



Logan-Union-Champaign  
regional planning commission

Director: Bradley J. Bodenmiller

**Zoning Parcel Amendment Checklist**

Date: 12/29/25 Township: Jerome

Amendment Title: Meijer Supercenter + Outlots

**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 type="checkbox"/>
Date of Request (stated in cover letter)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Description of Zoning Parcel 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"/>
Parcel Number(s) <u>App. Form</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Copy of Completed Zoning Amendment Application	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Applicant's Name and contact information	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Current Zoning	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proposed Zoning	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Current Land Use	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proposed Land Use	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Acreage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Copy of Zoning Text associated with proposed district(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Contiguous and adjoining Parcel Information, including Zoning District(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Any other supporting documentation submitted by applicant	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-LUC Member Fee, If applicable	<input type="checkbox"/>	<input type="checkbox"/>

NA

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

10820 St. Rt 347, PO Box 219  
East Liberty, Ohio 43319  
• Phone: 937-666-3431 •

• Email: [luc-rpc@lucplanning.com](mailto:luc-rpc@lucplanning.com) • Web: [www.lucplanning.com](http://www.lucplanning.com)

*Zoning Commission  
Jerome Township  
Union County, Ohio*

9777 Industrial Parkway  
Plain City, Ohio 43064

Office: (614) 873-4480  
jerometownship.us

December 29, 2025

L.U.C. Regional Planning Commission  
Brad Bodenmiller, Executive Director  
Box 219  
East Liberty, Ohio 43319

Dear Mr. Bodenmiller:

This letter is to inform you of a proposed amendment to the Jerome Township Zoning Resolution:

Case #:	PD25-002	Type:	Map Amendment
Name of Applicant:	Meijer Stores Limited Partnership c/o Crisman Jones Jr.		
Location:	0 US Highway 33, being a 29.57 +/- acre tract located on the west of Hyland Croy Road (CR #2) between Post Road (SR 161) and Weldon Road (CR #4).		
Current Zoning Dist.:	Planned Development District (PD)		
Proposed Zoning Dist.:	Planned Development District (PD)		
Current Land Use:	Commercial Shopping Center		
Proposed Land Use:	Commercial Shopping Center		

Enclosed is a copy of the application and other relevant documents and materials. A public hearing for this case before the Zoning Commission has tentatively been set for Monday, January 26, 2026, at 7:00 p.m.

If you need further information, please feel free to contact me.

Sincerely,



Liz Morrison  
Zoning Clerk/Secretary of the Commission

Enclosure



**JEROME TOWNSHIP**  
 UNION COUNTY, OHIO  
 9777 Industrial Parkway  
 Plain City, Ohio 43064  
 Office (614) 873-4480

Case #: PD25-002  
 App #: 11351  
 Date Submitted: 12/18/25  
 Fee Amount: \$3978.50  
 Check #: 616498

**I. PARCEL INFORMATION**

**ZONING COMMISSION APPLICATION**

Parcel Address: U.S. 33, Plain City, OH 43064		<b>FOR MAP AMENDMENT ONLY</b>	
Parcel No.(s): 1700310390010		Proposed Zoning Dist.: PD, Planned Dev. Dist.	
Description of Location: Adjacent to U.S. 33 and Hyland Croy Road, between Post Rd & Weldon Rd		Number of Proposed Lots: 2 subareas, lots TBD	
Parcel/Tract Area: 29.57 ac	Present Zoning Dist.: PD	Present Use: Agricultural	Existing Structures: None
Complete Where Applicable: Engineer/Surveyor: <u>Woolpert, Inc.</u>			
Builder/Developer: <u>Meijer Stores Limited Partnership</u>			

**II. OWNER OF RECORD**

Owner Name(s): John L. Wirchanski	Owner Address: 7010 Industrial Parkway, Plain City, OH 43064
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**III. APPLICANT INFORMATION**

Applicant Name: Crisman Jones Jr.(Meijer Stores Limited Partnership)	Applicant Address: 2350 Three Mile Road NW, Grand Rapids, MI 49544
Applicant Phone Number: 616-735-7992	Applicant Email: Cris.JonesJr@Meijer.com

- Parcel Owner     
  Business Owner/Tenant     
  Attorney/Agent     
  Architect/Engineer

**IV. PROJECT TYPE**

- Zoning Map Amendment - Standard Zoning District   
  Misc. Action: \_\_\_\_\_  
 Zoning Map Amendment - Planned Development District   
  Detailed Development Plan  
 Zoning Map Amendment - Change to PD Dist. Preliminary Dev. Plan   
  Modification of Detailed Development Plan

Please review the attached checklist and note the items you are responsible for submitting with this application. All required items must be submitted to the Zoning Inspector.

Applicant Signature:  Date: 12/18/25  
 \*By signing, I certify that I am the owner of the real property or the owner's agent, and that the application is authorized with the full knowledge of the owner.\*

**\*\*FOR OFFICIAL USE ONLY\*\***

Additional Notes:	<b>LUCRPC Review</b> Date: _____	<b>Zoning Com. Hearing</b> Date: _____	<b>Trustee Hearing Date:</b> _____
	<input type="checkbox"/> Approved as Submitted <input type="checkbox"/> Approved w/ Modifications <input type="checkbox"/> Continued <input type="checkbox"/> Denied	<input type="checkbox"/> Approved as Submitted <input type="checkbox"/> Approved w/ Modifications <input type="checkbox"/> Continued/Other <input type="checkbox"/> Denied/Disapproved	<input type="checkbox"/> Approved as Submitted <input type="checkbox"/> Approved w/ Modifications <input type="checkbox"/> Continued/Other <input type="checkbox"/> Denied

**Consent to Zoning Application Filing**

The undersigned, being the current owner of 29.57+/- gross acres in Jerome Township bounded by U.S. Route 33 on the west, Hyland-Croy Road on the east, and the centerline of the Gordon Tri-County Ditch on the north, hereby confirms that he is in contract to sell a portion of the property to Meijer Stores Limited Partnership and a portion of the property to Coughlin Investments, Ltd. By his signature below, he consents to those parties filing a rezoning application pertaining to the property.

  
John Wirchanski

Date: 17 December 2025



# Transmittal Letter

If enclosures are not received as noted below, please call sender or Woolpert at 937.461.5660

**Date:** December 18, 2025      **Re:** Jerome Township Zoning Commission Application  
 JRM Jerome Township Meijer  
 Hyland-Croy Road, Plain City, Ohio

**To:** Jerome Township, Union County, Ohio      **Order Number:** 10020719.00.099  
 9777 Industrial Parkway  
 Plain City, Ohio 43064

**Shipped Via:** Hand Delivered

We are sending you:

- Shop Drawings   
  Samples   
  Specifications   
  Plans   
  Change Order  
 Other

Copies	Date	No.	Description
1	12/16/25	x	Check in the amount of \$2,500 payable to Jerome Township
1	12/8/25	1	Meijer Signed Application Form
1	12/16/25	7	Meijer JRM Legal Description
15	12/16/25	165	Fifteen (15) plan sets of Meijer JRM plan set (folded to 8.5x11)
1	12/16/25	1	List of adjacent property owners (regular letter paper)
1	12/16/25	1	List of adjacent property owners (printed on Avery #5160 mailing labels)
1	12/16/25	1	Meijer JRM Projected Development Schedule
1	12/11/25	83	Meijer JRM Stormwater Management Report (folded to 8.5x11)
1	08/04/25	11	Meijer JRM Building Elevations (folded to 8.5x11)
1	12/18/25	1	Statement in Support of Rezoning Application
1	12/18/25	13	Planned Development District Regulation Text
1	12/16/25	66	Hyland Croy – Meijer Development Traffic Memo
1	12/17/25	1	Consent to Zoning Application Filing
			Hard Drive with digital submission

Enclosed please find check and submission items for the PD rezoning of the Meijer JRM development in Jerome Township, Union County, Ohio.

Please let me know if you need anything else. Thank you.

Ali

Copy To:

file

Signature: Ali Bischof, EI

513.527.2660

Woolpert, Inc.  
 4454 Idea Center Boulevard  
 Dayton, OH 45430-1500  
 937.461.5660

SITUATED IN THE VIRGINIA MILITARY SURVEY NO. 6420, TOWNSHIP OF JEROME, COUNTY OF UNION AND STATE OF OHIO:

AND KNOWN AS BEING A PORTION OF THE LANDS CONVEYED TO LAWRENCE HALL BY DEED OF RECORD IN DEED BOOK 166, PAGE 263, RECORDER'S OFFICE, UNION COUNTY, OHIO, AND BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING, FOR REFERENCE, AT A RAILROAD SPIKE SET AT THE INTERSECTION OF THE CENTERLINE OF HYLAND AND CROY ROAD-COUNTY ROAD NO. 2-B (50 FEET WIDE) WITH THE CENTERLINE OF WELDON ROAD-TOWNSHIP ROAD NO. 4-B (30 FEET WIDE BY HIGHWAY PLAN) AND AT THE NORTHEAST CORNER OF SAID HALL LANDS, SAID RAILROAD SPIKE BEING IN THE EAST LINE OF SAID VIRGINIA MILITARY SURVEY NO. 6420 AND IN THE WEST LINE OF VIRGINIA MILITARY SURVEY NO. 3452;

THENCE SOUTH 4 DEG. 15' 38" EAST ALONG THE CENTERLINE OF HYLAND AND CROY ROAD, ALONG A PORTION OF THE EAST LINE OF SAID HALL LANDS, ALONG A PORTION OF THE EAST LINE OF SAID VIRGINIA MILITARY SURVEY NO. 6420 AND ALONG A PORTION OF THE WEST LINE OF SAID VIRGINIA MILITARY SURVEY NO. 3452 A DISTANCE OF 627.86 FEET TO A P.K. NAIL SET IN THE CENTER OF A CULVERT OVER THE GORDEN TRI-COUNTY DITCH AND AT THE TRUE PLACE OF BEGINNING OF THE TRACT HEREIN INTENDED TO BE DESCRIBED;

THENCE SOUTH 4 DEG. 15' 38" EAST ALONG THE CENTERLINE OF HYLAND AND CROY ROAD, ALONG A PORTION OF THE EAST LINE OF SAID HALL LANDS, ALONG A PORTION OF THE EAST LINE OF SAID VIRGINIA MILITARY SURVEY NO. 6420 AND ALONG A PORTION OF THE WEST LINE OF SAID VIRGINIA MILITARY SURVEY NO. 3452 A DISTANCE OF 1,264.56 FEET TO AN IRON PIN FOUND BENT AND RESET AT THE SOUTHEAST CORNER OF SAID VIRGINIA MILITARY SURVEY NO. 6420, AT THE NORTHEAST CORNER OF VIRGINIA MILITARY SURVEY NO. 6748, AT THE SOUTHEAST CORNER OF SAID HALL LANDS AND AT THE NORTHEAST CORNER OF AN ORIGINAL 46.75 ACRE TRACT OF LAND CONVEYED TO WARREN W. AND HELEN L. GORDEN (1/2 INTEREST) BY DEED OF RECORD IN DEED BOOK 218, PAGE 110, RECORDER'S OFFICE, UNION COUNTY, OHIO, AND TO WARREN W. GORDEN (1/2 INTEREST) BY DEED OF RECORD IN DEED BOOK 255, PAGE 316 (PARCEL 2 WITH EXCEPTIONS), RECORDER'S OFFICE, UNION COUNTY, OHIO;

