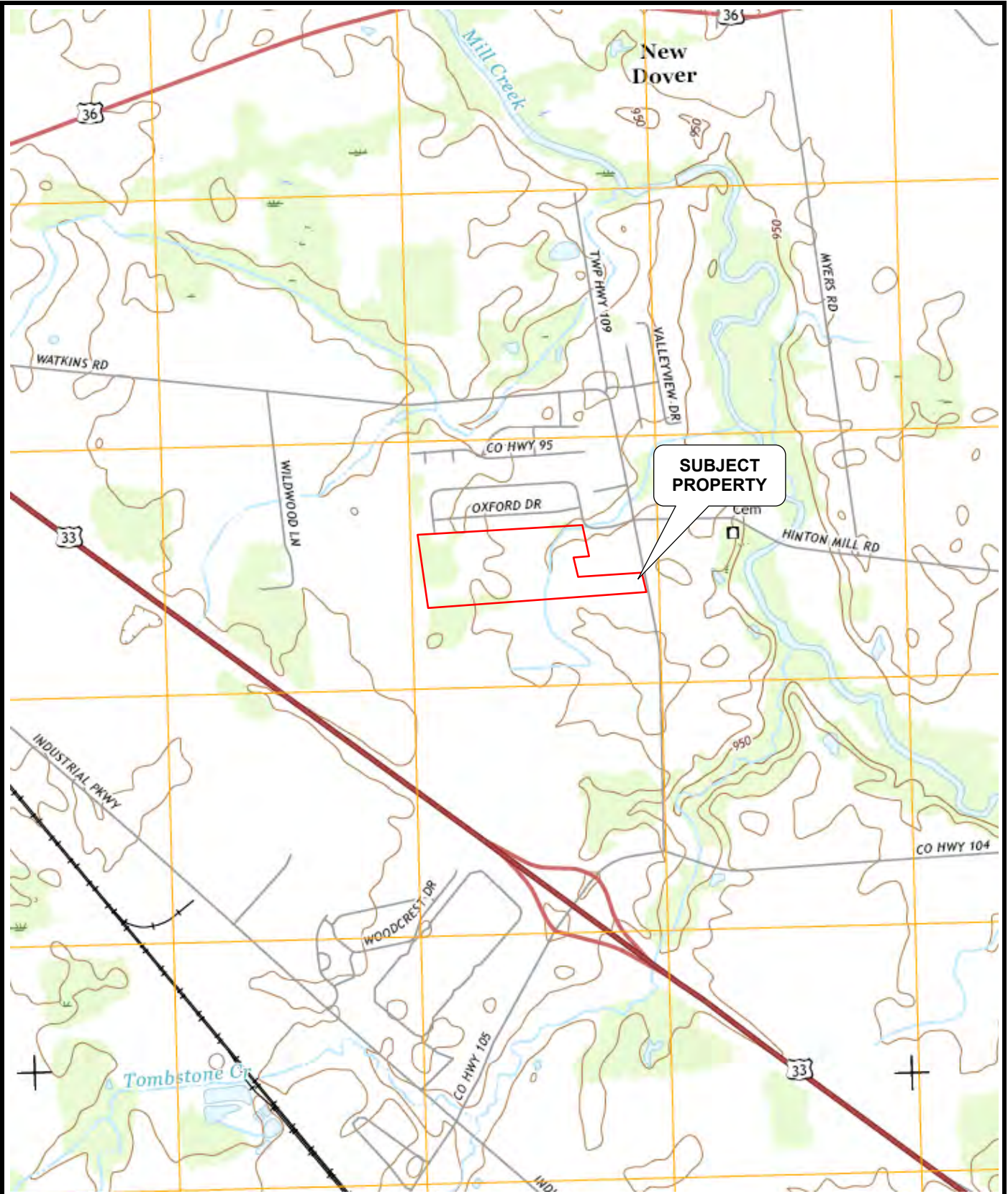


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WATKINS ROAD  
MARYSVILLE, UNION COUNTY, OHIO**





Soil Map may not be valid at this scale.



North

**PROPOSED BUXTON MEWS RESIDENTIAL DEVELOPMENT  
WATKINS ROAD  
MARYSVILLE, UNION COUNTY, OHIO**





Wetlands

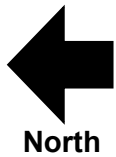
U.S. Fish and Wildlife Service  
National Wetlands Inventory



SUBJECT PROPERTY

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

- July 12, 2018
- Wetlands**
- Estuarine and Marine Deepwater
  - Estuarine and Marine Wetland
  - Freshwater Emergent Wetland
  - Freshwater Forested/Shrub Wetland
  - Freshwater Pond
  - Lake
  - Other
  - Riverine

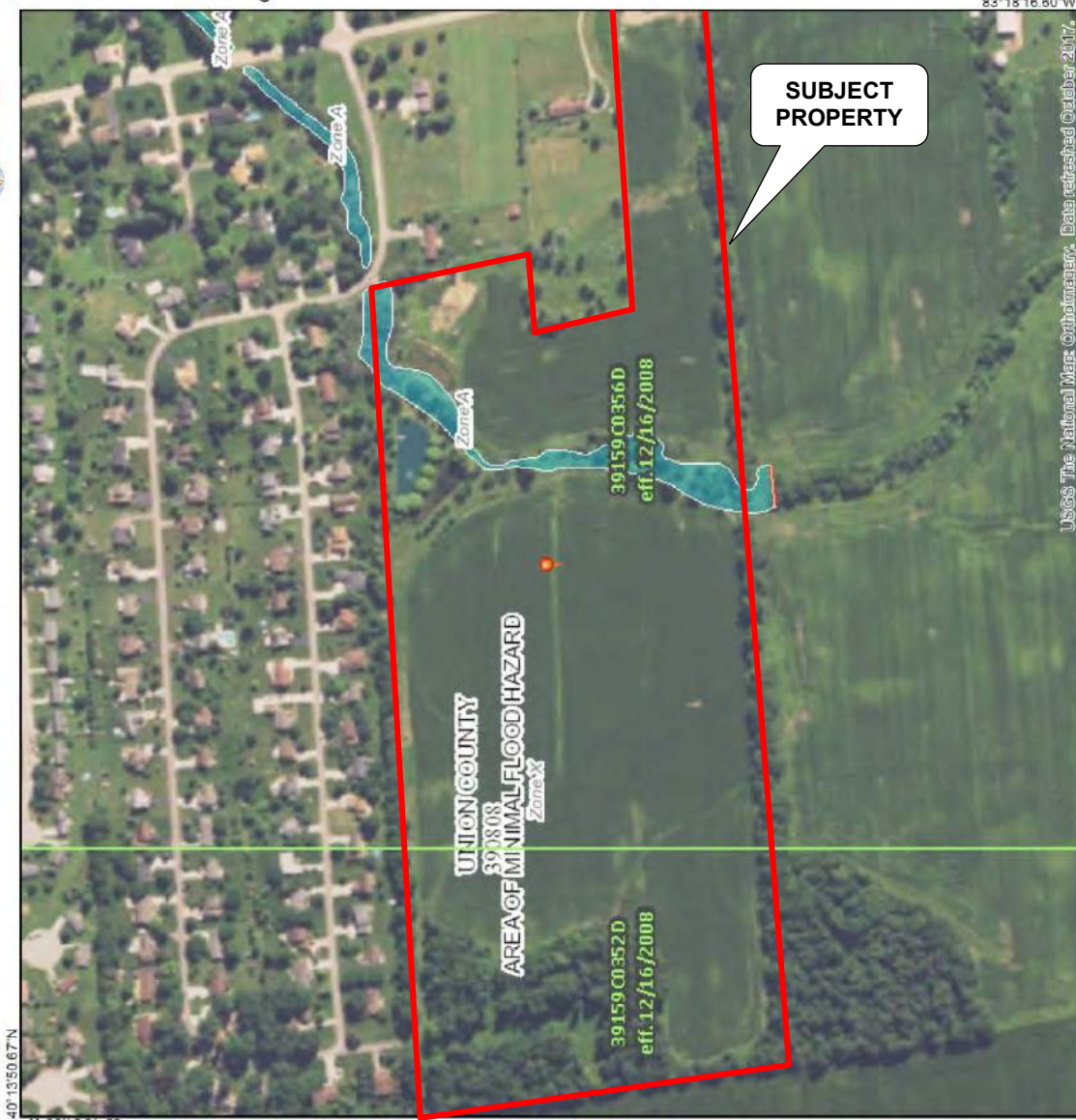


PROPOSED BUXTON MEWS RESIDENTIAL DEVELOPMENT  
WATKINS ROAD  
MARYSVILLE, UNION COUNTY, OHIO





National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

<b>SPECIAL FLOOD HAZARD AREAS</b>	Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AH, VE, AF Regulatory Floodway
<b>OTHER AREAS OF FLOOD HAZARD</b>	0.2% Annual Chance Flood Hazard. Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X Future Conditions, 1% Annual Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes. Zone X Area with Flood Risk due to Levee Zone D
<b>OTHER AREAS</b>	Area of Minimal Flood Hazard Zone X Effective LOMR Area of Undetermined Flood Hazard Zone D
<b>GENERAL STRUCTURES</b>	Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall
<b>OTHER FEATURES</b>	Cross Sections with 1% Annual Chance Water Surface Elevation Coastal Transect Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary Coastal Transect Baseline Profile Baseline Hydrographic Feature
<b>MAP PANELS</b>	Digital Data Available No Digital Data Available Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards. The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/13/2018 at 10:13:00 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



North

PROPOSED BUXTON MEWS RESIDENTIAL DEVELOPMENT  
WATKINS ROAD  
MARYSVILLE, UNION COUNTY, OHIO

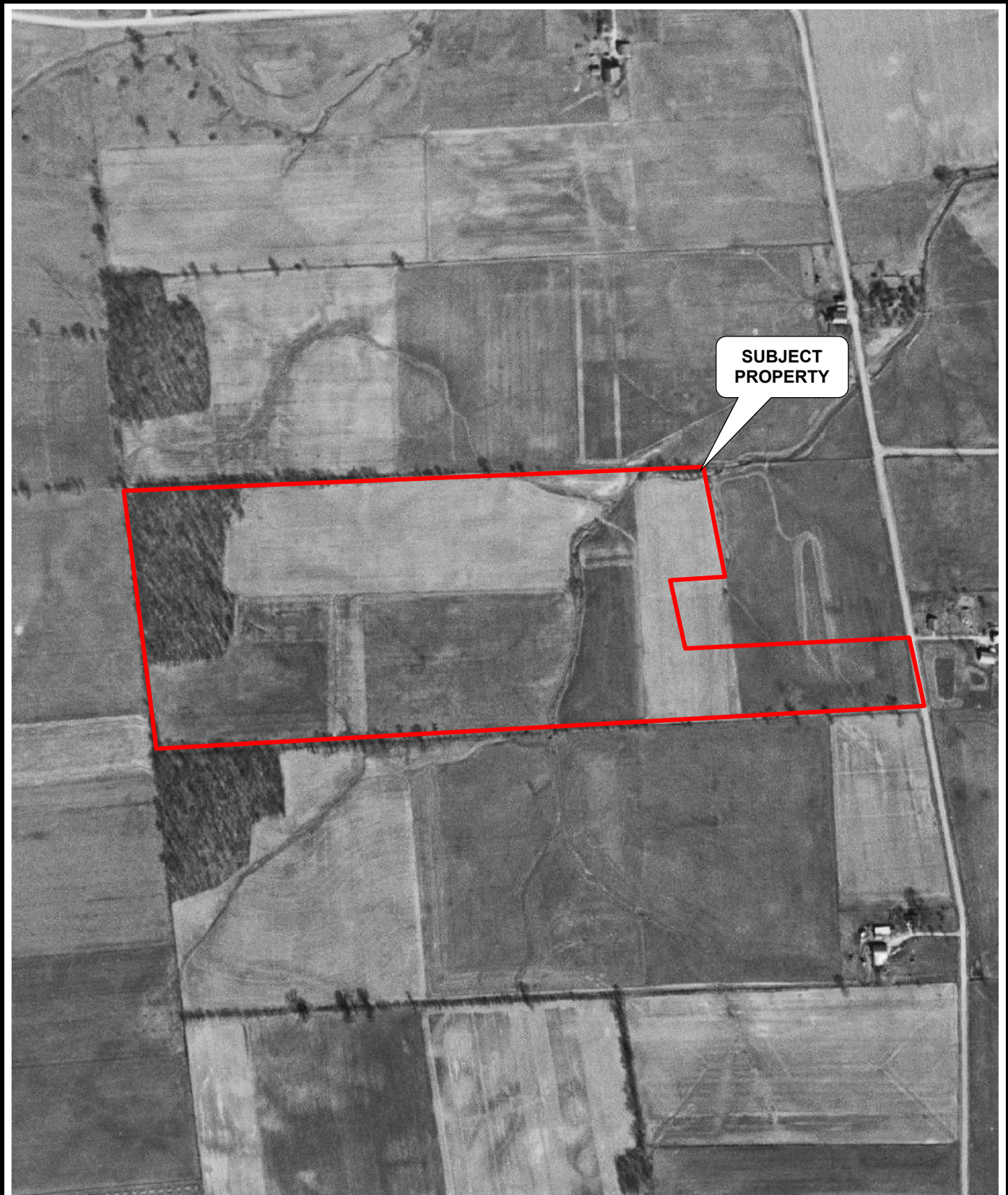




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MARYSVILLE, UNION COUNTY, OHIO**







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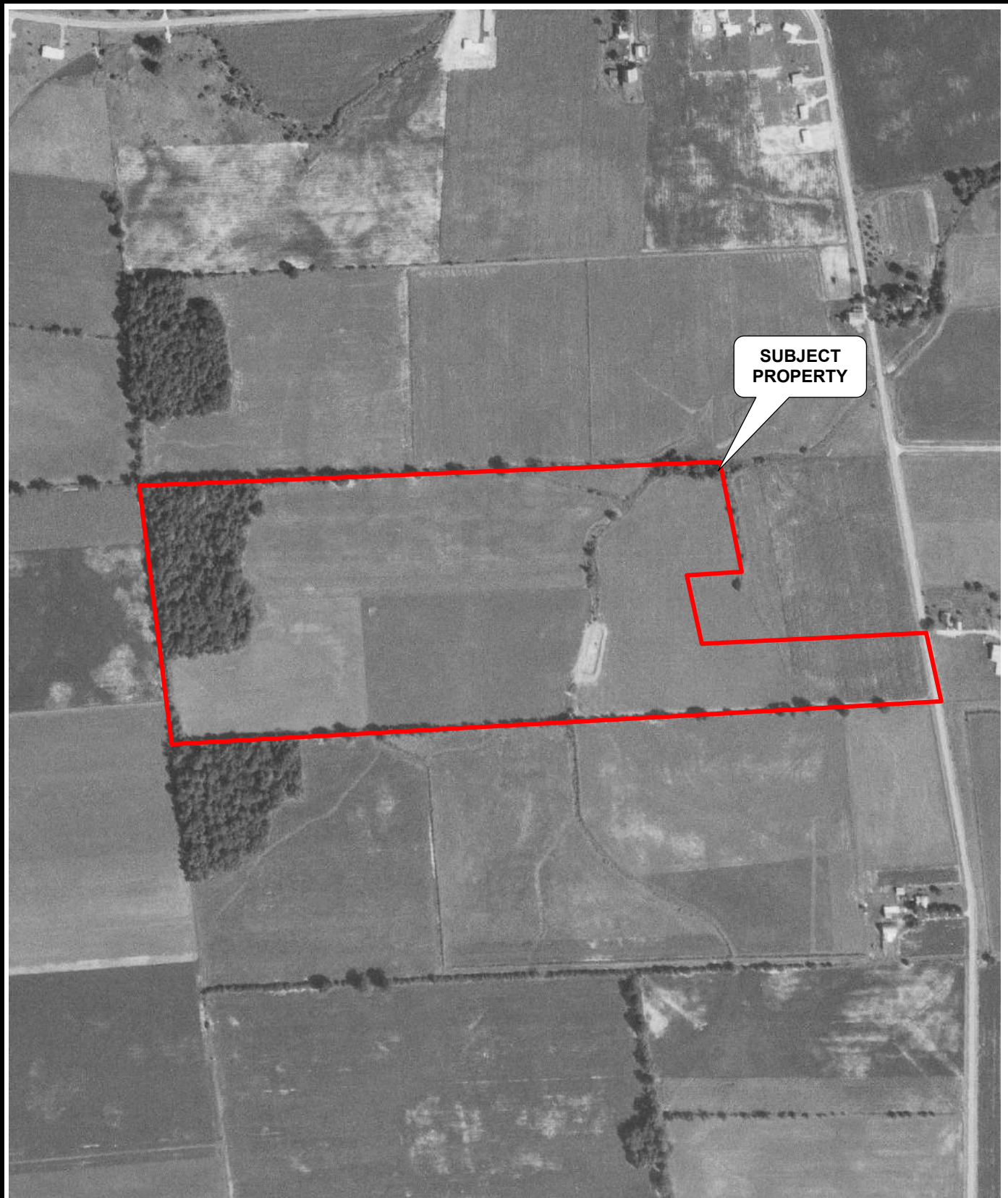


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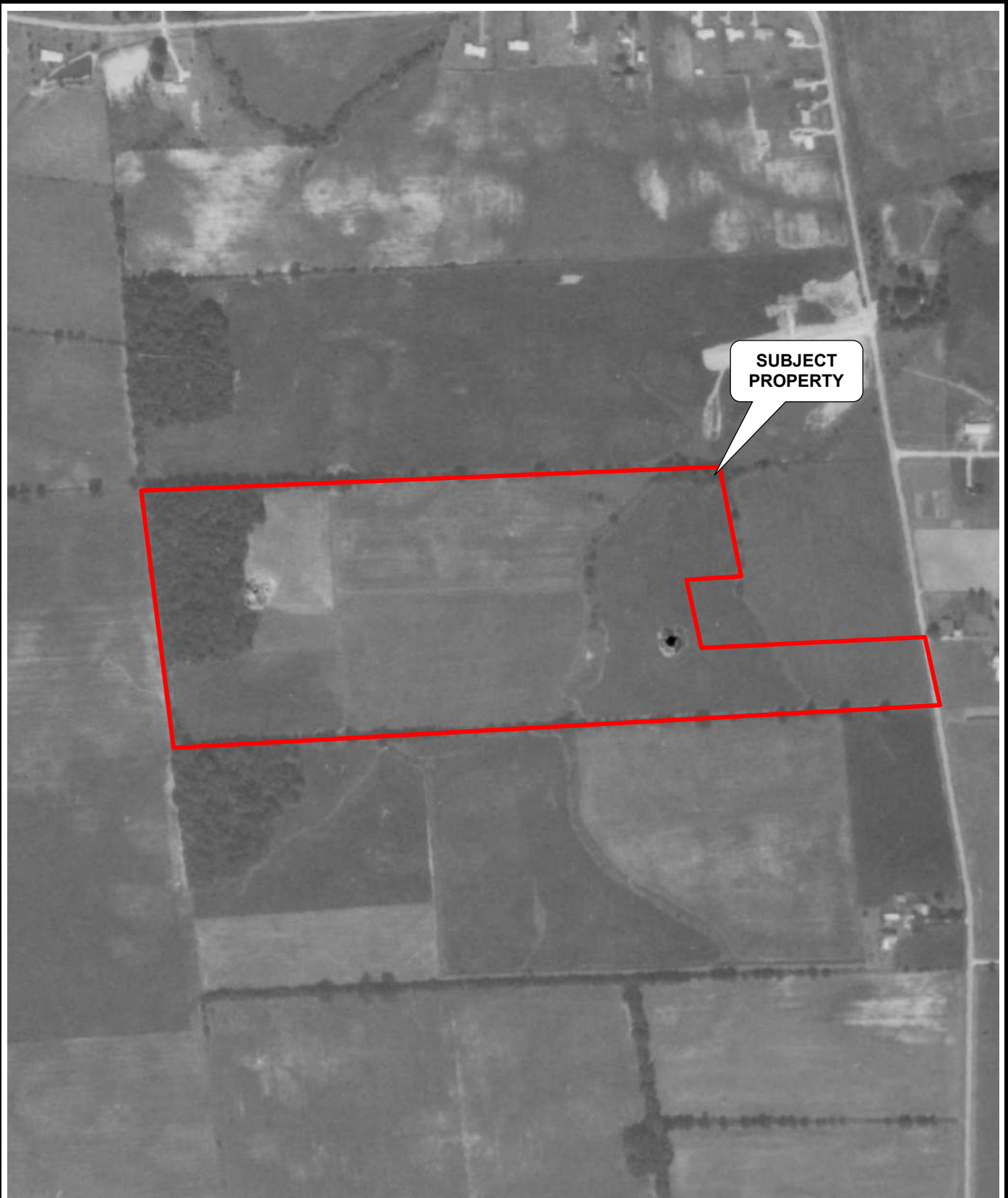




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**PROPOSED BUXTON MEWS RESIDENTIAL DEVELOPMENT  
WATKINS ROAD  
MARYSVILLE, UNION COUNTY, OHIO**





North

**PROPOSED BUXTON MEWS RESIDENTIAL DEVELOPMENT  
WATKINS ROAD  
MARYSVILLE, UNION COUNTY, OHIO**







SUBJECT  
PROPERTY



North

PROPOSED BUXTON MEWS RESIDENTIAL DEVELOPMENT  
WATKINS ROAD  
MARYSVILLE, UNION COUNTY, OHIO







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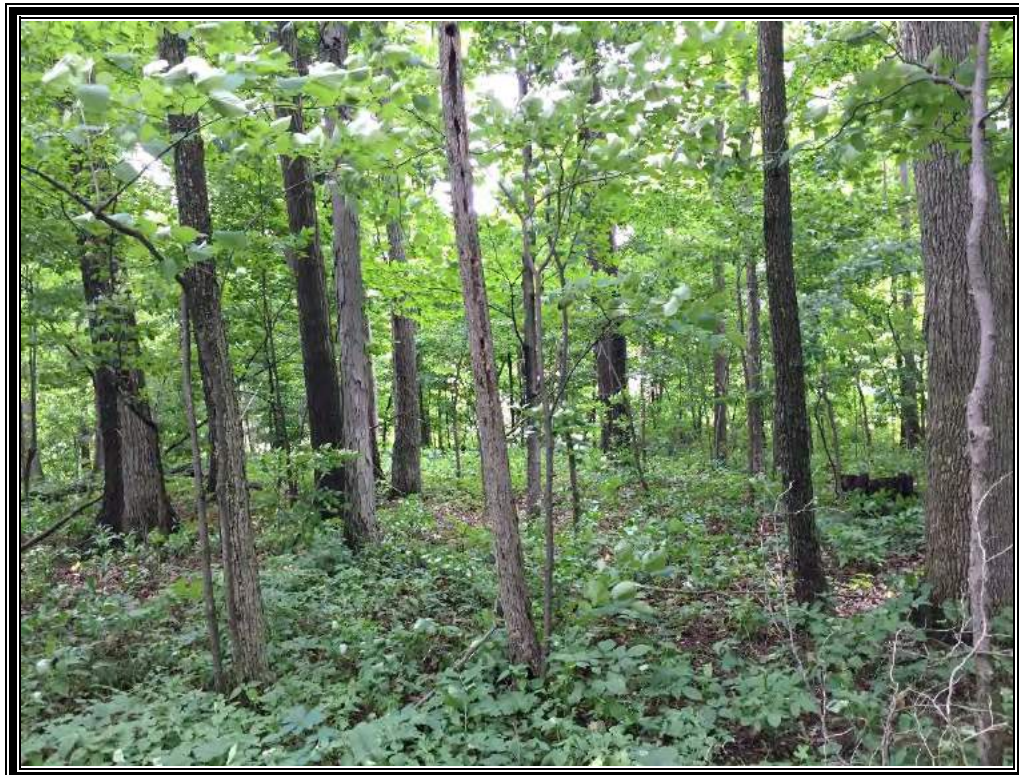
**BUXTON MEWS RESIDENTIAL DEVELOPMENT PROPERTY**  
**WATKINS ROAD**  
**MARYSVILLE, UNION COUNTY, OHIO**







**Photo 1:** Southerly view along a clearing and proposed Hinton Mill Road extension on the northwest part of the property.



**Photo 2:** Typical view of the wooded northwest part of the property.





**Photo 3:** Typical view of the wooded west central part of the property.



**Photo 4:** Southerly view along a clearing and proposed Hinton Mill Road extension on the west central part of the property.





**Photo 5:** Typical view of the wooded northwest part of the property.



**Photo 6:** Typical view of the wooded west central part of the property.





**Photo 7:** Easterly view from the southwest part of the property.



**Photo 8:** Northerly view across the southwest part of the property.





**Photo 9:** Northwesterly view across a swale within an agricultural area on the southwest part of the property.



**Photo 10:** Westerly view from the south central part of the property.





**Photo 11:** Northerly view along the wooded stream corridor crossing the central part of the property.



**Photo 12:** Northerly view along a Stream 1 crossing the central part of the property.





**Photo 13:** Northerly view along a Stream 1 and Wetland 1 on the central part of the property.



**Photo 14:** Southerly view from the northern part of Wetland 1.





**Photo 15:** Easterly view from the south central part of the property.



**Photo 16:** Northerly view from the south central part of the property.





**Photo 17:** Easterly view across the southeast part of the property.



**Photo 18:** Northwesterly view across the northeast part of the property.





**Photo 19:** Westerly view of Pond 3 on the northeast part of the property.



**Photo 20:** Easterly view of Pond 3 on the northeast part of the property.





**Photo 21:** Easterly view of Pond 1 on the northeast part of the property.



**Photo 22:** Northwesterly view of Pond 1 on the northeast part of the property.





**Photo 23:** Southwesterly view along the eastern berm of Pond 1.



**Photo 24:** Northwesterly view of Pond 2 on the northeast part of the property.





**Photo 25:** Southeasterly view of Pond 2 on the northeast part of the property



**Photo 26:** Westerly view along the north property boundary.

## WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Buxton Mews City/County: Marysville/Union Sampling Date: June 27, 2018  
 Applicant/Owner: Gary Dodson State: Ohio Sampling Point: DP-1  
 Investigator(s): Matt Kaminski Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): till plains Local relief (concave, convex, none): concave  
 Slope (%): 2-6 Lat: 40.226723 Long: -83.308795 Datum: Wetland 1  
 Soil Map Unit Name: Blount silt loam (Blg1B1) NWI or WWI classification: PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No _____	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No _____		
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No _____		
Remarks: <b>Area is delineated Wetland 1.</b>				

## VEGETATION – Use scientific names of plants.



<u>Tree Stratum</u> (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. <u>Populus deltoides</u>	10	Y	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>3</u> (A)
2. _____				Total Number of Dominant Species Across All Strata:	<u>3</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100.00</u> (A/B)
4. _____					
5. _____					
	<u>10</u> = Total Cover			<b>Prevalence Index worksheet:</b>	
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u> )				Total % Cover of:	Multiply by:
1. <u>Salix alba</u>	10	Y	FACW	OBL species <u>0</u>	x 1 = <u>0</u>
2. _____				FACW species <u>105</u>	x 2 = <u>210</u>
3. _____				FAC species <u>10</u>	x 3 = <u>30</u>
4. _____				FACU species <u>0</u>	x 4 = <u>0</u>
5. _____				UPL species <u>0</u>	x 5 = <u>0</u>
	<u>10</u> = Total Cover			Column Totals:	<u>115</u> (A) <u>240</u> (B)
<u>Herb Stratum</u> (Plot size: <u>5'</u> )				Prevalence Index = B/A = <u>2.09</u>	
1. <u>Phalaris arundinacea</u>	95	Y	FACW	<b>Hydrophytic Vegetation Indicators:</b>	
2. _____				<input checked="" type="checkbox"/> Dominance Test is >50%	
3. _____				<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>	
4. _____				____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
5. _____				____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
6. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
7. _____					
8. _____					
9. _____					
10. _____					
	<u>95</u> = Total Cover			<b>Hydrophytic Vegetation Present?</b>	
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u> )				Yes <input checked="" type="checkbox"/> No _____	
1. _____					
2. _____					
	_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)					
<b>Dominance of hydrophytic vegetation satisfies the vegetation criteria for wetlands. Refer to photos 12 through 14 in GCI's Jurisdictional Waters Delineation Report.</b>					





## Background Information

<b>Name:</b>	Matt Kaminski
<b>Date:</b>	6/27/2018
<b>Affiliation:</b>	Geotechnical Consultants, Inc.
<b>Address:</b>	720 Greencrest Drive, Westerville, Ohio 43081
<b>Phone Number:</b>	614-895-1400
<b>e-mail address:</b>	mkaminski@gci2000.com
<b>Name of Wetland:</b>	Wetland 1
<b>Vegetation Communit(ies):</b>	emergent
<b>HGM Class(es):</b>	riverine
<b>Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc.</b>	
<p>Wetland 1 is located within the corridor of Stream 1 on the central part of Union County parcel 1100120010000. The wetland is located approximately 1,100 feet west of Watkins Road and approximately 600 feet south of Oxford Drive. The approximate coordinates for this wetland are 40.226723 / -83.308795. Refer to GCI's delineation report and jurisdictional waters location maps for additional information of the location of this wetland.</p>	
Lat/Long or UTM Coordinate	40.226723 / -83.308795
USGS Quad Name	Marysville Ohio
County	Union
Township	Dover
Section and Subsection	
Hydrologic Unit Code	05060001
Site Visit	6/27/2018
National Wetland Inventory Map	PEM1C
Ohio Wetland Inventory Map	N/A
Soil Survey	Blount silt loam, ground moraine (Blg1B1)
Delineation report/map	Jurisdictional Waters Location Map

Name of Wetland: Wetland 1	
Wetland Size (acres, hectares): 0.14 acre	
Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.	
<p style="text-align: center;">JURISDICTIONAL WATERS LOCATION MAP <span style="float: right;">GCI PROJECT #18-E-21962-A</span></p> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: center;">         orth     </div> <div style="text-align: center;"> <b>BUXTON MEWS RESIDENTIAL DEVELOPMENT PROPERTY</b>        WATKINS ROAD        MARYSVILLE, UNION COUNTY, OHIO     </div> <div style="text-align: center;">  </div> </div> <p style="font-size: small; text-align: center; margin-top: 5px;">GEOTECHNICAL CONSULTANTS, INC. • 720 GREENCREST DRIVE • WESTERVILLE, OHIO 43081 • 614-895-1400 • FAX 614-895-1171</p>	
<b>Comments, Narrative Discussion, Justification of Category Changes:</b>  Wetland 1 is located along an intermittent/perennial stream between two active agricultural fields. The fields are drained by subterranean tile. The wetland scored 38.0 which falls in the modified category 2 zone.	
<b>Final score :</b> 38	<b>Category:</b> 2

## Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the “scoring boundaries” of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the “jurisdictional boundaries.” For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland’s jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. *Areas with a high degree of hydrologic interaction should be scored as a single wetland.* In determining a wetland’s scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
<b>Step 1</b>	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	✓	
<b>Step 2</b>	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	✓	
<b>Step 3</b>	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	✓	
<b>Step 4</b>	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	✓	
<b>Step 5</b>	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	✓	
<b>Step 6</b>	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	✓	

**End of Scoring Boundary Determination. Begin Narrative Rating on next page.**



## Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), <http://www.dnr.state.oh.us/dnap>. The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	<b>Critical Habitat.</b> Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES  Wetland should be evaluated for possible Category 3 status  Go to Question 2	<b>NO</b>  Go to Question 2
2	<b>Threatened or Endangered Species.</b> Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES  Wetland is a Category 3 wetland.  Go to Question 3	<b>NO</b>  Go to Question 3
3	<b>Documented High Quality Wetland.</b> Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES  Wetland is a Category 3 wetland  Go to Question 4	<b>NO</b>  Go to Question 4
4	<b>Significant Breeding or Concentration Area.</b> Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES  Wetland is a Category 3 wetland  Go to Question 5	<b>NO</b>  Go to Question 5
5	<b>Category 1 Wetlands.</b> Is the wetland less than 0.5 hectares (1 acre) in size and <b>hydrologically isolated</b> and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by <i>Phalaris arundinacea</i> , <i>Lythrum salicaria</i> , or <i>Phragmites australis</i> , or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES  Wetland is a Category 1 wetland  Go to Question 6	<b>NO</b>  Go to Question 6
6	<b>Bogs.</b> Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly <i>Sphagnum</i> spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES  Wetland is a Category 3 wetland  Go to Question 7	<b>NO</b>  Go to Question 7
7	<b>Fens.</b> Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES  Wetland is a Category 3 wetland  Go to Question 8a	<b>NO</b>  Go to Question 8a
8a	<b>"Old Growth Forest."</b> Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES  Wetland is a Category 3 wetland.  Go to Question 8b	<b>NO</b>  Go to Question 8b