THENCE SOUTH 84 DEG. 48' 55" WEST ALONG A PORTION OF THE SOUTH LINE OF SAID VIRGINIA MILITARY SURVEY NO. 6420, ALONG A PORTION OF THE NORTH LINE OF SAID VIRGINIA MILITARY SURVEY NO. 6748, ALONG A PORTION OF THE SOUTH LINE OF SAID HALL LANDS AND ALONG A PORTION OF THE NORTH LINE OF SAID ORIGINAL 46.75 ACRE TRACT A DISTANCE OF 911.73 FEET TO AN IRON PIN SET IN AN EAST LIMITED ACCESS

RIGHT-OF-WAY LINE FOR RAMP "A" OF U.S. ROUTE 33, AS SAID LIMITED ACCESS RIGHT-OF-WAY LINE IS SHOWN UPON SHEET 24 OF 29 OF OHIO DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY PLANS FOR UNI-33-20.23 AND FRA-33-0.00, SAID IRON PIN ALSO BEING AT THE SOUTHEAST CORNER OF A 13.220 ACRE TRACT OF LAND CONVEYED AS PARCEL NO. 85 WL TO STATE OF OHIO BY DEED OF RECORD IN DEED BOOK 226, PAGE 248, RECORDER'S OFFICE, UNION COUNTY, OHIO (PASSING AN IRON PIN SET IN THE WEST RIGHT-OF-WAY LINE OF HYLAND AND CROY ROAD AT 25.00 FEET);

THENCE NORTH 37 DEG. 08' 10" WEST ALONG A PORTION OF AN EAST LIMITED ACCESS RIGHT-OF-WAY LINE FOR RAMP "A" OF U.S. ROUTE 33 AND ALONG AN EAST LINE OF SAID PARCEL NO. 85 WL A DISTANCE OF 0.54 FOOT TO AN IRON PIN SET AT THE POINT OF CURVATURE OF A CURVE;

THENCE NORTHERLY ALONG A CURVED EAST LIMITED ACCESS RIGHT-OF-WAY LINE FOR RAMP "A" OF U.S. ROUTE 33, ALONG A CURVED EAST LINE OF SAID PARCEL NO. 85 WL AND WITH A CURVE TO THE RIGHT, DATA OF WHICH IS: RADIUS = 1,383.42 FEET, DELTA = 14 DEG. 49' 26" AND ARC LENGTH = 357.93 FEET, A CHORD DISTANCE OF 356.93 FEET BEARING NORTH 29 DEG. 43' 27" WEST TO AN IRON PIN SET AT THE POINT OF TANGENCY OF SAID CURVE;

THENCE NORTH 22 DEG. 18' 44" WEST ALONG AN EAST LIMITED ACCESS RIGHT-OF-WAY LINE OF U.S. ROUTE 33, AS SHOWN UPON SHEET 23 OF 29 OF SAID OHIO DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY PLANS, AND ALONG AN EAST LINE OF SAID PARCEL NO. 85 WL A DISTANCE OF 899.00 FEET TO AN IRON PIN SET;

THENCE NORTH 20 DEG. 50' 50" WEST ALONG AN EAST LIMITED ACCESS RIGHT-OF-WAY LINE OF U.S. ROUTE 33 AND ALONG AN EAST LINE OF SAID PARCEL NO. 85 WL A DISTANCE OF 145.94 FEET TO AN IRON PIN SET;

THENCE NORTH 2 DEG. 54' 12" EAST ALONG A PORTION OF AN EAST LIMITED ACCESS RIGHT-OF-WAY LINE OF U.S. ROUTE 33 AND ALONG A PORTION OF AN EAST LINE OF SAID PARCEL NO. 85 WL A DISTANCE OF 36.07 FEET TO AN IRON PIN SET IN THE CENTERLINE OF THE GORDEN TRI-COUNTY DITCH;

THENCE DOWN THE CENTERLINE OF THE GORDEN TRI-COUNTY DITCH AND CROSSING A PORTION OF SAID HALL LANDS THE FOLLOWING FIVE (5) COURSES:

- 1) SOUTH 61 DEG. 59' 55" EAST A DISTANCE OF 154.22 FEET TO AN IRON PIN SET;
- 2) SOUTH 85 DEG. 19' 48" EAST A DISTANCE OF 555.85 FEET TO AN IRON PIN SET;
- 3) NORTH 85 DEG. 10' 43" EAST A DISTANCE OF 277.80 FEET TO AN IRON PIN SET;

4) NORTH 61 DEG. 18' 37" EAST A DISTANCE OF 163.82 FEET TO AN IRON PIN SET; AND 5) NORTH 80 DEG. 41' 07" EAST A DISTANCE OF 275.71 FEET TO THE TRUE PLACE OF BEGINNING. CONTAINING 32.623 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO ALL LEGAL HIGHWAYS, EASEMENTS AND RESTRICTIONS OF RECORD.

THE ABOVE DESCRIPTION WAS PREPARED BY RICHARD J. BULL, OHIO SURVEYOR NO. 4723, OF C. F. BIRD & R. J. BULL, LTD., CONSULTING ENGINEERS & SURVEYORS, WORTHINGTON, OHIO FROM AN ACTUAL BOUNDARY SURVEY PERFORMED IN THE FIELD IN MAY, 1980.

EXCEPTING THEREFROM THE FOLLOWING CONVEYED IN OR BOOK 951, PAGE 470:

SITUATED IN THE VIRGINIA MILITARY SURVEY NO. 6420, TOWNSHIP OF JEROME, COUNTY OF UNION AND STATE OF OHIO:

AND KNOWN AS BEING A PART OF THE ORIGINAL 21.887 ACRE TRACT (TRACT I) AND THE 32.623 (TRACT II) ACRE TRACT

CONVEYED TO JOHN L. WIRCHAINSKI BY DEEDS OF RECORD IN DEED BOOK 298, PAGE 339, RECORDS OF THE RECORDER'S OFFICE, UNION COUNTY, OHIO, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEING A PARCEL OF LAND LYING ON THE LEFT SIDE OF THE CENTERLINE OF RIGHT-OF-WAY AND CONSTRUCTION OF U.S. ROUTE 33, AS ESTABLISHED BY A SURVEY MADE BY R.D. ZANDE & ASSOCIATES, INC., FOR THE CITY OF DUBLIN, AND BEING LOCATED WITHIN THE FOLLOWING DESCRIBED BOUNDARY POINTS OF PARCEL 92-WL;

BEGINNING FOR REFERENCE AT A RAILROAD SPIKE FOUND IN THE CENTERLINE OF HYLAND - CROY ROAD, AT THE COMMON CORNER OF VIRGINIA MILITARY SURVEY NUMBERS 6420 AND 6748, AND BEING A COMMON CORNER OF SAID 32.623 ACRE TRACT AND THE 11.644 ACRE TRACT CONVEYED TO THE HAWKINS FAMILY PARTNERSHIP, LTD., BY DEED OF RECORD IN OFFICIAL RECORD 557, PAGE 119;

THENCE SOUTH 84 DEG. 50' 41" WEST, A DISTANCE OF 863.60 FEET, ALONG THE COMMON LINE OF SAID VIRGINIA MILITARY SURVEY NUMBERS 6420 AND 6748, AND THE COMMON LINE OF SAID 32.623 AND 11.644 ACRE TRACTS, TO AN IRON PIN SET IN THE PROPOSED NORTHEASTERLY LIMITED ACCESS RIGHT-OF-WAY LINE OF U.S. ROUTE 33, AND THE NORTHEASTERLY LINE OF AN EXISTING CHANNEL EASEMENT (PARCEL 85 X-2) DELINEATED UPON THE STATE OF OHIO RIGHT-OF-WAY PLAN UNI-33-20.23, FRA-33-0.00, ON FILE WITH THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 6; SAID POINT

BEING 232.38 FEET LEFT OF CENTERLINE STATION 1322+59.98, AND BEING THE POINT OF TRUE BEGINNING OF THE HEREIN DESCRIBED PARCEL 92-WL;

THENCE CONTINUING SOUTH 84 DEG. 50' 41" WEST A DISTANCE OF 48.33 FEET (PASSING AN IRON PIN FOUND AT A DISTANCE OF 48.10 FEET) ALONG SAID COMMON LINE OF SAID VIRGINIA MILITARY SURVEY NUMBERS 6420 AND 6748, AND SAID COMMON LINE OF THE 32.623 AND 11.644 ACRE TRACTS, TO A POINT IN ON A CURVE, IN THE EXISTING NORTHEASTERLY LIMITED ACCESS RIGHT-OF-WAY LINE OF U.S. ROUTE 33, AT A COMMON CORNER OF SAID 32.623 AND 11.644 ACRE TRACTS; SAID POINT BEING 185.85 FEET LEFT OF CENTERLINE STATION 1322+46.92;

THENCE THE FOLLOWING FIVE (5) COURSES AND DISTANCES ALONG SAID EXISTING NORTHEASTERLY LIMITED ACCESS RIGHT-OF-WAY LINE OF U.S. ROUTE 33, AND THE SOUTHWESTERLY LINES OF SAID 32.623 AND 21.887 ACRE TRACTS;

1. THENCE ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 1380.39 FEET, A CENTRAL ANGLE OF 14 DEG. 50' 22", AN ARC LENGTH OF 357.52 FEET, THE CHORD TO WHICH BEARS NORTH 29 DEG. 41' 16" WEST, A CHORD DISTANCE OF 356.52 FEET, TO A POINT OF TANGENCY; SAID POINT BEING 130.98 FEET LEFT OF CENTERLINE STATION 1318+94.64;

2. THENCE NORTH 22 DEG. 18' 02" WEST A DISTANCE OF 899.00 FEET TO AN ANGLE POINT, BEING 308.00 FEET LEFT OF CENTERLINE STATION 1309+95.94;

3. THENCE NORTH 20 DEG. 50' 09" WEST A DISTANCE OF 145.94 FEET TO AN ANGLE POINT, BEING 108.00 FEET LEFT OF CENTERLINE STATION 1308+50.00;

4. THENCE NORTH 02 DEG. 54' 49" EAST A DISTANCE OF 54.63 FEET TO AN ANGLE POINT, BEING 130.00 FEET LEFT OF CENTERLINE STATION 1308+00.00;

5. THENCE NORTH 20 DEG. 50' 09" WEST A DISTANCE OF 536.18 FEET TO A POINT IN THE CENTERLINE OF WELDON ROAD (UNIMPROVED), AT THE COMMON CORNER OF SAID 21.887 ACRE TRACT AND THE 47.256 ACRE TRACT CONVEYED TO PAUL L. & MARY M. JACQUEMIN BY DEED OF RECORD IN DEED BOOK 295, PAGE 501, BEING 130.00 FEET LEFT OF CENTERLINE STATION 1302+63.82;

THENCE NORTH 84 DEG. 55' 14" EAST A DISTANCE OF 10.39 FEET ALONG SAID CENTERLINE OF WELDON ROAD AND SAID COMMON LINE OF THE 21.887 AND 47.256 ACRE TRACTS, TO AN IRON PIN SET IN THE PROPOSED NORTHEASTERLY LIMITED ACCESS RIGHT-OF-WAY LINE OF U.S. ROUTE 33, BEING 140.00 FEET LEFT OF CENTERLINE STATION 1302+66.64;

THENCE THE FOLLOWING SIX (6) COURSES AND DISTANCES ALONG SAID PROPOSED NORTHEASTERLY LIMITED ACCESS RIGHT-OF-WAY LINE OF U.S. ROUTE 33, AND ACROSS SAID 32.623 AND 21.887 ACRE TRACTS;

1. THENCE SOUTH 20 DEG. 50' 09" EAST A DISTANCE OF 483.37 FEET TO AN IRON PIN SET, BEING 140.00 FEET LEFT OF CENTERLINE STATION 1307+50.00;

2. THENCE SOUTH 37 DEG. 32' 16" EAST A DISTANCE OF 52.19 FEET TO AN IRON PIN SET AT THE NORTHERLY CORNER OF SAID EXISTING CHANNEL EASEMENT, BEING 155.00 FEET LEFT OF CENTERLINE STATION 1308+00.00;

3. THENCE ALONG THE NORTHEASTERLY LINE OF SAID EXISTING CHANNEL EASEMENT, SOUTH 21 DEG. 43' 29" EAST A DISTANCE OF 550.07 FEET TO AN IRON PIN SET, BEING 163.54 FEET LEFT OF CENTERLINE STATION 1313+50.00;

4. THENCE SOUTH 23 DEG. 06' 04" EAST A DISTANCE OF 750.59 FEET TO IRON PIN SET ON A CURVE IN THE NORTHEASTERLY LINE OF SAID EXISTING CHANNEL EASEMENT, BEING 193.21 FEET LEFT OF CENTERLINE STATION 1321+00.00;

5. THENCE WITH SAID NORTHEASTERLY LINE OF SAID EXISTING CHANNEL EASEMENT, ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 1339.39 FEET, A CENTRAL ANGLE OF 05 DEG. 58' 22", AN ARC LENGTH OF 139.62 FEET, THE CHORD TO WHICH BEARS SOUTH 34 DEG. 08' 18" EAST, A CHORD DISTANCE OF 139.56 FEET TO AN IRON PIN SET, BEING 225.32 FEET LEFT OF CENTERLINE STATION 1322+35.82;

6. THENCE SOUTH 37 DEG. 07' 27" EAST A DISTANCE OF 25.17 FEET TO THE POINT OF TRUE BEGINNING OF THE HEREIN DESCRIBED PARCEL 92-WL. CONTAINING 1.745 ACRES, MORE OR LESS, OF WHICH THE PRESENT ROAD OCCUPIES 0.005 ACRES, MORE OR LESS. OF THE ABOVE DESCRIBED AREA, 1.745 ACRES ARE CONTAINED WITHIN UNION COUNTY AUDITOR'S PARCEL 17-0031039.001, AS SHOWN ON UNION COUNTY GIS MAP NUMBER 146-00-00-012.000.

ALL STATION AND OFFSET REFERENCES ARE TO THE AFOREMENTIONED CENTERLINE OF RIGHT-OF-WAY AND CONSTRUCTION OF U.S. ROUTE 33, UNLESS OTHERWISE SHOWN.

ALL IRON PINS SET ARE 3/4 INCHES IN DIAMETER BY 30 INCHES LONG WITH AN ALUMINUM CAP, BEARING THE NAME ODOT R/W AND R.D. ZANDE & ASSOCIATES.

THE BEARINGS FOR THE UNI-33-24.87 PROJECT ARE BASED UPON STATE PLANE GRID BEARINGS FROM THE OHIO COORDINATE SYSTEM, SOUTH ZONE, NAD 83 (86), AS MEASURED USING G.P.S. METHODS THROUGH THE FRANKLIN COUNTY ENGINEER'S STATIONS "FRANK 72" "FRANK 172", "FCGS 5536", AND "FCGS 5534".

THIS DESCRIPTION WAS PREPARED OCTOBER 11, 2006, BY STEVEN E. RADER, REGISTERED SURVEYOR 7191, AND IS BASED UPON A SURVEY FOR THE CITY OF DUBLIN FROM OCTOBER, 2005 TO MARCH, 2006 BY R. D. ZANDE AND ASSOCIATES, INC., UNDER THE DIRECTION OF SAID SURVEYOR.

EXCEPTING THEREFROM THE FOLLOWING CONVEYED IN INSTRUMENT NO. 202311160008425:

SITUATED IN THE TOWNSHIP OF JEROME, COUNTY OF UNION AND IN THE STATE OF OHIO;

KNOWN AS BEING PART OF VIRGINIA MILITARY SURVEY NO. 6420, ALSO KNOWN AS BEING A PORTION OF A 21.887 ACRE TRACT AND A 32.623 ACRE TRACT DEEDED TO JOHN L. WIRCHANSKI BY DEED OF RECORD IN DEED BOOK 298 PAGE 339 (ALL RECORDS REFERENCED HEREIN REFER TO THE UNION COUNTY RECORDS) AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A MAGNETIC NAIL FOUND AT THE INTERSECTION OF THE EXISTING CENTERLINE OF HYLAND CROY ROAD (C.R.2.) (VARIABLE WIDTH RIGHT OF WAY) WITH THE SOUTHERLY LINE OF SAID 32.623 ACRE TRACT, SAID LINE ALSO BEING THE NORTHERLY LINE OF A 10.179 ACRE TRACT DEEDED TO HAWKINS FAMILY PARTNERSHIP, LTD., A FLORIDA LIMITED PARTNERSHIP BY DEED OF RECORD IN OFFICIAL RECORD 557 PAGE 119, SAID LINE ALSO BEING THE SOUTHERLY LINE OF VIRGINIA MILITARY SURVEY NO. 6420 AND THE NORTHERLY LINE OF VIRGINIA MILITARY SURVEY NO. 6748, ALSO BEING THE SOUTHWESTERLY CORNER OF A 2.919 ACRE TRACT DEEDED TO THE UNION COUNTY BOARD OF COMMISSIONERS, BY DEED OF RECORD IN INSTRUMENT NO. 201903280002067;

THENCE, SOUTH 84°-55'-46" WEST, A DISTANCE OF 50.01 FEET, PASSING THROUGH A REBAR FOUND WITH A CAP STAMPED STANTEC AT 39.83 FEET, BEING COINCIDENT WITH THE SOUTHERLY LINE OF SAID 32.623 ACRE TRACT AND THE NORTHERLY LINE OF SAID 10.179 ACRE TRACT, TO A REBAR SET;

THENCE, NORTH 04°-14'-57" WEST, A DISTANCE OF 1893.32 FEET, ACROSS AND THROUGH SAID 32.623 ACRE TRACT AND CROSSING INTO THE 21.887 ACRE TRACT AT A REBAR SET AT 1261.82 FEET, TO A MAGNETIC NAIL SET ON THE EXISTING SOUTHERLY RIGHT OF WAY LINE OF WELDON ROAD (VARIABLE WIDTH) AND THE NORTHERLY LINE OF SAID 21.887 ACRE TRACT;

THENCE, NORTH 84°-53'-12" EAST, A DISTANCE OF 50.01 FEET, BEING COINCIDENT WITH THE NORTHERLY LINE OF THE SAID 21.887 TRACT AND THE EXISTING SOUTHERLY RIGHT OF WAY LINE OF WELDON ROAD, TO A MAGNETIC NAIL SET AT THE INTERSECTION OF THE EXISTING CENTERLINE OF HYLAND CROY ROAD AND THE NORTHERLY LINE OF SAID 21.887 ACRE TRACT, ALSO BEING IN THE WEST LINE OF SAID 2.919 ACRE TRACT;

THENCE, SOUTH 04°-14'-57" EAST, A DISTANCE OF 1893.35 FEET, CROSSING FROM SAID 21.887 ACRE TRACT INTO SAID 32.623 ACRE TRACT AT A REBAR SET AT 627.83 FEET, BEING COINCIDENT WITH SAID EXISTING CENTERLINE OF HYLAND CROY ROAD AND THE WEST LINE OF SAID 2.919 ACRE TRACT, TO THE POINT OF BEGINNING.

CONTAINING 2.173 ACRES, MORE OR LESS, OF WHICH 0.723 ACRE IS CONTAINED WITHIN TRACT 1 OF WHICH 0.361 ACRE LIES WITHIN THE PRESENT ROAD OCCUPIED AND 1.450 ACRES IS CONTAINED WITHIN TRACT 2 OF WHICH 0.726 ACRE LIES WITHIN THE PRESENT ROAD OCCUPIED AND SUBJECT TO ALL EASEMENTS, RESTRICTIONS, AND RIGHTS-OF-WAY OF RECORD.

THE BEARINGS IN THE ABOVE DESCRIPTION ARE BASED ON THE GRID BEARING OF NORTH 04°-14'-57" WEST FOR THE EXISTING CENTERLINE OF HYLAND CROY ROAD AS DETERMINED BY A GPS NETWORK OF FIELD OBSERVATIONS PERFORMED IN AUGUST, 2022 AND ARE BASED UPON THE OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD83 (2011).



# MEIJER STORE JRM HYLAND-CROY ROAD PLAIN CITY, JEROME TOWNSHIP, UNION COUNTY, OHIO 43064

±29.57 ACRES LOCATED IN THE VIRGINIA MILITARY SURVEY NO. 6420

**WOOLPERT**  
ARCHITECTURE | ENGINEERING | GEOSPATIAL  
4454 Idea Center Boulevard  
Dayton, OH 45430  
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GRAND RAPIDS, MICHIGAN 49544  
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### CIVIL DRAWING INDEX

FILLED CIRCLES INDICATES INCLUDED IN ISSUANCE	LATEST ISSUANCE NUMBER	LATEST ISSUANCE DATE	SHEET NUMBER	SHEET TITLE
•	-	12/11/25	C-001	COVER SHEET
•	-	12/11/25	C-100	EXISTING CONDITIONS PLAN
•	-	12/11/25	C-200	OVERALL SITE PLAN
•	-	12/11/25	C-300	SITE GRADING - DRAINAGE PLAN
•	-	12/11/25	C-400	UTILITY PLAN
•	-	12/11/25	C-500	TRAFFIC CONTROL SIGNAGE - STRIPING PLAN
•	-	12/11/25	C-501	EXTERIOR SIGNAGE DETAILS
•	-	12/11/25	C-502	EXTERIOR SIGNAGE DETAILS
•	-	12/11/25	C-600	LANDSCAPE PLAN
•	-	12/11/25	C-801	SITE PHOTOMETRIC PLAN
•	-	12/11/25	C-802	SITE ELECTRICAL DETAILS