<b>8b</b>	<b>Mature forested wetlands.</b> Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES  Wetland should be evaluated for possible Category 3 status.  Go to Question 9a	<b>NO</b>  Go to Question 9a
<b>9a</b>	<b>Lake Erie coastal and tributary wetlands.</b> Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES  Go to Question 9b	<b>NO</b>  Go to Question 10
<b>9b</b>	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES  Wetland should be evaluated for possible Category 3 status  Go to Question 10	<b>NO</b>  Go to Question 9c
<b>9c</b>	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES  Go to Question 9d	<b>NO</b>  Go to Question 10
<b>9d</b>	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES  Wetland is a Category 3 wetland  Go to Question 10	<b>NO</b>  Go to Question 9e
<b>9e</b>	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES  Wetland should be evaluated for possible Category 3 status  Go to Question 10	<b>NO</b>  Go to Question 10
<b>10</b>	<b>Lake Plain Sand Prairies (Oak Openings)</b> Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES  Wetland is a Category 3 wetland.  Go to Question 11	<b>NO</b>  Go to Question 11
<b>11</b>	<b>Relict Wet Prairies.</b> Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES  Wetland should be evaluated for possible Category 3 status  Complete Quantitative Rating	<b>NO</b>  Complete Quantitative Rating

**Table 1. Characteristic plant species.**

<b>invasive/exotic spp</b>	<b>fen species</b>	<b>bog species</b>	<b>Oak Opening species</b>	<b>wet prairie species</b>
<i>Lythrum salicaria</i>	<i>Zygadenus elegans</i> var. <i>glaucus</i>	<i>Calla palustris</i>	<i>Carex cryptolepis</i>	<i>Calamagrostis canadensis</i>
<i>Myriophyllum spicatum</i>	<i>Cacalia plantaginea</i>	<i>Carex atlantica</i> var. <i>capillacea</i>	<i>Carex lasiocarpa</i>	<i>Calamagrostis stricta</i>
<i>Najas minor</i>	<i>Carex flava</i>	<i>Carex echinata</i>	<i>Carex stricta</i>	<i>Carex atherodes</i>
<i>Phalaris arundinacea</i>	<i>Carex sterilis</i>	<i>Carex oligosperma</i>	<i>Cladium mariscoides</i>	<i>Carex buxbaumii</i>
<i>Phragmites australis</i>	<i>Carex stricta</i>	<i>Carex trisperma</i>	<i>Calamagrostis stricta</i>	<i>Carex pellita</i>
<i>Potamogeton crispus</i>	<i>Deschampsia caespitosa</i>	<i>Chamaedaphne calyculata</i>	<i>Calamagrostis canadensis</i>	<i>Carex sartwellii</i>
<i>Ranunculus ficaria</i>	<i>Eleocharis rostellata</i>	<i>Decodon verticillatus</i>	<i>Quercus palustris</i>	<i>Gentiana andrewsii</i>
<i>Rhamnus frangula</i>	<i>Eriophorum viridicarinarum</i>	<i>Eriophorum virginicum</i>		<i>Helianthus grosseserratus</i>
<i>Typha angustifolia</i>	<i>Gentianopsis</i> spp.	<i>Larix laricina</i>		<i>Liatris spicata</i>
<i>Typha xglauca</i>	<i>Lobelia kalmii</i>	<i>Nemopanthus mucronatus</i>		<i>Lysimachia quadriflora</i>
	<i>Parnassia glauca</i>	<i>Scheuchzeria palustris</i>		<i>Lythrum alatum</i>
	<i>Potentilla fruticosa</i>	<i>Sphagnum</i> spp.		<i>Pycnanthemum virginianum</i>
	<i>Rhamnus alnifolia</i>	<i>Vaccinium macrocarpon</i>		<i>Silphium terebinthinaceum</i>
	<i>Rhynchospora capillacea</i>	<i>Vaccinium corymbosum</i>		<i>Sorghastrum nutans</i>
	<i>Salix candida</i>	<i>Vaccinium oxycoccos</i>		<i>Spartina pectinata</i>
	<i>Salix myricoides</i>	<i>Woodwardia virginica</i>		<i>Solidago riddellii</i>
	<i>Salix serissima</i>	<i>Xyris difformis</i>		
	<i>Solidago ohioensis</i>			
	<i>Tofieldia glutinosa</i>			
	<i>Triglochin maritimum</i>			
	<i>Triglochin palustre</i>			

**End of Narrative Rating. Begin Quantitative Rating on next page.**

<b>Site:</b> Buxton Mews	<b>Rater(s):</b> Matt Kaminski	<b>Date:</b> 6/27/2018
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1	1
max 6 pts.	subtotal

## Metric 1. Wetland Area (size).

- Select one size class and assign score.
- >50 acres (>20.2ha) (6 pts)
  - 25 to <50 acres (10.1 to <20.2ha) (5 pts)
  - 10 to <25 acres (4 to <10.1ha) (4 pts)
  - 3 to <10 acres (1.2 to <4ha) (3 pts)
  - 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
  - 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
  - <0.1 acres (0.04ha) (0 pts)

2	3
max 14 pts.	subtotal

## Metric 2. Upland buffers and surrounding land use.

- 2a. Calculate average buffer width. Select only one and assign score. Do not double check.
- WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
  - MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
  - NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
  - VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)
- 2b. Intensity of surrounding land use. Select one or double check and average.
- VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
  - LOW. Old field (>10 years), shrub land, young second growth forest. (5)
  - MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
  - HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

23	26
max 30 pts.	subtotal

## Metric 3. Hydrology.

- 3a. Sources of Water. Score all that apply.
- High pH groundwater (5)
  - Other groundwater (3)
  - Precipitation (1)
  - Seasonal/Intermittent surface water (3)
  - Perennial surface water (lake or stream) (5)
- 3b. Connectivity. Score all that apply.
- 100 year floodplain (1)
  - Between stream/lake and other human use (1)
  - Part of wetland/upland (e.g. forest), complex (1)
  - Part of riparian or upland corridor (1)
- 3c. Maximum water depth. Select only one and assign score.
- >0.7 (27.6in) (3)
  - 0.4 to 0.7m (15.7 to 27.6in) (2)
  - <0.4m (<15.7in) (1)
- 3d. Duration inundation/saturation. Score one or dbl check.
- Semi- to permanently inundated/saturated (4)
  - Regularly inundated/saturated (3)
  - Seasonally inundated (2)
  - Seasonally saturated in upper 30cm (12in) (1)
- 3e. Modifications to natural hydrologic regime. Score one or double check and average.
- None or none apparent (12)
  - Recovered (7)
  - Recovering (3)
  - Recent or no recovery (1)

Check all disturbances observed	
<input type="checkbox"/> ditch	<input type="checkbox"/> point source (nonstormwater)
<input type="checkbox"/> tile	<input type="checkbox"/> filling/grading
<input type="checkbox"/> dike	<input type="checkbox"/> road bed/RR track
<input type="checkbox"/> weir	<input type="checkbox"/> dredging
<input type="checkbox"/> stormwater input	<input type="checkbox"/> other _____

14	40
max 20 pts.	subtotal

## Metric 4. Habitat Alteration and Development.

- 4a. Substrate disturbance. Score one or double check and average.
- None or none apparent (4)
  - Recovered (3)
  - Recovering (2)
  - Recent or no recovery (1)
- 4b. Habitat development. Select only one and assign score.
- Excellent (7)
  - Very good (6)
  - Good (5)
  - Moderately good (4)
  - Fair (3)
  - Poor to fair (2)
  - Poor (1)
- 4c. Habitat alteration. Score one or double check and average.
- None or none apparent (9)
  - Recovered (6)
  - Recovering (3)
  - Recent or no recovery (1)

Check all disturbances observed	
<input type="checkbox"/> mowing	<input type="checkbox"/> shrub/sapling removal
<input type="checkbox"/> grazing	<input type="checkbox"/> herbaceous/aquatic bed removal
<input type="checkbox"/> clearcutting	<input type="checkbox"/> sedimentation
<input type="checkbox"/> selective cutting	<input type="checkbox"/> dredging
<input type="checkbox"/> woody debris removal	<input type="checkbox"/> farming
<input type="checkbox"/> toxic pollutants	<input type="checkbox"/> nutrient enrichment

40
subtotal this page



# Wetland 1

<b>Site:</b> Buxton Mews	<b>Rater(s):</b> Matt Kaminski	<b>Date:</b> 6/27/2018
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40

subtotal first page

0	40
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- Bog (10)
- Fen (10)
- Old growth forest (10)
- Mature forested wetland (5)
- Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- Lake Erie coastal/tributary wetland-restricted hydrology (5)
- Lake Plain Sand Prairies (Oak Openings) (10)
- Relict Wet Prairies (10)
- Known occurrence state/federal threatened or endangered species (10)
- Significant migratory songbird/water fowl habitat or usage (10)
- Category 1 Wetland. See Question 1 Qualitative Rating (-10)

-2	38
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- Aquatic bed
- Emergent
- Shrub
- Forest
- Mudflats
- Open water
- Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- High (5)
- Moderately high(4)
- Moderate (3)
- Moderately low (2)
- Low (1)
- None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- Extensive >75% cover (-5)
- Moderate 25-75% cover (-3)
- Sparse 5-25% cover (-1)
- Nearly absent <5% cover (0)
- Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- 0 Vegetated hummocks/tussucks
- 0 Coarse woody debris >15cm (6in)
- 0 Standing dead >25cm (10in) dbh
- 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

38

**End of Quantitative Rating. Complete Categorization Worksheets.**

# ORAM Summary Worksheet

## Wetland 1

		<b>circle answer or insert score</b>	<b>Result</b>
Narrative Rating	Question 1. Critical Habitat	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 4. Significant bird habitat	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 1.
	Question 6. Bogs	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 7. Fens	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 8a. Old Growth Forest	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3.
	Question 8b. Mature Forested Wetland	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, evaluate for Category 3; may also be 1 or 2.
Question 10. Oak Openings	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, Category 3	
Question 11. Relict Wet Prairies	YES <input type="radio"/> NO <input checked="" type="radio"/>	If yes, evaluate for Category 3; may also be 1 or 2.	
Quantitative Rating	Metric 1. Size	1	
	Metric 2. Buffers and surrounding land use	2	
	Metric 3. Hydrology	23	
	Metric 4. Habitat	14	
	Metric 5. Special Wetland Communities	0	
	Metric 6. Plant communities, interspersion, microtopography	-2	
	TOTAL SCORE	38	Category based on score breakpoints Modified Category 2

**Complete Wetland Categorization Worksheet.**

# Wetland 1

## Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions:  Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES  Wetland is categorized as a Category 3 wetland	<b>NO</b>	Is quantitative rating score <i>less</i> than the Category 2 scoring threshold ( <i>excluding</i> gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM
Did you answer "Yes" to any of the following questions:  Narrative Rating Nos. 1, 8b, 9b, 9e, 11	YES  Wetland should be evaluated for possible Category 3 status	<b>NO</b>	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to  Narrative Rating No. 5	YES  Wetland is categorized as a Category 1 wetland	<b>NO</b>	Is quantitative rating score <i>greater</i> than the Category 2 scoring threshold ( <i>including</i> any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	<b>YES</b>  Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the "gray zone" for Category 1 or 2 or Category 2 or 3 wetlands?	YES  Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	<b>NO</b>	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit <i>moderate OR superior</i> hydrologic OR habitat, OR recreational functions AND the wetland was <i>not</i> categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES  Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	<b>NO</b>  Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

**Final Category**  
 Choose one      Category 1      **Category 2**      Category 3

**End of Ohio Rapid Assessment Method for Wetlands.**



**County Engineer  
Environmental Engineer  
Building Department**

233 W. Sixth Street  
Marysville, Ohio 43040  
P 937. 645. 3018  
F 937. 645. 3161  
[www.co.union.oh.us/engineer](http://www.co.union.oh.us/engineer)

**Marysville Operations Facility**

16400 County Home Road  
Marysville, Ohio 43040  
P 937. 645. 3017  
F 937. 645. 3111

**Richwood Outpost**

190 Beatty Avenue  
Richwood, Ohio 43344

September 6, 2018

*Public Service with integrity*

Bradley Bodenmiller  
LUC Regional Planning Commission  
Box 219  
East Liberty, Ohio 43319

Re: Preliminary Plat Review  
Mills of Watkins

Brad,

We have completed our review for the above preliminary plat, received by our office on August 27, 2018. We recommend it be approved with the below modifications and recommendations. Items listed below should be addressed in the final construction drawings, or resolved as indicated.

1. A left turn lane must be installed on Watkins Road.
2. A traffic impact study (TIS) will need to be submitted and approved prior to approval of the construction plans to determine right turn lane warrants.
3. All off-site road improvements needed for opening day are to be constructed at the same time with the internal roadway infrastructure, pending the results of the TIS.
4. The perpendicular intersection of Watkins Road and Clifton Mill drive needs to extend at least 100'.
5. Provide a clear label and definition of all easements within the development, including who all easements are granted to.
6. Provide intersection site distance exhibits for the intersection of Watkins road and Clifton Mill drive in the construction documents.
7. Detail all flood routing swales, including 100 year water surface elevations, ensuring at least 1' of freeboard between the 100 year water surface and the finished grade elevations of all building structures.
8. Provide detailed construction drawings to private utility providers.
9. Provide a letter from the Health Department for approval of well locations.



In accordance with the Subdivision Regulations of Union County, additional information is required from the developer prior to final plat approvals, including but not limited to final construction documents. It is the responsibility of the developer to become familiar with the regulations and file requisite information within the time frames outlined in the regulations. Should you have any questions or concerns, feel free to contact me at (937) 645-3165.

*Bill Narducci*

Bill Narducci, P.E.  
Assistant County Engineer  
Union County Engineer

Cc: Jeremy Burrey, Union Soil and Water Conservation District (via email)



Engineering, Planning and Zoning  
City Hall, 209 South Main Street  
Marysville, Ohio 43040-1641  
(937) 645-7350  
FAX (937) 645-7351  
[www.marysvilleohio.org](http://www.marysvilleohio.org)

September 7, 2018

Bradley J. Bodenmiller  
LUC Regional Planning Commission  
10820 St. Rt. 347, PO Box 219  
East Liberty OH 43319

**Subject: Mills of Watkins  
Preliminary Plat Comments**

The City of Marysville has reviewed the Preliminary Plat for the Mills of Watkins development and recommends approving the Preliminary Plat upon addressing the following comments as part of the final engineering process:

**General:**

1. Please provide a twenty (20) foot utility easement along the entirety of this parcel's frontage with Watkins Road.
2. The developer shall provide proof of the sanitary force main easement from Lot 84 (Buxton Meadows) along Hinton Mill Road.
3. Confirm the ownership and maintenance responsibility for each of the wastewater components.

**Wastewater:**

1. Detailed sanitary sewer sizing calculations (including an upstream elevation analysis and confirmation that the downstream sewer has adequate capacity) shall be provided during the final engineering design process.
2. From a maintenance and access perspective, backyard sanitary sewers are not permitted. The sanitary sewer alignment for Lots 1 through 5 shall be revised.
3. From a maintenance and access perspective, a larger sanitary sewer easement (30 feet) shall be provided for the proposed side yard sanitary sewer between Lots 16 and 17.
4. During the final engineering process, additional detail shall be provided for the proposed pump station and force main.
5. Prior to final engineering approval, a significant amount of work will need to be completed on the submitted sanitary profiles.

Please contact us if you need additional clarification or wish to discuss these comments further.

Sincerely,

Jeremy Hoyt, P.E.

City Engineer / Deputy Public Service Director

- cc. Kyle Hoyng, P.E. (City of Marysville)  
Mike Andrako, P.E. (City of Marysville),  
Rich Felton (City of Marysville)  
Bill Narducci (Union County Engineer's Office)



**DOVER TOWNSHIP**  
**Union County**  
**Marysville, OH. 43040**

September 4, 2018

Brad Bodenmiller  
LUC Planning Commission  
10820 St. Rt. 347  
East Liberty, OH 43319

RE: Mills of Watkins

Mr. Bodenmiller,

Following are questions/concerns from the Dover Township Trustees regarding the Mills of Watkins subdivision.

- What will become of the road connection in Phase 3
- The road connection is completed when Phase 3 comes into completion.
- Want to make sure that the proposed green space is only for Phase 1, 2 & 3.
- Want to make sure the development follows the Dover Township Zoning requirements.

Thank you,  
Dover Township Trustees

**Preliminary Plan Checklist**  
**RPC Subdivisions**

Date: **August 20, 2018**

Applicant: **Buxton Development Company**

RPC Number: 73086

**Legend:**

  X   =OK

  N   =Not Applicable

  I   =Incomplete

Subdivision Name: The Mills of Watkins (Lots 1 - 20)

**The Preliminary Development Plan shall include:**

- I   1. Total land area to be used
- I   2. Location and size of all lots, including any residual acreage
- X   3. Reference scale: ex. 1" = 50'
- X   4. North arrow
- X   5. Location of all bodies of water, streams, ditches, sewers, drain tiles, existing and proposed potable water supply sources and lines on this or adjacent lots within 50 feet of the proposed subdivision, or any other information that may affect the installation or operation of household sewage treatment systems (STS); or the enforcement of rules 3701-29-01 to 3701-29-21 of the Ohio Sanitary Code; or the private water systems (PWS) rules
- X   6. Distance from nearest intersection and or existing address
- X   7. Existing and potential building locations
- X   8. Existing and final grade of all lots
- I   9. Flood plain delineated
- I   10. Driveway shown, not across STS or PWS areas
- X   11. Existing/Proposed easements shown (drainage ways, existing field tile)
- X   12. Sanitary/Drainage/Collector tile easement (20')
- N   13. Soil scientist report-indicating properties and characteristics of the soils in this subdivision, including but not limited to water table, bedrock, and dense glacial till (test hole locations shown with test hole numbers)
- N   14. Soil delineation per soil survey
- N   15. Areas for STS are in suitable soil



- N 16. Building envelope is at least 10 feet away STS area
- N 17. Plan views of primary and secondary STS
- N 18. Note regarding number of bedrooms proposed per lot
- N 19. STS and PWS are shown to be at least 10 feet off of property lines, easements, and ROW
- X 20. Tree line/wooded areas are shown
- N 21. Note that clear-cutting may be required if STS is in wooded areas
- N 22. Does STS size accurately reflect both linear loading rate (LLR) and infiltration loading rate (ILR) loading rates are shown on each lot
- X 23. Topography shown in 1 foot intervals
- N 24. Length of any STS is < 1 foot change in elevation (does not cross more than one contour line)
- N 25. STS not in flood plain-(100 year)
- N 26. STS not in drainage way
- N 27. Finished Grade Elevation (FGE) at residence minimum of 1.5' above highest grade when using STS area
- N 28. If elevation of STS is higher than FGE at residence, note that pumping is required
- N 29. Perimeter drain shown to adequate outlet (3' lower elevation than surface of leach area)
- N 30. Perimeter drain outlet note: Contractor to provide minimum of 4" freeboard at perimeter drain outlet
- N 31. If collector tile is to be installed, collector tile profile included
- N 32. Size of collector tile
- N 33. Invert of collector tile at least 3' < surface elevation of leach area for all lots
- N 34. Indicate lot lines on collector tile profile
- X 35. Utilities shown not crossing STS or PWS areas
- X 36. Letter regarding feasibility of centralized sewer from nearby sewer districts
- I 37. If more than 5 lots, Board of Health approval
- I 38. A vertical and horizontal reference point or benchmark has been identified
- N 39. Note regarding an administrative variance may be required prior to permitting
- N 40. Homeowner central sewer agreement is noted on plat
- N 41. Note stating that the proposed STS on these lots do not violate the prohibitions in Chapter 3701-29 of the Ohio Administrative Code
- N 42. Means of access of O&M equipment
- N 43. If secondary STS is to be located on a separate parcel, a legal easement must recorded and copy of the legal description must be submitted with the survey
- N 44. Note that a design plan needs to be approved prior to permitting
- I 45. Note stating that the proposed PWS on these lots do not violate the prohibitions in Chapter 3701 -28 of the Ohio Administrative Code

Notes to include:

- The location, operation, and maintenance of each well or any other private water system (PWS) shall be properly maintained and operated according to the requirements of chapter 3701-28-07 of the Ohio Administrative Code (OAC).
- A private water system shall be located only where the system and its surroundings can be maintained in a sanitary condition, and only where surface and subsurface conditions will not permit contamination of the private water system or aquifer. A PWS shall be located the maximum practical distance from a known or suspected source of contamination, and shall be located so that it is accessible for cleaning, treatment, repair, alteration, testing, and such other attention as may be necessary.
- When a replacement PWS or a public water supply system is installed the well that is not providing the primary source of water shall be sealed pursuant to the provisions of this rule within thirty days, unless certain conditions within 3701-28-17 of the OAC can be met.

Please feel free to contact me should you have any questions after reviewing this checklist.

Thank you,



Jim Cogar R.S.


Deputy Director

Environmental Health Division

Union County Health Department



15461 US Route 36 • PO Box 393 • Marysville, OH 43040-0393  
(937) 642-1826 • (800) 642-1826 • Fax (937) 644-4239  
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Your Touchstone Energy® Cooperative 

September 5, 2018

Bradley Bodenmiller  
LUC Regional Planning Commission  
9676 E. Foundry St.  
East Liberty, OH 43319

RE: UREC comments for the Mills of Watkins – Preliminary Plat

Brad,

Noted comments per paper drawings received 08/27/18. Drawing set of 6 sheets issued Preliminary Plat for the Mills of Watkins, Dated August 21, 2018:

- 1) Cover Sheet
  - a) Number of Lots: 20 for phase 1
  - b) Front Setback: 35 FT
  - c) Side Setback: 10 FT
  - d) Rear Setback: 40 FT
  - e) Note 28 identifies URE will provide electric service, and URE/CERC will provide natural gas service.
  
- 2) Sheet C.1
  - f) URE/CERC will require an easement, or share a government (township) easement along the North most section of the future phase, in order to install natural gas facilities to phase 1. This would be the existing drainage easement for Buxton Meadows Subdivision.
  
- 3) Sheet C.2
  - g) URE will require a combination of front lot and rear lot distribution.
  - h) URE will require an easement for primary installation entering the development on the South side of Clifton Mill Drive.
  - i) URE has existing facilities located along Watkins Road, and details around relocation (if needed) must be addressed.
  - j) URE easement requirements are 20 feet for underground primary and secondary facilities. Actual location of electrical facilities on lots can be located within a 10 feet easement if adjacent property has additional easements or right of way for ingress and egress totaling a minimum of 20 feet.
  - k) URE/CERC typically installs the main natural gas line parallel to, and 3-5 FT off of, the edge of pavement or curb.
  
- 4) Sheet C.3
  - l) Same comments as C.2.
  - m) URE will require 20 feet electric easement extension onto development phase 2.

- n) URE easement will need to be provided between lots 8 & 9, in order to accommodate the installation for the for Blackhurst Mill CT section.
- 5) Sheet C.4
- o) URE/CERC natural gas line will need an easement to transition from the drainage area easement to the phase 1 development area, extending out to Watkins Road.
  - p) URE easement requirements are 20 feet for underground primary and secondary facilities. Actual location of electrical facilities on lots can be located within a 10 feet easement if adjacent property has additional easements or right of way for ingress and egress totaling a minimum of 20 feet. Will need to look at the future extensions to the West.
  - q) All easement areas must be continuous for electric and gas facilities.
  - r) Typically, phone and or cable or fiber will go joint use with URE trenching.
  - s) Include road crossing conduits at the end of project sections for continuous electric facilities.
- 6) Sheet C.5
- t) No comments.

General comments: Development must comply with URE's Terms and Conditions for Supplying Electric Service.

Electric and gas easement must be platted and shown on final plat plans.

Do not put easement area over building setbacks, adjacent to is acceptable.

Utility Easement for URE electric facilities could possibly be joint use for phone, cable or other private communication entities (fiber).

Street crossing and adjacent property paths to be determined when facilities layout is completed.

Still need to work with developer to complete UREC electrical facility layout.

Request updated drawings ASAP for facilities layout.

Regards,

Matt Zarnosky  
COO / VP Engineering  
Union Rural Electric Cooperative, Inc.  
PO Box 393  
15461 US Route 36  
Marysville, Ohio 43040  
Direct: (937) 645-9246





**Staff Report – Claibourne Township Zoning Amendment**

<b>Jurisdiction:</b>	<p><b>Claibourne Township Zoning Commission</b> c/o Dustin Converse (937) 407-0463 <a href="mailto:dconverse@proag.com">dconverse@proag.com</a></p>
<b>Request:</b>	<p>Review of Claibourne Township Zoning Resolution text amendment, initiated by the Zoning Commission.</p> <p>The amendment amends/creates:</p> <ol style="list-style-type: none"> <li>1. Article II Definitions (Amend)</li> <li>2. Section 350 Penalties for Violation (Amend)</li> <li>3. Official Schedule of District Regulations; Permitted Uses in Column 2 and Conditional Uses in Column 3 (Amend)</li> <li>4. Section 1004 Temporary Buildings (Amend)</li> <li>5. Section 1035 General Conditions for Medical Marijuana Entities (Create)</li> <li>6. Article XIII (Manufactured Dwelling (Housing) - Mobile Home Parks) And (Manufactured Dwelling (Housing) - Mobile Homes Individually) (Amend)</li> </ol>
<b>Location:</b>	<p>Claibourne Township is in Union County.</p>

<b>Staff Analysis:</b>	<p>This analysis breaks-down the proposal and provides a recommendation.</p> <p><b>1. Article II Definitions (Amend)</b></p> <ul style="list-style-type: none"> <li>○ The proposal amends dwelling definitions, exempts lots less than 20 acres from the 3:1 ratio, adds medical marijuana related definitions, and adds a definition for very low density residential.</li> <li>○ For the most part, the definitions mirror language from the Ohio Revised Code and eliminate legacy definitions associated with mobile homes. Many of these changes are consistent with what LUC reviewed for York Township in June 2018.</li> <li>○ Staff recommends modifying the language for Lot Measurements, Depth. The phrase reads, “No lot less than twenty (20) acres....Further, all lots of more than twenty (20) acres shall be exempt from...” Staff recommends the second sentence read, “Further, all lots of twenty (20) acres or more shall...” This</li> </ul>
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## Staff Report – Claibourne Township Zoning Amendment

eliminates potential questions about whether or not the exemption does or does not apply to a lot of exactly 20 acres.

### **2. Section 350 Penalties for Violation**

- The proposal increases the maximum fine for a zoning violation from \$100 to \$500. This is consistent with the ORC.

### **3. Official Schedule of District Regulations, Permitted Uses in Column 2 and Conditional Uses in Column 3 (Amend)**

- The proposal updates dwelling types allowed as principally permitted and conditional uses. This change updates the dwelling types allowed to be consistent with the updated definitions.

### **4. Section 1004 Temporary Buildings (Amend)**

- The proposal updates the language for temporary buildings to allow more flexibility when constructing a new home. The intent is to allow someone a temporary dwelling in addition to the dwelling under construction.
- Staff expressed concerns with this change while working with the Zoning Commission; once two dwellings are on the property, it may become difficult to force removal of the temporary dwelling. The Zoning Commission expressed interest in keeping this provision and worked with staff to craft this change.

### **5. Section 1035 General Conditions for Medical Marijuana Entities (Create)**

- The proposal is from the LUC Model Text.

### **6. Article XIII (Manufactured Dwelling (Housing) - Mobile Home Parks) and (Manufactured Dwelling (Housing) - Mobile Homes Individually) (Amend)**

- The proposal updates terminology to be consistent with the updated definitions. Now, both manufactured homes (not permanently sited) and mobile homes are permitted, in parks and individually in any districts where permitted.
- Also, the proposed text strikes conditions for manufactured (not permanently sited) and/or mobile homes. Those conditions were similar to ones struck in the York Township update in June 2018. At that



**Staff Report – Claibourne Township Zoning Amendment**

	<p>time, such conditions were proposed struck after discussion with the Prosecutor’s Office.</p> <p><b>Prosecutor’s Office</b> The Prosecutor’s Office submitted comments in an email dated 08-31-2018. The Prosecutor’s Office recommended modifications to the proposed definitions. Those modifications are described below:</p> <ul style="list-style-type: none"> <li>○ Modify definition of “Dwelling, Manufactured Home” to include the phrase “as they may be amended or replaced from time to time” after the second USCA citation, (42 USCA 5414).</li> <li>○ Modify proposed definition changes to include the phrase “as they may be amended or replaced from time to time” after each ORC reference.</li> </ul> <p>The Prosecutor’s Office also posed questions for the Township to consider regarding undefined terms. Those included “foremost”, “rearmost”, “farm housing”, and “farm”. Farm is defined in ORC 901.80 (A) (4).</p>
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<p><b>Staff Recommendations:</b></p>	<p>Staff recommends <b><i>APPROVAL WITH MODIFICATIONS</i></b> of the proposed zoning amendment. Those modifications impact the amendments proposed to Article II Definitions.</p>
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<p><b>Z&amp;S Committee Recommendations:</b></p>	
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**Date of Request.**

~~July 23, 2018~~

August 20, 2018

Logan-Union-Champaign Regional Planning Commission  
c/o Brad Bodenmiller  
PO Box 219  
East Liberty, OH 43319  
[bradbodenmiller@lucplanning.com](mailto:bradbodenmiller@lucplanning.com)

**RE: Zoning Text Amendment Application, Claibourne Township, Union County  
Violations, Official Schedule of District Regulations Permitted/Conditional Uses,  
Temporary Buildings, Medical Marijuana, and Manufactured/Mobile Homes,**

Dear LUC Regional Planning Commission Committee Members:

The Claibourne Township Zoning Commission met on Monday, <sup>Aug</sup> ~~July~~ 20, 2018. During the meeting, amendments to the Zoning Resolution were initiated by motion of the Zoning Commission. The amendments propose alterations to the text of the Zoning Resolution.

**Description of Zoning Text Amendments.**

The proposal amends Article II Definitions, Section 350 Penalties for Violation, the Official Schedule of District Regulations, Section 1004 Temporary Buildings, and Article XIII (Manufactured Dwelling (Housing) - Mobile Home Parks) And (Manufactured Dwelling (Housing) - Mobile Homes Individually). Also, it creates Section 1035 General Conditions for Medical Marijuana Entities. These amendments would increase the fine for violations, provide increased flexibility for temporary structures during construction, create standards for and prohibit medical marijuana entities, amend manufactured and mobile home standards, and amend and create related definitions.

Included with this cover letter, you will find a copy of the existing zoning as it appears in the Zoning Resolution. Proposed changes are bolded and struck. Please refer to these attachments for further information.

**Public Hearing.**

The Claibourne Township Zoning Commission of Union County, Ohio, will hold a public hearing concerning the proposed amendments at 7:00 PM on 09 24, 2018, in the Claibourne Twp Hall.   
(September)

**Point of Contact.**

Please consider me Claibourne Township's point of contact for this matter. My contact information is below:

Dustin Converse, Chair  
937-407-0463 dconverse@Prosj-Com

Sincerely,







Logan-Union-Champaign  
regional planning commission

**Zoning Text Amendment Checklist**

Date: 08-20 ~~07-2018~~ Township: Clairborne

Amendment Title: Article II Definitions, Section 350 Penalties for Violations, Official Schedule of District Regs, Section 1004 Temporary Buildings, Article X III Manufactured Dwellings

**Notice:** Incomplete Amendment requests **will not** be processed by our office. LUC Regional Planning Commission will return them to the requestor, stating the reason the amendment was not accepted.

Each Zoning Text Amendment change must be received in our office along with a cover letter, explaining the proposed zoning text change (s). All items listed below must be received **no later than 10 days** before the next scheduled LUC Regional Planning Commission Executive Board Meeting (second Thursday of every month). It is recommended that a person who is able to provide further information on the amendment attend the Zoning and Subdivision Committee meeting to answer any additional questions that may arise.

Required Item:	Completed by Requestor:	Received by LUC:
Cover Letter & Checklist	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Date of Request (stated in cover letter)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Description of Zoning Text Amendment Change (s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Date of Public Hearing (stated in cover letter)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Township Point of Contact and contact information for zoning amendment (stated in cover letter)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Attachment of Zoning Text Amendment with changes highlighted or bolded	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Copy of current zoning regulation, or section to be modified for comparison	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Non-LUC Member Fee, If applicable	<u>N/A</u>	<u>N/A</u>

Additionally, after final adoption regarding this zoning text amendment, please provide LUC with a letter stating the results of the Trustees vote, along with a copy of the adopted language.

Please see reverse side for a timeline of the Township Zoning Amendment Process, per ORC 519.12

**Proposed changes to Claibourne Township Zoning Resolution.**

As Initiated by Zoning Commission on: 08-29-2018

These proposed changes impact the following articles and sections in the Claibourne Township Zoning Resolution:

*Amend to Article II Definitions.*

*Amend Section 350 Penalties for Violation.*

*Amend Official Schedule of District Regulations: Permitted Uses (Column 2) and Conditional Uses (Column 3).*

*Amend Section 1004 Temporary Buildings.*

*Create Section 1035 General Conditions for Medical Marijuana Entities.*

*Amend to Article XIII (Manufactured Dwelling (Housing) - Mobile Home Parks) And (Manufactured Dwelling (Housing) - Mobile Homes Individually)*

# Proposed changes to Claibourne Township Zoning Resolution.

As Initiated by Zoning Commission on: 07-20-2018

## Amend Article II Definitions.

### ARTICLE II DEFINITIONS

~~**Building, Manufactured.** A manufactured building has the following features or characteristics: It is (1) mass produced in a factory; (2) designed and constructed for transportation to site with or without a chassis for installation and use when connected to required utilities; (3) either an independent, individual factory erected building or a module with two or more sides erected at the factory, for combination with other elements to form a building on the site.~~

~~**Chassis.** The steel undercarriage, supporting framework to which a dwelling is permanently attached.~~

**Dwelling.** Any building or structure which is wholly or partly used or intended to be used for living or sleeping by one or more human occupants.