### GENERAL NOTES

- CONDUCT SITE CLEARING OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION. STREETS AND ROADWAYS SHALL BE THOROUGHLY CLEANED AND/OR SWEEPED ON A DAILY BASIS OR MORE FREQUENTLY AS REQUIRED BY THE GOVERNING AUTHORITY. RESTORE DAMAGED IMPROVEMENTS TO ORIGINAL CONDITION AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
- PRIOR TO SITE CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL INSTALL ALL SWPP MEASURES TO PROTECT EXISTING DRAINAGE FACILITIES. CONTRACTOR SHALL PREVENT SILTATION FROM LEAVING THE SITE AT ALL TIMES.
- ALL STREET SURFACES, DRIVEWAYS, CULVERTS, ROADSIDE DRAINAGE DITCHES AND OTHER STRUCTURES THAT ARE DISTURBED OR DAMAGED IN ANY MANNER AS A RESULT OF CONSTRUCTION SHALL BE REPLACED IN ACCORDANCE WITH SPECIFICATIONS.
- UNLESS SPECIFIED OTHERWISE, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH MEIJER STANDARD SPECIFICATIONS, THE STATE DEPARTMENT OF ENVIRONMENTAL QUALITY STANDARDS, DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND/OR THE APPROPRIATE LOCAL AUTHORITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS, PERMIT FEES, LICENSES, AND LICENSE FEES, UNLESS NOTED OTHERWISE.
- RELOCATION OF ANY UTILITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF THE APPROPRIATE UTILITY COMPANY AND/OR REGULATORY AGENCY. OBTAIN WRITTEN APPROVAL FROM THE ENGINEER BEFORE ANY UTILITY RELOCATION.
- ELECTRONIC FILES IN DWG FORMAT ARE AVAILABLE TO THE CONSTRUCTION MANAGER FOR LAYOUT AND GRADING.
- ELECTRONIC FILE USE TERMS AND CONDITIONS:  
8.A. RECIPIENT ACKNOWLEDGES THAT ANY USE OF THE TRANSFERRED DATA IS FOR INFORMATION ONLY AND NOT GUARANTEED OR WARRANTED BY MEIJER OR ITS CONSULTANTS. USE OF TRANSFERRED DATA BY THE RECIPIENT SHALL BE AT RECIPIENT'S SOLE RISK. RECIPIENT ACKNOWLEDGES THAT THE AUTOMATED CONVERSION OF INFORMATION AND DATA FROM THE ORIGINAL FORMAT AND SYSTEM TO AN ALTERNATE FORMAT OR SYSTEM CAN NOT BE ACCOMPLISHED WITHOUT THE INTRODUCTION OF INEXACTITUDES, ANOMALIES, AND ERRORS. RECIPIENT FURTHER ACKNOWLEDGES THAT THE ELECTRONIC DATA MAY NOT BE FULLY COMPATIBLE WITH RECIPIENT'S COMPUTER SYSTEM AND NEITHER MEIJER NOR ITS CONSULTANTS MAKE NO REPRESENTATIONS REGARDING SUCH COMPATIBILITY.  
8.B. ACCORDINGLY, WITH RESPECT TO THE CONVERSION AND USE OF SUCH ELECTRONIC DATA, RECIPIENT AGREES TO ASSUME ALL RISKS ASSOCIATED THEREWITH, AND TO THE FULLEST EXTENT PERMITTED BY LAW, TO HOLD HARMLESS AND INDEMNIFY MEIJER AND THEIR CONSULTANTS FROM AND AGAINST ALL CLAIMS, LIABILITIES, LOSSES, DAMAGES, AND COSTS, INCLUDING BUT NOT LIMITED TO ATTORNEY'S FEES AND COSTS, WHETHER OR NOT SUIT HAS BEEN FILED, ARISING OUT OF, OR IN ANY WAY CONNECTED WITH THE USE, MODIFICATION, MISINTERPRETATION, MISUSE, OR REUSE BY RECIPIENT OR OTHERS OF THE ELECTRONIC DATA WHICH IS PROVIDED BY MEIJER OR ITS CONSULTANTS UNDER THESE TERMS AND CONDITIONS.  
8.C. THESE TERMS AND CONDITIONS SHALL BE BINDING UPON THE SUCCESSORS AND ASSIGNS OF THE PARTIES.  
UPON ACCEPTANCE OF THE ELECTRONIC DATA TRANSMISSION, RECIPIENT HEREBY AGREES TO THE FOREGOING TERMS AND CONDITIONS. IF RECIPIENT DOES NOT AGREE TO THE FOREGOING TERMS AND CONDITIONS, MEIJER AND ITS CONSULTANTS DO NOT AUTHORIZE THE USE OF THE TRANSMITTED DATA AND RECIPIENT SHALL DESTROY THE TRANSMITTED DATA AND NOTIFY MEIJER OR ITS CONSULTANTS OF THE SAME BY PROVIDING WRITTEN NOTICE WITHIN ONE DAY OF TRANSMISSION. FAILURE TO PROVIDE SUCH NOTICE SHALL ACT AS WAIVER AND RECIPIENT SHALL BE BOUND TO THE FOREGOING TERMS AND CONDITIONS.

### LOCAL UTILITY LOCATING AGENCY

ALL CONTRACTORS SHALL NOTIFY UTILITY COMPANIES AND GOVERNMENT AGENCIES IN WRITING OF THE INTENT TO EXCAVATE NO LESS THAN 72 HOURS PRIOR TO SUCH EXCAVATION (EXCLUSIVE OF SATURDAYS, SUNDAYS, AND HOLIDAYS) AND CALL LOCAL UTILITY LOCATING AGENCY AT 811.  
EXISTING UTILITY LOCATIONS SHOWN SHALL BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. LOCATIONS OF UNDERGROUND UTILITIES ON THESE DRAWINGS ARE APPROXIMATE ONLY AND BASED ON ACTUAL FIELD LOCATIONS OF VISIBLE STRUCTURES AND PLAN COMPUTATIONS.

### SURVEY

EXISTING TOPOGRAPHY IS BASED ON AN ACTUAL FIELD SURVEY PERFORMED BY WOOLPERT, IN PLAIN CITY, JEROME TOWNSHIP, UNION COUNTY, OHIO COMPLETED ON JULY 25, 2025.

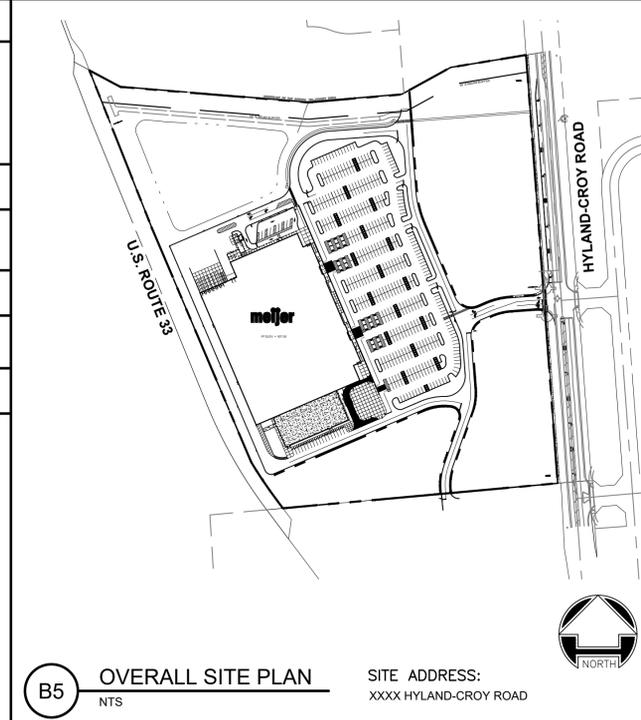
### GEOTECHNICAL

REFER TO GEOTECHNICAL SITE ASSESSMENT PREPARED.

### SHEET KEYNOTE INSTRUCTIONS

SHEET KEYNOTES ARE NOTED WITHIN THE GRAPHIC AREA OF THE DRAWING. THESE ARE REPRESENTED BY A NUMBER SURROUNDED BY A HEXAGON, WITH OR WITHOUT A LEADER. A LEGEND ON THE RIGHT SIDE OF THE PAGE LISTS THE NOTES IN NUMERICAL ORDER.

- EXAMPLE:  1. ALIGN NEW CONSTRUCTION WITH THE FACE OF EXISTING CONSTRUCTION.



**B5 OVERALL SITE PLAN**  
NTS  
SITE ADDRESS:  
XXXX HYLAND-CROY ROAD

### SYMBOL LEGEND

	EXISTING MAJOR CONTOUR		8" SAN SANITARY SEWER & MANHOLE
	EXISTING MINOR CONTOUR		WYE & LEAD
	NEW MINOR CONTOUR		RISER & LEAD
	NEW MAJOR CONTOUR		STANDARD SEWER CLEANOUT
	CENTER OF DITCH		12" SD STORM SEWER & MANHOLE
	LOT LINE (AS PLATTED)		CATCH BASIN WITH EROSION CONTROL
	R.O.W. LINE		UNDERDRAIN
	SECTION LINE		8" WTR WATER MAIN
	FENCE		8" WTR VALVE & BOX
	GRAVEL SURFACE		METER
	PAVED SURFACE		PLUG
	EXISTING CURB & GUTTER		STANDARD FIRE HYDRANT ASSEMBLY
	PROPOSED CURB & GUTTER		CURB STOP & BOX
	TURN DOWN CONCRETE SLAB		G GAS MAIN
	SIGN		UE UNDERGROUND ELECTRIC
	SITE LIGHT POLES		UT UNDERGROUND TELEPHONE
	BENCH MARK		TELEPHONE PEDESTAL
	SECTION CORNER		CONCRETE SLAB
	EASEMENT LINE		HEAVY DUTY ASPHALT
	PROPOSED ELEVATION		LIGHT DUTY ASPHALT
	PROPOSED PAVEMENT MARKING (PAINTING)		MATCH LINE
	PROPOSED BARRIER FREE PARKING		