**Dwelling Unit.** Space, within a dwelling, comprising living, dining, sleeping room or rooms, storage closets, as well as space and equipment for cooking, bathing, and toilet facilities, all used by only one family and its household employees.

**Dwelling, Single-Family.** A dwelling, ~~except (Housing) Manufactured~~ except a manufactured home not permanently sited or a mobile home, consisting of single dwelling unit only, separated from other dwelling units by open space.

**Dwelling, Multi-Family.** A dwelling, ~~except (Housing) Manufactured~~ except a manufactured home not permanently sited or a mobile home, consisting of two or more dwelling units including condominiums with varying arrangements of entrances and party walls.

~~**Dwelling, (Housing) Manufactured.** A manufactured building or portion of a building designed for long-term residential use. This category includes the following:~~

- ~~(a) **Modular Unit.** A factory-fabricated transportable building designed to be used by itself or to be incorporated with similar units at a building site. The term is intended to apply to major assemblies and does not include prefabricated panels, trusses, plumbing trees, and other prefabricated sub-elements which are to be incorporated into a structure at the site.~~
- ~~(b) **Section Units.** A dwelling made of two or more modular units transported to the homesite, put on a foundation, and joined to make a single dwelling.~~
- ~~(c) **Mobile Home.** Manufactured housing built on a chassis. A mobile home shall be construed to remain a mobile home, subject to all regulations applying thereto, even when wheels, axles, hitch, or other appurtenances of mobility are removed and regardless of the nature of the foundation provided. A mobile home shall not be construed to be a travel trailer or other form of recreational vehicle.~~

~~(d) Mobile Home, Expandable. A mobile home with one or more room sections that fold, collapse, or telescope into the principal unit when being transported and which can be expanded at the site to provide additional living area.~~

~~This category does not include the sub-assembly methods of construction known as pre-fab or pre-cut in which cases some portion of the preparation or sub-assembly may be done at the factory but not erected until at the foundation site.~~

STATEMENT OF INTENT FOR  
DWELLING (HOUSING), MANUFACTURED DEFINITION

~~Because terms for manufactured housing such as those listed in the above definition titled Dwelling, (Housing) Manufactured tend to change over the years, the purpose and intent of the definition is to draw a distinction between dwellings that are produced and erected in assembly line style at the factory, from those stick-built dwellings (see definition of Stick-built) in which a substantial amount of material and construction labor are brought together in final form at the foundation site. The above explanation is the spirit in which any future interpretation shall be made from this section, no matter what terms for manufactured housing are in vogue at any given time.~~

Dwelling, Industrialized Unit. Pursuant to ORC 3781.06 (C) (3), "industrialized unit" means a building unit or assembly of closed construction fabricated in an off-site facility, that is substantially self-sufficient as a unit or as part of a greater structure, and that requires transportation to the site of intended use. "Industrialized unit" includes unit installs on the site as independent units, as part of a group of units, or incorporated with standard construction methods to form a completed structural entity. "Industrialized unit" does not include a manufactured home as defined herein or a mobile home as defined herein.

Dwelling, Manufactured Home. Pursuant to ORC 3781.06 (C) (4), "manufactured home" means a building unit or assembly of closed construction that is fabricated in an off-site facility and constructed in conformance with the federal construction and safety standards established by the secretary of housing and urban development pursuant to the "Manufactured Housing Construction and Safety Standards Act of 1974," 88 Stat. 700, 42 U.S.C.A. 5401, 5403, and that has a permanent label or tag affixed to it, as specified in 42 U.S.C.A. 5415, certifying compliance with all applicable federal construction and safety standards.

Dwelling, Manufactured Home (Permanently Sited). Pursuant to ORC 3781.06 (C) (6), "permanently sited manufactured home" means a manufactured home that meets all of the following criteria:

- a) The structure is affixed to a permanent foundation and is connected to appropriate facilities. "Permanent foundation" means permanent masonry, concrete, or a footing or foundation approved by the Ohio Department of Commerce pursuant to ORC 4781, to which a manufactured home may be affixed; and,
- b) The structure, excluding any addition, has a width of at least twenty-two feet at one point, a length of at least twenty-two feet at one point, and a total living area, excluding garages, porches, or attachments, of at least nine hundred square feet; and,



- c) The structure has a minimum 3:12 residential roof pitch, conventional residential siding, and a six-inch minimum eave overhang, including appropriate guttering; and,
- d) The structure was manufactured after January 1, 1995; and,
- e) The structure is not located in a manufactured home park as defined herein.

**Dwelling, Mobile Home.** Pursuant to ORC 4501.01 (O), "mobile home" means a building unit or assembly of closed construction that is fabricated in an off-site facility, is more than thirty-five body feet in length or, when erected on site, is three hundred twenty or more square feet, is built on a permanent chassis, is transportable in one or more sections, and does not qualify as a manufactured home as defined herein or as an industrialized unit as defined herein.

**Lot Measurements.** A lot shall be measured as follows:

**Depth.** The distance between the mid-points of straight lines connecting the foremost points of the side lot lines in front and rearmost points of the side lot lines in the rear. No lot less than twenty (20) acres shall have an average depth which is more than three (3) times its average width. Further, all lots of more than twenty (20) acres shall be exempt from this ratio.

**Width.** The distance between straight lines connecting front and rear lot lines at each side of the lot, measured at the building setback line.

**Manufactured or Mobile Home Park.** Any site, or tract of land under single ownership, upon which three or more manufactured or mobile homes used for habitation are parked, either free of charge or for revenue purposes; including any roadway building, structure, vehicle, or enclosure used or intended for use as a part of the facilities of such park. This definition does not include individual lots for the purpose of installation of manufactured or mobile homes.

**Medical Marijuana Related Definitions.**

- a) **Cultivate.** Means to grow, harvest, package, and transport medical marijuana pursuant to ORC 3796.
- b) **Cultivator.** Means an entity that has been issued a certificate of operation by the State of Ohio to grow, harvest, package, and transport medical marijuana as permitted under ORC 3796.
- c) **Dispensary.** Means an entity licensed pursuant to ORC 3796 and any rules promulgated thereunder to sell medical marijuana to qualifying patients and caregivers.
- d) **Dispense.** Means the delivery of medical marijuana to a patient or the patient's registered caregiver that is packaged in a suitable container appropriately labeled for subsequent administration to or use by a patient as permitted by Ohio law in accordance with Ohio law.
- e) **Manufacture.** Means the process of converting harvested plant material into marijuana extract by physical or chemical means for use as an ingredient in a medical marijuana product.
- f) **Marihuana.** Has the same meaning as defined in ORC 3719.01, as amended from time to time.

- g) **Marijuana**. Has the same meaning as defined in ORC 3796.01, as amended from time to time.
- h) **Medical Marijuana**. Has the same meaning as defined in ORC 3796.01, as amended from time to time.
- i) **Medical Marijuana Entity**. Means a medical marijuana cultivator, processor, dispensary, or testing laboratory licensed by the State of Ohio.
- j) **Medical Marijuana Processor**. Means an entity that has been issued a certificate of operation by the State of Ohio to manufacture medical marijuana products.
- k) **Testing Laboratory**. Means an independent laboratory located in Ohio that has been issued a certificate of operation by the State of Ohio to have custody and use of controlled substances for scientific and medical purposes and for purposes of instruction, research, or analysis.

~~**Stick built**. A way of describing any structure built from boards of lumber and other building materials, in which a substantial amount of the required material and construction labor are brought together in final form at the foundation site.~~

**Very Low Density Residential**. Very low density residential land use refers to farm housing units and isolated residential developments not requiring a major plat under the County's Subdivision Regulations. (A major plat consists of 6 or more lots.)

## Proposed changes to Claibourne Township Zoning Resolution.

As Initiated by Zoning Commission on: 08-20-2018

### *Amend Section 350 Penalties for Violation.*

Section 350 Penalties for Violation. Violation of the provisions of this Resolution or failure to comply with any of its requirements, including violations of conditions and safeguards established in various sections of this Resolution shall constitute a minor misdemeanor. Any person who violates this Resolution or fails to comply with any of its requirements shall upon conviction thereof be fined not more than ~~one hundred (100)~~ **five hundred (500)** dollars for each offense and in addition shall pay all costs and expenses involved in the case. Such sum may be recovered in a court of jurisdiction in ~~the~~ Union County by the legal representative of the township, in the name of the township and for the use thereof. Each day such violation continues after receipt of a violation notice, shall be considered a separate offense. The owner or tenant of any building structure, premises, or part thereof, and any architect, builder, contractor, agent, or other person who commits, participates in, assists in, or maintains such violation may each be found guilty of a separate offense and suffer the penalties herein provided. Nothing herein contained shall prevent the Board of Township Trustees from taking such other lawful action as is necessary to prevent or remedy any violation.

## Proposed changes to Claibourne Township Zoning Resolution.

As Initiated by Zoning Commission on: 07-20-2018

### *Amend Official Schedule of District Regulations:*

Row U-1; Column 2 PERMITTED USES: ~~Manufactured dwelling (modular & sectional units only)~~

Row U-1; Column 3 CONDITIONAL USES: ~~Manufactured home; Mobile home; Manufactured and/or Mobile Home Park~~ **Manufactured dwelling (mobile home)**

Row R-1; Column 2 PERMITTED USES: ~~Manufactured dwelling (modular & sectional units only)~~

Row R-2; Column 2 PERMITTED USES: ~~Manufactured dwelling (modular & sectional units only)~~

Row R-3; Column 2 PERMITTED USES: ~~Manufactured dwelling (modular & sectional units only)~~

Row B-2; Column 2 PERMITTED USES: ~~Manufactured dwelling (modular & sectional units only)~~

Row M-1; Column 2 PERMITTED USES: ~~Manufactured dwelling (modular & sectional units only)~~



## Proposed changes to Claibourne Township Zoning Resolution.

As Initiated by Zoning Commission on: 08-28-2018

### *Create Section 1004 Temporary Buildings.*

Section 1004 Temporary Structures Buildings. Temporary structures ~~buildings~~, such as a manufactured home or mobile home, an existing dwelling, mobile offices, construction trailers, construction equipment and construction materials, used in conjunction with construction work on a lot require a zoning permit ~~only may be permitted in any district during the period construction work is in progress, but such~~. The zoning inspector may approve a zoning permit for temporary structures facilities, but such temporary structures shall be removed upon completion of the construction work or within 24 months upon issuance of an approved zoning permit, whichever occurs first. ~~Storage of such facilities or equipment beyond the completion date of the project shall require a zoning permit authorized by the zoning inspector.~~

## Proposed changes to Claibourne Township Zoning Resolution.

As Initiated by Zoning Commission on: ~~08-28~~-2018

*Create Section 1035 General Conditions for Medical Marijuana Entities.*

**Section 1035 General Conditions for Medical Marijuana Entities.** In the interest of protecting the public health, safety, and general welfare, this section establishes zoning regulations that provide for State-authorized medical marijuana land uses consistent with ORC 519 and ORC 3796. ORC 519.21 and ORC 3796 allow regulation of the location of medical marijuana cultivators, processors, or dispensaries within the unincorporated area of the township.

1. **Not an Agricultural Use.** Medical marijuana is not considered an "agricultural" use pursuant to ORC 519.21 (D).
2. **Zoning Districts.** No medical marijuana cultivator, processor, or dispensary shall be located in a zoning district where it is not explicitly listed as a permitted or conditionally permitted use. Furthermore, no cultivator, processor, or dispensary shall be permitted as a home occupation.
3. **Mobile Building Prohibited.** No medical marijuana cultivator, processor, or dispensary shall be located within a mobile building.

## Proposed changes to Claibourne Township Zoning Resolution.

As Initiated by Zoning Commission on: 07-20-2018

*Amend Article XIII (Manufactured Dwelling (Housing) - Mobile Home Parks) and (Manufactured Dwelling (Housing) - Mobile Homes Individually).*

~~ARTICLE XIII (MANUFACTURED DWELLING (HOUSING) - MOBILE HOME PARKS) AND (MANUFACTURED DWELLING (HOUSING) - MOBILE HOMES INDIVIDUALLY)~~

**ARTICLE XIII MANUFACTURED AND/OR MOBILE HOME PARKS & AND MANUFACTURED AND/OR MOBILE HOMES INDIVIDUALLY**

Section 1300 Intent. It is the intent of this Article to regulate the location of, and to encourage, stabilize and protect the development of well-planned manufactured and/or mobile home parks if one is proposed ~~after the adoption or amendment of this Resolution.~~

Section 1310 Approval Procedures. ~~Manufactured and/or mobile~~ Mobile home parks shall be permitted only as a Conditional Use in the U-1 District and shall be developed according to the general standards and regulations stated and referenced in Article 13.

Section 1320 General Standards for Manufactured and/or Mobile Home Parks. A new or expanded mobile home park shall:

1. be designed, constructed, operated and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such use will not change the essential character of the same area;
2. not be hazardous or detrimental to existing or future neighboring uses;
3. be served adequately by essential public facilities and services such as highways, police and fire protection, drainage, refuse disposal, etc.; ~~or that the persons or agencies responsible for the establishment of the proposed park shall be able to provide adequately any such needed services;~~
4. be consistent with the intent and purpose of this Resolution;
5. have vehicular approaches to the property which shall be so designed as not to create an interference with the traffic on surrounding public highways;
6. not result in the destruction, loss or damage of natural features of major importance.

Section 1330 Manufactured and/or Mobile Home Park Requirements. ~~Manufactured and/or mobile~~ Mobile home parks shall be developed in accordance with the requirements of Chapter 37-1-27 of the Ohio Sanitary Code adopted by the Public Health Council under the authority of the Ohio Revised Code, Section 3733 and as amended.

Section 1341 Manufactured (Not Permanently Sited) and/or Mobile Homes Individually. The following requirements shall apply to ~~manufactured homes (not permanently sited) and/or mobile home dwellings that are placed upon an individual lot in any district where permitted:~~

1. Individual manufactured homes (not permanently sited) and/or mobile homes shall have, using accepted industry measurements standards, a minimum area of nine hundred (900) square feet of floor area.
2. The manufactured homes (not permanently sited) and/or mobile home's tongue(s), axle(s) and wheels shall be removed and the home shall be placed upon a permanent concrete foundation which is below the frost line and is in accordance with the County Auditor's current requirement for real estate tax purposes and which includes at least two tie-down rings.
3. The manufactured homes (not permanently sited) and/or mobile home shall be skirted entirely closing the bottom section, within ninety (90) days after its placement. ~~Skirting shall be constructed of vinyl, aluminum or other suitable material that is designed specifically for skirting.~~
4. ~~The mobile home shall be landscaped with lawn and shrubbery within one hundred sixty (160) days after its placement.~~
5. ~~The mobile home shall: (1) not be increased in floor area by any means of construction except with a unit specifically designed and constructed by the mobile home manufacturer; (2) not be covered with an additional roof structure.~~
6. ~~The mobile home lot shall have an accessory structure thereon with minimum dimensions of 8 x 12 feet for storage purposes. It shall be located in the side or rear yard.~~



## Brad Bodenmiller

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**From:** Thayne Gray <tgray@co.union.oh.us>  
**Sent:** Friday, August 31, 2018 9:22 AM  
**To:** Brad Bodenmiller  
**Subject:** RE: Zoning amendments forwarded to LUC

These look good. A couple of suggested tweaks, that should not rock the boat.

- Dwelling, Manufactured Home - after the second USCA citation (42 USCA 5414) I recommend adding “,as they may be amended or replaced from time to time,” – That will avoid any issue of having the Zoning Res tied to an out-of-date statutory reference.
- As I look and think, the same addition would probably be a good idea for the ORC references also
- Lot Measurement – Does the ZR specify how “foremost” and “rearmost” is determined. Especially “foremost” as “rearmost could reasonably be inferred to be the “side” opposite “foremost.”
  - Would tying “foremost” to road frontage tighten this up?
  - Also, how would this apply if the “rear” line is irregular – eg roughly pentagonal for some reason.
- Very Low Density Housing – uses the term/concept “farm housing.” Is that defined? Is “farm” defined? R.C. 901.80(A)(4) has such a definition if they want to incorporate it.

Thayne

Thayne D. Gray  
Assistant Prosecuting Attorney  
Tel. – 937-645-4190  
Dir. – 937-645-4184  
Fax – 937-645-4191  
Cell – 740-816-1864

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**From:** Brad Bodenmiller <bradbodenmiller@lucplanning.com>  
**Sent:** Thursday, August 30, 2018 2:47 PM  
**To:** Thayne Gray <tgray@co.union.oh.us>  
**Subject:** Zoning amendments forwarded to LUC

Good afternoon,

Claibourne Twp (U) started a zoning text amendment. This triggers a recommendation from LUC. Our committees meet Thursday, September 13. A link to the Zoning Resolution is here: <https://www.lucplanning.com/union-county-townships>.

I attached a copy of the proposed amendment. These amendments would increase the fine for violations, provide increased flexibility for temporary structures during construction, create standards for and prohibit medical marijuana entities, amend manufactured and mobile home standards, and amend and create related definitions. My only concern is regarding temporary structures during construction, that someone may have a temporary dwelling in addition to the dwelling under construction; however, this is what the Township wants.

I wanted to see if you have any comments you’d like our committees to consider or share. If not, that is perfectly fine too!

**Bradley J. Bodenmiller**  
**Planner II | LUC Regional Planning Commission**  
P.O. Box 219 | 10820 State Route 347 | East Liberty, Ohio 43319  
P: (937) 666-3431 | [www.lucplanning.com](http://www.lucplanning.com)





**Staff Report – Washington Township Parcel Amendment**

<p><b>Jurisdiction:</b></p>	<p><b>Washington Township Zoning Commission</b> c/o Gary Bias (937) 539-1879 <a href="mailto:washtwpzoning@gmail.com">washtwpzoning@gmail.com</a></p>
<p><b>Request:</b></p>	<p>The Zoning Commission initiated an amendment to rezone four square blocks of Lewistown, a census-designated place. The proposal would rezone a 5.64 +/- acre area from B-2 Local Business District to R-2 Medium-Density Residential District.</p> <p>Parcel(s) involved:</p> <ul style="list-style-type: none"> <li>• 33 parcels are involved</li> <li>• Parcel numbers are provided in the application to LUC</li> </ul> <p>Total acreage:</p> <ul style="list-style-type: none"> <li>• 5.64 +/- acres</li> </ul> <p>Acreage proposed to be rezoned:</p> <ul style="list-style-type: none"> <li>• 5.64 +/- acres</li> </ul> <p>Existing use:</p> <ul style="list-style-type: none"> <li>• The Township reports all of these parcels are residential except for parcels labeled in the application as 10 and 11 (Post Office) and parcels labeled 21 and 29 (church)</li> </ul> <p>Proposed use:</p> <ul style="list-style-type: none"> <li>• All are residential except for the Post Office (Public Use) and church (Quasi-Public)</li> </ul>
<p><b>Location:</b></p>	<p>The proposal involves the four square blocks surrounded by Williams Street, Eldridge Street, and Hanford Street. Lewistown is in Washington Township, Logan County.</p>
<p><b>Staff Analysis:</b></p>	<p><b>Comprehensive Plans.</b> The Township does not have a standalone comprehensive plan.</p> <p>Logan County has as Comprehensive Plan, dated August 14, 2007. This proposal appears to follow the objectives:</p> <ul style="list-style-type: none"> <li>○ Target commercial growth to and near incorporated centers that have existing infrastructure services.</li> <li>○ Direct development in areas, which can be served by sanitary sewer, water, and roadways.</li> </ul>



## Staff Report – Washington Township Parcel Amendment

- Target growth and development in Villages/Cities with urban services to contain sprawl. Infill development in appropriate incorporated areas and villages.

### **Zoning Resolution – District Purposes.**

The purpose of the R-2 District is to provide land for single and multi-family housing units not to exceed eight families per acre (ZR, pp. 16).

The purpose of the B-2 District is to provide land for small retail and personal service establishments offering convenience-type goods and services for the daily needs of the people in the immediate neighborhood or area. Residential and other commercial development is prohibited (ZR, pp. 17).

### **Vicinity Land Uses & Zoning.**

The Township provided a list of each parcel involved in the proposal and its corresponding land use, according to the Logan County Auditor's website. The majority of parcels in this four square block area are residential. While there are some listed as commercial, other commercial, etc. they are in the minority and some appear vacant or in disrepair; some appear to be storage facilities of some type. Storage facilities are permitted as a conditional use in the R-2 District, but single-family residential is not a principally/conditionally permitted use in the B-2 District. There is an existing church and a post office located within the area; both Public Use and Quasi-Public Use are principally permitted uses in the R-2 District and the B-2 District.

The four square block area proposed to be rezoned is surrounded entirely by an R-2 District. Further from Lewistown, nearby zoning districts are mostly U-1 District, but there is a small M-2 District.

### **Unintended Consequences.**

Rezoning the property may have unintended consequences. This rezoning proposal reduces the total number of non-conforming uses in the center of Lewistown. At the same time, it prevents local business development in Lewistown and eliminates the B-2 District in the Township. However, this elimination, or need for local businesses, is mitigated by nearby business districts in the Village of Lakeview, Village of Russells Point, and City of Bellefontaine.





Logan-Union-Champaign  
regional planning commission

**Staff Report – Washington Township Parcel Amendment**

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<b>Staff Recommendations</b>	Staff recommends <b>APPROVAL</b> of the proposed zoning amendment based on the Logan County Comprehensive Plan, Article II of the Washington Township Zoning Resolution, and the existing land use pattern.
<b>Z&amp;S Committee Recommendations</b>	



**Zoning Parcel Amendment Checklist**

Date: 8/21/2018 Township: WASHINGTON  
 Amendment Title: ZONING MAP CHANGES 2018

**Notice:** Incomplete Amendment requests **will not** be processed by our office. LUC Regional Planning Commission will return them to the requestor, stating the reason the amendment was not accepted.

Each Zoning Parcel Amendment change must be received in our office along with a cover letter, explaining the proposed zone change (s). All items listed below must be received **no later than 10 days** before the next scheduled LUC Regional Planning Commission Executive Board Meeting (which is the second Thursday of every month). It is recommended that a person who is able to provide further information on the amendment attend the Zoning and Subdivision Committee meeting to answer any additional questions that may arise.

Required Item:	Completed by Requestor:	Received by LUC:
Cover Letter & Checklist	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Date of Request (stated in cover letter)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Description of Zoning Parcel Amendment Change(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Date of Public Hearing (stated in cover letter)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Township point of contact and contact information for zoning amendment (stated in cover letter)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Parcel Number(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Copy of Completed Zoning Amendment Application	<input type="checkbox"/>	<input checked="" type="checkbox"/> N/A
Applicant's Name and contact information	<input type="checkbox"/>	<input checked="" type="checkbox"/> N/A
Current Zoning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Proposed Zoning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Current Land Use	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Proposed Land Use	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Acreage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Copy of Zoning Text associated with proposed district(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Contiguous and adjoining Parcel Information, including Zoning District(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Any other supporting documentation submitted by applicant	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Non-LUC Member Fee, If applicable	<input type="checkbox"/>	<input checked="" type="checkbox"/> N/A

(ZC initiated)

5.64 +/-  
(see ZR submittal)

Additionally, after final adoption regarding this zoning parcel amendment, please provide LUC with a letter stating the results of the Trustees vote, along with a copy of the adopted parcel change (s).

Please see reverse side for a timeline of the Township Zoning Amendment Process, per ORC 519.12



Zoning Map Amendment Cover Letter-August 21 2018

Date of Request: 8/21/2018  
 Township: Washington  
 Amendment Title: Zoning Map Changes 2018

County: Logan

Description of Zoning Map Amendment changes:

The existing Washington Township Map was last updated January of 2016. The recommended changes from the public meetings of the Zoning Commission Board on 2/27, 4/2, 6/4 & 8/20 2018, are shown below. The ZCB recommends that the 33 parcels, which are in a 4 square blocks from Williams St., to Council St., to Eldridge St., to Hanford St. and back to Williams St, be changed from the current zoning district of B-2 (Local Business District) to R-2 (Medium-Density Residential District) All of these parcels are residential except Parcels 10 & 11, which is the post office and parcels 21 & 29 which is the church. See the attached number map.

The tentative schedule below shows the public meeting that have been conducted to date and also the proposed public meetings that will be conducted by the ZCB & Trustees in the future. We also attached the Zoning Map Amendment checklist and Township Zoning Amendment Process, per ORC 519.12.

Township Contact: Gary Bias, who can be contacted by phone at 937-539-1879 or by email at washtwpzoning@gmail.com

TENTATIVE SCHEDULE

- |  |            |
|--|------------|
| 1. Public Notice was ran in the Examiner & posted at the Twp. Bldg. at least 10 days prior to this meeting           | 2/14/2018  |
| 2. ZCB reviewed & approved proposed zoning text amendments at this 1st public meeting                                | 2/27/2018  |
| 3. Public Notice was ran in the Examiner & posted at the Twp. Bldg. at least 10 days prior to this meeting           | 3/15/2018  |
| 4. ZCB reviewed & approved proposed zoning text amendments at this 2nd public meeting                                | 4/2/2018   |
| 5. Public Notice was ran in the Examiner & posted at the Twp. Bldg. at least 10 days prior to this meeting           | 5/14/2018  |
| 6. ZCB reviewed & approved proposed zoning text amendments at this 3rd public meeting                                | 6/4/2018   |
| 7. Public Notice was ran in the Examiner & posted at the Twp. Bldg. at least 10 days prior to this meeting           | 8/9/2018   |
| 8. ZCB reviewed & approved proposed zoning text amendments at this 3rd public meeting                                | 8/20/2018  |
| 9. Final entire packet of documents would be emailed to the LUC by zoning Inspector                                  | 8/21/2018  |
| A. Must be to the LUC at least 10 days before their scheduled meeting  | 9/3/2018   |
| B. LUC meetings are held the second Thursday of every month  | 9/13/2018  |
| A. Twp. Contact to attend meeting , which will be Gary Bias  |            |
| B. LUC board will review this in the meeting   |            |
| C. LUC board rep will have their recommendation back to us in 5 Days   | 9/17/2018  |
| 10. ZCB must hold public hearing 20-40 days after passing a resolution on 8/20/18 (9/9 is 20 days 7 9/29 is 40 days) |            |
| 11. Public meeting to be posted at least 10 days prior to this meeting in the Bellefontaine Examiner                 | 9/12/2018  |
| 12. Proposed Public meeting date for ZCB   | 9/24/2018  |
| 13. ZCB must have recommendation to Trustees within 30 days  | 9/25/2018  |
| 14. Public meeting was posted at least 10 days prior to this meeting in the Bellefontaine Examiner                   | 9/28/2018  |
| 15. Trustees will hold public hearing within 30 days of ZCB's recommendation   |            |
| A. Proposed Public meeting date for Trustees - same day as current Twp. Mtg.   | 10/8/2018  |
| B. Trustees will make their decision in this township meeting  | 10/8/2018  |
| 16. Trustees will need to have their decision made within 20 days of the public hearing                              | 10/28/2018 |
| 17. This would take affect 30 days after it was approved by the Trustees   | 11/7/2018  |
| 18. Filing of map with County Recorder & LUC within five (5) days after affective date                               | 11/12/2018 |
| 19. Unless a petition is filed with the Trustees, see 519.12 H for signature requirements, to place this on a ballot |            |

\* Days shown on LUC flow chart are calendar days not work days

Indicates proposed dates which may need to be changed due to people's availability

ZONING APPLICATION TO REZONE/REDISTRICT THE OFFICIAL ZONING MAP  
WASHINGTON TOWNSHIP, LOGAN COUNTY, OHIO

The undersigned requests a zoning district change for the use specified below. Should this application be approved, it is understood that it shall only authorize that particular use described on this application and any conditions or safeguards required by the Zoning Commission Board.

Name of Property Owner(s) See attached list

Mailing Address See attached list

Phone Number(s) Home \_\_\_\_\_ Business \_\_\_\_\_ Cell \_\_\_\_\_

Name of Applicant(s) Washington Twp. Zoning Commission Board (Contact Gary L. Bias)

Mailing Address 7464 CR 91, PO Box 127, Lewistown, OH 43333

Phone Number(s) Home \_\_\_\_\_ Business 937-686-7165 Cell 937-539-1879

Address of Property to be Reviewed See attached list

Parcel #(s) See attached list

Present Zoning District(s) B-2, Local Business District

Present Use(s) All are residential except for the post office and church, none are businesses

Proposed Zoning District(s) R-2, Medium Density Residential District

Proposed Use(s) All are residential except for the post office (public use) and church (quasi-public use)

Supporting Information to be provided by the applicant: Attach a site plan for the proposed use, showing the location of building(s), parking and loading areas, traffic access and circulation drives, open space, landscaping, utilities, signs, yards, refuse and service areas, all with dimensions to the property lines. Also a copy of the property survey and deed are required. Attach a narrative statement relative to the above requirements and also explain the economic, noise, glare, any odor effects on the adjoining properties and the general compatibility with adjacent and other properties in the district.

Date \_\_\_\_\_

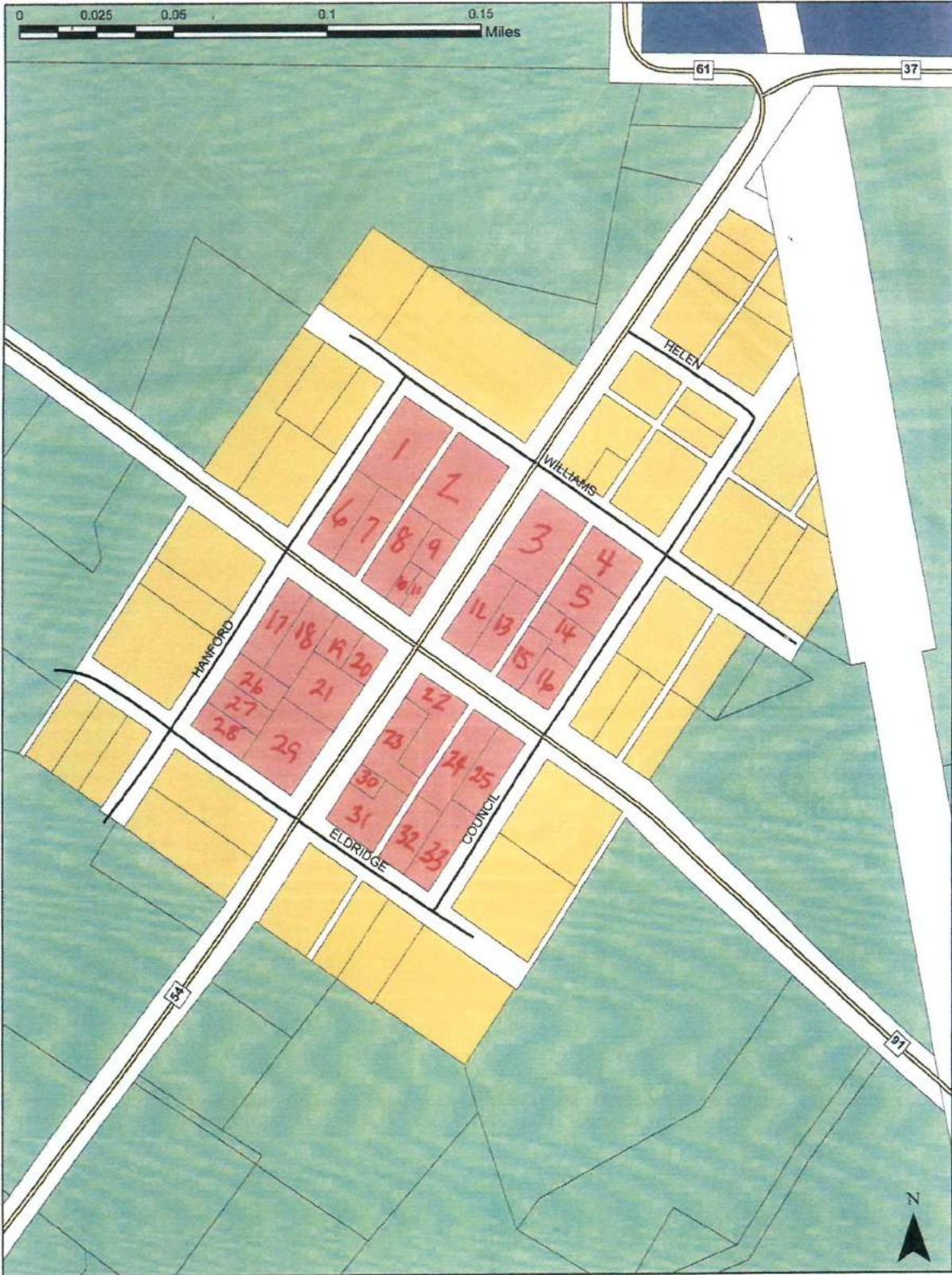
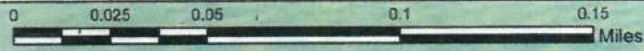
Date 8/20/2018 \_\_\_\_\_  
Owner  
Gary L. Bias for the Washington Twp. ZCB  
Applicant

Date Filed \_\_\_\_\_ For Official Use Only  
Date of Notice to Parties in Interest \_\_\_\_\_

Date of Notice in Newspaper \_\_\_\_\_ Payment Amount & Type \_\_\_\_\_



# Lewistown Zoning Map



Roads	Zoning Districts
US Route	ODNR
State Route	U-1
County Road	R-1
Township Road	R-2
Municipal Road	B-1
	M-1
	B-2
	M-2
	Russells Point
	Washington Twp. Line



**Logan-Union-Champaign  
 Regional Planning Commission**  
 9676 E. Foundry St.  
 East Liberty, OH 43319  
 (937) 666-3431  
 Map Created: 03/03/2009  
 Map Revised: 05/23/2016



2018 Proposed Map Changes

Item #	Parcel Number	Owner	Parcel Address	Mailing Address	Previous Zoning	Previous Zoning District	Zoning Changed to	Current Zoning District	Auditor's Land Use Code	Comments
1	51-060-06-04-001-000	Sheri L. Freese	7703 Williams St., Lewistown, OH 43333	8144 CR 54, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
2	51-060-06-04-007-000	Jerry Elliott	7956 Center St., Lewistown, OH 43333	5234 Cardo Rd., Fort Loramie, OH 45845	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
3	51-060-06-08-001-000	Jarad Thompson	Williams St., Lewistown, OH 43333	4236 CR 91, Bellefontaine, OH 43311	B-1	Service Business District	R-2	Medium Density Residential	599-Other Residential Structures	
4	51-060-06-08-008-000	Ruth Bodle	7623 Williams St., Lewistown, OH 43333	7623 Williams St., Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
5	51-060-06-08-007-001	Johm Miller	7958 Council St., Lewistown, OH 43333	PO Box 164, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
6	51-060-06-04-002-000	Ruby Stroud	PO Box 232, Lewistown, OH 43333	4144 N SR 235, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
7	51-060-06-04-003-000	Ruby Stroud	7694 CR 91, Lewistown, OH 43333	4144 N SR 235, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
8	51-060-06-04-004-001	Jerry Snipes	7680 CR 91, Lewistown, OH 43333	PO Box 164, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
9	51-060-06-04-006-000	Robin Levan	Center St., Lewistown, OH 43333	7974 CR 54, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	499-Other Commercial Structures	
10	51-060-06-04-004-000	Brush Creek Partners	Center St., Lewistown, OH 43333	123 Grove Ave. STE 222, Cedarhurst, NY 11516	B-1	Service Business District	R-2	Medium Density Residential	500-Residential Vacant Land	
11	51-060-06-04-005-000	Brush Creek Partners	7670 CR 91, Lewistown, OH 43333	123 Grove Ave. STE 222, Cedarhurst, NY 11516	B-1	Service Business District	R-2	Medium Density Residential	429-Other Retail Structures	
12	51-060-06-08-002-000	Curtis Martin	7652 CR 91, Lewistown, OH 43333	15404 Wapakoneta Fisher Rd., Lot 13, Wapakoneta, OH 45895	B-1	Service Business District	R-2	Medium Density Residential	599-Other Residential Structures	
13	51-060-06-08-003-000	Rock Solid Rentals	7706 CR 91, Lewistown, OH 43333	PO Box 314, Rushsylvania, OH 43347	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
14	51-060-06-08-006-000	Tood Weeks	7972 Council St., Lewistown, OH 43333	PO Box 238, 7972 Council St., Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
15	51-060-06-08-004-000	Ronald Purtee	7630 CR 91, Lewistown, OH 43333	7630 CR 91, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	560-House Trailers or Mobile Homes Affixed to Real Estate	
16	51-060-06-08-005-000	Tood Weeks	7972 Council St., Lewistown, OH 43333	PO Box 238, 7972 Council St., Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	455-Commercial Garages	
17	51-060-06-02-001-000	Randy Beck	7703 CR 91, Lewistown, OH 43333	7645 CR 91, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
18	51-060-06-02-009-000	Carole Spring	7695 CR 91, Lewistown, OH 43333	7695 CR 91, PO Box 152, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
19	51-060-06-02-008-000	Carole Spring	7685 CR 91, Lewistown, OH 43333	7695 CR 91, PO Box 152, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	

Item #	Parcel Number	Owner	Parcel Address	Mailing Address	Previous Zoning	Previous Zoning District	Zoning Changed to	Current Zoning District	Auditor's Land Use Code	Comments
20	51-060-06-02-007-000	Carole Spring	Main St., Lewistown, OH 43333	7695 CR 91, PO Box 152, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	499-Other Commercial Structures	
21	51-060-06-02-006-001	Methodist Church of Lewistown	Center St., Lewistown, OH 43333	8088 CR 54, Box 134, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	456-Parking Garage, Structures and Lots	
22	51-060-06-09-001-000	Michael Kindle	7639 CR 91, Lewistown, OH 43333	7639 CR 91, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
23	51-060-06-09-002-000	Robert Siegenthaler	8023 Center St., Lewistown, OH 43333	8023 CR 54., Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
24	51-060-06-09-008-000	Don Moore	7629 CR 91, Lewistown, OH 43333	PO Box 195, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
25	51-060-06-09-007-000	Don Moore	7623 CR 91, Lewistown, OH 43333	PO Box 195, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	500-Residential Vacant Land	
26	51-060-06-02-002-000	Zachary Case	8049 Hanford St., Lewistown, OH 43333	8049 Hanford St., Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	599-Other Residential Structures	
27	51-060-06-02-003-000	Zachary Case	8049 Hanford St., Lewistown, OH 43333	8049 Hanford St., Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
28	51-060-06-02-004-000	Ricky Beck	7700 Eldridge St., Lewistown, OH 43333	8052 Hanford St., Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
29	51-060-06-02-005-000	Methodist Church of Lewistown	Center St., Lewistown, OH 43333	8088 CR 54, Box 134, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	499-Other Commercial Structures	
30	51-060-06-09-003-000	Don Moore	8045 Center St., Lewistown, OH 43333	PO Box 195, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	499-Other Commercial Structures	
31	51-060-06-09-004-000	Shannon Reames	8059 Center St., Lewistown, OH 43333	8059 CR 54, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	
32	51-060-06-09-005-000	Shannon Reames	Eldridge St., Lewistown, OH 43333	8059 CR 54, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	599-Other Residential Structures	
33	51-060-06-09-006-000	Moore Family Trust	8056 Cuncil St., Lewistown, OH 43333	7629 CR 91, Lewistown, OH 43333	B-1	Service Business District	R-2	Medium Density Residential	510-Single Family Dwelling	





**Staff Report – Washington Township Text Amendment**

<b>Jurisdiction:</b>	<p><b>Washington Township Zoning Commission</b>  c/o Gary Bias  (937) 539-1879  <a href="mailto:washtwpzoning@gmail.com">washtwpzoning@gmail.com</a></p>
<b>Request:</b>	<p>Review of Washington Township Zoning Resolution text amendment, initiated by the Zoning Commission.</p> <p>The amendment amends:</p> <ol style="list-style-type: none"> <li>1. Official Schedule of District Regulations</li> <li>2. Article II Establishment of Districts</li> <li>3. Article V Supplementary District Regulations</li> <li>4. Article VII Mobile Homes and Mobile Home Parks</li> <li>5. Article IX Non-Conforming Uses</li> <li>6. Article XII Definitions</li> </ol>
<b>Location:</b>	<p>Washington Township is in Logan County.</p>

<b>Staff Analysis:</b>	<p>This analysis breaks-down the proposal and provides a recommendation.</p> <p><b>1. Official Schedule of District Regulations</b></p> <ul style="list-style-type: none"> <li>○ Some of the <i>existing</i> terminology in the Official Schedule of District Regulations is vague. For example, low-density residence is a listed conditional use, but the term is not defined in Article XII Definitions. (It is defined in Article II Establishments of Districts.)</li> <li>○ The proposal provides clearer meaning to terms used under permitted uses, conditional uses, and other provisions and requirements. For example, “Dwelling conversion” is listed under Other Provisions and Requirements, but no explanation or reference is provided in the <i>existing</i> Zoning Resolution. The proposal adds a reference to Section 522; the Section lists requirements for dwelling conversion.</li> <li>○ The proposal also provides clarification on the sum of side yards requirement and increases maximum accessory building height by 5’ in some districts.</li> <li>○ The Township reported there are a number of single family dwellings in the areas zoned B-1 District, but single family dwellings are prohibited. Some</li> </ul>
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## Staff Report – Washington Township Text Amendment

Townships allow residential in commercial districts and single family dwellings to follow the regulations in one of the residential districts. The Township has proposed this. Although this seems odd in a commercial district, it matches the existing land use pattern.

- The Township proposes to prohibit agriculture to the extent permitted by the ORC in its residential and commercial districts. In the Township, these districts are typically comprised of smaller lots and in relatively dense areas or subdivisions. Staff thinks this makes sense, as agriculture can only be prohibited on lots less than 1 acre and animal husbandry can only be prohibited on lots less than 5 acres—other areas in the Township are better suited for dairies than Orchard Island or Lewistown.
- The proposal increases B-1 District side setbacks for principal buildings to a sum of 4' and side/rear setbacks for accessory buildings from 0' to 4'. It also reduces the maximum height from 3 stories and 45' to 2 stories and 35'. Generally, staff is cautious about creating more restrictive requirements where they have been long been established because it may create non-conformities. However, since this proposal comes from the Zoning Commission, staff defers to the Zoning Commission's knowledge and expertise of the area's existing development pattern.

### **2. Article II Establishment of Districts**

- The proposal amends the purpose/intent statements to be consistent with the changes proposed to the Official Schedule of District Regulations.

### **3. Article V Supplementary District Regulations**

- The proposal reduces the maximum height of fences around swimming pools from 6' to 4'. This is based in part on the height in the optional/supplemental section of the Ohio Residential Code.
- The proposal cleans-up language under the section on noise restrictions. It removes language about determinations regarding noise violations being determined by the Board. It's unclear who the Board is.
- Prior to this proposal, chain link fences up to a height of 4' were permitted. The proposal increases the



**Staff Report – Washington Township Text Amendment**

	<p>minimum fence height permitted in the front yard from 3’ to 4’. Walls and solid fences are still prohibited in the front yard.</p> <ul style="list-style-type: none"> <li>○ The <i>existing</i> text reads private driveway installation on County roads are the responsibility of the Logan County Engineer’s Office. The proposal adds that private driveways installed on Township roads are also the responsibility of the Logan County Engineer’s Office.</li> <li>○ The <i>existing</i> text requires a zoning permit for building demolition. The proposal requires building demolition to include filling any holes/depressions to grade level with soil and planted with grass seed.</li> </ul> <p><b>4. Article VII Mobile Homes and Mobile Home Parks</b></p> <ul style="list-style-type: none"> <li>○ The proposal adds the term “Manufactured” to clarify the article applies to manufactured and mobile homes both.</li> </ul> <p><b>5. Article IX Non-Conforming Uses</b></p> <ul style="list-style-type: none"> <li>○ The proposal updates numbering in some sections and allows for repair/replacement of both non-bearing and bearing walls. The <i>existing</i> language allows for repair/replacement of non-bearing walls only. This change is not common in other LUC townships.</li> </ul> <p><b>6. Article XII Definitions</b></p> <ul style="list-style-type: none"> <li>○ The proposal updates dwelling definitions and moves definitions which were not in alphabetical order.</li> </ul> <p><b>Prosecutor’s Office</b> A copy of this proposal was forwarded to the County Prosecutor’s Office for further consideration and comment. Before LUC takes official action on the proposal, any comments received from that Office should be reviewed and incorporated into this recommendation.</p>
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<b>Staff Recommendations:</b>	Given the fact that LUC has worked closely with Washington Township Zoning Commission, staff recommends <b>APPROVAL</b> of the proposed zoning amendment.
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<b>Z&amp;S Committee Recommendations:</b>	
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Logan-Union-Champaign  
regional planning commission

**Staff Report – Washington Township Text Amendment**



### Zoning Text Amendment Checklist

Date: 8/21/18 Township: WASHINGTON

Amendment Title: ZONING RESOLUTION CHANGES 2018

**Notice:** Incomplete Amendment requests **will not** be processed by our office. LUC Regional Planning Commission will return them to the requestor, stating the reason the amendment was not accepted.

Each Zoning Text Amendment change must be received in our office along with a cover letter, explaining the proposed zoning text change (s). All items listed below must be received **no later than 10 days** before the next scheduled LUC Regional Planning Commission Executive Board Meeting (second Thursday of every month). It is recommended that a person who is able to provide further information on the amendment attend the Zoning and Subdivision Committee meeting to answer any additional questions that may arise.

Required Item:	Completed by Requestor:	Received by LUC:
Cover Letter & Checklist	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Date of Request (stated in cover letter)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Description of Zoning Text Amendment Change (s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Date of Public Hearing (stated in cover letter)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Township Point of Contact and contact information for zoning amendment (stated in cover letter)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Attachment of Zoning Text Amendment with changes highlighted or bolded	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Copy of current zoning regulation, or section to be modified for comparison	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-LUC Member Fee, If applicable	<input type="checkbox"/>	<input type="checkbox"/>

Additionally, after final adoption regarding this zoning text amendment, please provide LUC with a letter stating the results of the Trustees vote, along with a copy of the adopted language.

Please see reverse side for a timeline of the Township Zoning Amendment Process, per ORC 519.12



W A S H I N G T O N T O W N S H I P ,  
L O G A N C O U N T Y  
Z O N I N G R E S O L U T I O N

Prepared for:  
Washington Township, Logan County, Ohio  
By:  
The Washington Township Zoning Commission

With the assistance of:  
Logan-Union-Champaign (LUC) Regional Planning Commission

Last Updated **November of 2018**

**Proposed Changes**  
~~Delete Text~~

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Official Schedule of District Regulations  
Washington Township, Logan County, Ohio

Zoning District

U-1 Rural Undeveloped District

Permitted Uses (Accessory uses and essential services are included)

Agriculture; very low-density residence (farm housing units and isolated single family dwelling residential developments not requiring a plat under the County subdivision regulations); veterinary animal hospital or clinic, kennel; public use; quasi-public use.

Conditional Uses (Permitted upon issuance of a Conditional Use Permit by the Board of Zoning Appeals)

Public service facility; low-density residence (single family dwelling residential development not to exceed four dwelling units per acre); medium-density residence (single family and multi-family residential development not to exceed eight dwelling units per acre);; home occupation; commercial recreation; service business; mineral extraction; light and heavy manufacturing; signs and advertising structures; mobile home park; storage facility.

Planned Unit Development (Permitted upon approval by the Zoning Commission and issuance of certificate by the Board of Appeals)

Residential; commercial; industrial; public and quasi-public uses.  
(Individually or in combination)

Minimum Lot Size (Square feet per dwelling)

With on-site sewage treatment: 2 acres

With group or central sewage treatment: 10,800

Road Frontage Width (feet): 300'

Maximum Percentage of Lot Coverage (Principal and Accessory Buildings)

50 %

Minimum Floor Area (Square feet)

1,000 Square Feet

Maximum Height of Principal Buildings

Stories - 2 ½; 40 Feet

Minimum Yard Dimensions/Setbacks Measured from Survey Pins (feet)

Front - 100' ; **One side yard - 20'**; **Sum of One side yards - 50'** ; Rear - 50'

Accessory Buildings

Maximum height (feet) - **25**~~20~~' ; minimum distance to side lot line - 20' ;  
 Minimum distance to rear lot line -20' ; minimum distance to front lot line - 100' .  
 School bus shelters would be an exception to this front line distance and they must  
 Be at least 20' from the lot line.

Minimum (mandatory) Off-street Parking Space (two for each unit) One-family housing unitMinimum (mandatory) Off-street Loading Space

None

Zoning District

U-1 Rural Undeveloped District

Signs Permitted

Yes, under Article VIII

Other Provisions and Requirements (Supplementary regulations, prohibitions, notes, etc.)

Dwelling conversion: ~~dwelling, modular unit~~ permitted **as per Section 522.**

Mobile housing units and semi-trailers shall not be permitted or used as storage units.

"Dwelling, **manufactured or** mobile homes" are not permitted in the U-1 District unless they are in a mobile home park.

Official Schedule of District Regulations  
Washington Township, Logan County, Ohio

Zoning District

R-1 Low-density Residential District

Permitted Uses (Accessory uses and essential services are included)

~~Agriculture~~; **S**ingle-family dwelling; public use; quasi-public use.

Conditional Uses (Permitted upon issuance of a Conditional Use Permit by the Board of Zoning Appeals)

Non-commercial recreation; home occupation; storage facility.

Planned Unit Development (Permitted upon approval by the Zoning Commission and issuance of certificate by the Board of Appeals)

Residential; mobile home park ; public and quasi-public uses.

(Individually or in combination)

Minimum Lot Size (Square feet per dwelling)

With on-site sewage treatment: 40,000

With group or central sewage treatment: 10,800

Road Frontage Width (feet): 80'

Maximum Percentage of Lot Coverage (Principal and Accessory Buildings)

50%

Minimum Floor Area (Square feet)

1,500 Square Feet

Maximum Height of Principal Buildings

Stories - 2; Feet - 35

Minimum Yard Dimensions/Setbacks Measured from Survey Pins (feet)

Front - 35'; One side yard - 8'; Sum of Side Yards - 20'; Rear - 40'

Accessory Buildings

Maximum height (feet) – ~~20~~15'; minimum distance to side lot line – 10'; minimum distance to rear lot line – 10'; minimum distance to front lot line – 35'.

School bus shelters would be an exception to this front line distance and they must be at least 20' from the lot line.

Minimum (mandatory) Off-street parking Space (two for each unit)

One-family housing unit

Minimum (mandatory) Off-street loading Space

None

Signs Permitted

Yes, under Article VIII

Zoning District

R-1 Low-density Residential District

Other Provisions and Requirements (Supplementary regulations, prohibitions, notes, etc.)

~~Dwelling, modular unit are conditional uses.~~

Dwelling conversion: permitted as per Section 522.

Mobile housing units and semi-trailers shall not be permitted or used as storage units.

"Dwelling, ~~manufactured or~~ mobile homes" are not permitted in the R-1 District.

Agriculture is prohibited to the extent permitted by ORC 519.21.



Official Schedule of District Regulations  
Washington Township, Logan County, Ohio

Zoning District

R-2 Medium-density Residential District

Permitted Uses (Accessory uses and essential services are included)

~~Agriculture~~; **S**ingle-family dwelling; public use; quasi-public use.

Conditional Uses (Permitted upon issuance of a Conditional Use Permit by the Board of Zoning Appeals)

Mobile home park; dwelling, multi-family; non-commercial recreation; home occupation; storage facility.

Planned Unit Development (Permitted upon approval by the Zoning Commission and issuance of certificate by the Board of Appeals)

Residential; commercial; public and quasi-public uses.

(Individually or in combination)

Minimum Lot Size (Square feet per dwelling)

With on-site sewage treatment: Prohibited

With group or central sewage treatment: 5,400

Road Frontage Width (feet): 60'

Maximum Percentage of Lot Coverage (Principal and Accessory Buildings)

50%

Minimum Floor Area (Square feet)

1000 Square Feet

Maximum Height of Principal Buildings

Stories - 2; Feet - 35

Minimum Yard Dimensions/Setbacks Measured from Survey Pins (feet)

Front - 15'; One side yard - 4'; Sum of Side Yards - 10'; Rear - 15'

Accessory Buildings

Maximum height (feet) - ~~20~~15'; minimum distance to side lot line - 4; minimum distance to rear lot line - 5'; minimum distance to front lot line - 15'

School bus shelters would be an exception to this front line distance and they must be at least 20' from the lot line.

Minimum (mandatory) Off-street parking Space (two per unit)

One-half housing unit in multi-family structure.

Minimum (mandatory) Off-street loading Space

None

Zoning District

R-2 Medium-density Residential District

Signs Permitted

Yes, under Article VIII

Other Provisions and Requirements (Supplementary regulations, prohibitions, notes, etc.)

~~Dwelling, modular unit permitted.~~

**Dwelling conversion: permitted as per Section 522.**

Mobile housing units and semi-trailers shall not be permitted or used as storage units.

"Dwelling, manufactured or mobile homes" are not permitted unless they are in a mobile home park.

**Agriculture is prohibited to the extent permitted by ORC 519.21.**

Official Schedule of District Regulations  
Washington Township, Logan County, Ohio

Zoning District

B-1 Service Business District

Permitted Uses (Accessory uses and essential services are included)

Service business; drive-in business; eating and drinking establishments; commercial recreation; Veterinary animal hospital or (clinic, kennel); transient lodgings; **single family dwelling (See Section 250 for Zoning Regulations)**; public use; quasi-public use.

Conditional Uses (Permitted upon issuance of a Conditional Use Permit by the Board of Zoning Appeals)

Retail business; offices; wholesale and warehousing; food processing; printing and publishing; transport terminals; signs and advertising structures; public service facility; storage facility.

Planned Unit Development (Permitted upon approval by the Zoning Commission and issuance of certificate by the Board of Appeals)

Commercial; industrial; residential; public and quasi-public uses.  
(Individually or in combination)

Minimum Lot Size (Square feet per structure)

With on-site sewage treatment: Prohibited

With group or central sewage treatment: 15,000

Road Frontage Width (feet): 100'

Maximum Percentage of Lot Coverage (Principal and Accessory Buildings)

50%

Minimum Floor Area (Square feet)

200 square feet

Maximum Height of Principal Buildings

Stories - ~~23~~; **35** Feet

Minimum Yard Dimensions/Setbacks Measured from Survey Pins (feet)

Front - 50'; ~~One side yard - none~~; Sum of Side Yards - ~~4'~~ **4'**; Rear - 30'

Accessory Buildings

Maximum height (feet) – 20'; minimum distance to side lot line – ~~4'~~; minimum distance to rear lot line – ~~4'~~, minimum distance to front lot line – 50'

Minimum (mandatory) Off-street parking Space (one for each unit)

200 sq. ft. of retail or service floor area.

Minimum (mandatory) Off-street loading Space

5,000 sq. ft. of floor area

Zoning District

B-1 Service Business District

Signs Permitted

Yes, under Article VIII

Other Provisions and Requirements (Supplementary regulations, prohibitions, notes, etc.)

Non-residential use cannot be conducted any closer than 40' from any residential district, **except that the minimum yard requirements may be reduced to seventy (75) percent of the requirement if acceptable landscaping or screening approved by the Zoning Inspector is provided.**

**Agriculture is prohibited to the extent permitted by ORC 519.21.**



Official Schedule of District Regulations  
Washington Township, Logan County, Ohio

Zoning District

B-2 Local Business District

Permitted Uses (Accessory uses and essential services are included)

Convenience-type retail business; personal services; offices; public use; quasi-public use.

Conditional Uses (Permitted upon issuance of a Conditional Use Permit by the Board of Zoning Appeals)

Shopping-type retail business; service stations; service business eating and drinking establishments; commercial recreation; public service facility; storage facility.

Planned Unit Development (Permitted upon approval by the Zoning Commission and issuance of certificate by the Board of Appeals)

Residential; commercial; public and quasi-public uses.  
(Individually or in combination)

Minimum Lot Size (Square feet per structure)

With on-site sewage treatment: Prohibited

With group or central sewage treatment: None

Road Frontage Width (feet): None

Maximum Percentage of Lot Coverage (Principal and Accessory Buildings)

50%

Minimum Floor Area (Square feet)

200 square feet

Maximum Height of Principal Buildings

Stories - 2; 35 Feet

Minimum Yard Dimensions/Setbacks Measured from Survey Pins (feet)

Front - 30'; One side yard - none; Sum of Side Yards - none; Rear - 30'

Accessory Buildings

Maximum height (feet) – 15'; minimum distance to side lot line – none; minimum distance to rear lot line – none. minimum distance to front lot line – 30'

Minimum (mandatory) Off-street parking Space (one for each unit)

200 sq. ft. of retail or service floor area.

Minimum (mandatory) Off-street loading Space

5,000 sq. ft. of floor area

Zoning District

B-2 Local Business District

Signs Permitted

Yes, under Article VIII

Other Provisions and Requirements (Supplementary regulations, prohibitions, notes, etc.)

Non-residential use cannot be conducted any closer than 40' from any residential district, **except that the minimum yard requirements may be reduced to seventy (75) percent of the requirement if acceptable landscaping or screening approved by the Zoning Inspector is provided.**

**Agriculture is prohibited to the extent permitted by ORC 519.21.**

Official Schedule of District Regulations  
Washington Township, Logan County, Ohio

Zoning District

M-1 Light Manufacturing District

Permitted Uses (Accessory uses and essential services are included)

Agriculture; light manufacturing and related offices; public use; quasi-public use.

Conditional Uses (Permitted upon issuance of a Conditional Use Permit by the Board of Zoning Appeals)

Wholesale and warehousing; printing and publishing; storage facilities; transport terminals; signs and advertising structures; public service facility.

Planned Unit Development (Permitted upon approval by the Zoning Commission and issuance of certificate by the Board of Appeals)

Commercial; industrial; public and quasi-public uses.  
(Individually or in combination)

Minimum Lot Size (Square feet per structure)

With on-site sewage treatment: Prohibited

With group or central sewage treatment: 15,000

Road Frontage Width (feet): 100'

Maximum Percentage of Lot Coverage (Principal and Accessory Buildings)

50%

Minimum Floor Area (Square feet)

200 square feet

Maximum Height of Principal Buildings

Stories - 4; 50 Feet

Minimum Yard Dimensions/Setbacks Measured from Survey Pins (feet)

Front - 50'; One side yard - 10'; Sum of Side Yards - 30'; Rear - 40'

Accessory Buildings

Maximum height (feet) – 25'; minimum distance to side lot line – 5'; minimum distance to rear lot line – 10'. minimum distance to front lot line – 50'

Minimum (mandatory) Off-street parking Space (one for each unit)

Two (2) employees on the maximum work shift.

Minimum (mandatory) Off-street loading Space

5,000 sq. ft. of floor area.

Zoning District

M-1 Light Manufacturing District

Signs Permitted

Yes, under Article VIII

Other Provisions and Requirements (Supplementary regulations, prohibitions, notes, etc.)

Objectionable uses in noise, odor, and hours of operation prohibited.



Official Schedule of District Regulations  
Washington Township, Logan County, Ohio

Zoning District

M-2 Heavy Manufacturing District

Permitted Uses (Accessory uses and essential services are included)

Agriculture; heavy manufacturing and related offices; wholesale and warehousing; printing and publishing; transport terminals; public use; quasi-public use.

Conditional Uses (Permitted upon issuance of a Conditional Use Permit by the Board of Zoning Appeals)

Light manufacturing and related offices; signs and advertising structures; extractive industry; junk yard and sales; public service facility.

Planned Unit Development (Permitted upon approval by the Zoning Commission and issuance of certificate by the Board of Appeals)

Commercial; industrial; public and quasi-public uses.  
(Individually or in combination)

Minimum Lot Size (Square feet per structure)

With on-site sewage treatment: 200,000

With group or central sewage treatment: 40,000

Road Frontage Width (feet): 150'

Maximum Percentage of Lot Coverage (Principal and Accessory Buildings)

50%

Minimum Floor Area (Square feet)

200 square feet

Maximum Height of Principal Buildings

Stories - 4; Feet - 50'

Minimum Yard Dimensions/Setbacks Measured from Survey Pins (feet)

Front - 80'; One side yard - 20'; Sum of Side Yards - 50'; Rear - 50'

Accessory Buildings

Maximum height (feet) – 25'; minimum distance to side lot line – 10'; minimum distance to rear lot line – 20'. minimum distance to front lot line – 80'

Minimum (mandatory) Off-street parking Space (one for each unit)

Two (2) employees on the maximum work shift.

Minimum (mandatory) Off-street loading Space

5,000 sq. ft. of floor area.

Zoning District

M-2 Heavy Manufacturing District

Signs Permitted

Yes, under Article VIII

Other Provisions and Requirements (Supplementary regulations, prohibitions, notes, etc.)

Extractive use cannot be conducted any closer than 500' from any residential district.

This is to certify this is the official schedule of District Regulations referred to in Section 410 and Article IV (4) of the Zoning Resolution of Washington Township, Logan County, Ohio.

## WASHINGTON TOWNSHIP ZONING RESOLUTION

A RESOLUTION OF THE TOWNSHIP OF WASHINGTON, OHIO, ENACTED IN ACCORDANCE WITH A COMPREHENSIVE PLAN AND THE PROVISIONS OF CHAPTER 519, OHIO REVISED CODE, AND FOR THE PURPOSE OF PROTECTING THE PUBLIC HEALTH, SAFETY, COMFORT, CONVENIENCE AND GENERAL WELFARE; DIVIDING THE UNINCORPORATED PORTION OF THE TOWNSHIP, INTO ZONES AND DISTRICTS, ENCOURAGING, REGULATING AND RESTRICTING THEREIN THE LOCATION, CONSTRUCTION, RECONSTRUCTION, ALTERATION AND USE OF STRUCTURES AND LAND; PROMOTING ORDERLY DEVELOPMENT OF THE RESIDENTIAL, BUSINESS, INDUSTRIAL, RECREATIONAL AND PUBLIC AREAS; PROVIDING FOR ADEQUATE LIGHT, AIR, AND CONVENIENCE OF ACCESS TO PROPERTY BY REGULATING THE USE OF LAND AND BUILDINGS AND THE BULK OF STRUCTURES IN RELATIONSHIP TO SURROUNDING PROPERTIES; LIMITING CONGESTION IN THE PUBLIC RIGHT-OF-WAYS: PROVIDING THE COMPATIBILITY OF DIFFERENT LAND USES AND THE MOST APPROPRIATE USE OF LAND; PROVIDING FOR THE ADMINISTRATION OF THIS RESOLUTION AND DEFINING THE POWERS AND DUTIES OF THE ADMINISTRATING OFFICERS AS PROVIDED HEREINAFTER AND PRESCRIBING PENALTIES FOR THE VIOLATION OF THE PROVISIONS IN THIS RESOLUTION OR ANY AMENDMENT THERTO; AND FOR THE REPEAL BE IT ORDAINED BY THE BOARD OF WASHINGTON TOWNSHIP TRUSTEES. LOGAN COUNTY, OHIO; THEREFORE BE IT HEREBY RESOLVED BY THE BOARD OF TRUSTEES OF WASHINGTON TOWNSHIP, LOGAN COUNTY, STATE OF OHIO:

ARTICLE I  
TITLE OF RESOLUTION

Section 100 Title.

This Resolution shall be known and may be cited and referred to as the "Zoning Resolution of the Township of Washington."

ARTICLE II  
ESTABLISHMENT OF DISTRICTS

Section 200 District Types.

The township is hereby divided into seven districts as follows: Rural District, Low Density Residential District, Medium Density Residential District, Service Business District, Local Business District, Light Manufacturing District, and Heavy Manufacturing District.

Section 210 Rural District ( U - 1 ).

The intention of the rural district is to provide land which is suitable or used for agriculture, conservation, very low density residence and public and quasi-public purpose. Very low density residential land use refers to farm housing unit and isolated residential developments not requiring a plat under the County subdivision regulations. It is further the attempt of the rural district to discourage the scattering of residential subdivisions and commercial and industrial development. Some residential, commercial, and industrial development may be permitted as conditional uses under Section 601 and as planned unit development under Article VI. On-site water and sewer facilities are permitted provided such facilities comply with the County and State health regulations.

Section 220 Low Density Residential District ( R - 1 ).

The purpose of the low density residential district is to provide land for single family housing units not to exceed four families per acre. ~~Mobile housing units~~ **Manufactured homes, mobile homes,** and multi-family housing units are permitted only under the planned unit development approach. Commercial and industrial development is prohibited. Group or central water and sewer facilities are required if more than one residence is planned on less than 40,000 square feet. (See Official Schedule of District Regulations.)

Section 230 Medium Density Residential District ( R - 2 ).

The purpose of the medium density residential district is to provide land for single- and multi-family housing units not to exceed eight families per acre. ~~Mobile housing units~~ **Mobile home parks** are permitted under Section 410 and in accordance with Article VII ~~Section 700~~. Commercial development is prohibited unless introduced under the planned unit development approach. Group or central water and sewer facilities are required.

Section 250 Service Business District ( B - 1 ).

The purpose of the service business district is to provide land for sales, service and repair establishments which require highway orientation or large tracts of land not normally available in central and local business districts; do not contribute to the design of a unified business center; depend on drive-in business; and require a location along or near major thoroughfares and intersections. General retail and office businesses are permitted as a conditional use. Residential, commercial, and industrial development may be introduced under the planned unit development approach. Group or central water and sewer facilities are required. **All Single Family Dwellings in this B-1 District must meet R-2, Medium-Density Residential District Regulations.**



Section 260 Local Business District ( B - 2 ) .

The purpose of the local business district is to provide land for small retail and personal service establishments offering convenience-type goods and services for the daily needs of the people in the immediate neighborhood or area. Residential and other commercial development are prohibited unless introduced under the planned unit development approach. Group or central water and sewer facilities are required.

Section 280 Light Manufacturing District ( M - 1 ) .

The purpose of the light manufacturing district is to provide land for manufacturing or industrial establishments which are clean, quiet, and free of hazardous or objectionable elements such as noise, odor, dust, smoke or glaze; operate within enclosed structures; and generate little industrial traffic. Heavy manufacturing or industrial development is prohibited. Commercial development is prohibited unless introduced under the planned unit development approach. Group or central water and sewer facilities are required.

Section 290 Heavy Manufacturing District ( M - 2 ) .