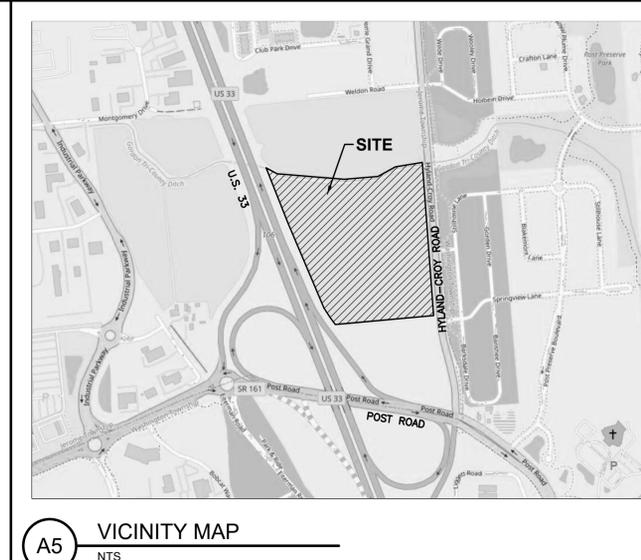
### ABBREVIATIONS

A	AREA	MAT'L	MATERIAL
ALT	ALTERNATE	MAX	MAXIMUM
AMP	AMPERE	MECH	MECHANICAL
ARCH	ARCHITECTURAL	MIN	MINIMUM
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	MH	MANHOLE
B/C	BACK OF CURB	(N)	NORTH
BIT	BITUMINOUS PAVEMENT	ON	ON CENTER
BM	BENCH MARK	OC	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION
CONC	CONCRETE	OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION
DA	DIAMETER	PC	POINT OF CURVATURE
(E)	EAST	PE	POLYETHYLENE
E.I.F.S.	EXTERIOR INSULATION FINISHING SYSTEM	PH	PHASE
EL. ELEV	ELEVATION	PSI	POUNDS PER SQUARE INCH
EQ	EQUIVALENT	PT	POINT OF TANGENCY
ES	END SECTION	PVC	POLYVINYL CHLORIDE
ETC	ETC	PVMT	PAVEMENT
FH	FIRE HYDRANT	RCP	REINFORCED CONCRETE PIPE
FF	FINISHED FLOOR	RE	REFERENCE
FS	FOOT SQUARE	REQ'D	REQUIRED
FT	FOOT	ROW	RIGHT-OF-WAY
GND, GRD	GROUND	RW	RETAINING WALL
GP	GUTTER PAN	(S)	SOUTH
GPD	GALLONS PER DAY	SAN	SANITARY SEWER
GPM	GALLONS PER MINUTE	SB	SOIL BORING
GV&BOX	GATE VALVE AND BOX	SQ. FT.	SQUARE FEET
HC	HIGH CAPACITY	SQ.	SQUARE
HEX	HEAVY DUTY	STM	STORM SEWER
HT	HEIGHT	STRUC	STRUCTURE
IE	INVERT ELEVATION	TC	TOP OF CURB
KVA	KILOVOLT AMPERE	TEL	TELEPHONE
LBS	POUNDS	TP	TOP OF PAVEMENT
LD	LIGHT DUTY	TRNF	TRANSFORMER
LED	LIGHT EMITTING DIODE	TS	TOP OF SLAB
LF	LINEAR FEET	TW	TOP OF WALL
LG	LARGE	TYP	TYPICAL
MANUF	MANUFACTURE	UC	UTILITY CROSSING
		UD	UNDER DRAIN
		W	WIRE
		(W)	WEST
		WC	WATER COLUMN
		WTR	WATER
		WWF	WELDED WIRE FABRIC

### AGENCIES

<b>ZONING</b> JEROME TOWNSHIP 9777 INDUSTRIAL PARKWAY PLAIN CITY, OH 43064 ERIC SNOWDEN PHONE: 614-873-4480 EXT. 3 EMAIL: ESNOWDEN@JEROMETOWNSHIP.COM	<b>FIRE</b> JEROME TOWNSHIP FIRE DEPARTMENT 9889 US-42 N PLAIN CITY, OH 43064 DOUG STEWART PHONE: 614-873-8990 EMAIL: DSTEWART@JEROMETOWNSHIP.COM
<b>STORMWATER</b> UNION COUNTY ENGINEER/UNION SOIL & WATER CONSERVATION DISTRICT 3900 EUCLID AVENUE CLEVELAND, OH 44115 ROBERT STOEKEL PHONE: 216-881-8600 X6802 EMAIL: STOEKELR@NEORSO.DRG	<b>ELECTRIC</b> AEP 700 MORRISON ROAD GAHANNA, OH 43230 ANGEL ECHARD PHONE: 614-883-7189 EMAIL: AMECHARD@AEP.COM
<b>WATER</b> CITY OF MARYSVILLE 18000 RAYMOND ROAD MARYSVILLE, OH 43040 SCOTT SHEPPEARD PHONE: 937-645-7350 EMAIL: SSSHEPPEARD@MARYSVILLEOHIO.ORG	<b>GAS - SERVICES</b> COLUMBIA GAS OF OHIO 601 MINOR PARK DRIVE COLUMBUS, OH 43215 TODD SCHWARZ PHONE: 614-506-7023 EMAIL: TSCHWARZ@NISOURCE.COM
<b>SANITARY</b> CITY OF MARYSVILLE 12901 BEECHER GAMBLE ROAD MARYSVILLE, OH 43040 CORY SMITH PHONE: 937-645-7344 EMAIL: CSMITH@MARYSVILLEOHIO.ORG	<b>TELEPHONE &amp; INTERNET</b> FRONTIER 13630 LORAIN AVENUE - 2ND FLOOR CLEVELAND, OH 44111 RODNEY RHODES PHONE: 214-476-6057 EMAIL: RR9432@ATT.COM
<b>BUILDING PERMITS</b> UNION COUNTY 233 WEST 6TH STREET MARYSVILLE, OH 43040 PHONE: 937-645-3021 EMAIL: ENGINEER@UNIONCOUNTYOHIO.GOV	

### VICINITY MAP



**A5 VICINITY MAP**  
NTS

REV.	DATE	DESCRIPTION



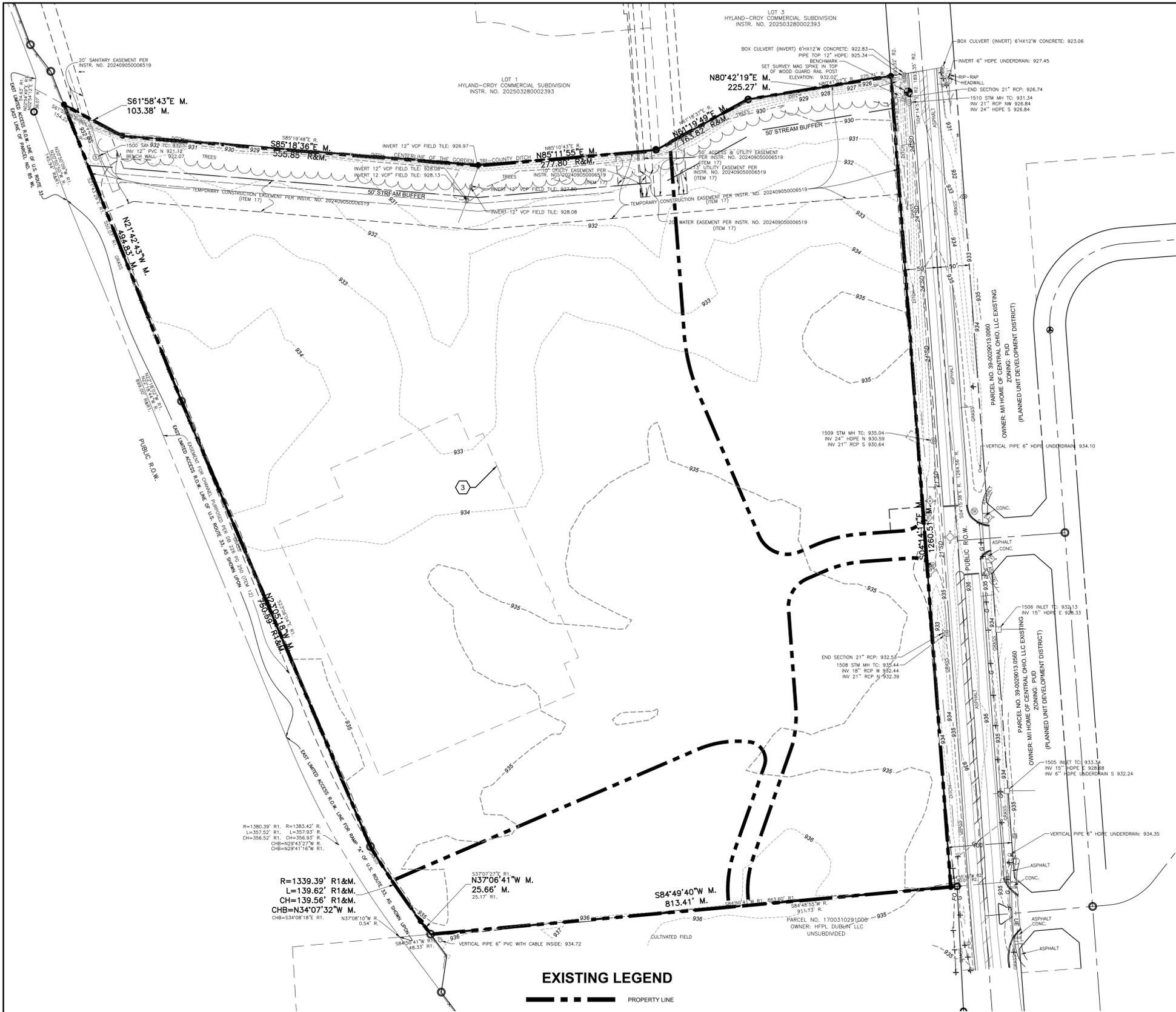
MEIJER STORE JRM  
HYLAND-CROY ROAD  
PLAIN CITY, OHIO 43064  
**COVER SHEET**

ISSUED FOR:	
PERMIT	MM/DDYY
BID	MM/DDYY
CONSTRUCTION	MM/DDYY
PROJECT MANAGER	DESIGNER
BLS	MRS

JOB NO.  
10020719

**C-001**

Images: Xrefs: 10020719-x.dwg; 10020719-p.dwg; main store and gc footprint.dwg; 10020719TBLK.dwg; Base - Coughlin Kia.dwg  
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**EXISTING LEGEND**

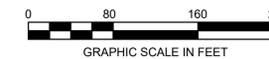
--- PROPERTY LINE

**GENERAL NOTES**

1. PLANIMETRIC FEATURES SHOWN HEREON ARE BASED UPON A FIELD SURVEY COMPLETED BY WOOLPERT INC. ON AUGUST 5, 2025 AND WILL NOT REFLECT ANY CHANGES TO THE PHYSICAL SITE THROUGH MANMADE OR NATURAL OCCURRENCES BEYOND SAID DATE.
2. ANY USE OF THIS DRAWING BY PARTIES NOT CONTRACTED DIRECTLY WITH WOOLPERT OR CERTIFIED TO ON THIS DRAWING IS PROHIBITED WITHOUT PRIOR WRITTEN PERMISSION.
3. ONLY THE IMPROVEMENTS THAT WERE VISIBLE FROM ABOVE GROUND AT TIME OF SURVEY, THROUGH A NORMAL SEARCH AND WALK THROUGH OF THE SITE, ARE SHOWN ON THE FACE OF THIS PLAT. THIS SURVEY MAY NOT REFLECT ALL UTILITIES OR IMPROVEMENTS, IF SUCH ITEMS ARE HIDDEN BY LANDSCAPING, OR ARE COVERED BY SUCH THINGS AS DUMPSTERS, TRAILERS, SNOW, ETC.
4. BASED ON REVIEW OF THE CURRENT NATIONAL WETLAND INVENTORY MAPPING NO WETLAND AREAS ARE CURRENTLY DEPICTED ON THE PROPERTY. GIVEN THE PREVIOUSLY FARMED NATURE OF THE SITE IT IS UNLIKELY THAT WETLANDS ARE PRESENT.
5. ACCORDING TO THE FLOOD INSURANCE RATE MAP - MAP NUMBER 39159C0500D, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITH A REVISION DATE OF DECEMBER 16, 2008, WHICH IS THE MOST CURRENT FLOOD INSURANCE RATE MAP AVAILABLE ON FEMA'S WEBSITE, THIS SITE IS LOCATED IN ZONE "X" (NO SCREEN) - AREAS OF MINIMAL FLOOD HAZARD. THE ABOVE REFERENCED FLOODPLAIN MAP WAS UTILIZED FOR THIS DETERMINATION.
6. RECYCLED CONCRETE MATERIAL IS DEFINED AS CRUSHED CONCRETE SLAB, FOUNDATIONS, CURBS AND SIDEWALK, ALONG WITH THE GRANULAR BASE MATERIAL ASSOCIATED WITH THESE ITEMS (EXCLUDES CRUSHED CONCRETE BLOCK). THIS MATERIAL SHALL BE CRUSHED AND OR PROCESSED TO BE IN ACCORDANCE WITH MEIJER SPECIFICATIONS AND CAN BE USED AS FOLLOWS:
  - MASS GRADING AND GENERAL FILL AREAS.
  - UTILITY TRENCH BACKFILL (EXCEPT FOR PIPE BEDDING).
  - SUBGRADE FILL MATERIAL DIRECTLY UNDER THE ASPHALT AND CONCRETE PAVEMENT SECTIONS. (MATERIAL SHALL NOT BE USED AS PART OF THE PAVEMENT SECTIONS.)