The purpose of the heavy manufacturing district is to provide land for major manufacturing processing, storage, warehousing, research, and testing establishments which require large sites, extensive community services and facilities, ready access to regional transportation; have large open storage and service areas; generate heavy traffic; and create no nuisance discernible beyond the district. Extractive manufacturing use is permitted as a conditional use if the operation does not create a hazard or nuisance which adversely affects the health, safety, and general well-being of the community and other manufacturing establishments in the district. Residential development is prohibited. Light manufacturing or industrial uses are permitted as conditional uses. Commercial and industrial development may be introduced under the Planned Unit Development (PUD) approach. Central water and sewer facilities are required.

ARTICLE III  
PROVISION FOR OFFICIAL ZONING MAP

Section 300 Official Zoning Map.

The districts established in Section 200 of this Resolution are shown on the Official Zoning Map which, together with all explanatory matter thereon, is hereby adopted by reference and declared to be part of this Resolution.

Section 310 Identification of the Official Zoning Map.

The official zoning map shall be identified by the signature of the Chairman of the Board of Township Trustees attested by the Township Clerk, under the following words: "This is to certify that these are the Official Zoning Map referred to in Section 300 of the Zoning Resolution of the Township of Washington, Logan County, Ohio," together with the date of the adoption of this Resolution.

Section 320 Recording Changes in the Official Zoning Map.

If in accordance with the provisions of this Resolution and Chapter 519 of the Ohio Revised Code changes are made in district boundaries or other matters portrayed on the Official Zoning Map, such changes shall be entered on the Official Zoning Map promptly after the amendment has been approved by the Board of Township Trustees with a 2/3 vote with an entry on the Official Zoning Map indicating the Resolution number, if any, and the date of adoption.

Section 330 Replacement of the Official Zoning Map.

In the event that the Official Zoning Map becomes damaged, destroyed, lost or difficult to interpret because of the nature or number of changes and additions, the Board of Township Trustees may, by Resolution, adopt a new Official Zoning Map which shall supersede the prior Official Zoning Map. The new Official Zoning Map may correct drafting or other errors or omissions in the prior Official Zoning Map, but no such correction shall have effect of amending the original Official Zoning Map or any subsequent amendment thereof. The new Official Zoning Map shall be identified by the signature of the Chairman of the Board of Trustees, attested by the Township clerk, under the following words: "This is to certify that this Official Zoning Map supersedes and replaces the Official Zoning Map adopted as part of the Zoning Resolution of the Township of Washington, Logan County, Ohio.

Section 340 Preserving Records.

Unless the prior Official Zoning Map has been lost, or has been totally destroyed, the prior map and/or significant parts thereof remaining shall be preserved, together with all available records pertaining to its adoption or amendment.

Section 350 Interpretation of District Boundaries.

Where uncertainty exists with respect to the boundaries of any of the zoning districts as shown on the zoning map, the following rules shall apply:

1. Where district boundaries are indicated as approximately following the center lines of streets or highways, street lines, or highway right-of-way lines, such center lines, street lines, or highway right-of-way lines shall be construed as such boundaries;

2. Where district boundaries are so indicated that they approximately follow the lot lines, such lot lines shall be construed as said boundaries;
3. Where district boundaries are so indicated that they are approximately parallel to the center lines or street lines of streets, or the center lines or right-of-way lines of highways, such district boundaries shall be construed as being parallel thereto and at such distance there from as indicated on the Zoning Map. If no distance is given, such dimensions shall be determined by the use of the scale shown on the Official Zoning Map.
4. Where the boundary of a district follows a railroad line such boundary shall be deemed to be located in the middle of the main tracks of said railroad line.
5. Where the boundary of a district follows a stream, lake or other body of water, said boundary line shall be deemed to be at the limit of the jurisdiction of the Township unless otherwise indicated.

ARTICLE IV  
DISTRICT REGULATIONS

Section 400 Compliance with Regulations.

The regulations set by this Resolution within each district shall be minimum regulations and shall apply uniformly to each class or kind of structure or land, except as hereinafter provided:

1. No building, structure or land shall hereafter be used or occupied, and no building or structure or part thereof shall hereafter be erected, constructed, reconstructed, moved or structurally altered except in conformity with all of the regulations herein specified for the district in which it is located;
2. No building or other structure shall hereafter be erected or altered:
  - a. To exceed the height or bulk;
  - b. To accommodate or house a greater number of families;
  - c. To occupy a greater percentage of lot area; or
  - d. To have narrower or smaller rear yards, front yards, side yards or other open spaces than herein required; or in any other manner contrary to the provisions of this Resolution.
3. No yard or lot existing at the time of passage of this Resolution shall be reduced in dimension or area below the minimum requirements set forth herein. Yards or lots created after the effective date of this Resolution shall meet at least the minimum requirements established by this Resolution.

Section 410 Schedule of District Regulations Adopted.

District regulations shall be as set forth in the Official Schedule of District Regulations hereby adopted by reference and declared to be a part of this Resolution, and in Article V of this Resolution, entitled, "Supplementary District Regulations."

Section 420 Identification of the Schedule of District Regulations.

The Official Schedule of District Regulations shall be identified by the signature of the Chairman of the Board of Township Trustees, attested by the Township Clerk, under the following words: "This is to certify that this is the Official Schedule of District Regulations referred to in Section 410 and Article IV of the Zoning Resolution of the Township of Washington, Logan County, Ohio", together with the date of the adoption or amendment of this Resolution.



ARTICLE V  
SUPPLEMENTARY DISTRICT REGULATIONS

Section 500 Permitted Conditional Uses.

Conditional uses shall conform to all requirements of this Resolution, including additional standards as set forth in Sections 501 to 504, inclusive, before being permitted in their respective districts. All conditional uses are hereby declared to possess characteristics of such unique and special forms that each specific use shall be considered as an individual case.

Section 501 Required Plan.

A plan for the proposed development of a site for a permitted conditional use shall be submitted with an application for a conditional use permit, and such plan shall show the location of all current and planned buildings, parking areas, traffic access and circulation drives, open spaces, landscaping, and any other pertinent information that may be necessary to determine if the proposed conditional use meets the requirements of this Resolution.

Section 502 Expiration.

A conditional use permit shall be deemed to authorize only one particular conditional use and shall expire if the conditional use shall cease for more than six months for any reason or unless otherwise specified by the Zoning Appeals Board.

Section 503 Existing Violations.

No permit shall be issued for a conditional use for a property where there is an existing violation of this Resolution.

Section 504 Standards Applicable to ALL Conditional Uses.

The location and size of the use, the nature and intensity of the operations involved, the size of the site in relation to it, and the location of the site with respect to the existing and future streets giving access to it, shall be such that it will be in harmony with the orderly development of the district, and the location, nature of height of buildings, walls, and fences will not discourage the appropriate development and use of adjacent land and buildings or impair its value thereof. In addition, operations in connection with any conditional use shall not be more objectionable to nearby properties by reason of noise, fumes, vibration, or flashing light, than would be the operation of any permitted use.

Section 510 Off-Street Parking Requirements.

Off-street automobile parking spaces shall be provided for every land use on any lot or any time any building or structure is erected, enlarged or increased in capacity in accordance with the following requirements:

1. Each off-street parking space shall have an area of not less than three hundred (300) square feet including access drives and aisles. ~~and shall be surfaced with a sealed surface pavement and maintained in such a manner that no dust will be produced by continuous use.~~

2. Each off-street parking space shall have an adequate vehicular access to a street or alley.
3. Whenever the number of off-street parking spaces required is determined from the floor area of a specified use, it shall mean the gross floor area of such use.
4. Fractional numbers shall be increased to the next whole number.
5. The parking space requirement for a use not specifically mentioned herein shall be the same as required for a use of similar nature.
6. Whenever a building or use constructed or established after the effective date of this Resolution is changed or enlarged in floor area, numbers of employees, number of housing units, seating capacity, or otherwise, to create a need for an increase of ten percent (10%) or more in the number of existing parking spaces, such spaces shall be provided on the basis of the enlargement or change. Whenever a building or use existing prior to the effective date of this Resolution is enlarged to the extent of fifty percent (50%) or more in floor area or in the area used, said building or use shall then and thereafter comply with the parking requirements set forth herein.

Section 511 Number of Parking Spaces Required.

The number of off-street parking spaces required shall be provided and satisfactorily maintained by the owner of the property as follows:

<u>TYPE OF USE</u>	<u>PARKING SPACES REQUIRED</u> <u>(one unit for each)</u>
• Single family or two-family dwelling	Housing unit.
• Multi-family housing unit	One-half housing unit
• Hotel, motel, lodging house or dormitory	Living or sleeping room
• Private club or lodge	Five (5) members
• Church or temple	Five seats in main auditorium
• Grade school	Five seats in auditorium
• College or high school	Teacher, employee and five students
• Library, museum or art gallery	300 sq. ft. of floor area
• Hospital, clinic, nursing home	Employee and bed or similar institution
• Theater, sports arena, auditorium, stadium or gymnasium other than school	Five seats
• Bowling alley	Bowling seat
• Mortuary or funeral home	Fifty square feet of floor area in slumber rooms, parlors or individual funeral service rooms

- Retail or business service establishment area Two (2) employees; 200 sq. ft. of floor
  - Offices, personal or professional Services; restaurants, nightclubs, Dance halls, assembly or exhibition without fixed seats 200 sq. ft. of floor area
  - Wholesale or warehousing 300 sq. ft. of floor area
  - Manufacturing or industrial establishment, research or testing laboratory, or bottling plant Two employees on the maximum shift
-

Section 512 Screening and Landscaping.

Off-street parking areas for more than ten (10) vehicles shall be effectively screened on each side which adjoins or faces premises situated in any residential district by a fence or wall of acceptable design. Such fence or wall shall be not less than four (4) feet or more than six (6) feet in height and shall be maintained in good condition. The space between such fence or wall and the lot line of the adjoining premises in any residential district shall be landscaped with grass, hardy shrubs or evergreen ground cover and maintained in good condition. In lieu of such wall or fence a strip of land not less than ten (10) feet in width, and planted and maintained with an evergreen hedge or dense planting of evergreen shrubs not less than four (4) feet in height may be substituted.

Section 513 Minimum Distance and Setbacks.

No part of any parking area for more than ten (10) vehicles shall be closer than twenty (20) feet to any housing unit, school, hospital or other institution for human care located on an adjoining lot, unless separated by an acceptably designed screen. If on the same lot with a one-family residence the parking area shall not be located within the front yard required for such building. In no case shall any part of a parking area be closer than four (4) feet to any established street or alley right-of-way.

Section 514 Joint Use.

Two (2) or more nonresidential uses may jointly provide and use parking spaces when their hours of operation do not normally overlap provided that a written agreement, approved by the Zoning Commission, shall be filed with the application for a Zoning Certificate.

Section 515 Other Locations.

Parking spaces may be located on a lot other than that containing the principal use provided it is within three hundred (300) feet of the principal use. Lots farther than three hundred (300) feet from the principal use may be approved by the Board of Zoning Appeals provided a written agreement, approved by the Zoning Commission, shall be filed with the application for a Zoning Certificate.

Section 516 Surfacing.

Any off-street parking area for more than ten (10) vehicles shall be graded for proper drainage and surfaced with acceptable impervious material to provide a durable and dustless surface.

Section 517 Lighting.

Any lighting used to illuminate any off-street parking area shall be so arranged as to reflect the light away from adjoining premises in any residential district.

Section 518 Disabled Vehicles.

The parking of a disabled vehicle within a residential or commercial district for a period of more than thirty (30) days shall be prohibited, unless such vehicle is stored in an enclosed garage or other accessory building.

Section 519 Off-Street Loading Requirements.

In any district, in connection with every building or part thereof hereafter erected and having a gross floor area of five thousand (5,000) square feet or less, which is to be occupied by manufacturing, storage, warehouse, retail, wholesale, hotel, hospital, mortuary, dry cleaning or other uses similarly requiring the receipt or distribution by vehicle



of material or merchandise, there shall be provided and maintained, on the same lot with such building, at least one (1) off-street loading space, plus one (1) additional such loading space for each additional ten thousand (10,000) square feet, or major fraction thereof, of gross floor area, provided, however, that in the case of ground floor area exceeding one hundred thousand (100,000) square feet, not more than eleven ( 1 1 ) additional loading spaces shall be required, all in accordance with the following requirements:

1. Each loading space shall be not less than 12 feet in width, 15 feet in height and 50 feet in length for tandem trailers, or 30 feet for two axle trucks.
2. Subject to the limitations of Section 501 of this Resolution such space may occupy all or any part of any required yard space.

#### Section 520 Special Provisions for Residential Uses.

The regulations applicable to residential uses shall be supplemented by the provisions of Sections 521 to 522, inclusive.

#### Section 521 Determining Minimum Floor Area for Housing Units.

The minimum floor area per family in housing units shall include only area used for living quarters. Utility rooms, garages, carports, porches, laundry areas, enclosed decks, and basements shall be excluded.

#### Section 522 Conversion of Dwellings to More Units.

In U-1, R-1 and R-2 districts a residence may be converted to accommodate an increased number of dwelling units provided:

1. The yard dimensions still meet the yard dimensions required by the Zoning Regulations for new structures in that district;
2. The lot area per family shall equal the lot area requirements for new structures in that district;
3. The number of square feet of living area per family unit is not reduced to less than that which is required for new construction in that district.

#### Section 523 Private Swimming Pools.

A private swimming pool, not including farm ponds, shall be any pool, lake or open tank not located within a completely enclosed building and containing or normally capable of containing water to a depth at any point greater than one and one-half ( 1 1 | 2 ) feet. No such swimming pool, exclusive of portable swimming pools with a diameter less than twelve (12) feet or with an area of less than one hundred (100) square feet, shall be allowed in any commercial or residential district except as an accessory use and unless it complies with the following conditions and requirements:

1. The pool is intended and is to be used solely for the enjoyment of the occupants of the principal use of the property on which it is located;
2. It may not be located, including any walks or paved areas or accessory structures adjacent thereto, closer than ten (10) feet to any property line of the property on which it is located; and
3. The swimming pool, or the entire property on which it is located, shall be walled or fenced to prevent uncontrolled access by children from the street or from adjacent properties. Said fence or wall

shall be not less than ~~six (6)~~ four (4) feet in height and maintained in good condition with a gate and lock.

#### Section 524 Community or Club Swimming Pools.

A community or club swimming pool constructed by an association of property owners, or by a private club, for use and enjoyment by members of the association or club and their families. Community and club swimming pools are permitted in all districts but shall comply with the following conditions and requirements:

1. The pool is intended solely for the enjoyment of the members and families and guests of members of the association or club under whose ownership or jurisdiction the pool is operated;
2. The pool and accessory structures thereto, including the areas used by the bathers, shall not be closer than fifty (50) feet to any property line of the property on which it is located; and
3. The swimming pool and all of the area used by the bathers shall be walled or fenced to prevent uncontrolled access by children from the street or adjacent properties. The said fence or wall shall not be less than six (6) feet in height and maintained in good condition with a gate and lock.

#### Section 525 Setback Requirements for Corner Buildings.

On a corner lot the main building and its accessory structures shall be required to set back the same distance from all street right-of-way lines as required for the front set back in the district in which such structures are located.

#### Section 530 Special Provisions for Commercial and Industrial Uses.

No land or building in any district shall be used or occupied in any manner so as to create any dangerous, injurious, noxious, or otherwise objectionable element or condition so as to adversely affect the surrounding area or adjoining premises provided that any use permitted by this Resolution may be undertaken and maintained if acceptable measures and safeguards are employed to limit dangerous and objectionable elements to acceptable limits as established by the performance requirements in Sections 531 to 540, inclusive.

#### Section 531 Fire Hazards.

Any activity involving the use or storage of flammable or explosive materials shall be protected by adequate fire-fighting and fire-suppression equipment and by such safety devices as are normally used in the handling of any such material. Such hazards shall be kept removed from adjacent activities to a distance, which is compatible with the potential danger involved and shall comply with all local, state, and federal regulations.

#### Section 532 Radioactivity or Electrical Disturbance.

No activity shall emit dangerous radioactivity at any point, or electrical disturbance adversely affecting the operation at any point of any equipment other than that of the creator of such disturbance.

#### Section 533 Noise.

Noise which is objectionable ~~as determined by the Board~~ due to volume, frequency or beat shall be muffled or otherwise controlled. Air-raid sirens and related apparatus used solely for

public purposes are exempt from this requirement. (Except as provided for under Sections 542 to 546.)

Section 534 Vibration.

No vibration shall be permitted which is discernible without instruments on any adjoining lot or property.

Section 535 Smoke.

Smoke shall not be emitted with a density greater than No. 1 on the Ringelman Chart as issued by the U. S. Bureau of Mines except for blow-off periods of ten minutes duration of one per hour when a density of not more than No. 2 is permitted.

Section 536 Odors.

No malodorous gas or matter shall be permitted which is offensive or as to produce a public nuisance or hazard on any adjoining lot or property.

Section 537 Air Pollution.

No pollution of air by fly-ash, dust, vapors or other substances shall be permitted which is harmful to health, animals, vegetation or other property, or which can cause excessive soiling. In the case of an area within an M-2 Heavy Manufacturing District, in lieu of the foregoing standards, no emissions shall be permitted except in compliance with applicable federal and state environmental protection, health, safety or other applicable federal or state governmental laws and regulations.

Section 538 Glare.

No direct or reflected glare shall be permitted which is visible from any property outside an industrial district or from any public street, road, or highway.

Section 539 Erosion.

No erosion, by either wind or water, shall be permitted which will carry objectionable substance onto neighboring properties.

Section 540 Water Pollution.

Pollution of water shall be subject to the requirements and regulations established by the Ohio Water Pollution Control Board. In the case of an area within an M-2 Heavy Manufacturing District, in lieu of the foregoing standards, the discharge of water pollutants shall not be permitted except in compliance with applicable federal and state environmental protection, health, safety or other applicable federal or state governmental laws and regulations.

Section 541 Mineral, Clay, Sand and Gravel Extraction, Storage and Processing.

The extraction, storage and processing of minerals shall be conducted in accordance with the requirements of Sections 542 to 546, inclusive.

Section 542 Distance from Residential Areas.

Mineral extraction, storage or processing shall not be conducted closer than 500 feet from any residential district, nor closer than 200 feet from any structure used for human occupancy in any other district.

Section 543 Filing of Location Map.

The operator shall file with the Zoning Inspector a location map which clearly shows areas to be mined and the location of adjacent properties, roads and natural features.

Section 544 Information on Operation.

The operator shall submit information on the anticipated depth of excavations and on depth and probable effect on the existing water table as coordinated with the Ohio Division of Water.

Section 545 Restoration of Mined Area.

The operator shall file with the Board Of Zoning Appeals a detailed plan for the restoration of the area to be mined which shall include the anticipated future use of the restored land, the proposed final topography indicated by contour lines of no greater interval than five feet, the type and number per acre of trees or shrubs to be planted; and the location of future roads, drives, drainage course, or other improvements, contemplated.

Section 546 Performance Bond.

The operator shall file with the Board of Township Trustees a bond, payable to the Township and conditioned on the faithful performance of all requirements contained in the approved restoration plan. The rate, per acre of property to be mined, of the required bond shall be fixed by Resolution of the Board of Township Trustees. The bond shall be released upon written certification of the zoning inspector that the restoration is complete and in compliance with the restoration plan.

Section 547 Enforcement Provision.

The Zoning Inspector or Board of Zoning Appeals, prior to the issuance of a zoning certificate, may require the submission of statements and plans indicating the manner in which dangerous and objectionable elements involved in processing and in equipment operations are to be eliminated or reduced to acceptable limits and tolerances.

Section 548 Measurement Procedures.

Methods and procedures for the determination of the existence of any dangerous and objectionable elements shall conform to applicable standard measurement procedures published by the American Standards Association, Inc., New York, N. Y., the Manufacturing Chemists' Association, Inc., Washington D. C., and the United States Bureau of Mines.

Section 550 Supplementary District Regulations.

Supplementary regulations apply to several districts or a set of districts and are set forth in Sections 551 to 560, inclusive.

Section 551 Side and Rear Yard Requirements for Nonresidential Uses Abutting Residential

Districts. Nonresidential buildings or uses shall not be located nor conducted closer than forty (40) feet to any lot line of a residential district, except that the minimum yard requirement may be reduced to 50 percent of the requirement if acceptable landscaping or screening approved by the Board of Zoning Appeals is provided. Such screening shall be a

masonry or solid fence between four (4) and eight (8) feet in height maintained in good condition and free of all advertising or other signs. Landscaping provided in lieu of such wall or fence shall consist of a strip of land not less than twenty (20) feet in width planted with a evergreen hedge or dense planting of evergreen shrubbery not less than four feet in height at the time of planting. Either type of screening shall not obscure traffic visibility within twenty (20) feet of an intersection.

#### Section 552 Exceptions to Height Regulation.

The height limitation contained in the Official Schedule of District Regulations, Section 410, do not apply to spires, belfries, cupolas, antennas, water tanks, ventilators, chimneys or other appurtenances usually required to be placed above the roof level and not intended for human occupancy.

#### Section 553 Architectural Projections.

Open structures such as porches, canopies, balconies, platforms, carports and covered patios, and similar architectural projects shall be considered parts of the building to which attached and shall not project into the required minimum front, side, or rear yard.

#### Section 554 Visibility at Intersections in Residential Districts.

On a corner lot in any residential district nothing shall be erected, placed, planted or allowed to grow in such a manner as materially to impede vision between a height of two and a half and ten feet above the center line grades of the intersection streets in the area bounded by the street lines of such corner lots and a line joining points along said street lines fifty (50) feet from the point of intersection.

#### Section 555 Fences, Walls and Hedges.

Notwithstanding other provisions of this Resolution, fences, walls and hedges may be permitted in any yard, or along the edge of any yard, provided that no fence, wall or hedge along the sides or front edge of any yard extending between the building line and the road right-of-way shall be over ~~three (3)~~ **four (4)** feet in height, except that in the case of an area within an M-2 Heavy Manufacturing District, no fence, wall or hedge within or along the edge of any yard area shall be over five feet in height. Any fence in a Residential District that exceeds seventy two (72) inches in height shall be required to have a variance.

1. ~~A barricade or other~~ **No wall or** solid fence may not be extended into the front yard.
2. ~~Front lot line may have shrubbery or solid fence not to exceed thirty six (36) inches anytime. Chain link fence up to a height of forty eight (48) inches may be used to encompass lot zoning permit required.~~
3. Corner barriers are prohibited.
4. ~~Decorative rails may be used provided visibility is not obstructed to vehicular traffic.~~



### Section 556 Erection of More than One Principal Structure on a Lot.

In any district more than one structure housing a permitted or permissible principal use may be erected on a single lot, provided that yard and other requirements of this Resolution shall be met for each structure as though it were on an individual lot. Accessory buildings such as a garage may be located in the rear yard, provided that yard and other requirements of this Resolution are met.

All accessory buildings must meet setback requirements of the associated zoning district and, therefore, shall require a permit (agricultural use exempted from this provision). This requirement applies regardless whether a foundation is included in the construction of the utility building.

### Section 560 Adult Entertainment.

General Conditions for Adult Entertainment facilities Use.

Adult Entertainment Facilities are conditionally permitted within the B-1 Business District only, and subject to conditions set forth in the Zoning Resolution Section 560 and paragraphs 1-9 hereafter set forth.

1. No adult entertainment facility shall be established within one thousand (1,000) feet of any areas zoned for residential use, R-1 and R-2.
2. No adult entertainment facility shall be established within a radius of one thousand five hundred (1,500) feet of any school, library, or teaching facility, whether public or private, governmental or commercial which school, library, or teaching facility is attended by persons under eighteen (18) years of age.
3. No adult entertainment facility shall be established within a radius of one thousand five hundred (1,500) feet of any park or recreational facility attended by persons under eighteen (18) years of age.
4. No adult entertainment facility shall be established within a radius of two thousand (2,000) feet of any other adult entertainment facility.
5. No adult entertainment facility shall be established within a radius of one thousand five hundred (1,500) feet of established church, synagogue, or permanently established place of religious services which is attended by persons under eighteen (18) years of age.
6. No advertisements, displays, or other promotional materials shall be shown or exhibited so as to be visible to the public from pedestrian sidewalks or walkways, or from other areas public or semi-public.
7. All building openings, entries, windows, etc. for adult uses shall be located, covered, or serviced in such a manner as to prevent a view into the interior from any public or semi-public area, sidewalk, or street. For new construction, the building shall be oriented so as to minimize any possibility of viewing the interior from public or semi-public areas.

8. No screens, loudspeakers, or sound equipment shall be used for adult motion picture theatres (enclosed or drive-in) that can be seen or discerned by the public from public or semi-public areas.
9. Off-street parking shall be provided in accordance with the standards for permitted use within B-1 Business District.

#### Section 565 Telecommunication Towers.

Pursuant to the Telecommunications Act of 1996 and the ORC Section 519.211, and the Washington Township Trustees being duly notified of a person's intent to construct a Telecommunication Tower in areas zoned "R-1" Districts; public utilities or other functionally equivalent providers may site a telecommunications tower as a conditional use provided the following conditions are met:

1. The applicant must provide proof that the proposal to construct a tower or attach equipment to an existing structure has been approved by all other agencies and governmental entities with jurisdiction (i.e. Federal Communication Commission, Federal Aviation Administration, Ohio Department of Transportation, and Ohio Building Basic Code).
2. The applicant shall provide proof of notification to contiguous or directly across the street property owners as required by ORC Section 519.211.
3. The applicant must demonstrate at the time of application that no technically suitable and feasible sites are available in a nonresidential district. There shall be an explanation of why a tower at this proposed site is technically necessary.
4. Co-location. Applicant shall provide a signed statement indicating that the applicant agrees to allow for the potential co-location of other users on the same tower to the extent possible. All co-located and multiple-use telecommunication facilities shall be designed to promote facility and site sharing.
5. Setbacks from all platted residential uses and residential districts. All new towers shall be setback from the closest subdivision boundary line for all platted residential subdivisions, and for all non-platted residential districts from the closest residence, a distance of 900 feet with the exception of the B-2 zoning district where such setback shall be 200 feet.
6. Setbacks from all streets and private and public road right of ways. All new towers shall be setback from all road right of ways public and private, a distance of 900 feet.
7. Setbacks from all other uses allowable in the zoning district. All new towers shall be setback from any building that is not associated with or accessory to the telecommunications tower facility a distance of 900 feet.

8. Any and all base station equipment, accessory structures, buildings, etc. used in conjunction with the tower shall be screened with fencing, masonry, shrubbery or other screening materials.
9. The applicant shall notify the Zoning Inspector within 30 Days of ceasing operations at the site and shall remove all structures within 120 days of ceasing operations.
10. No advertising or illumination other than that required by law may be located on the structure or on the required screening.
11. An inspection report prepared by a qualified engineer licensed by the State of Ohio shall be submitted to the Zoning Office every five (5) years which details the structural integrity of all towers and support structures on the property. The results of such inspections shall be provided to the Logan County Building Regulations Department and Washington Township Zoning Inspector. Based upon results of an inspection, the Township Trustees may require repair or removal of a communication tower. Any and all necessary repairs to the tower and/or support structures shall be made within a seven (7) day period or the tower and/or structures shall be removed. The tower owner (applicant) is responsible to cover the cost of all inspections, repair, and/or removal.
12. The unstaffed storage building and/or unit that houses transmitting equipment is considered an accessory use and/or structure. Setbacks for accessory uses/structures will comply with distances in the zoned district of the tower location. These facilities may not include offices, long-term vehicle storage, other outdoor storage, or broadcast studios except for emergency purposes, or other uses that are needed to send or receive transmissions.
13. A six (6) foot safety fence with a locked gate surrounding the tower is required. If high voltage is necessary, signs must be posted every twenty (20) feet along the fence saying, "Danger - High Voltage." The operator must also post "NO Trespassing" signs.

#### Section 566 Performance Bond

1. For each telecommunication tower, the owner or operator shall provide to the Township, a surety bond or a bank letter of credit, to assure the Township that the terms and conditions of Section 565 are performed and complied with, including necessary repairs, including repairs to public highways and roads and the costs and expenses of removal in the event of abandonment.
2. The Washington Township Board of Trustees may draw upon the performance bond to recover any costs, damages, or expenses incurred by the Township, which arise

out of the violations of Section 565 or the abandonment or discontinuance of the use of a tower.

#### Section 567 - Small Wind Projects less than 5MW

1. Wind Projects of 5MW or more shall be required to submit an application with the Ohio Power Siting Board (OPSB) at the Public Utilities Commission of Ohio (PUCO) and are required to meet OPSB regulations. Small Wind Projects less than 5MW and used solely for Agriculture will be exempt from these zoning regulations as an Agricultural Use. Any proposed construction, erection, or siting of a small wind project less than 5MW including the wind turbine generator or anemometer or any parts thereof shall be a Permitted Use in all Washington Township Zoning Districts the U 1, B, and M Districts if the following conditions are met (both as Permitted and Conditional Use):
  - A. The maximum height of any turbine shall be 125 ft. For purposes of this Resolution, maximum height shall be considered the total height of the turbine system including the tower, and the maximum vertical height of the turbine's blades. Maximum height therefore shall be calculated by measuring the length of a prop at maximum vertical rotation to the base of the tower.
  - B. Setbacks: the following shall apply in regards to setbacks.
    1. Any turbine erected on a parcel of land shall be setback 1.1 times the height of the tower, or established "clear fall zone", from all road right-of-way lines and neighboring property lines. A turbine shall be erected and placed in such a manner that if it were to fall, whatever direction the fall occurs would be contained solely on the property where the turbine is located at.
  - C. Maintenance
    1. Wind turbines must be maintained in good working order. The owner shall within 30 days of permanently ceasing operation of a wind turbine, provide written notice of abandonment to the Zoning Inspector. An unused wind turbine or small wind project may stand no longer than 12 months following abandonment. All costs associated with the demolition of the wind turbine and associated equipment shall be borne by the owner. A wind turbine is considered abandoned when it ceases transmission of electricity for 30 consecutive days. Wind turbines that become inoperable for more than 12 months must be removed by the owner within thirty (30) days of issuance of zoning violation. Removal includes removal of all apparatuses, supports, and or other hardware associated with the existing wind turbine.

#### D. Decibel Levels

1. Decibel levels shall not exceed those provided by the manufacturer as requested in II Permits, 2., e.

#### E. Wiring and electrical apparatuses:

1. All wires and electrical apparatuses associated with the operation of a wind turbine unit shall be located underground and meet all applicable local, state, and federal codes including the County Building Regulations and Residential Building Code of Ohio.

#### F. Warning Signs:

1. Appropriate warning signs to address voltage shall be posted (where and meeting sign requirements).

#### G. Building Permits:

1. All Small Wind Projects Farms and parts thereof shall obtain all applicable Building Permits from the State of Ohio and County Building Regulations where required.

### 2. Permits

A. A permit shall be required before construction can commence on an individual wind turbine project.

B. As part of the permit process, the applicant shall inquire with the County Building Regulations as to whether or not additional height restrictions are applicable due to the unit's location in relation to any local airports.

B. Applicant shall then provide the Township Zoning Inspector with the following items and or information when applying for a permit:

1. Location of all public and private airports in relation to the location of the wind turbine.

2. An engineering report that shows:

- a. The total size and height of the unit



- b. If applicable, the total size and depth of the unit's foundation structure, as well as soil and bedrock data.
  - c. A list and or depiction of all safety measures that will be on the unit including anti-climb devices, grounding devices, and lightning protection, braking systems, guy wiring & anchors.
  - d. Data specifying the kilowatt size and generating capacity in kilowatts of the particular unit.
  - e. The maximum decibel level of the particular unit. This information shall be obtained from the manufacturer of the turbine unit.
  - f. Hazardous materials containment and disposal plan.
3. A site drawing showing the location of the unit in relation to existing structures on the property, roads and other public right-of-ways, and neighboring property lines.
  4. Evidence of an established setbacks of 1.1 times the height of the wind turbine and "clear fall zone."
  5. A maintenance schedule as well as a dismantling plan that outlines how the unit will be dismantled shall be required as part of the permit.

These definitions would go in Article XII after "Sign" and listed under "Small Wind Projects less than 5MW":

Accessory Structures: Structures such as sheds, storage sheds, pool houses, unattached garages, and barns.

Anemometer: An instrument that measures the force and direction of the wind.

Clear Fall Zone: An area surrounding the wind turbine unit into which the turbine and -or turbine components might fall due to inclement weather, poor maintenance, faulty construction methods, or any other condition causing turbine failure that shall remain unobstructed and confined within the property lines of the primary parcel where the turbine is

located. The purpose of the zone being that if the turbine should fall or otherwise become damaged, the falling structure will be confined to the primary parcel.

Cowling: A streamlined removable cover that encloses the turbine's nacelle.

Decibel: A unit of relative loudness equal to ten times the common logarithm of the ratio of two readings. For sound, the decibel scale runs from zero for the least perceptible sound to 130 for sound that causes pain.

Nacelle: Sits atop the tower and contains the essential mechanical components of the turbine to which the rotor is attached.

Primary Structure. For each property, the structure that one or more persons occupy the majority of time on that property for either business or personal reasons. Primary structures include structures such as residences, commercial buildings, hospitals, and day care facilities. Primary structures exclude structures such as hunting sheds, storage sheds, pool houses, unattached garages, and barns.

Professional Engineer. A qualified individual who is licensed as a Professional Engineer in the State of Ohio.

Megawatt (MW): A unit of power, equal to one million watts.

Small Wind Project: Any wind project less than 5MW which includes the wind turbine generator and anemometer.

Wind Power Turbine Owner. The person or persons who owns the Wind Turbine structure.