**BENCHMARK:**

THE BASIS OF ELEVATIONS HEREON IS NAVD 88 PER OBSERVATIONS OF SELECTED STATIONS IN THE NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING REFERENCE STATION (NGS CORS) NETWORK. SURVEY MAG SPIKE SET IN THE TOP OF WOOD GUARD RAIL POST - SEE DRAWING FOR LOCATION.  
 ELEVATION = 932.02'



4454 Idea Center Boulevard  
 Dayton, OH 45430  
 937.461.5660



2929 WALKER AVENUE  
 GRAND RAPIDS, MICHIGAN 49544  
 (616) 453-6711

REV.	DATE	DESCRIPTION

MEIJER STORE JRM  
 HYLAND-CROY ROAD  
 PLAIN CITY, OHIO 43064

**EXISTING CONDITIONS PLAN**

ISSUED FOR:	
PERMIT	MMDDYY
BID	MMDDYY
CONSTRUCTION	MMDDYY

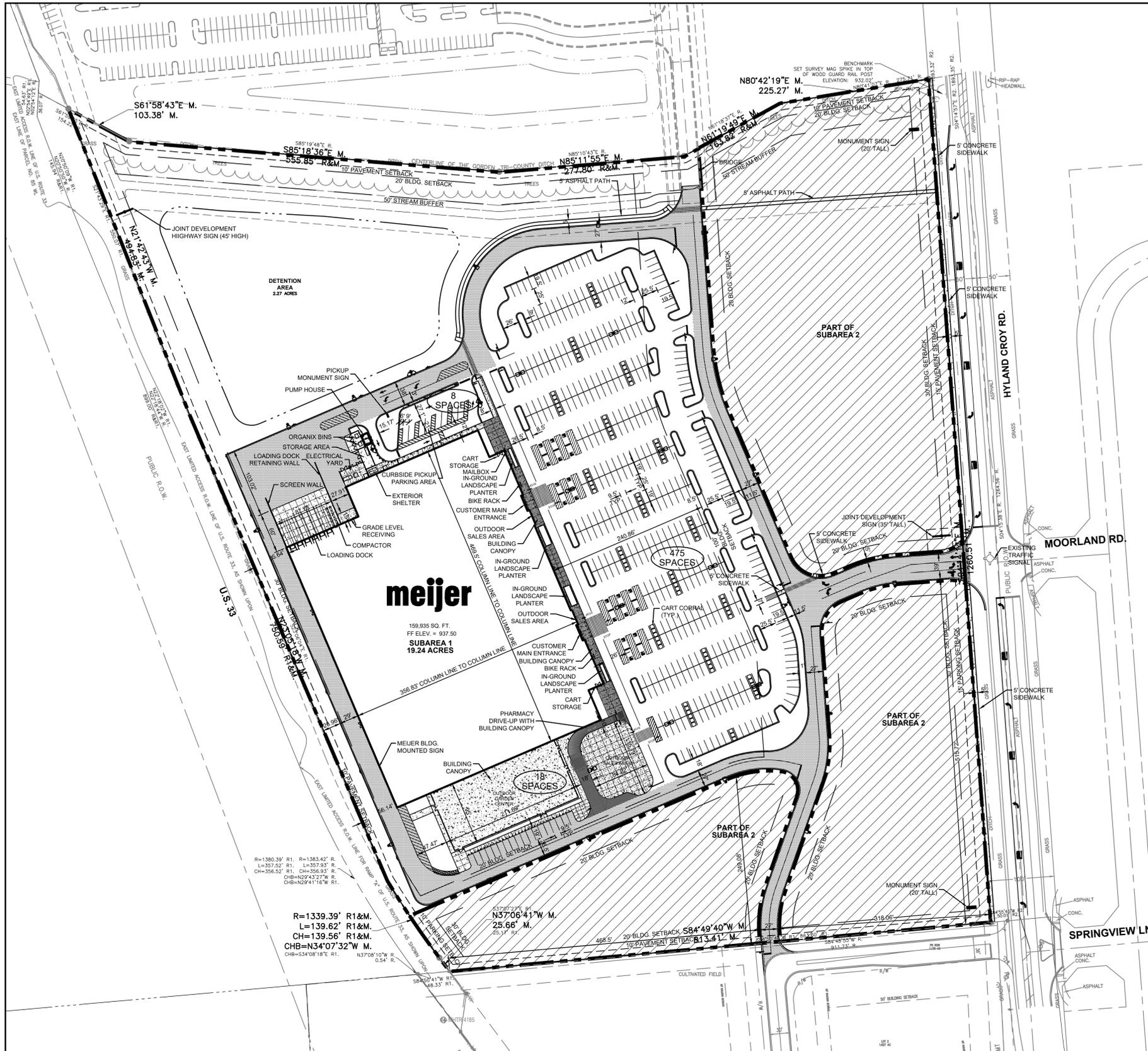
PROJECT MANAGER	DESIGNER
BLS	MRS

JOB NO.  
 10020719

**C-100**

A1 EXISTING CONDITIONS / DEMOLITION PLAN  
 1" = 80'

Images: Xrefs: 10020719-p.dwg; main store and gc footprint.dwg; 10020719TBLK.dwg; EX 10.2.25.dwg; NEIGHBOR 10.22.25.dwg  
 User: C-200  
 Last Saved By: Daulton, 12/16/2025 12:27:25 PM  
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**LEGEND**

- EXISTING BOUNDARY
- PROPERTY LINE
- - - PROPOSED SETBACK
- - - EXISTING EASEMENT
- - - PROPOSED EASEMENT
- - - EXISTING LOT LINE
- - - PROPOSED LOT LINE
- - - EXISTING RIGHT-OF-WAY
- CONCRETE PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- SUBAREA 2 (10.33 ACRES)
- 9'x6' PARKING SPACES, UNLESS NOTED OTHERWISE
- BARRIER FREE PARKING SPACES
- CART CARRAL
- LIGHT POLE

**GENERAL NOTES**

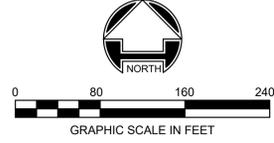
1. NO DIMENSION MAY BE SCALED. REFER UNCLER ITEMS TO THE ENGINEER FOR INTERPRETATION.
2. DIMENSIONS AND/OR COORDINATES ARE TO BACK OF CURB, FACE OF BUILDING (FACE OF PRECAST), EDGE OF PAVEMENT OR CENTER OF STRUCTURE OR SIGN. VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
3. BUILDING SLABS, UNDERBED THICKNESS AND LOCATIONS ARE SHOWN FOR REFERENCE. VERIFY WITH STRUCTURAL DRAWINGS.
4. REFER TO SHEET C-500 AND C-501 FOR STRIPING/SIGNAGE, AND PARKING COUNT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING TO ACCOMPLISH ALL WORK INDICATED ON PLANS AND PERFORM REQUIRED COMPACTION OPERATIONS.
6. PROVIDE ADEQUATE BARRICADES AT DRIVES, ENTRANCES, EXCAVATIONS AND OTHER OPENINGS TO KEEP OUT UNAUTHORIZED PERSONS AND FOR PUBLIC SAFETY AND TRAFFIC CONTROL. SAFETY PROVISIONS OF APPLICABLE LAWS SHALL BE OBSERVED AT ALL TIMES. BARRICADES LEFT IN PLACE AT NIGHT SHALL BE LIGHTED.
7. NO EQUIPMENT OR MATERIAL STORAGE IS PERMITTED IN THE RIGHT-OF-WAY.
8. WORK SHALL CONFORM TO THE REQUIREMENTS OF MEIJER STANDARD SPECIFICATIONS, GOVERNING AGENCIES HAVING JURISDICTION, GRADING, PAVING AND MATERIALS SHALL COMPLY WITH THE STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AS WELL AS PROJECT SPECIFICATIONS AND DRAWINGS. IN CASE OF DISCREPANCIES BETWEEN REQUIREMENTS, THE MORE STRINGENT SHALL APPLY.
9. EXTERIOR CONCRETE SLABS ADJACENT TO BUILDING SHALL BE PLACED ON 4" STRUCTURAL CUSHION, UNLESS NOTED OTHERWISE, REFER TO THE STRUCTURAL DRAWINGS FOR INFORMATION ON THE GARDEN CENTER SLAB.
10. AGGREGATE TO EXTEND 12" BEYOND BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
11. ALL RADII SHALL BE 4' UNLESS OTHERWISE NOTED.
12. ALL CONCRETE SIDEWALK IN THE PUBLIC RIGHT-OF-WAY TO COMPLY WITH COUNTY CONSTRUCTION STANDARDS.

**PARKING SUMMARY**

<b>MAIN STORE</b>	
PARKING PROVIDED	481
PARKING DEFERRED	000
BARRIER FREE PARKING	20
<b>TOTAL PARKING</b>	<b>501</b>

**BENCHMARK:**

THE BASIS OF ELEVATIONS HEREON IS NAVD 88 PER OBSERVATIONS OF SELECTED STATIONS IN THE NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING REFERENCE STATION (NGS CORN) NETWORK. SURVEY MAG SPIKE SET IN THE TOP OF WOOD GUARD RAIL POST - SEE DRAWING FOR LOCATION. ELEVATION = 932.02'



**WOOLPERT**  
 ARCHITECTURE | ENGINEERING | GEOGRAPHICAL  
 4454 Idea Center Boulevard  
 Dayton, OH 45430  
 937.461.5660

**meijer**  
 2929 WALKER AVENUE  
 GRAND RAPIDS, MICHIGAN 49544  
 (616) 453-6711

REV.	DATE	DESCRIPTION

MEIJER STORE JRM  
 HYLAND-CROY ROAD  
 PLAIN CITY, OHIO 43064

**OVERALL SITE LAYOUT PLAN**

ISSUED FOR:	
PERMIT	MMDDYY
BID	MMDDYY
CONSTRUCTION	MMDDYY

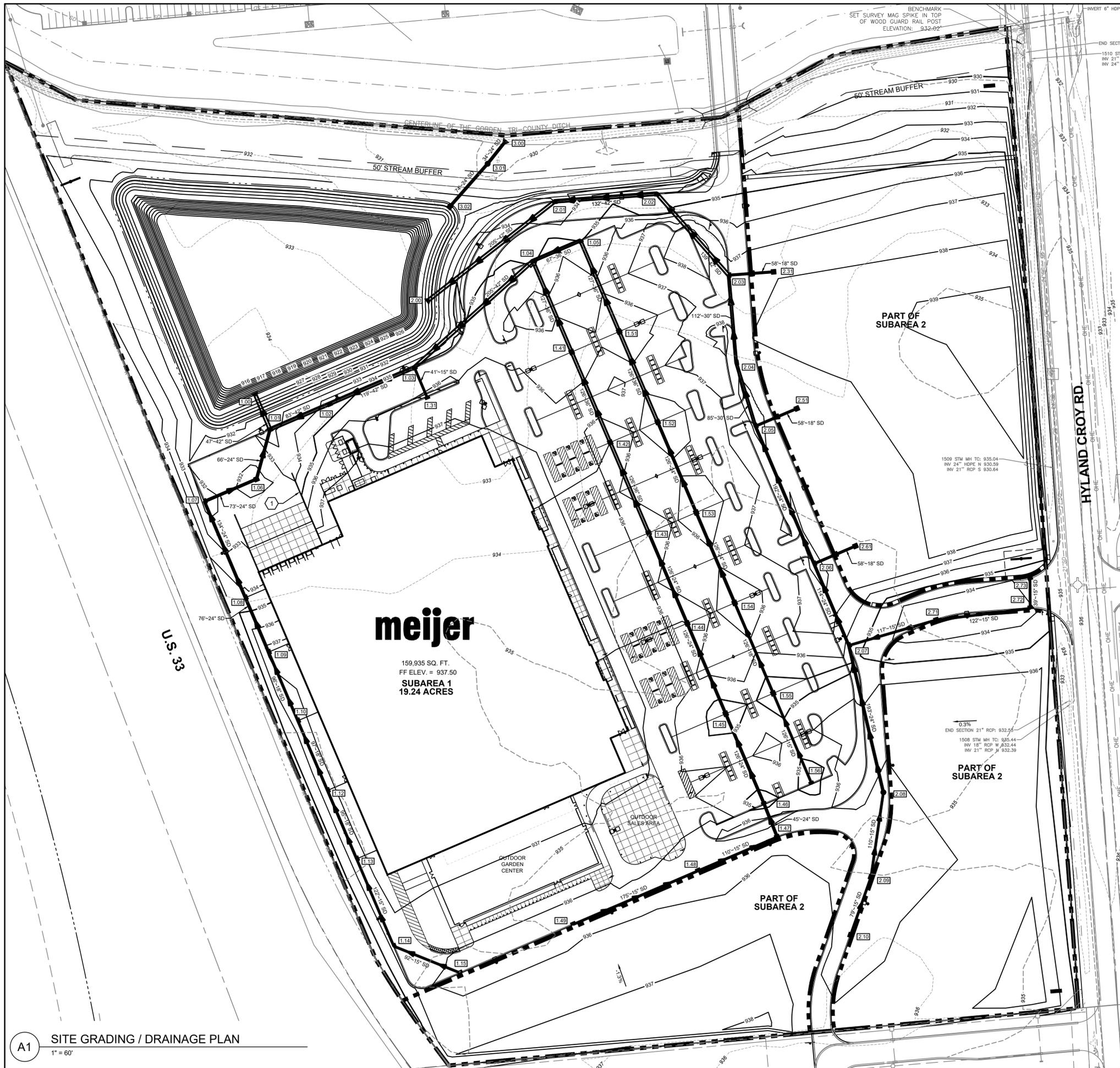
PROJECT MANAGER	DESIGNER
BLS	MRS

JOB NO.  
10020719

**C-200**

**A1** OVERALL SITE LAYOUT PLAN  
 1" = 80'

Images: Xrefs: 10020719TBLK.dwg; Base - Coughlin Kis.dwg; 10020719-g.dwg; 10020719-p.dwg; main store and gc footprint.dwg; 10020719-x.dwg; NEIGHBOR 10.22.25.dwg  
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- LEGEND**
- CATCH BASIN
  - CURB INLET
  - MANHOLE
  - END SECTION
  - CLEANOUT
  - ⊠ STORM STRUCTURE I.D.
  - STORM SEWER
  - SD — EXISTING STORM SEWER
  - UNDERDRAIN
  - 1179 — EXISTING 1' CONTOUR
  - 1180 — EXISTING 5' CONTOUR
  - 1179 — PROPOSED 1' CONTOUR
  - 1180 — PROPOSED 5' CONTOUR
  - PROPERTY LINE

- KEYNOTES** X
- LOADING DOCK RETAINING WALL

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 Dayton, OH 45430  
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 GRAND RAPIDS, MICHIGAN 49544  
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REV.	DATE	DESCRIPTION

MEIJER STORE JRM  
 HYLAND-CROY ROAD  
 PLAIN CITY, OHIO 43064

**SITE GRADING / DRAINAGE PLAN**

ISSUED FOR:	
PERMIT	MMDDYY
BID	MMDDYY
CONSTRUCTION	MMDDYY

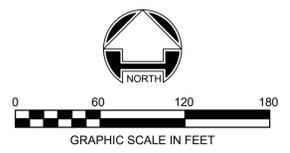
PROJECT MANAGER	DESIGNER
BLS	MRS

JOB NO.  
 10020719

**C-300**

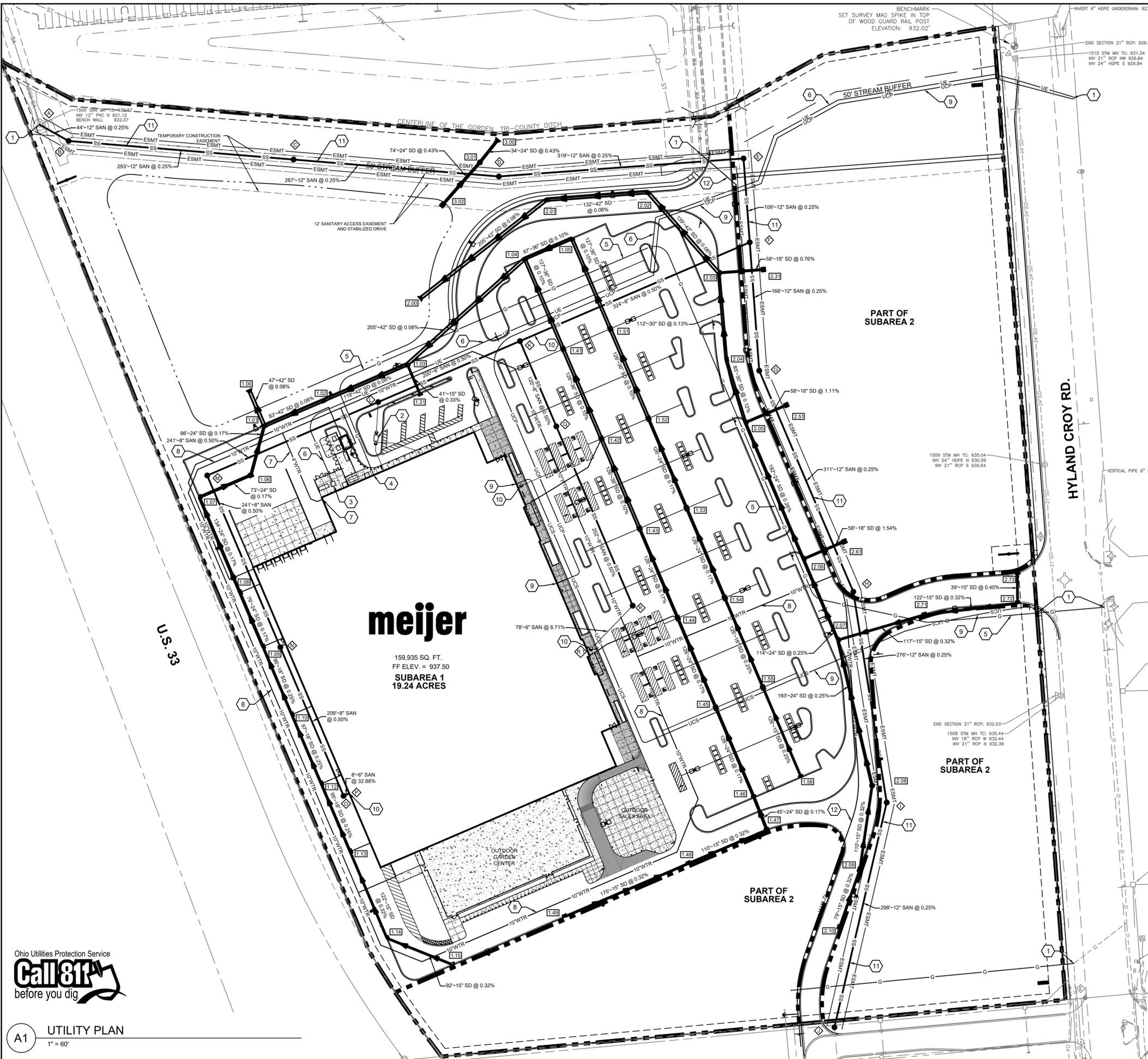
**BENCHMARK:**  
 THE BASIS OF ELEVATIONS HEREON IS NAVD 88 PER OBSERVATIONS OF SELECTED STATIONS IN THE NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING REFERENCE STATION (NGS CORS) NETWORK. SURVEY MAG SPIKE SET IN THE TOP OF WOOD GUARD RAIL POST - SEE DRAWING FOR LOCATION.  
 ELEVATION = 932.02'

Ohio Utilities Protection Service  
**Call 811**  
 before you dig



**A1** SITE GRADING / DRAINAGE PLAN  
 1" = 60'

Images: Xrefs: 10020719-p.dwg; main store and gc footprint.dwg; 10020719TBLK.dwg; EX 10.2.25.dwg; 10020719-x.dwg; NEIGHBOR 10.22.25.dwg  
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### LEGEND

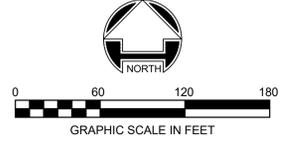
- CATCH BASIN
- ▣ CURB INLET
- MANHOLE
- CLEANOUT
- STORM SEWER
- - - UNDERDRAIN
- SS — SANITARY SEWER
- 10"WTR — FIRE SERVICE
- 4"WTR — DOMESTIC WATER SERVICE
- FIRE HYDRANT
- ⊗ WW WATER VALVE
- G — GAS SERVICE
- UCT — UNDERGROUND COMMUNICATIONS SERVICE
- UCP — UNDERGROUND COMMUNICATIONS SERVICE
- UCS — UNDERGROUND COMMUNICATIONS SERVICE
- UE — UNDERGROUND ELECTRIC SERVICE
- LIGHT POLE

### KEYNOTES

1. CONNECT TO EXISTING UTILITY IN ACCORDANCE WITH APPROPRIATE AGENCY REQUIREMENTS.
2. GREASE INTERCEPTOR.
3. TRANSFORMER.
4. GAS METER.
5. GAS SERVICE.
6. ELECTRIC SERVICE.
7. DOMESTIC SERVICE.
8. FIRE SERVICE.
9. COMMUNICATION SERVICE.
10. SANITARY SERVICE.
11. SANITARY MAIN EXTENSION.
12. WATER MAIN EXTENSION.