Wind Power Turbine Tower. The support structure to which the turbine and rotor are attached.

Wind Power Turbine Tower Height. The distance from the rotor blade at its highest point to the top surface of the ground at the Wind Power Generating Facility (WPGF) foundation.

## SECTION 568 - PRIVATE DRIVEWAY INSTALLATION

Private driveways installed on county **or township** roads will be the responsibility of the Logan County Engineer's office. ~~Washington Township will be responsible for issuing zoning permit for all township roads~~

- ~~1. All private drives that are to be constructed shall be the responsibility of the individual wishing said driveway.~~
- ~~2. The township zoning inspector shall determine the size (diameter) of the culvert required. Twelve (12") diameter is preferred but the zoning inspector may allow other sizes to match existing ditch lines.~~
- ~~3. No culvert shall be less than thirty (30') in length. Longer length may be required if the inspector finds it necessary.~~
- ~~4. No driveway shall intersect a public road at an angle less than 70 degrees, 90 degrees is desirable.~~
- ~~5. All culverts shall be corrugated metal pipe (C.M.P.), reinforced concrete, double walled polyethylene drainage pipe equivalent to Hancor Hi Q or ADS N 12, or an approved type of equal strength. All fittings shall be manufactured for the type of pipe installed.~~
- ~~6. Backfill for culvert shall be stone or gravel aggregate of size 304, 310, or equivalent.~~
- ~~7. The grade shall be on the flow line of the existing side ditch and shall slope with the natural grade of the ditch. From the viewpoint of safety, it is suggested that the driveway be located so as to have a minimum of 550 feet sight distance each way on the public road and a driveway grade should be no greater than 10%. The driveway shall be a minimum of 150' from any intersection.~~

#### Section 569 - Recreational Vehicles

Campers (travel trailers, recreation vehicles) shall be parked in an approved campground or on an approved service business, with the exception that not more than one (1) camper may be located on a residential or undeveloped lot subject to the following: (1) Campers that are temporarily occupied, in accordance with this Section, shall be located in a side or rear yard and may not be located within required setbacks for the district. (2) It is not to be occupied for dwelling purposes for more than thirty (30) days within any one calendar year. (3) It is not hooked up to a water system, septic system or other utilities. (4) Any sewage generated shall be disposed of in accordance with all applicable local, state and federal regulations. (B) Nothing shall prohibit a property owner from parking his/her camper, travel trailer or recreation vehicle on his/her property.

#### Section 570 - Demolition

A zoning permit is required for demolition. Material from demolition operations are those items affixed to the structure being demolished, such as brick, concrete, stone, glass, wallboard, framing and finishing lumber, roofing materials, plumbing, plumbing fixtures, wiring, insulation material and other similar materials and/or waste. Where a structure is removed or destroyed, all debris shall be cleared and removed from the premises with sixty (60) days after the zoning permit is issued. Precautions shall be taken to ensure no debris is scattered on neighboring properties. **All holes or depressions in the ground must be filled to grade level with soil and planted with grass seed.** Monitoring of the site will be done to ensure compliance with this section. Zoning Violations shall be issued for any person found not to be in compliance with this section.

## ARTICLE VI

## PLANNED UNIT DEVELOPMENT

Section 600 Purpose of Planned Unit Development.

Planned development of land may be permitted in any district to encourage and provide a means for effectuating a more desirable physical development pattern than would be possible through the strict application of the density and dimensional requirements of this Resolution.

Section 601 Permitted Uses.

Only those uses permitted or conditionally permitted in each district or interpreted to be included under Sections 200 to 290, inclusive, the Official Schedule of District Regulations, Section 410, of this Resolution may be proposed for development under the planned development approach. Compatible residential, commercial, industrial, public and quasi-public uses may be combined, provided that the proposed location of the commercial or industrial uses will not adversely affect or disregard adjacent property, public health, safety, morals and general welfare, and provided further that in a residential-commercial-industrial or residential-commercial development the amount of land devoted to commercial and/or industrial usage shall not exceed 50 percent of the total land area of the development. A variety of housing and building types are encouraged by permitting an increased number of families per acre and by allowing reductions in lot dimensions, yards, building setbacks, and area requirements.

Section 602 General Requirements.

The gross area of the tract to be developed under the planned unit development approach shall comprise not less than 10 acres. The minimum lot size shall not be less than 70 percent of the lot area per family or use required in the district in which it would otherwise be located. A minimum of 10 percent of the land developed in a planned unit development project shall be reserved for open space and similar uses. Lot widths and required yards may be reduced to 80 percent of the requirement of this Resolution.

Section 603 Disposition of Open Space.

The amount of open space reserved under a planned unit development shall be held in corporate ownership by the owners of the project area building sites for the use of each owner who buys property within the development.

Section 604 Residential Lot Location.

Every property subdivided under the planned unit development shall be designed to abut upon open space or similar areas. A clustering of dwellings is encouraged. In areas where town houses are used there shall be no more than five town house units in any contiguous group. A variety of building setbacks, color, and building materials for contiguous town house units is encouraged.

Section 605 Diversification of Lot Sizes.

A diversification of lot sizes may be permitted within a district without additional dedication or creation of open space, provided the overall density of the project area is not increased and provided further the net residential area per family is not reduced below the minimum requirements of Section 602.

Section 606 Reduction of Planned Unit Development Area.

The minimum tract size to be developed under the planned unit development may be reduced 50 percent where the proposed development is to contain only residential, commercial, or industrial developments, not a mixture of uses.

Section 607 Height Requirements.

For each foot of building height over the maximum height regulations specified in the Official Schedule of District Regulations, Section 410, the distance between such building and the side and rear property lines of the planned unit development project area shall be increased by one foot in addition to the side and rear yard required in the district, provided that this additional setback shall not be considered part of the side and rear yards.

Section 608 Commercial Planned Unit Development Requirements.

Planned unit development of related commercial establishments is encouraged by varying the setback and area requirements. Open space gained through the varying of setback and area requirements is to be used for the development of open plazas, pedestrian malls, tot lots, and other public spaces and uses with adequate arrangement, design and planting.

Section 609 Commercial Projects, Side Yards and Rear Yards.

Side yards of thirty (30) feet and a rear yard of forty (40) feet shall be required if the project is to be located adjacent to any residential district or planned residential unit development.

Section 610 Arrangement of Commercial Uses.

The location and arrangement of structures, parking, access drives, outdoor lighting, signs and other uses and developments in the planned commercial unit development shall be compatible with the existing and future land use plan. Off-street parking, loading, and service areas shall be provided in accordance with Sections 510 to 519, inclusive. However, off-street parking and loading areas shall not be permitted within fifteen (15) feet of a residential district. All areas designated for future expansion or not intended for immediate improvement or development shall be landscaped or otherwise maintained in a neat and orderly manner.

Section 611 Industrial Planned Unit Development Requirements.

Planned unit development of industrial establishments is encouraged by varying the setback and other requirements, if it can be shown that the development results in a more efficient and desirable use of space.

Section 612 Industrial Project.

Project side yards of forty (40) feet and a rear yard of fifty (50) feet shall be required if the project is located adjacent to any residential district or planned residential unit development.

Section 613 Arrangement of Industrial Uses.

The location and arrangement of structures, parking, access drives, outdoor lighting, signs, storage areas, and other uses and developments in the planned industrial unit development shall be compatible with the existing and future land use plan. Off-street parking, loading, and service areas shall be provided in accordance with Sections 510 to 519, inclusive.



#### Section 614 Procedure to Secure Approval of Planned Unit Development.

The procedure in Sections 615 to 621, inclusive, shall be met before approval to develop land under the planned unit development is granted by the Zoning Commission and the Board of Zoning Appeals.

#### Section 615 Preliminary Development Plan.

Three copies of a preliminary development plan shall be submitted to the Zoning Commission for an approval in principle of the land uses proposed and their interrelationship. Approval in principle shall not be construed to endorse precise location of uses, configuration of parcels or engineering feasibility. Any preliminary development plan and text shall be prepared and endorsed by a qualified urban planner and shall include the following information presented in a general, schematic fashion:

1. Proposed location and size of the planned development;
2. Proposed land uses, population densities and building intensities;
3. Proposed parks, playgrounds, school sites and other open spaces;
4. Relation to existing and future land use in surrounding area;
5. Proposed provision of water, sanitary sewers, and surface drainage;
6. Proposed traffic circulation pattern indicating both public and private streets and access points to public rights-of-way;
7. A market analysis of proposed commercial uses, if the property is not zoned for commercial purposes at the time of submittal of the preliminary development plan;
8. Proposed schedule of site development; and
9. Evidence that the applicant has sufficient control over the land to carry out the proposed development plan within five years.

#### Section 616 Preliminary Development Plan Review.

The Zoning Commission shall review the preliminary development plan to determine if it is consistent with the intent and purpose of this Resolution; whether the proposed development advances the general welfare of the community and neighborhood; and whether the benefits, combination of various land uses and the interrelationship with the land uses in the surrounding area justify the deviation from standard district regulations. The Zoning Commission's approval in principle of the preliminary development plan shall be necessary before an applicant may submit a detailed development plan.

#### Section 617 Detailed Development Plan.

The detailed development plan shall be submitted in five copies and shall contain the following documents and supporting evidence, prepared and endorsed by a qualified professional team and which shall include an urban planner, licensed architect, registered land surveyor, registered civil engineer and registered landscape architect:

1. A survey of the proposed development site, showing the dimensions and bearings of the property lines, area in acres, topography, existing features of the development site, including specimen trees, structures, streets, easements, utility lines and land use;

2. A detailed development plan, which shall be in conformance with the approved preliminary plan, showing, as appropriate, all the information required on the preliminary development plan; the approximate location and size of lots; the approximate location and proposed density of dwelling units; nonresidential building intensity; and land use considered suitable for adjacent properties;
3. A schedule for the development of units to be constructed in progression and a description of the design principles for buildings and streetscapes; tabulation of the number of acres in the proposed project for various uses, the number of housing units proposed by type; estimated residential population by type of housing; estimated nonresidential population; proposed retail sales area and economic justification; anticipated timing for each unit; and standards for height, open space, building intensity, parking areas, population density and public improvements proposed for each unit of development whenever the applicant proposes an exception from standard zoning district or other regulations governing development;
4. Engineering feasibility studies and plans showing, as necessary, water, sewer and other utility installations; waste disposal facilities; surface drainage; street improvements; and nature and extent of earth work required for site preparation and development;
5. Site plan, showing building(s), various functional use areas, circulation and their relationship;
6. Preliminary building plans, including floor plans and exterior elevations;
7. Landscaping plans; and
8. Deed restrictions, protective covenants, and other legal statements or devices to be used to control the use, development and maintenance of the land, the improvements thereon, including those areas which are to be commonly owned and maintained.

#### Section 618 Basis of Approval.

The Zoning Commission may recommend that the Board of Zoning Appeals after a public hearing, approve the detailed development plan, provided the Zoning Commission finds that the facts submitted with the application and presented, at the hearings establish that:

1. The proposed development can be completed within five (5) years of the date of approval;
2. Each individual unit of development, as well as the total development, can exist as an independent unit capable of creating an environment of sustained desirability and stability, or that adequate assurance will be provided that such objective will be

- attained; the uses proposed will not be detrimental to present and potential surrounding uses, but will have a beneficial effect which could not be achieved under standard district regulations;
3. The streets and thoroughfares proposed are suitable and adequate to carry anticipated traffic, and increased densities will not generate traffic in such amounts as to overload the street network outside the planned development;
  4. Any proposed commercial development can be justified economically at the locations proposed to provide for adequate commercial facilities of the types proposed;
  5. Any exception from standard district requirements is warranted by the design and amenities incorporated in the detailed development plans, in accord with the planned unit development and the adopted policy of the Zoning-Commission and the Board of Township Trustees;
  6. The area surrounding said development can be planned and zoned in coordination and substantial compatibility with the proposed development;
  7. The planned unit development is in general conformance with the comprehensive plan of the Township; and
  8. The existing and proposed utility services are adequate for the population densities and non-residential uses proposed.

Section 619 Action of the Zoning Commission and Board of Zoning Appeals.

The Zoning Commission shall deny the detailed development plan if from the facts presented the Zoning Commission is unable to make the necessary findings. The Zoning Commission shall certify to the Board of Zoning Appeals the approval, approval with specific amendments or disapproval of the detailed development plan within 30 days of the date of submission of said plan. If the Board of Zoning Appeals finds that the proposed planned unit development is consistent with the intent and purpose of this Resolution after a public hearing, it may authorize the zoning inspector to issue a zoning certificate permitting the planned unit development.

Section 620 Approval Period.

The zoning certificate for a Planned Unit Development shall be for a period of five years to allow the preparation and recording of the required subdivision plat and the development of the project. If no development has occurred to effectuate the plan within five years after approval is granted, the approval shall be voided and the land shall revert to the district regulations in which it is located. An extension of the time limit or modification of the approved development plan may be approved if the Zoning Commission and the Board of Zoning Appeals find that such extension or modification is not in conflict with the public interest. Partial completion/development of the PUD shall result in the remaining undeveloped land reverting to the district regulations in which it is located.

Section 621 Other Requirements.

Underground utilities, including telephone and electric systems, are required within the limits of all planned unit developments. Appurtenances to these systems which can be effectively screened may be exempt from this requirement if the Zoning Commission finds that such exemption will not violate the intent or character of the proposed planned unit development.

ARTICLE VII  
MOBILE HOMES AND MOBILE HOME PARKS

Section 700 Location of **Manufactured or Mobile Homes.**

Individual **Manufactured or Mobile Homes** are permitted only in **Manufactured or Mobile Home Parks and mobile home communities as permitted by the Official Schedule of District Regulations.**

Section 700-a Additional Requirements Applicable to **Manufactured or Mobile Homes.**

1. Two or more contiguous lots may be considered as one lot for the purposes of this resolution;
2. Provisions for sewage disposal must be made before a permit can be issued;
3. Setbacks shall be those already established for the area by precedent; a minimum setback from the street right-of-way line of 15 feet for 40 x 80 foot lots on allotments platted previous to June 8, 1972. Rear lot line setbacks shall not be less than 15 feet for those lots. Side yard setbacks shall be in accord with the requirements set down in the Schedule of District Regulations incorporated into Section 412. Skirting must be installed within 90 days after the mobile is set on the lot; (Ref. Section 706-13)
4. Structure must have a minimum Of 3:12 roof pitch, conventional siding and a minimum 6 inch eave overhang, including appropriate rain gutters.
5. Each **Manufactured or Mobile Home Site** shall be developed with a **manufactured or mobile home stand** and which may, at the option of the owner, be any of the following:
  - a. Standard footer and foundation – footer depth to 32 inches or more from completed grade line.
  - b. A poured concrete pad consistent with the size of the mobile home. The dimension of which shall not be less than the perimeter of the mobile home and not less than 5 inches thick, over a suitable coarse gravel underlayment of not less than 6 inches of gravel. The concrete shall be above the grade of the surrounding area to permit drainage of the pad.
6. Each mobile home stand shall be provided with at least four (4) tie-downs points to secure the mobile home to the stand.
7. All ~~modular or factory built~~ **Manufactured or Mobile** homes must have a solid foundation consisting of footer or poured masonry walls built to Logan County building requirements.



Section 701 Location of **Manufactured or** Mobile Home Parks.

A **manufactured or** mobile home park is a conditional use in the U-I and R-2 Districts.

**Manufactured or** Mobile home parks may be introduced **conditionally permitted** in any district under planned unit development, provided a planned unit development in that district permits residential uses.

Section 703 Density.

The maximum density shall not exceed six (6) **manufactured or** mobile homes per gross acre, **and the minimum lot size shall not be less than 4,000 square feet.**

Section 704 Park Width and Depth.

The park shall have a minimum frontage of two hundred and fifty (250) feet. The ratio of width to depth shall not exceed one to five (1:5).

Section 705 Park Side and Rear Yards.

A side yard on each side of the park and a rear yard of thirty (30) feet or more shall be provided around the edge of the **manufactured or** mobile home park. Such yards shall not be occupied by or counted as part of an individual **manufactured or** mobile home site.

Section 706 Park Improvements.

The location and size of **manufactured or** mobile home sites and structures within the **manufactured or** mobile home park shall be in accordance with the following provisions:

- ~~8.~~ 1. Each **manufactured or** mobile home site shall have a clearly defined minimum area of four thousand (4,000) square feet, with a minimum lot width of forty (40) feet, and a minimum depth of one hundred (100) feet. The minimum width of corner lots, however, shall be fifty (50) feet;
  - a) Each **manufactured or** mobile home placed within the mobile home park or in any district on a single lot shall have a minimum of one thousand (1000) square feet of floor space.
- ~~9.~~ 2. There shall be a minimum clearance of twenty (20) feet between the individual **manufactured or** mobile homes or trailers;
- ~~10.~~ 3. All **manufactured or** mobile home parks shall meet the County street requirements and specifications currently in effect;
- ~~11.~~ 4. Walkways not less than three feet wide, which may abut street pavement, shall be provided from the **manufactured or** mobile home sites to the service buildings. Such walkways shall be constructed of concrete having a minimum thickness of four (4) inches and lighted at night by not less than three-tenths (3/10) foot candle of artificial light;
- ~~12.~~ 5. Each **manufactured or** mobile home site shall be developed with a **manufactured or** mobile home stand of not less than ten (10) feet by fifty (50) feet and such **manufactured or** mobile home

- stand shall be not less than ten (10) feet from the **manufactured or** mobile home site boundary. The **manufactured or** mobile home stand shall be constructed of a minimum of six (6) inches of concrete and provide two tie-down rings;
- ~~13.~~ 6. Each **manufactured or** mobile home site shall be provided with a water outlet connected to an approved water supply and a connection to an approved sewer system;
  - ~~14.~~ 7. Electricity, electrical outlets, and wiring shall be according to the current provisions of the National Electric Code published by the National Fire Protection Association;
  - ~~15.~~ 8. The park shall provide service buildings, complying with all applicable building regulations, to house laundry facilities and supplemental toilet facilities.
  - ~~16.~~ 9. The park shall be located on a well drained site, properly graded to insure rapid drainage and freedom from stagnant pools of water;
  - ~~17.~~ 10. A safe, usable recreation area shall be conveniently located in each **manufactured or** mobile home park, the size of which shall be determined at one thousand (1000) square feet per household or **manufactured or** mobile home;
  - ~~18.~~ 11. No **manufactured or** mobile home site shall be located closer to any street right-of-way line than thirty (30) feet measured horizontally from the right-of-way line to the lot line of the **manufactured or** mobile home site.
  - ~~19.~~ 12. All telephone, electrical and other distribution lines shall be installed in underground conduits. No overhead lines shall be permitted. All underground utilities, sanitary sewers and drainage structures installed in streets or access roads shall be constructed prior to the surfacing of such roads;
  - ~~20.~~ 13. Each **manufactured or** mobile home in any district or trailers within a mobile home park shall be skirted, entirely enclosing the bottom section with a permanent type material, using materials generally accepted in such situations and acceptable to the zoning inspector within ninety (90) days after its placement;
  - ~~21.~~ ~~The maximum height of mobile homes and accessory buildings shall not exceed twenty (20) feet;~~
  - ~~22.~~ ~~If a central television antenna system is not provided, individual antennas shall not exceed six (6) feet above the roof line of the mobile home;~~
  - ~~23.~~ 14. The storage and collection of garbage and refuse within each **manufactured or** mobile home park shall be conducted so as to create no health hazards, rodent harborage, insect breeding areas, fire hazards, or air pollution. All garbage shall be stored in fly-tight, rodent-proof containers and shall be collected at least once weekly.

24. 15. A permanent masonry, concrete, or a footing or foundation approved by the manufacturing homes commission pursuant to ORC 4781. poured concrete pad consistent with the size of the mobile home. The dimension of which shall not be less than the perimeter of the mobile home and not less than 5 inches thick, over a suitable coarse gravel underlayment of not less than 6 inches of gravel. The concrete shall be above the grade of the surrounding area to permit drainage of the pad

Section 707 Hardship Temporary Manufactured or Mobile Homes.

In the case that a mobile home is replaced with a newer mobile or manufactured home which places it in non-compliance to the Official Schedule of District Regulations or the Township Zoning Resolution, the Zoning Inspector may upon discretion issue a zoning permit to said owner. In addition, In the case of building or remodeling sites or an undue hardship such as illness that requires care or fire of home, an owner/parcel may temporarily (up to 6 months) reside/hold a manufactured or mobile home on said parcel upon issuance of a conditional use permit from the Board of Zoning Appeals.

Article VIII  
SIGNS AND ADVERTISING

Section 800 Sign Defined and Regulated.

Any device or display designated to inform or attract the attention of persons not on the premises on which the sign is located. No sign or advertising structure of any classification shall be permitted in any district except as provided in Sections 801 to 838, inclusive.

Section 801 Outdoor Advertising Structures Defined.

Any outdoor display for the purpose of advertisement, notice or announcement located apart from the premises or product referred to in the display.

Section 802 Measurement of Area.

The surface area of a sign shall be computed as including the entire area within a regular geometric form or combinations of regular, geometric forms comprising all of the display area of the sign and including all of the elements of the matter displayed. Frames and structural members not being advertising matter shall not be included in computation of surface area.

Section 803 General Provisions.

Permits for all signs and outdoor advertising structures shall be granted by the zoning inspector in accordance with the requirements set forth in Sections 804 to 838, inclusive, except that no permit shall be required for any sign containing less than six ( 6 ) square feet of advertising area or advertising the sale, rent or lease of the premises on which the sign is located.

Section 804 Location and Area of Advertising Signs.

Signs not exceeding twelve (12) square feet in area and advertising the sale, rental or lease of the premises on which the sign is located shall be permitted on any property, except that the maximum size of such a sign in any residential district shall not exceed six ( 6 ) square feet.

Section 805 Area of Announcement and Professional Signs.

Announcement or professional signs for home occupations and professional activities where permitted shall not exceed four (4) square feet in area in the residential district and not more than six ( 6 ) square feet in other districts.

Section 806 Signs for Public or Quasi public Purposes.

Bulletin boards and signs for a church, school, community, or other public or quasi-public institutional building shall be permitted, provided the area of such bulletin board or sign shall not exceed fifteen (15) square feet.

Section 807 Wall Signs.

Wall signs pertaining to a nonconforming use shall be permitted on the same premises of such use, provided the area of such sign does not exceed fifteen (15) square feet.

Section 808 Use of Building Walls for Signs.

No building wall shall be used for display of advertising except that pertaining to the use carried on within such building.

#### Section 809 Temporary Signs.

Temporary signs not exceeding in the aggregate fifty (50) square feet announcing special public or institutional events or the erection of a building, the architect, the builders, contractors, etc., may be erected for a period of sixty (60) days plus the construction period.

#### Section 810 Signs and Public Right-of-Way.

No sign shall be placed in any public right-of-way except publicly-owned signs, such as traffic control signs and directional signs. Signs directing and guiding traffic and parking on private property but bearing no advertising matter shall be permitted on any property.

#### Section 811 Government Flags and Insignia.

Flags and insignia of any government except when displayed in connection with commercial promotion shall be permitted on any property.

#### Section 812 Signs Required by Governmental Bodies.

Legal notices, identification, informational or directional signs erected or required by governmental bodies shall be permitted on any property.

#### Section 813 Electrically Illuminated Signs.

All wiring, fittings and materials used in the construction, connection and operation of electrically illuminated signs shall be in accordance with the provisions of the National Electric Code and applicable local electric codes in effect.

#### Section 814 Marking of Signs.

All signs hereafter installed or erected shall be plainly marked with the name of the person, firm, or corporation installing or erecting such sign.

#### Section 815 Attachment of Signs.

No sign of any classification shall be installed, erected, or attached in any form, shape, or manner to a fire escape or any door or window giving access to any fire escape.

#### Section 816 Inspection of Electrical Signs.

No electrical sign of any description shall hereafter be erected without having first been inspected on the ground and approved by the Zoning Inspector or his authorized agent. It shall be the duty of the erector of such sign to notify the zoning inspector when such sign is ready for aforesaid ground inspection.

#### Section 817 Maintenance of Signs.

Should any sign be or become insecure or in danger of falling or otherwise unsafe, the owner thereof or the person maintaining the same shall, upon receipt of written notice from the Zoning Inspector, proceed at once to put such sign in a safe and secure condition or remove the sign.

#### Section 818 Signs Installed in Violation of Requirements.

In case any sign shall be installed, erected, constructed, or maintained in violation of any of the terms of this Resolution the Zoning Inspector shall notify in writing the owner or lessee thereof to alter such sign so as to comply with this Resolution.



#### Section 819 Signs in Commercial and Industrial Districts.

Except as provided in the following sentence in a commercial or industrial district, each business shall be permitted one flat or wall sign. In the case of an area within an M-2 Heavy Manufacturing District, each business shall be permitted two flat or wall signs. Projection of wall signs shall not exceed two (2) feet as measured from the face of the main building.

#### Section 820 Area of Permanent Advertising Signs.

The area of all permanent advertising signs for any single business enterprise shall be limited according to the width of the building or part of building occupied by such enterprise. For the purposes of this section, width shall be measured along the building face nearest and parallel to the street line. In the case of a corner lot, either frontage may be used in determining maximum area of the sign.

#### Section 821 Free Standing Signs.

Except as provided in the following sentence, free-standing signs not over thirty (30) feet in height, having a maximum total sign area of one hundred (100) square feet per display area and located not closer than ten (10) feet to any street right-of-way line and not closer than thirty (30) feet to any adjoining lot line, may be erected to serve a group of business establishments, and there shall be only one free-standing sign for each building, regardless of the number of businesses conducted in said building. In the case of an area within an M-2 Heavy Manufacturing District, there shall be permitted two (2) free-standing signs not over five (5) feet in height nor twenty (20) feet in length, each having a maximum total sign area of one hundred (100) square feet per display area and located not closer than ten (10) feet to any street right-of-way line and not closer than thirty (30) feet to any adjoining lot line. The setback requirement contained herein for signs in the M-2 Heavy Manufacturing District shall apply in lieu of any other setback requirements for signs contained in this Resolution.

#### Section 822 Attachments to Wall Signs.

Every wall sign projecting out from the face of the building shall be securely attached to the building wall structure, or suitable metal posts located within the lot lines by iron or metal anchors, bolts, supports, chains, stranded cables or steel rods. No such sign shall project into the street right-of-way or be supported from a street, road or sidewalk.

#### Section 823 Pole Signs.

Pole signs of symbolical design shall be permitted for business establishments, provided no part of such sign shall project into the right-of-way of any street or highway; the maximum area of any face of such sign shall not exceed thirty (30) square feet; and the pole support of the sign shall not be less than fifty (50) feet from any lot in any residential district.

#### Section 824 Area of Business Advertising Signs.

The area of all permanent advertising signs for any single business enterprise may have an area equivalent to one and one-half square feet of sign area for each lineal foot of width of a building, or part of a building occupied by such enterprise, but shall not exceed a maximum area of one hundred (100) square feet.

#### Section 825 Roof Signs.

No sign shall be placed on the roof of any building.

### Section 826 Political Signs.

No political sign shall be posted in any place or in any manner that is destructive of public property upon posting or removal. All candidates for public office, their campaign committees, or other persons responsible for the posting on public property of campaign material shall remove such material within two (2) weeks following Election Day.

### Section 827 Sign Setback Requirements.

Except as provided in this Resolution signs and outdoor advertising structures where permitted shall be set back from the established right-of-way line of any street or highway at least as far as the required front yard depth for a principal use in such district except for the modifications in Sections 828 to 831, inclusive.

### Section 828 Increased Setbacks.

For every square foot by which such sign or outdoor advertising structure exceeds fifty (50) square feet, the setback shall be increased by one-half (1.5) foot but need not exceed one hundred (100) feet.

### Section 829 Setbacks at the Intersection of Highways.

At the intersection of any state, federal or major local highway with a major or collector street, the setback of any sign or outdoor advertising structure shall not be less than fifty (50) feet from the established right-of-way of each highway or street.

### Section 830 Setbacks for Public and Quasi-public Signs.

Real estate signs and bulletin boards for a church, school or any other public or quasi-public, religious or educational institution may be erected not less than ten (10) feet from the established right-of-way line of any street or highway provided such sign or bulletin board does not obstruct traffic visibility at street or highway intersections.

### Section 831 Special Yard Provisions.

Signs and advertising structures where permitted shall be erected or placed in conformity with the side and rear yard requirements of the district in which located except no sign or advertising structure shall be erected or placed closer than within fifty (50) feet to a side or rear lot line in any residential district.

### Section 832 Illumination.

All signs and advertising structures except as hereinafter modified may be illuminated internally or by reflected light provided the source of light is not directly visible and is so arranged as to reflect away from the adjoining premises and provided that such illumination shall not be so placed as to cause confusion or a hazard to traffic or conflict with traffic control signs or lights.

### Section 833 Subdivision Signs.

Upon application to the zoning inspector, a permit may be issued as a conditional use in accordance with this Resolution allowing a land-sales sign, provided that the sign shall not be illuminated; the sign shall advertise the sale or development of a recorded lot subdivision; the sign shall be erected only upon the property for sale or being developed and shall be set back from the street right-of-way at least one (1) foot for each square foot of sign area; the sign shall not be in excess of thirty (30) square feet; not more than one such sign shall be placed along single road frontage of any property in single and separate ownership, provided that not more than two (2) such signs may be permitted in

any single development; and a permit for the erection, construction or maintenance of said sign shall expire within one (1) year.

Section 834 Sign Permits Required.

A separate permit shall be required for the erection of signs regulated in this Resolution, except that no permit shall be required for temporary real estate signs with an area of twelve (12) square feet or less, for the sale or lease of property and for small announcement signs with an area of less than four (4) square feet. Announcement signs shall be removed by the person or persons responsible for posting same within thirty (30) days after erection.

Section 835 Drawings and Specifications.

Clear drawings and specifications shall be made of the proposed sign indicating the location, nature, and quality of material, full dimensions in figures, supports, manner of erecting, manner of fastening the sign to the structure, number and the weight of the sign. Such plans to be made on blank forms furnished by the Zoning Inspector, signed by the owner or tenant of property for which sign is to be used and by the erecting contractor.

Section 836 Signs Interfering With Traffic Control or Movement Prohibited.

No person shall place, maintain or display upon or in view of any highway any unauthorized sign, signal, marking or device which purports to be or is an imitation of or resembles a traffic control device or railroad sign or signal, or which attempts to direct the movement of traffic; or which hides from view or interferes with the effectiveness of any traffic control device or any railroad sign or signal; and no person shall place or maintain, nor shall any public authority permit upon any highway, any traffic sign or signal bearing thereon any commercial advertising. This section does not prohibit the erection upon private property adjacent to highways of signs giving useful directional information of a type that cannot be mistaken for traffic control devices. Every such prohibited sign, signal, marking, or device is a public nuisance, and the authority having jurisdiction over the highway may remove the same or cause it to be removed.

Section 837 Exemptions.

Public notices by governmental bodies, traffic control signs and other official signs and notices are exempt from the provisions of this Resolution.

Section 838 Off-Premise Signs (Billboards).

A distance of one thousand (1000) feet is to be maintained between commercial free-standing off-premise signs (billboards).

## ARTICLE IX NON-CONFORMING USES

### Section 900 Intent.

Within the districts established by this Resolution or amendments that may later be adopted, there exists lots, uses of land, structures and uses of structures and land in combination which were lawful before this Resolution was passed or amended, but which would be prohibited, regulated or restricted under the terms of this Resolution or future amendments. It is the intent of this Resolution to permit these non-conformities to continue until they are removed, but not to encourage their survival. It is further the intent of this Resolution that non-conformities shall not be enlarged upon, expanded or extended, nor be used as grounds for adding other structures or uses prohibited elsewhere in the same district.

### Section 901 Incompatibility of Non-Conforming Uses.

Non-conforming uses are declared by this Resolution to be incompatible with permitted uses in the districts involved. A non-conforming use of a structure, land, or a structure and land in combination shall not be extended or enlarged after passage of this Resolution. In addition, the attachment on a building or premises of additional signs intended to be seen from off the premises, or the addition of other uses, of a nature which would be prohibited generally in the district are prohibited.

### Section 902 Avoidance of Undue Hardship.

To avoid undue hardship, nothing in this Resolution shall be deemed to require a change in the plans, construction or designated use of any building on which actual construction was lawfully begun prior to the effective date of adoption or amendment of this Resolution, and upon which actual building construction has been carried on diligently. "Actual construction" is hereby defined to include the placing of construction materials in permanent position and fastened in a permanent manner. Where excavation, demolition or removal of an existing building has substantially begun preparatory to rebuilding, such excavation or demolition or removal shall be deemed to be actual construction, provided that work shall be carried on diligently. Where a building is removed or destroyed, all debris shall be removed in accordance with Section 570 of this Zoning Resolution.

### Section 903 Non-Conforming Lots of Record.

At the time of adoption or amendment of this Resolution there may exist lots of record that do not conform to the requirements for lot width and or lot area established by this Resolution or amendment. Nothing in this Resolution shall prevent the construction of dwellings, buildings, structures, or accessory uses or structures on these non-conforming lots of record provided the following:

1. The proposed dwellings, buildings, structures, or accessory uses are permitted within the district established by this Resolution.
2. Such lot shall be in separate ownership and not of continuous frontage with other lots in the same ownership.
3. The construction of dwellings, buildings, structures, or accessory uses shall meet all requirements established by this Resolution other than for lot area and lot width.
4. Variance from all other requirements shall be obtained only through action of the Board of Zoning Appeals.

#### Section 904 Non-Conforming Lots of Record in Combination.

If two or more lots or combinations of lots and portions of lots with continuous frontage in single ownership are of record at the time of passage or amendment of this Resolution and if all or part of the lots do not meet the requirements established for lot width and area, the lands involved shall be considered to be an undivided parcel for the purposes of this Resolution and no portion of said parcel shall be used or sold in a manner which diminishes compliance with lot width and area requirements established by this Resolution, nor shall any division of any parcel be made which creates a lot with width or area below the requirements stated in this Resolution.

#### Section 905 Non-Conforming Uses Of Land.

Where at the time of adoption or amendment of this Resolution lawful use of land exists, which would not be permitted by the regulations imposed by this Resolution, the use may be continued so long as it remains otherwise lawful, provided the following:

1. No such non-conforming use shall be enlarged or increased, nor extended to occupy a greater area of land than was occupied at the effective date of adoption or amendment of this Resolution;
2. No such non-conforming use shall be moved in whole or in part to any portion of the lot or parcel other than that occupied by such use at the effective date of adoption or amendment of this Resolution;
3. If any such non-conforming use of land has been willfully abandoned for any reason for a period of more than 24 months (except when government action impedes access to the premises), any subsequent use of such land shall conform to the regulations specified by this Resolution for the district in which such land is located; and,
4. No additional structure not conforming to the requirements of this Resolution shall be erected in connection with such non-conforming use of land.

#### Section 906 Non-Conforming Structures.

Where a lawful structure exists at the effective date of adoption or amendment of this Resolution that could not be built under the terms of this Resolution by reason of restrictions on area, lot coverage, height, yards, its location on the lot, bulk, or other requirements concerning the structure, such structure may be continued so long as it remains otherwise lawful, subject to the following provisions:

1. No such non-conforming structure may be enlarged or altered in a way which increases its non-conformity, but any structure or portion thereof may be altered to decrease its non-conformity;
2. Any non-conforming structure which is removed, partially removed, damaged, destroyed, or partially destroyed by any means by more than 60 percent of its then fair market value shall eliminate the non-conforming use of structure or structure and land in combination, and shall not be repaired or reconstructed except in conformity with this Resolution. All remaining debris shall be cleared away and disposed of properly within two months of the time of removal, partial removal,



damage, destruction, or partial destruction. If the structure is damaged 60 percent or less of the fair market value, the non-conforming structure may be restored on the same footprint, provided such restoration shall begin within six months from the time of removal, partial removal, damage, destruction, or partial destruction.

3. Should such structure be moved for any reason for any distance whatsoever, it shall thereafter conform to the regulations for the district in which it is located after it is moved.

#### Section 907 Non-Conforming Uses of Structures or of Structures and Premises in Combination.

If lawful use involving individual structures, or of a structure and land in combination, exists at the effective date of adoption or amendment of this Resolution that would not be allowed in the district under the terms of this Resolution or amendment, the lawful use may be continued so long as it remains otherwise lawful, subject to the following provisions:

1. No existing structure devoted to a use not permitted by this Resolution in the district in which it is located shall be enlarged, extended, constructed, reconstructed, moved, or structurally altered except in changing the use of the structure to a use permitted in the district in which it is located.
2. Any non-conforming use may be extended throughout any parts of a building which were manifestly arranged or designed for such use at the time of adoption or amendment of this Resolution but no such use shall be extended to occupy any land outside such building that was not used for such non-conforming use at the time of adoption or amendment of this resolution.
3. If no structural alterations are made, any non-conforming use of a structure, or structure and land in combination, may upon application to and approval by the Board of Zoning Appeals as a Conditional Use, be changed to another non-conforming use provided that, in addition to any other criteria, the Board of Zoning Appeals finds after consideration of the nature, predominate character, and intensity of the proposed use and the size, dimensional requirements, and other regulatory characteristics of the proposed use, that the proposed use is equally appropriate or more appropriate to the district than the existing non-conforming use and that the size, dimensional requirements, traffic generation, signage needs, parking requirements and other regulatory characteristics are not greater than the existing non-conforming use. The Board of Zoning Appeals may require appropriate conditions and safeguards in accordance with provisions of this Resolution.
4. Any structure, or structure and land in combination, in or on which a non-conforming use is superseded by a permitted use, shall thereafter conform to the regulations for the district and the non-conforming use may not thereafter be resumed.

5. When a non-conforming use of a structure, or structure and land in combination, is willfully discontinued or abandoned for 24 months (except when government action impedes access to the premises), the structure, or structure and land in combination, shall not thereafter be used except in conformity with the regulations of the district in which it is located.

Section 908 Repairs and Maintenance.

On any non-conforming structure or portion of a structure containing a non-conforming use, work may be done on ordinary repairs, or on repair or replacement of ~~non-bearing~~ walls, fixtures, wiring, or plumbing, provided that the following :

1. The cubic content of the structure existing when it became non-conforming shall not be increased through such repairs or maintenance.
2. Nothing in this Resolution shall be deemed to prevent the strengthening or restoring to a safe condition of any building or part thereof declared to be unsafe by any official charged with protecting the public safety, upon order of such official.

Section 909 Uses Under Conditional Use Provisions not Non-Conforming Uses.

Any use which is permitted as a conditional use in a district shall not be deemed a non-conforming use in such district, but shall without further action be considered a conforming use.

ARTICLE X  
ADMINISTRATION AND ENFORCEMENT

Section 1000 Office of Zoning Inspector Created.

A Zoning Inspector, designated by the Board of Township Trustees, shall administer and enforce this Resolution. He or she may be provided with the assistance of such other persons as the Board of Township Trustees may direct. If the Zoning Inspector shall find that any of the provisions of this Resolution are being violated, he shall notify in writing the person responsible for such violations, indicating the nature of the violation and ordering the action necessary to correct it. He or she shall order discontinuance of illegal use of land, buildings or structures; removal of illegal buildings or structures or of illegal additions, alterations or structural changes; discontinuance of any illegal work being done; or shall take any other action authorized by this Resolution to ensure compliance with or to prevent violation of its provisions.

Section 1001 Zoning Permits Required.

No building or other structure shall be erected, moved, added to or structurally altered without a permit therefore, issued by the Zoning Inspector. No Zoning permit shall be issued by the zoning inspector except in conformity with the provisions of this Resolution unless he receives a written order from the Board of Zoning Appeals in the form of an administrative review, conditional use, or variance as provided by this Resolution.

Section 1002 Application for Zoning Permit.

All applications for zoning permits shall be accompanied by plans ~~in triplicate and drawn to scale,~~ showing the actual dimensions and shape of the lot to be built upon; the exact sizes and locations on the lot of buildings already existing, if any; and the location and dimensions of the proposed building or alteration. The placement of survey pins are required of all zoning permits. The application shall include such other information as lawfully may be required by the Zoning Inspector, including existing or proposed building or alteration; existing or proposed uses of the building and land; the number of families, housekeeping units, or rental units the building is designed to accommodate; conditions existing on the lot; and such other matters as may be necessary to determine conformance with and provide for the enforcement of this Resolution. ~~One copy of the plans shall be returned to the applicant by the Zoning Inspector after he or she shall have marked such copy either as approved or disapproved and attested to same by his or her signature on such copy. The original and one copy of the plans, similarly marked,~~ shall be retained by the Zoning Inspector.

Section 1003 Zoning Certificates Required.

It shall be unlawful to use or occupy or permit the use or occupancy of any building or premises, or both, or part thereof hereafter created, erected, changed, converted, or wholly or partly altered or enlarged in its use or structure until a Zoning Certificate shall have been issued therefore by the Zoning Inspector stating that the proposed use of the building or land conforms to the requirements of this Resolution. If a building or premises is created, erected, changed, converted, or wholly or partly altered or enlarged in its use or structure without obtaining a zoning permit, the Zoning Inspector shall double the cost of the permit.

Section 1004 Zoning Certificates for a Non-Conforming Use Required.

No non-conforming structure or use shall be maintained, renewed, changed, or extended unless and until approved by the Board of Zoning Appeals and a zoning certificate shall thereupon have been issued by the zoning inspector. The zoning certificate shall state specifically wherein the non-conforming use differs from the provisions of this Resolution, provided that upon enactment or amendment of this Resolution, owners or occupants of non-conforming uses or structures shall have six (6) months to apply for zoning certificates. Failure to make such application within six months shall be presumptive evidence that the property was not in conforming use at the time of enactment or amendment of this Resolution.

Section 1005 Issuance of Zoning Certificates.

No permit for erection, alteration, moving or repair of any building shall be issued until an application has been made for a zoning certificate, and the certificate shall be issued in conformity with the provisions of this Resolution upon completion of the work.

Section 1006 Temporary Zoning Certificate.

A temporary zoning certificate may be issued by the Zoning Inspector for a period not exceeding six (6) months during alterations or partial occupancy of a building pending its completion, provided that such temporary zoning certificate may include such conditions and safeguards as will protect the safety of the occupants and the public.

Section 1007 Record of Zoning Certificates.

The Zoning Inspector shall maintain a record of all zoning certificates, and a copy shall be furnished upon request to any person. Appropriate fees as set forth in Section 1023 apply.

Section 1008 Failure to Obtain a Zoning Certificate.

Failure to obtain a zoning certificate shall be a violation of this Resolution and punishable under Section 1025 of this Resolution.

Section 1009 Expiration of Zoning Permit.

If the work described in any zoning permit has not begun within 180 days from the date of issuance thereof, said permit shall expire. It shall be cancelled by the Zoning Inspector and written notice thereof shall be given to the persons affected. If the work described in any building permit has not been substantially completed within one year of the date of issuance thereof, said permit shall expire and be cancelled by the zoning inspector, and written notice thereof shall be given to the persons affected together with notice that further work as described in the cancelled permit shall not proceed unless and until a new building permit has been obtained.

Partially constructed dwellings or other structures shall be deemed a hazard to the health, safety, and welfare of the community at-large and, therefore, shall be removed by order of the Zoning Inspector and at the expense of the property owner.

Section 1010 Construction and Use To Be as Provided in Applications, Plans, Permits and Zoning Certificates.

Zoning Permits issued on the basis of plans and applications approved by the Zoning Inspector authorize only the use, arrangement or construction as specified in the permit. Use, arrangement or construction at variance with that authorized

shall be deemed violation of this Resolution and punishable as provided by Section 1025 hereof.

Section 1011 Issuance of Zoning Permit for Projects Requiring Site Plan Review.

The zoning inspector shall not issue a zoning certificate for any application requiring site plan review by the Zoning Commission and/or the Board of Zoning Appeals, namely planned unit development (Article VI) and mobile home parks (Article VII), unless the site plan has been approved by the Zoning Commission and/or the Board of Zoning Appeals.

Section 1012 Board of Zoning Appeals Established.

A Board of Zoning Appeals is hereby established, which shall consist of five members to be appointed by the Board of Township Trustees each for a term of five years, except the initial appointments shall be one each for one, two, three, four and five year terms. Each member shall be a resident of the unincorporated area of Washington Township. Members of the Board of Zoning Appeals may be removed from office by the Board of Township Trustees for cause upon written charges and after public hearing. Vacancies shall be filled by resolution of the Board of Township Trustees for the unexpired term of the member affected.

Section 1013 Proceedings of the Board of Zoning Appeals.

The Board of Zoning Appeals shall adopt rules necessary to the conduct of its affairs and in keeping with the provisions of this Resolution. Meetings shall be held at the call of the chairman and at such other times as the Board of Zoning Appeals may determine. The chairman, or in his absence the acting chairman, may administer oaths and compel the attendance of witnesses. All meetings shall be open to the public. The Board of Zoning Appeals shall keep minutes of its proceedings, showing the vote of each member upon each question, or if absent or failing to vote indicating such fact, and shall keep records of its examinations and other official actions, all of which shall be a public record and be immediately filed in the Board of Zoning Appeals.

Section 1014 Hearings, Appeals, Notice.

Appeals to the Board of Zoning Appeals concerning interpretation or administration of this Resolution may be taken by any person aggrieved or by any officer or bureau of the governing body of the Township affected by any decision of the Zoning Inspector. Such appeals shall be taken within a reasonable time, not to exceed sixty (60) days or such lesser period as may be provided by the rules of the Board of Zoning Appeals, by filing with the Zoning Inspector and with the Board of Zoning Appeals a notice of appeal specifying the grounds thereof. The Zoning Inspector shall forthwith transmit to the Board of Zoning Appeals all papers constituting the record upon which the action appealed from was taken. The Board of Zoning Appeals shall fix a reasonable time for the hearing of appeal, give public notice thereof as well as due notice to the parties in interest, and decide the same within a reasonable time. At the hearing, any party may appear in person or by agent or attorney.

Section 1015 Stay of Proceedings.

An appeal stays all proceedings in furtherance of the action appealed from, unless the zoning inspector from whom the appeal is taken certifies to the Board of Zoning Appeals after the notice of appeal is filled with him or her that by reason of facts stated in the certificate, a stay would, in his opinion, cause imminent peril of life and property. In such case proceedings shall not be stayed other than by a restraining order which may be granted by the Board of Zoning Appeals, or by a court of record on application on notice to the Zoning Inspector from whom the appeal is taken and on due cause shown.



Section 1016 Powers and Duties of the Board of Zoning Appeals.

The Board of Zoning Appeals shall have the powers and duties set forth in Section 1017 to 1027, inclusive.

Section 1017 Administrative Review.

The Board of Zoning Appeals shall hear and decide appeals where it is alleged there is error in any order, requirement, decision, or determination made by the Zoning Inspector in the enforcement of this Resolution.

Section 1018 Conditional Uses.

The Board of Zoning Appeals shall hear and decide only such conditional uses as the Board of Zoning Appeals specifically authorized to pass on by the terms of this Resolution; decide such questions as are involved in determining whether conditional uses should be granted; and grant conditional uses with such conditions and safeguards as are appropriate under this Resolution, or deny conditional uses when not in harmony with the purpose and intent of this Resolution. A conditional use shall not be granted by the Board of Zoning Appeals unless and until:

1. A written application for a conditional use is submitted indicating the section of this Resolution under which the conditional use is sought and stating the grounds on which it is requested;
2. Notice shall be given at least ten (10) days in advance of public hearing. The owner of the property for which conditional use is sought or his agent shall be notified by certified mail. Notice of such hearings shall be posted on the property for which conditional use is sought, at the Township Hall and in one other public place at least ten (10) days prior to the public hearing;
3. The public hearing shall be held. Any party may appear in person, or by agent or attorney;
4. The Board of Zoning Appeals shall make a finding that it is empowered under the section of this Resolution described in the application to grant the conditional use and that the granting of the conditional use will not adversely affect the public interest;
5. Before any conditional use shall be issued, the Board of Zoning Appeals shall make written findings certifying compliance with the specific rules governing individual conditional uses and that satisfactory provisions and arrangement has been made concerning the following, where applicable:
  - a. Ingress and egress to property and proposed structures thereon with particular reference to automotive and pedestrian safety and convenience, traffic flow and control, and access in case of fire or catastrophe;
  - b. Off-street parking and loading areas where required, with particular attention to the items in ( a . ) above and the economic, noise, glare or odor effects of the

- conditional use on adjoining properties and properties generally in the district;
- c. Refuse and service areas, with particular reference to the items in ( a . ) and ( b . ) above;
- d. Utilities, with reference to locations, availability, and compatibility;
- e. Screening and buffering with reference to type, dimensions, and character;
- f. Signs, if any, and proposed exterior lighting with reference to glare, traffic safety, economic effect and compatibility and harmony with properties in the district;
- g. Required yards and other open space;
- h. General compatibility with adjacent properties and other property in the district.

#### Section 1019 Variances, Conditions Governing Applications and Procedures.

To authorize upon appeal in specific cases such variance from the terms of this Resolution as will not be contrary to the public interest where, owing to special conditions, a literal enforcement of the provisions of this Resolution would result in unnecessary hardship. No non-conforming use of neighboring lands, structures or buildings in the same district and no permitted or non-conforming use of lands, structures or buildings in other districts shall be considered grounds for the issuance of a variance. A variance from the terms of this Resolution shall not be granted by the Board of Zoning Appeals unless and until:

1. A written application for a variance is submitted demonstrating:
  - a. That special conditions and circumstances exist which are peculiar to the land, structure or building involved and which are not applicable to other lands, structures or buildings in the same district;
  - b. That literal interpretation of the provisions of this Resolution would deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of this Resolution;
  - c. That granting the variance requested will not confer on the applicant any special privilege that is denied by this Resolution to other lands, structures, or buildings in the same district.
2. Notice of public hearing shall be given as in Section 1018(2) of this Resolution;
3. The public hearing shall be held. Any party may appear in person, or by agent or attorney;
4. The Board of Zoning Appeals shall make findings that the requirements of Section 1019(1) have been met by the applicant for a variance;

5. The Board of Zoning Appeals shall further make a finding that the reasons set forth in the application justify the granting of the variance, and that the variance is the minimum variance that will make possible the reasonable use of the land, building, or structure;
6. The Board of Zoning Appeals shall further make a finding that the granting of the variance will be in harmony with the general purpose and intent of this Resolution and will not be injurious to the neighborhood, or otherwise detrimental to the public welfare.

Section 1020 Supplementary Conditions and Safeguards May Be Prescribed.

In granting any variance, the Board of Zoning Appeals may prescribe appropriate conditions and safeguards in conformity with this Resolution. Violation of such conditions and safeguards, when made a part of the terms under which the variance is granted, shall be deemed a violation of this Resolution and punishable under Section 1025 of this Resolution. Under no circumstances shall the Board of Zoning Appeals grant a variance to allow a use not permissible under the terms of this Resolution in the district involved, or any use expressly or by implication prohibited by the terms of this Resolution in said district.

Section 1021 Board has Powers of Zoning Inspector on Appeals Reversing Decision of Zoning Inspector. In exercising the powers in Section 1017 to 1020, inclusive, the Board of Zoning Appeals may, so long as such action is in conformity with the terms of this Resolution, reverse or affirm, wholly or partly, or may modify the order, requirement, decision, or determination appealed from and may make such order, requirement decision or determination as ought to be made, and to that end shall have the powers of the Zoning Inspector from whom the appeal is taken. The concurring vote of four members of the Board of Zoning Appeals shall be necessary to reverse any order, requirement, decision, or determination of the Zoning Inspector, or to decide in favor of the applicant on any matter upon which it is required to pass under this Resolution or to effect any variation in the application of this Resolution.

Section 1022 Duties of Zoning Inspector, Board of Zoning Appeals, Governing Body and Courts on Matters of Appeal. It is the intent of this Resolution that all questions of interpretation and enforcement shall be first presented to the zoning inspector, and that such questions shall be presented to the Board of Zoning Appeals only on appeal from the decision of the Zoning Inspector, and that recourse from the decisions of the Board of Zoning Appeals shall be to the courts as provided by law. It is further the intent of this Resolution that the duties of the Board of Township Trustees in connection with this Resolution shall not include hearing and deciding questions of interpretation and enforcement that may arise. The procedure for deciding such questions shall be as stated in this section and this Resolution. Under this Resolution the Board of Township Trustees shall have only the duties of considering and adopting or rejecting proposed amendments or the repeal of this Resolution as provided by law, and of establishing a schedule of fees and charges as stated in Section 1023 of this Resolution.

Section 1023 Schedule of Fees, Charges and Expenses.

The Board of Township Trustees shall establish a schedule of fees, charges, and expenses and a collection procedure for zoning permits, zoning certificates, appeals and other matters pertaining to this Resolution. The schedule of fees shall be posted in the office of the Zoning Inspector, and may be altered or amended only by the Board of Township Trustees. Until all applicable fees, charges and expenses have been paid in full no action shall be taken on any application or appeal.

Section 1024 Complaints Regarding Violations.

Whenever a violation of this Resolution occurs, or is alleged to have occurred, any person may file a written complaint. Such complaint stating fully the causes and basis thereof shall be filed with the Zoning Inspector. He shall record properly such complaint, immediately investigate and take action thereon as provided by this Resolution.

Section 1025 Penalties for Violation.

Violation of the provisions of this Resolution or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with grants of variances or conditional uses) shall constitute a misdemeanor. Any person who violates this Resolution or fails to comply with any of its requirements shall upon conviction thereof be fined not more than maximum penalty allowable for minor misdemeanor offenses under Ohio Revised Code, section 2929-28 (A) (b), and in addition shall pay all costs and expenses involved in the case. Such sum may be recovered in a court of jurisdiction in Logan County by the legal representative of the township, in the name of the township and for the use thereof. Each day such violation continues shall be considered a separate offense. The owner or tenant of any building, structure, premises, or part thereof, and any architect, builder, contractor, agent, or other person who commits, participates in, assists in or maintains such violation may each be found guilty of a separate offense and suffer the penalties herein provided. Nothing herein contained shall prevent the Board of Trustees from taking such other lawful action as is necessary to prevent or remedy any violations.

## ARTICLE XI AMENDMENTS

### Section 1100 General Requirements.

Whenever the public necessity, convenience, general welfare or good zoning practices require, the Board of Township Trustees may by Resolution and—after receipt of recommendation thereon from the Zoning Commission and subject to the procedures provided by law—amend, supplement, change or repeal the regulations, restrictions and boundaries or classification of property. It shall be the duty of the Zoning Commission to submit its recommendations regarding all applications or proposals for amendments to the Board of Township Trustees.

### Section 1101 Procedure for Change in Zoning Districts.

Applications for any change of district boundaries or classifications of property as shown on the Official Zoning Map shall be submitted to the Zoning Commission at its public office upon such forms, and shall be accompanied by such data and information as may be prescribed for that purpose by the Zoning Commission so as to assure the fullest practicable presentation of facts for the permanent record. Each proposal for a zone change shall be accompanied by a reproducible vicinity map at a scale approved by the Zoning Inspector showing the property lines and streets of existing and proposed zoning. Each such application shall be verified by at least one of the owners or lessees of property within the area proposed to be reclassified attesting to the truth and correctness of all facts and information presented with the applications. Applications for amendments initiated by the Zoning Commission shall be accompanied by its motion pertaining to such proposed amendment. The procedure for amendment of the Zoning Resolution shall follow the Ohio Revised Code, Chapter 519.

### Section 1102 Application Fees.

At the time that an application for a change of zoning districts is filed with the Zoning Commission, as provided herein, a fee shall be paid to the Zoning Inspector, who shall deliver same to the Township Clerk, for investigation, legal notices, and other expenses incidental to the determination of the zoning change. . Such sums so deposited shall be credited to the general fund of the Township. Refer to the Washington Township Zoning Permit Fee Schedule for these fees



## ARTICLE XII DEFINITIONS

### Interpretation of Terms or Words:

For the purpose of this Resolution, certain terms or words used herein shall be interpreted as follows:

1. The word "person" includes a firm, association, organization;
2. Partnership, trust, company or corporation, as well as an individual;
3. The present tense includes the future tense, the singular number includes the plural and the plural number includes the singular;
4. The word "shall" is a mandatory requirement, the word "may" is a permissive requirement and the word "should" is a preferred requirement;
5. The words "used" or "occupied" include the words "intended, designed or arranged to be used or occupied;" and
6. The word "lot" includes the words "plot" or "parcel."

Accessory Use or Structure. A use or structure on the same lot with and of a nature customarily incidental and subordinate to the principal use or structure.

Adult Entertainment Facilities. A facility having a significant portion of its function as adult entertainment which includes the following listed categories:

1. Adult Bookstore. An establishment having as a substantial or significant portion of its stock in trade, books, magazines, and other periodicals which are distinguished or characterized by their emphasis on matter depicting or relating to "specified sexual activities" or "specified anatomical areas" as herein defined or an establishment with a segment or section devoted to the sale or display of such material.
2. Adult Booth. Any area of a sexually oriented business establishment or tattoo parlor set off from the remainder of such establishment by one or more walls or other dividers or partitions and used to show, play, or otherwise demonstrate any adult materials or to view any live performance that is distinguished or characterized by an emphasis on the exposure, depiction, or description of "specified anatomical areas" or the conduct or simulation of "specified sexual activities."
3. Adult Material. Any of the following, whether new or used:
  - a. Books, magazines, periodicals, or other printed matter, or digitally stored materials that are distinguished or characterized by an emphasis on the exposure, depiction, or description of "specified anatomical areas" or the conduct or simulation of "specified sexual activities."

- b. Films, motion pictures, video or audio cassettes, slides, computer displays, or other visual representations or recordings of any kind that are distinguished or characterized by an emphasis on the exposure, depiction, or description of "specified anatomical areas" or the conduct or simulation of "specified sexual activities."
  - c. Instruments, novelties, devices, or paraphernalia that are designed for use in connection with "specified sexual activities" or that depict or describe "specified anatomical areas."
4. Adult Mini Motion Picture Theatre. A facility with a capacity for less than fifty (50) persons, used for presenting material distinguished or characterized by an emphasis on matter depicting, describing, or relating to "specified sexual activities" or "specified anatomical areas," for observation by patrons therein.
  5. Adult Motion Picture Theatre. A facility with a capacity of fifty (50) or more persons, used for presenting material distinguished or characterized by an emphasis on matter depicting, describing, or relating to "specified sexual activities" or "specified anatomical areas," for observation by patrons therein.
  6. Adult Entertainment Business. Any establishment involved in the sale or services or products characterized by the exposure or presentation of "specified anatomical areas" or physical contact of live males or females, and which is characterized by salacious conduct appealing to prurient interest for the observation or participation in by patrons. Services or products included within the scope of adult entertainment business are photography, dancing, reading, massage, and similar functions which utilize activities as specified above.

Agriculture. "Agriculture" as per Ohio Revised Code 519.01 shall include farming; ranching; aquaculture; apiculture; horticulture; viticulture; animal husbandry, including, but not limited to, the care and raising of livestock, equine, and furbearing animals; poultry husbandry and the production of poultry and poultry products; dairy production; the production of field crops, tobacco, fruits, vegetables, nursery stock, ornamental shrubs, ornamental trees, flowers, sod, or mushrooms; timber, pasturage; any combination of the foregoing; the processing, drying, storage, and marketing of agricultural products when those activities are conducted in conjunction with, but are secondary to, such husbandry or production.

Alley. See Thoroughfare

Alterations, Structural. Any change in the supporting members of a building such as bearing walls, columns, beams, or girders.

Animal Feed Lot. Means a paved animal feeding or holding area or other lot, pen, yard, or other feeding or holding area where grass or other suitable vegetative cover is not maintained.

Automotive Repair. The repair, rebuilding or reconditioning of motor vehicles or parts thereof, including collision services, painting, and steam cleaning of vehicles.

Basement. A story all or partly underground but having at least one-half of its height below the average level of the adjoining ground.

Building. Any structure designed or intended for the support, enclosure, shelter, or protection of persons, animals, chattels or property.

Building, Accessory. A subordinate building detached from but located on the same lot as the principal building, the use of which is incidental and accessory to that of the main building or use.

Business, Convenience-Type Retail. Retail businesses whose market area is the neighborhood or part of the community, which provides convenience-type goods and personal services for the daily needs of the people within the residential area. Uses include, but not limited to, drugstores, beauty salons, barber shops, carry-outs, dry cleaning and laundry facilities, supermarkets, etc.

Business, Drive-in. Any business, structure, or premise which is designed primarily to serve occupants of motor vehicles without the occupants having to leave the vehicle.

Business, Service. Any profit making activity which renders primarily service to the public or to other commercial or industrial enterprises. Some retail sales may be involved in connection with the services rendered.

Building, Height. The vertical distance measured from the average elevation of the proposed finished grade at the front of the building to the highest point of the roof for flat roofs, to the deck line of mansard roofs and the mean height between eaves and ridge for gable, hip, and gambrel roofs. Where a building is located on sloping terrain, the height may be measured from the average ground level of the grade at the building wall.

Building Line. See setback line.

Building, Principal. A building in which is conducted the main or principal use of the lot on which said building situated.

Building, Service. Any profit making activity which renders primarily services to the public or to other commercial or industrial enterprises. Some retail sales may be involved in connection with the service rendered.

Building, Shopping-Type Retail. A retail or service business which supplies a wide variety of comparison goods and services to consumers in a market area that includes the community or an area greater than a community. Examples of shopping-type businesses are furniture stores, automobile sales and service and clothing shops.

Channel. A natural or artificial watercourse of perceptible extent with bed and banks to confine and conduct continuously or periodically flowing water.

Clinic. A place used for the care, diagnosis and treatment of sick, ailing infirm or injured persons, and those who are in need of medical and surgical attention but who are: Not provided with board or room or kept overnight on the premises.

Club. A building or portion thereof or premises owned or operated by a person for a social, literary, political, educational, fraternal, or recreational purpose primarily for the exclusive use of members and their guests.

Comprehensive Development Plan. A plan, or any portion thereof, adopted by the Regional Planning Commission and the Board of County Commissioners showing the general location and extent of present and proposed physical facilities, including housing, industrial and commercial uses, major thoroughfares, parks, schools and other community facilities. This plan established the goals, objectives, and policies of the community.

Conditional Use. A use permitted within a district other than a principally permitted use, requiring a conditional use permit and approval of the Board of Zoning Appeals. Conditional uses permitted in each district are listed in the Official Schedule of District Regulations.

Conditional Use Permit. A permit issued by the Zoning Inspector upon approval by the Board of Zoning Appeals to allow a use other than a principally permitted use to be established within the district.

Corner, Lot. See Lot Types.

Cul-de-Sac. See Thoroughfare.

Dead-end Street. See Thoroughfare.

Density. A unit of measurement; the number of dwelling units per acre of land:

1. Gross Density - the number of dwelling units per acre of the total land to be developed.
2. Net Density - the number of dwelling units per acre of land when the acreage involved includes only the land devoted to residential uses.

Dwelling. Any building or structure, (except a house trailer or **manufactured mobile dwelling home** as defined hereafter) which is wholly or partly used or intended to be used for living or sleeping by one or more human occupants.

Dwelling, Mobile Home. A modular unit built on a chassis with body width exceeding eight (8) feet and body length exceeding thirty two (32) feet, designed to be used as a dwelling, with or without a permanent foundation, when connected to the required utilities.

~~Double wide or Triple wide. A mobile home consisting respectively of two or three sections combined horizontally at the site to form a single dwelling while still retaining their individual chassis for possible future movement.~~

~~Expandable Mobile Home. A mobile home with one or more room sections that fold, collapse or telescope into the principal unit when being transported and which can be expanded at the site to provide additional living area.~~

~~Dwelling, Modular Unit. A factory fabricated transportable building designed to be used by itself or to be incorporated with similar units at a building site into a modular structure. The term is intended to apply to major assemblies and does not include prefabricated panels, trusses, plumbing trees and other prefabricated sub-elements, which are to be incorporated into a structure at the site.~~

Dwelling, Manufactured or Mobile. Means a building unit or assembly of closed construction that is fabricated in an Off-site facility, is more than thirty-five body feet in length or, when erected on site, is three hundred twenty or more square feet, is built on a permanent chassis, is transportable in one or more sections, and does not qualify as a permanently sited manufactured houses as defined herein.

Dwelling, Multi-Family. A dwelling consisting of two or more dwelling units including condominiums with varying arrangements of entrances and party walls.

~~Dwelling, Sectional Unit. A dwelling made of two or more modular units transported to the home site, put on a foundation and joined to make a single dwelling.~~

~~Dwelling, Single Family. A dwelling consisting of single dwelling unit only and separated from other dwelling units by open space. A detached residential dwelling or housing unit, other than a mobile home, designed for and occupied by one family only, including public housing units and industrialized units. This type of dwelling consists of a single dwelling unit only, separated from other dwelling units by open space. This type of dwelling does not consist of manufactured housing, except it does consist of permanently sited manufactured housing as described below:~~

1. Dwelling, Permanently Sited Manufactured Housing.
  - a. A building unit or assembly of closed construction that is fabricated in an off-site facility and constructed in conformance with the federal construction and safety standards established by the secretary of housing and urban development pursuant to the "Manufactured Housing Construction and Safety Standards Act of 1974," 88 Stat. 700, 42 U.S.C.A. 5401, 5043, and that has a permanent label or tag affixed to it, as specified in 42 U.S.C.A. 5415, certifying compliance with all applicable federal construction and safety standards.
  - b. "Permanently sited manufactured home" means a manufactured home that meets all of the following criteria:
    - i. Has a permanent label or tab affixed to it, as specified in 42 U.S.C.A. 5415, certifying compliance with the federal construction and safety standards.
    - ii. The structure is affixed to a permanent foundation with wheels, axles, hitch, or all other appurtenances of mobility removed and is connected to appropriate facilities. "Permanent foundation" means a permanent masonry, concrete, or a footing or foundation approved by the



- manufactured homes commission pursuant to Chapter 4781. of the Revised Code, to which a manufactured or mobile home may be affixed.
- iii. The structure, excluding any addition, has a width of at least twenty-two feet at one point, a length of at least twenty-two feet at one point, and a total living area, excluding garages, porches, or attachments, that meets the zoning requirements in the Official Schedule of District Regulations.
  - iv. The structure has a minimum 3:12 residential roof pitch, conventional residential siding, and a six-inch minimum eave overhang, including appropriate guttering.
  - v. The structure was manufactured after January 1, 1995.
  - vi. The structure is not located in a manufactured home park as defined by section 4781.01 of the Revised Code.
  - vii. The structure complies with all zoning requirements that are uniformly imposed on all single-family residences within the district or zone in which the permanently sited manufactured home is or is to be located, except requirements that specify a minimum roof pitch and requirements that do not comply with the standards established pursuant to the "Manufactured Housing Construction and Safety Standards Act of 1974," 88 Stat. 700, 42 U.S.C.A. 5401.

Dwelling, Rooming House (Boarding House, Lodging House or Dormitory). A dwelling or part thereof, other than a hotel, motel or restaurant where meals and/or lodging are provided for compensation for three or more unrelated persons where no cooking or dining facilities are provided in the individual rooms.

Dwelling Unit. Space within a dwelling comprising living, dining, sleeping room or rooms, storage closets, as well as space and equipment for cooking, bathing and toilet facilities, all used by only one family and its household employees.

Easement. Authorization by a property owner of any designated part of his property by another for a specified purpose.

Essential Services. The erection, construction, alteration, or maintenance, by public utilities or municipal or other governmental agencies, of underground gas, electrical, water transmission, or distribution systems, collection, communication, supply or disposal systems or sites, including poles, wires, mains, drains, sewers, pipes, traffic signals, hydrants, or other similar equipment and accessories in connection therewith which are reasonably necessary for the furnishing of adequate service by such public utilities or municipal or other governmental agencies or for the public health or safety or general welfare, but not including buildings.

Fair Market Value. The "Fair Market Value" as used herein shall first be determined to be the current value of structures as carried by the Logan County Auditor. If such value is disputed by the owner of the structures or the Township, the Township may elect to hire a licensed third party appraiser to determine the value.

Family. One or more related persons occupying a single dwelling unit.

Flood Plain. That land including the flood fringe and the floodway subject to inundation by a regional flood.

Flood, Regional. Large floods which have previously occurred or which may be expected to occur on a particular stream because of like physical characteristics. The regional flood generally has an average frequency of the one hundred (100) year recurrence interval flood.

Floodway. That portion of the flood plain, including the channel, which is reasonably required to convey the regional flood waters. Floods of less frequent recurrence are usually contained completely within the floodway.

Floodway Fringe. That portion of the flood plain, excluding the floodway, where development may be allowed under certain restrictions.

Floor Area of a Residential Building. The sum of the gross horizontal area of the several floors of a residential building, excluding basement floor areas not devoted to residential use and attached garages, but including the area of roofed porches and roofed terraces. All dimensions shall be measured between interior faces of walls.

Floor Area of a Non-Residential Building for use in calculating parking requirements). The floor area of the specified use excluding stairs, washrooms, elevator shafts, maintenance shafts and rooms.

Floor Area, Usable. Measurement of usable floor area shall be the sum of the horizontal areas of the several floors of the building, measured from the interior faces of the exterior walls.

Food Processing. The preparation, storage or processing of food products. Examples of these activities include bakeries, dairies, canneries, meat processing plants and similar activities.

Forestry. The propagation and harvesting of forest trees.

~~Gasoline Service Station. Buildings and premises where gasoline, oil, grease, batteries, tires, and automobile accessories may be supplied and dispensed at retail.~~

Home Occupation. An occupation conducted in a dwelling unit, provided that: No more than one person other than members of the family residing on the premises shall be engaged in such occupation. The use of the dwelling unit for the home occupation shall be clearly incidental and subordinate to its use for residential purposes by its occupants, and not more than thirty-five (35) percent of floor area of the dwelling unit shall be used in the conduct of the home occupation. There shall be no change in the outside appearance of the building or premises, or other visible evidence of the conduct of such home occupation other than one sign, not exceeding four square feet in area, non-illuminated and mounted flat against the wall of the principal building. No traffic shall be generated by such occupation in greater volume than would normally be expected in such a residential area and any need for parking generated by the conduct of such home occupation shall meet the off-street parking requirements as specified in this Resolution.

Junk. Junk means old scrap copper, brass, rope, rags, trash, waste, batteries, paper, rubber, junked, dismantled, or wrecked automobiles or parts thereof; iron, steel and other old or scrap ferrous or non-ferrous materials.

Junk Yard. Junk Yard means an establishment or place of business which is maintained or operated for the purpose of storing, keeping, buying, or selling junk, or for the maintenance or operation of an automobile graveyard. It shall also include scrap metal processing facilities which are located within one thousand feet of the nearest edge of the right-of-way of a highway or street, and any site, location or premise on which are kept two or more junk motor vehicles defined in Section 311.301 of the Ohio Revised Code, whether or not for a commercial purpose.

Kennel. Any lot or premise on which dogs, cats or other household pets are boarded, bred or exchanged for monetary compensation.

Loading, Space Off-Street. Space logically and conveniently located for bulk pickups and deliveries, scaled to delivery vehicles expected to be used, and accessible to such vehicles when required off-street parking spaces are filled. Required off-street loading space is not to be included as off-street parking space in computation of required off-street parking space. All off-street loading spaces shall be located totally outside of any street or alley right-of-way.

Location Map. See Vicinity Map.

Lot. For the purposes of this Resolution a lot is a parcel of land of sufficient size to meet minimum zoning requirements for use, coverage and area for one principal building together with its accessory building and which provides such yards and other open spaces as are herein required. Such lot shall have frontage on an improved public street, or on an approved private street and may consist of:

1. A single lot of record;
2. A portion of a lot of record; and
3. A combination of complete lots of record, of complete lots of record and portions of lots of record, or of portions of lots of record.

Lot Coverage. The ratio of enclosed ground floor area of all buildings on a lot to the horizontally projected area of the lot, expressed as a percentage.

Lot Frontage. The front of a lot shall be construed to be the portion nearest the street. On waterfront parcels the water side is considered the front. For the purpose of determining yard requirements on corner lots and through lots, all sides of a lot adjacent to streets shall be considered frontage, and yards shall be provided as indicated under "Yards" in this section.

Lot, Minimum Area of. The area of a lot is computed exclusive of any portion of the right-of-way of any public or private street.

Lot Measurements. A lot shall be measured as follows: (3-1 Ratio)

1. Depth. The distance between the mid-points of straight lines connecting the foremost points of the side lot lines in front and

rearmost points of the side lot lines in the rear. No lot shall have an average depth which is more than three ( 3 ) times its average width, (ratio 3 to 1)

2. Width. The distance between straight lines connecting front and rear lot lines at each side of the lot, measured at the building setback line.

Lot of Record. A lot which is part of a subdivision recorded in the office of the County Recorder, or a lot or parcel described by metes and bounds, the description of which has been so recorded.

Lot Types. Terminology used in this Resolution with reference to corner lots, interior lots and through lots is as follows:

1. Corner Lot. A lot located at the intersection of two or more streets. A lot abutting on a curved street or streets shall be considered a corner lot if straight lines drawn from the foremost points of the side lot lines to the foremost point of the lot meet at an interior angle of less than one hundred thirty-five (135) degrees;
2. Interior Lot. A lot with only one frontage on a street;
3. Through Lot. A lot other than a corner lot with frontage on more than one street. Through lots abutting two streets may be referred to as double frontage lots; and
4. Reversed Frontage Lot. A lot on which frontage is at right angles to the general pattern in the area. A reversed frontage lot may also be a corner lot.

Major Thoroughfare Plan. The portion of the Comprehensive Plan adopted by the Board of County Commissioners indicating the general location recommended for arterial, collector, and local thoroughfares within the appropriate jurisdiction.

Manufacturing, Heavy. Manufacturing, processing, assembling, storing, testing and similar industrial uses which are generally major operations and extensive in character; require large sites, open storage and service areas, extensive services and facilities, ready access to regional transportation; and normally generate some nuisances such as smoke, noise, dust, glare, air pollution and odor, but not beyond the district boundary to any large extent.

Manufacturing, Light. Manufacturing or other industrial uses which are usually controlled operations; relatively clean, quiet, and free of objectionable or hazardous elements such as smoke, noise, odor or dust; operating and storing within enclosed structures; and generating little industrial traffic and no major nuisances.

Mining, Commercial Quarries, Sand and Gravel Pits. Any mining, quarrying or processing of limestone, clay, sand and gravel or other mineral resources. Also referred to as mineral extraction.

Mobile Home Park. Any site, or tract of land under single ownership, upon which three or more mobile homes used for habitation are parked, either free of charge or for revenue

purposes; including any roadway, building, structure, vehicle or enclosure used or intended for use as a part of the facilities for such park.

Non-Conformities. A building, structure or use of land existing at the time of enactment of this Resolution and which does not conform to the regulations of the district or zone in which it is situated.

Noxious Weeds. Any type or species that have been included on the official list of noxious plants for the State of Ohio which includes the following. Wild Mustard, Musk Thistle (Nodding Thistle), Oxeye Daisy, Canada Thistle, Poison Hemlock, Wild Carrot (Queen Annes Lace), Purple Loosestrife, Wild Parsnip, Mile-a-Minute Weed, Russian Thistle, Cressleaf Groundsel, Shattercane, Johnsongrass, and Grapevines (abandoned). Noxious weeds possess one or more of the following attributes: aggressive competition with cultivated plants, toxicity to livestock, natural habitat degradation, threat to public health, safety, navigation, or as defined by the OSU Extension Agency.

Nuisance. A building or property that is structurally unsafe, unsanitary, or not provided with adequate safe egress; that constitutes a fire hazard, is otherwise dangerous to human life, or is otherwise no longer fit and habitable; or that, in relation to its existing use, constitutes a hazard to the public health, welfare, or safety by reason of inadequate maintenance, dilapidation, obsolescence, or abandonment. A nuisance could constitute an offensive activity on a property that reduces the property value of neighboring properties or results in a lessening of normal use and enjoyment to neighboring properties. Examples include, noise, junk, automobile storage, accumulation of rodents and/or insects or mosquitoes, rubbish, refuse, debris, or weeds and tall grass measuring over twelve (12) inches.

Nursery, Nursing Home. A home or facility for the care and treatment of babies, children, pensioners, or elderly people.

Nursery, Tree and Plant. A place where young trees or other plants are raised for transplanting and/or for sale.

Offices. Quasi-commercial uses which may often be transitional between retail business and/or manufacturing and residential uses. Office business generally accommodates such occupations as administrative, executive, professional, accounting, clerical, drafting, etc. Institutional offices of a charitable, philanthropic, financial or religious or educational nature are also included in this classification.

Open Space. An area substantially open to the sky which may be on the same lot with a building. The area may include, along with the natural environmental features, water areas, swimming pools and tennis courts, any other recreational facilities that the Zoning Commission deems permissible. Streets, parking areas, structures for habitation and the like shall not be included.



Orchards. An area of land devoted to the cultivation and sale of fruit trees and the sale of the fruit therefrom.

Parking Space, Off-Street. For the purpose of this Resolution an off-street parking space shall consist of an area adequate for parking an automobile with room for opening doors on both sides, together with properly related access to a public street or alley and maneuvering room, but shall be located totally outside of any street or alley right-of-way.

Performance Bond or Surety Bond. An agreement by a subdivider or developer with the Board of County Commissioners for the amount of the estimated construction cost guaranteeing the completion of physical improvements according to plans and specifications within the time prescribed by the subdivider's agreement.

Personal Services. Any enterprise conducted for gain which primarily offers services to the general public such as shoe repair, watch repair, barber shops, florists, beauty parlors, and similar activities.

Printing and Publishing. Any business which is engaged in the printing and/or publishing of newspapers, magazines, brochures, business cards and similar activities either for profit or non-profit.

Public Service Facility. The erection, construction, alteration, operation or maintenance of buildings, power plants, or substations, water treatment plants or pumping station, sewage disposal or pumping plants and other similar public service structures by a public utility, by a railroad, whether publicly or privately owned, or by a governmental agency, including the furnishing of electrical, gas, rail transport, communication, public or private water and sewage service and sanitary landfills.

Public Uses. Public parks, schools, administrative and cultural buildings and structures, not including public land or buildings devoted solely to the storage and maintenance of equipment and materials and public service facilities.

Public Way. An alley, bridge, channel, ditch, easement, expressway, freeway, highway, land, road, sidewalk, street walk, bicycle path or other ways in which the general public or a public entity have a right, or which are dedicated, whether improved or not.

Quasi-public Use. Churches and other facilities of an educational, religious, charitable, philanthropic, or non-profit nature.

Recreation, Commercial. Any business which is operated as a recreational enterprise, either publicly or privately owned, for profit. Examples include but are not limited to: Golf courses, bowling alleys, swimming pools, tourist attractions, etc.

Recreation, Non-commercial. Any business which is operated as a recreational enterprise, either publicly or privately owned, for non-profit. Examples include, but are not limited to: Fishing areas, parks, archery ranges, ball parks, etc.

Recreational Vehicle. A vehicular-type unit primarily designed as temporary living quarters for recreational, camping, or travel use, which either has its own motive power or is mounted

on or drawn by another vehicle. The basic entities include: travel trailer, camping trailer, truck camper, and motor home.

Recreational Vehicle Park. A parcel of land upon which two or more recreational vehicle sites are located, established or maintained for occupancy by recreational vehicles of the general public as temporary living quarters for recreation or vacation purposes.

Recreational Vehicle Site. A plot of ground within a recreational vehicle park intended for the accommodation of either a recreational vehicle, tent or other individual camping unit-on a temporary basis.

Right-of-way. A strip of land taken or dedicated for use as a public way. In addition to the roadway, it normally incorporates the curbs, lawn strips, sidewalks, lighting, and drainage facilities, and may include special features required by the topography or treatment (such as grade separation, landscaped areas, viaducts, and bridges).

School Bus Shelter. A Portable type building on a skid, which shall be no more than 64 square feet in area, with a maximum height of 8 feet, with a 4/12 peaked roof. This structure can be enclosed on all sides, and shall be used solely for the purpose of children waiting for their school buses.

Seat. For purposes of determining the number of off-street parking spaces for certain uses, the number of seats is the number of seating units installed or indicated, or each twenty-four(24) lineal inches of benches, pews or space for loose chairs.

Service Station. Any building, structure or land used for the dispensing and sale at retail of any automobile fuels, oils or accessories, including lubrication of automobiles and replacement or installation of minor parts and accessories but not including major repair work.

Setback Line. A line established by the Zoning Resolution generally parallel with and measured from the lot line, defining the limits of a yard in which no building other than accessory building or structure may be located above ground, except as may be provided in said code.

Sewers, Central or Group. An approved sewage disposal system which provides a collection network and disposal system and central sewage treatment facility for a single development, community or region.

Sewers, On-Site. A septic tank or similar installation on an individual lot which utilizes an aerobic bacteriological process or equally satisfactory process for the elimination of sewage and provides for the proper and safe disposal of the effluent, subject to the approval of health and sanitation officials having jurisdiction.

Sidewalk. That portion of the road right-of-way outside the roadway, which is improved for the use of pedestrian traffic.

Sign. Any device designated to inform or attract the attention of persons not on the premises on which the sign is located.

- 1) Sign, On-Premises. Any sign related to a business or profession conducted, or a commodity or service sold or offered upon the premises where such sign is located.
- 2) Sign, Off-Premises (Billboards). Any sign unrelated to a business or profession conducted or to a commodity or service sold or offered upon the premises where such sign is located. Billboards are considered Off-Premises Signs.
- 3) Sign, Illuminated. Any sign illuminated by electricity, gas or other artificial light including reflecting or phosphorescent light;
- 4) Sign, Lighting Device. Any light, string of lights, or group of lights located or arranged so as to cast illumination on a sign;
- 5) Sign, Ground. Means a display sign supported by uprights or braces in or upon the ground surface;
- 6) Sign, Marquee. Means a display sign attached to or hung from a marquee, canopy or other covered structure projecting from and supported by the building and extending beyond the building wall, building line or street lot line;
- 7) Sign, Pole. Means any sign which is erected on a pole or poles, which is wholly or partially independent of any building for support;
- 8) Sign, Projecting. Means a display sign which is attached directly to the building wall and which extends more than fifteen inches from the face of the wall;
- 9) Sign, Roof. Means a display sign which is erected, constructed and maintained above the roof of the building;
- 10) Sign, Temporary. Means a display sign, banner or other advertising device constructed on cloth, canvas, fabric or other light temporary material, with or without a structural frame, intended for a limited period of display, including decorative displays for holidays or public demonstrations; and
- 11) Sign, Wall. Means a display sign which is painted on or attached directly to the building wall and which extends not more than fifteen inches from the face of the wall.

Storage Facility – A structure which is partially open or fully enclosed in which animals, chattels, or property are stored or kept.

Story. That part of a building between the surface of a floor and the ceiling immediately above.

Structure. Anything constructed or erected, the use of which requires location of the ground, or attachment to something having a fixed location on the ground. Among other things, structures include buildings, manufactured or mobile dwellings, walls, fences, and billboards.

Supply Yards. A commercial establishment storing and offering for sale building supplies, steel supplies, coal, heavy equipment, feed and grain, and similar goods.

Swimming Pool. A pool, pond, lake, or open tank containing at least 1.5 feet of water at any point and maintained by the owner or manager. Farm ponds are exempt from this definition:

1. Private. Exclusively used without paying an additional charge for admission by the residents and guests of a single household, a multifamily development, or a community, the members and guests of a club or the patrons of a motel or hotel; and accessory use; and
2. Community. Operated with a charge for admission; a primary use.

Telecommunication Tower. Any structure with radio frequency transmission or reception equipment attached that is free standing or is to be connected to a building or other structure. A telecommunication tower shall meet all of the following conditions:

- a) It is constructed on or after October 31, 1996;
- b) It is owned or principally used by a public utility engaged in the provision of telecommunication services;
- c) It is a free standing structure or is attached to another building or structure and is higher than the maximum allowable height permitted in the zoning district in which it is located.

~~Transient Lodgings. A building in which lodging or boarding and lodging are provided and offered to the public for compensation. As such, it is open to the public in contradistinction to a boarding house, rooming house, lodging house or dormitory, which is herein separately defined. Examples include: hotel, motel and apartment hotel.~~

~~Transport Terminals. Any business, structure, or premise which primarily receives or distributes goods.~~

~~Structure. Anything constructed or erected, the use of which requires location of the ground, or attachment to something having a fixed location on the ground. Among other things, structures include buildings, mobile homes, walls, fences, and billboards.~~

~~Supply Yards. A commercial establishment storing and offering for sale building supplies, steel supplies, coal, heavy equipment, feed and grain, and similar goods.~~

~~Swimming Pool. A pool, pond, lake, or open tank containing at least 1.5 feet of water at any point and maintained by the owner or manager. Farm ponds are exempt from this definition:~~

- ~~3. Private. Exclusively used without paying an additional charge for admission by the residents and guests of a single household, a multifamily development, or a community, the members and guests of a club or the patrons of a motel or hotel; and accessory use; and~~
- ~~4. Community. Operated with a charge for admission; a primary use.~~

Through Lot. See Lot types.

Thoroughfare, Street or Road. The full width between property lines bounding every public way or whatever nature with a part thereof to be used for vehicular traffic and designated as follows:

1. Alley. A minor street used primarily for vehicular service access to the back or side of properties abutting on another street;
2. Arterial Street. A general term denoting a highway primarily for through traffic carrying heavy loads and large volume of traffic, usually on a continuous route;
3. Collector Street. A thoroughfare, whether within a residential, industrial, commercial or other type of development, which primarily carries traffic from local streets to arterial streets, including the principal entrance and circulation routes within residential subdivisions;
4. Cul-de-Sac. A local street of relatively short length with one end open to traffic and the other end terminating in a vehicular turnaround;
5. Dead-end Street. A street temporarily having only one (1) outlet for vehicular traffic and intended to be extended or continued in the future;
6. Local Street. A street primarily for providing access to residential or other abutting property;
7. Loop Street. A type of local street, each end of which terminates at an intersection with the same arterial or collector street, and whose principal radius points of the one hundred and eighty (180) degree system of turns are not more than one thousand (1000) feet from said arterial or collector street, nor normally more than six hundred (600) feet from each other; and
8. Marginal Access Street. A local or collector street, parallel and adjacent to an arterial or collector street, providing access to abutting properties and protection from arterial or collector streets. (Also called Frontage Street.)

~~Service Station. Any building, structure or land used for the dispensing and sale at retail of any automobile fuels, oils or accessories, including lubrication of automobiles and replacement or installation of minor parts and accessories but not including major repair work.~~

~~Through Lot. See Lot types.~~

~~Transient Lodgings. A building in which lodging or boarding and lodging are provided and offered to the public for compensation. As such, it is open to the public in contradistinction to a boarding house, rooming house, lodging house or dormitory, which is herein separately defined. Examples include: hotel, motel and apartment hotel.~~

~~Transport Terminals. Any business, structure, or premise which primarily receives or distributes goods.~~



Transportation, Director of. The Director of the Ohio Department of Transportation.

Use. The specific purposes for which land or a building is designated, arranged, intended or for which it is or may be occupied or maintained.

Variance. A variance is a modification of the strict terms of the relevant regulations where such modification will not be contrary to the public interest and where owing to conditions peculiar to the property and not the result of the action of the applicant and where a literal enforcement of the regulations would result in unnecessary and undue hardship.

Veterinary Animal Hospital or Clinic. A place used for the care, grooming, diagnosis and treatment of sick, ailing, infirm, or injured animals, and those who are in need of medical or surgical attention, and may include overnight accommodations on the premises for the treatment, observation and/or recuperation. It may also include boarding that is incidental to the primary activity.

Vicinity Map. A drawing located on the plat which sets forth by dimensions or other means, the relationship of the proposed subdivision or use to other nearby developments or landmarks and community facilities and services within the general area in order to better locate and orient the area in question.

Walkway. A public way, four (4) feet or more in width, for pedestrian use only, whether along the side of a road or not.

Wholesale and Warehousing. Business establishments that generally store and sell commodities in large quantities or by the piece to retailers, jobbers, other wholesale establishments or manufacturing establishments. These commodities are basically for further resale, for use in the fabrication of a product or for use by a business service.

Yard. A required open space other than a court unoccupied and unobstructed by any structure or portion of a structure from three (3) feet above the general ground level of the graded lot upward; provided, accessories, ornaments, and furniture may be permitted in any yard, subject to height limitations and requirements limiting obstruction of visibility:

1. Yard, Front. A yard extending between side lot lines across the front of a lot and from the front lot line to the front of the principal building; on waterfront parcels the water side is considered the front.
2. Yard, Rear. A yard extending between side lot lines across the rear of a lot and from the rear lot line to the rear of the Principal building; and
3. Yard, Side. A yard extending from the principal building to the side lot line on both sides of the principal building between the lines establishing the front and rear yards.

Zoning Certificate. A document issued by the zoning inspector authorizing the occupancy or use of a building or structure or the actual use of lots or land in accordance with the previously issued Zoning Permit.

Zoning Permit. A document issued by the Zoning Inspector authorizing the use of lots, structures, uses of land and structures, and the characteristics of the uses.

## ARTICLE XIII

## INTERPRETATION AND ENACTMENT

Section 1300 Provisions of Resolution Declared to be Minimum Requirements.

In their interpretation and application, the provisions of this Resolution shall be held to be minimum requirements, adopted for the promotion of the public health, morals, safety, and the general welfare. Whenever the requirements of this Resolution are at variance with the requirements of any other lawfully adopted rules, regulations, or ordinances, the most restrictive or that imposing the higher standards shall govern.

Section 1301 Separability Clause.

Should any section or provision of this Resolution be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the Resolution as a whole or any part thereof other than the part so declared as being unconstitutional or invalid.

Section 1302 Repeal of Conflicting Resolutions, Effective Date.

All resolutions or parts of resolutions in conflict with this Zoning Resolution, or inconsistent with the provisions of this Resolution are hereby repealed to the extent necessary to give this Resolution full force and effect. This Resolution shall become effective from and after the date of its approval and adoption, as provided by law.

Section 1303 M-2 Heavy Manufacturing District.

Minimum Lot Size (square feet per household) with onsite sewage treatment 200,000 — with group or central sewage treatment 400,000 — provided that the installation and maintenance of on-site sewage treatment is done in accordance with applicable federal, state or local governmental laws and regulations.

## CERTIFICATIONS

Washington Township Trustees  
Logan County, Ohio

Date: April 12, 1970

Gentlemen:

The Washington Township Zoning Commission has for a period of some months had under study certain modifications and amendments to the zoning laws of Washington Township. These changes were brought about in part by changes in township conditions.

The Zoning Commission hereby certifies a revised plan for the districting and zoning of lands and structures in the interest of public, health, safety, convenience, comfort, prosperity, and general welfare. The plan is based upon planning studies and other Commission investigations.

Washington Township Zoning Commission

By: Roy Sickles, chairman

By: James O. Stevenson, secretary

Passed May 8, 1972  
Adopted June 8, 1972

Board of Trustees,  
Huitt Kipler, chairman

Attest  
Township clerk,  
James O. Stevenson

Amendment I Passed July 8, 1974  
Adopted August 8, 1974  
Carl Evans, Board of Trustees, chairman  
Attest: James O. Stevenson, clerk

Exhibit B Letter of July 16, 1984  
Roy Sickles, chairman, Washington Township  
Zoning Commission

Charles R. Rogers  
Vincent L. Glaze  
Roger Kipler, Washington Township Trustees

Exhibit II                      February 7, 1983  
   Lowell Miller  
   Richard Beard  
   James O. Sullivan, clerk

   March 2, 1983  
   Lowell Miller  
   Richard Beard  
   James O. Sullivan, clerk

Typed and revised              May 1990

Resolution is hereby adopted on this 8<sup>th</sup> day of September              2011.

Revised June 14, 2010 to include minor text changes, adding definitions, and adding Section 567 for Small Wind Projects Less than 5 MW (Megawatts) and Section 568 for Private Driveway Installations.

Revised August 8, 2011 to include minor text changes, Article XIII adding definitions for Noxious Weeds & Nuisance, and adding conditional uses for storage facilities for various Zoning districts U-1, R-1, R-2, B-1 & B-2

Revised December 14, 2011 to include adding Section 569 for the use and storage of recreational vehicles, Section 570 requiring a zoning permit for demolition operations and the removal of debris associated with that demolition and Section 902 text changes for Avoidance of Undue Hardship.

Revised December 14, 2015, to include minor changes to Section 555 for fences, Entire Article IX, Non-conforming Uses, minor change to Article X, Administration & Enforcement, and adding "Fair Market Value" to our definitions.

Revised Month, Day, 2018, to include ?



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Chairman, Board of Township Trustees

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Member, Board of Township Trustees

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Member, Board of Township Trustees

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Attest, Clerk Township Trustees



Zoning & Subdivision Committee  
Thursday, September 13, 2018

The Zoning and Subdivision Committee met in regular session on Thursday, September 13, 2018 at 12:05 pm at the LUC East Liberty Office.

Zoning & Subdivision Committee Members were in attendance as follows: Brad Bodenmiller, Tyler Bumbalough, Scott Coleman, Wes Dodds, Chad Flowers, Dave Gulden, Charles Hall, Steve McCall, Heather Martin, Bill Narducci, Tammy Noble for Vince Papsidero, Tom Scheiderer, Jeff Stauch and Andy Yoder.

Guests included: Gary Bias, Washington Township; Mark Spagnuolo, Jerome Township; Dave Faulkner, Champaign County; John Frey, Dover Township; Corey Theuerkauf, Rockford Homes; Justin Wollenberg, Terrain Evolution; John Bayliss, Logan County; Tim Notestine, City of Bellefontaine; Doug Annette, Modern Farmhouse; Jay McIntire, Encore Living; Barney Dodson; Steve Lamphear; Anthony Tempesta.

Scott Coleman chaired the Zoning & Subdivision Committee Meeting.

Andy Yoder moved a motion to approve the minutes from the August 9, 2018 meeting as written and Wes Dodds seconded. All in favor.

1. Review of Mitchell Highlands Preliminary Plat Extension (Union County) – Staff Report by Brad Bodenmiller
  - Tammy Noble – Is there a limit to the number of times the plat can be extended?
    - Brad Bodenmiller – No.
  - Andy Yoder made the first motion to recommend approval of the Mitchell Highlands Preliminary Plat Extension according to staff's recommendation and Steve McCall seconded. All in favor.
2. Review of Glacier Pointe Section 1 Preliminary Plat (Union County) – Staff Report by Brad Bodenmiller
  - Scott Coleman – So there is still something they need from Jerome Township?
    - Brad Bodenmiller provided an explanation.
  - Charles Hall – I feel that all of this should have been completed before we ever receive it.
    - Justin Wollenberg – For the one variance that we requested, it was not done soon enough, is that what your comment is regarding?
    - Charles Hall – It seems like we received this too soon. It should have been done before it was presented.



- Justin Wollenberg – Most of the comments will be addressed in the final plat. Most of those with one or two, are I believe, to be right inline with the process. For the process with the variance, we could have submitted it sooner, and I agree with that.
  - Steve McCall – I double checked to make sure it was a preliminary plat. Some of the comments that are there I expect in the preliminary discussion. For the variance, it's all preplanning and I agree, it should be sooner.
  - Dave Faulkner – Do you set a precedent of approving it?
    - Steve McCall – If they've done the work, I'm fine with voting along with the staff recommendation.
  - Charles Hall – It just irks me that it's the last minute. They've done this long enough, they should be more on top of it.
  - Dave Faulkner asked for more explanation regarding Jerome Township's comments which Brad Bodenmiller provided.
  - Tom Scheiderer made the first motion to recommend approval of the Glacier Pointe Section 1 Preliminary Plat based on all reviewing agencies and staff comments and Bill Narducci seconded. All in favor with Charles Hall voting No.
3. Review of Mills of Watkins Preliminary Plat (Union County) – Staff Report by Brad Bodenmiller
- Tammy Noble asked about the lot sizes.
    - Doug Annette – It's about 1/3 of an acre.
      - Tammy Noble – That's going to be big enough for sewer?
      - Scott Coleman – It's well only.
  - Scott Coleman – We still do not have approval from the Health Department? So the options would be either denial or a request from the developer to table it.
  - Tammy Noble – If the Board of Health doesn't approve it, then they're not going to develop it?
    - Doug Annette – We believe they'll approve it, but if they deny it then you're right, we have to wait for city water; so we want to move forward.
  - Bill Narducci – From our perspective I think it's critical that we have approval; we need a guarantee that the development can be served by utilities and that's a big piece of it. Timeframe wise, I believe submittal date is next week. The Board of Health would need to be approve it by then to be on the agenda for the next month. It's anticipated they'll have the approval at their meeting.
  - Scott Coleman – The benefit is that the developer doesn't have to pay to refile it.
  - Doug Annette requested a tabling.
  - Steve McCall made the first motion to recommend accepting the request to table Mills of Watkins Preliminary Plat at the request of the developer and Tammy Noble seconded. All in favor.



4. Review of Claibourne Township Zoning Text Amendment (Union County) – Staff Report by Brad Bodenmiller
  - Charles Hall made the first motion to recommend approval of the Claibourne Township Zoning Text Amendment with comments based on the staff report and Tyler Bumbalough seconded. All in favor.
  
5. Review of Washington Township Parcel Amendment (Logan County) – Staff Report by Brad Bodenmiller
  - Charles Hall – So if we do this and someone wants to put a restaurant in there, they can't do that.
    - Scott Coleman – They won't be able to do it anyways, they already have sewer issues.
    - Charles Hall – All these houses are already there with septic systems.
    - Gary Bias affirmed that Scott is correct regarding the sewer system.
  - Tyler Bumbalough – does the B2 district include restaurants? Washington Township has their own unique codes, so R2 allows them to do storage facilities.
    - Tammy Noble confirmed that they could do storage facilities in a R2. That seems awkward around a residential area.
    - Tyler Bumbalough – Churches are also a conditional use in the R2?
      - Brad Bodenmiller provided further clarification.
  - Andy Yoder made the first motion to recommend approval of the Washington Township Parcel Amendment based on the staff report and Charles Hall seconded. All in favor.
  
6. Review of Washington Township Zoning Text Amendment (Logan County) – Staff Report by Brad Bodenmiller
  - John Bayliss – On the issue of load bearing walls and non-bearing laws, is that for purposes for zoning permits only?
    - Brad Bodenmiller – It's really for the purpose of the grandfathered properties.
    - John Bayliss – I wonder how that will apply to the Building Authority's rules. We'd like to be involved in that if it's a load bearing wall.
  - Steve McCall – I had a question about the fence around swimming pools. As a homeowner, I'd think I'd want to protect myself the best that I can. A 4 foot fence is easy to get over. I'd be leery suggesting that a four-foot fence is the maximum height.
    - Tyler Bumbalough – The City of Urbana has a six-foot maximum and that's typically what we see go around the pools.
    - Wes Dodds – It looks like they're trying to go along with what the Ohio Residential code says, but it says minimum of four-foot, not maximum.
  - Tyler Bumbalough – If we're going to say minimum of four-foot, I think we should recommend a maximum of six-feet.



## Logan-Union-Champaign regional planning commission

- Dave Faulkner - I'm trying to figure out what they're trying to accomplish.
  - Scott Coleman provided further information on the location and information regarding Lewistown.
    - Dave Faulkner – The people of Lewistown, could zoning make them change it or it will be grandfathered in?
      - Brad Bodenmiller – Current property owners would be grandfathered.
- Charles Hall made the first motion to recommend approval of the Washington Township Zoning Text Amendment based on the staff report and all comments included from the Zoning and Subdivision committee and Tom Scheiderer seconded. All in favor.

The Zoning and Subdivision Committee adjourned at 12:51 pm with Steve McCall moving the motion to adjourn and Andy Yoder seconding. All in favor.