### BENCHMARK:

THE BASIS OF ELEVATIONS HEREON IS NAVD 88 PER OBSERVATIONS OF SELECTED STATIONS IN THE NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING REFERENCE STATION (NGS CORS) NETWORK SURVEY MAG SPIKE SET IN THE TOP OF WOOD GUARD RAIL POST - SEE DRAWING FOR LOCATION  
 ELEVATION = 932.02'



**WOOLPERT**  
 ARCHITECTURE | ENGINEERING | GEOSPATIAL  
 4454 Idea Center Boulevard  
 Dayton, OH 45430  
 937.461.5660

**meijer**  
 2929 WALKER AVENUE  
 GRAND RAPIDS, MICHIGAN 49544  
 (616) 453-6711

REV.	DATE	DESCRIPTION

MEIJER STORE JRM  
 HYLAND-CROY ROAD  
 PLAIN CITY, OHIO 43064

UTILITY PLAN

ISSUED FOR:	
PERMIT	MM/DD/YY
BID	MM/DD/YY
CONSTRUCTION	MM/DD/YY

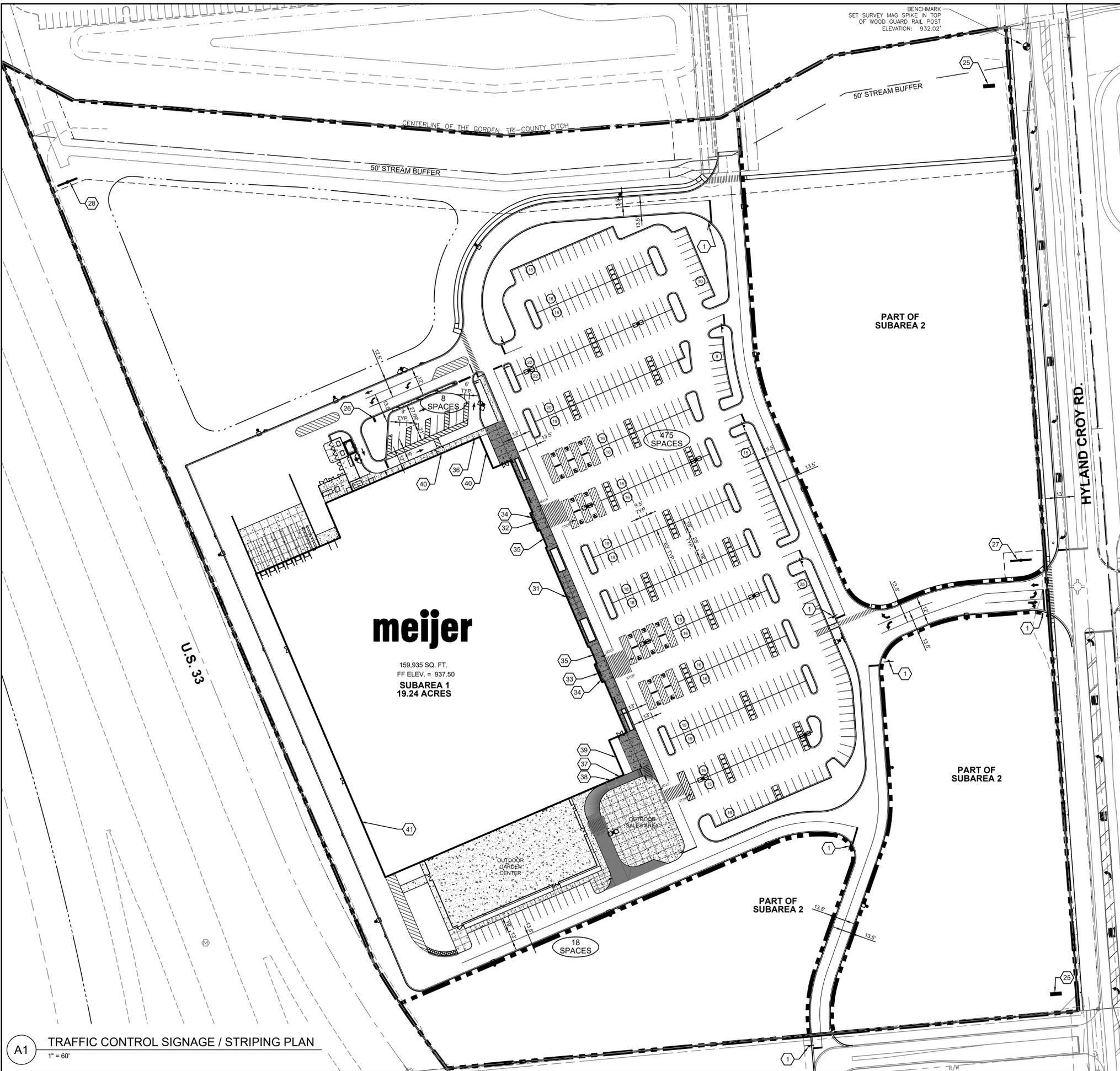
PROJECT MANAGER	DESIGNER
BLS	MRS

JOB NO.  
 10020719

**C-400**



**A1** UTILITY PLAN  
 1" = 60'



**PAVEMENT STRIPING NOTES**

1. ALL DIMENSIONS MEASURED FROM FACE OF BUILDING.
2. ALL PAVEMENT MARKING SHALL BE YELLOW IN COLOR UNLESS NOTED OTHERWISE.
3. CROSSWALK STRIPING TO BE CENTERED ON THE BUILDING AND GARDEN CENTER ENTRANCES.
4. TRANSVERSE STRIPING WITHIN THE OUTDOOR GARDEN CENTER SHALL MATCH "NO PARKING AREA" STRIPING AS INDICATED IN THE SIGNAGE/STRIPING LEGEND.

**BUILDING AND SITE SIGNAGE NOTES**

1. LOCATE FIRE LANE SIGNS AT FRONT OF BUILDING AT THE EDGE OF CONCRETE SIDEWALK (3 SIGNS)
2. STOP SIGNS AND FIRE LANE SIGNS ALONG FRONT OF THE STORE TO BE ON MOVABLE CONCRETE BASES
3. LOCATE FIRE LANE SIGNS ALONG THE GARDEN CENTER ATTACHED TO THE FENCE (2 SIGNS).
4. LOCATE FIRE LANE SIGNS ALONG BACK OF BUILDING AND THE TRUCK DOCK AREAS AT 2 FT. BEHIND PAVEMENT IN THE GRASS AREA (6 SIGNS).
5. INSTALL CART CORRAL PROVIDED BY OWNER.

**STRIPING LEGEND**

- NO PARKING AREAS  
NO PARKING AREAS 4" YELLOW STRIPE @ 2' O.C. AT 45° TO PARKING SPACE
- ADA VAN ACCESSIBLE PROVIDED PARKING SPACE CONTAINS PAINTED MARKING. SEE DETAIL X ON C-X
- SIGN  
SEE KEYNOTE
- SIGN DETAIL NUMBER  
XX X  
X-XXX
- SHEET NUMBER

**KEYNOTES - SITE/WAYFINDING SIGNAGE**

1. "STOP" SIGN, SEE DETAIL B1 ON C-701.
2. "NO PARKING - FIRE LANE" SIGN, SEE DETAIL B1 ON C-701.
3. "WRONG WAY" SIGN, SEE DETAIL B1 ON C-701.
4. "VAN ACCESSIBLE" PARKING SIGN, SEE DETAIL B6 ON C-701.
5. PHARMACY RIGHT SIGN, SEE DETAIL E3 ON C-501.
6. PICKUP LEFT SIGN, SEE DETAIL E3 ON C-501.
7. "TRUCK ROUTE WITH RIGHT ARROW" SIGN, SEE DETAIL B1 ON C-701.
8. "CROSS TRAFFIC DOES NOT STOP" SIGN, SEE DETAIL B1 ON C-701.
9. "PICKUP" SIGN WITH PARKING SPACE NUMBERS. NUMBERS ASSIGNED BY MEIJER, SEE DETAIL B3 ON C-501.
10. "EV" CHARGING SIGN, SEE DETAIL B3 ON C-501 AND D3 ON C-701. (FUTURE)
11. "EV" CHARGING SIGN WITH "VAN ACCESSIBLE" SIGN, SEE DETAIL C9 ON C-801 AND D3 ON C-701 (FUTURE)
12. PHARMACY STRAIGHT/PICKUP RIGHT SIGN, SEE DETAIL E3 ON C-501.
13. NOT USED.
14. "TRUCK ROUTE WITH LEFT ARROW" SIGN, SEE DETAIL B1 ON C-701.
15. DIGITAL MEDIA SIGN.
16. "STOP" SIGN POSTED ON S10 BOLLARD - BLACK, SEE DETAIL A1 AND B1 ON C-701.
17. "NO PARKING" SIGN, MOUNTED TO WALL, ARROWS TO RIGHT AND LEFT.
18. GREEN INFRASTRUCTURE SIGNAGE "STORMWATER PONDS", SEE DETAIL D5 ON C-501.
19. PHARMACY LEFT/PICKUP RIGHT SIGN, SEE DETAIL E3 ON C-501.

**KEYNOTES - MONUMENT/PYLON SIGNAGE**

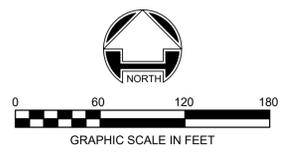
25. 20 FT. HIGH MONUMENT SIGN, SEE DETAIL A5 ON C-502.
26. PICKUP MONUMENT SIGN, SEE DETAIL A3 ON C-501.
27. 35 FT. HIGH JOINT DEVELOPMENT HIGHWAY SIGN, SEE DETAIL A1 ON C-502.
28. 45 FT. HIGH JOINT DEVELOPMENT HIGHWAY SIGN, SEE DETAIL A3 ON C-502.

**KEYNOTES - BUILDING SIGNAGE**

31. "MEIJER" PRIMARY LOGO, SEE DETAIL A3 ON C-501.
32. "FRESH" SIGN, SEE DETAIL A6 ON C-501.
33. "HOME" SIGN, SEE DETAIL B6 ON C-501.
34. "WELCOME" SIGN, SEE DETAIL C4 ON C-501.
35. "LICENSEE" SIGN, SEE DETAIL B4 ON C-501.
36. PICKUP BLADE SIGN, SEE DETAIL C3 ON C-501.
37. Rx BLADE SIGN, SEE DETAIL B3 ON C-501.
38. "PHARMACY DRIVE UP" SIGN, SEE DETAIL B5 ON C-501.
39. PHARMACY SIGN, SEE DETAIL A5 ON C-501.
40. PICKUP SIGN, SEE DETAIL B2 ON SHEET C-501.
41. "MEIJER" SECONDARY LOGO, SEE DETAIL A1 ON SHEET C-501.

**BENCHMARK:**

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ELEVATION = 932.02'



REV.	DATE	DESCRIPTION

MEIJER STORE JRM  
HYLAND-CROY ROAD  
PLAIN CITY, OHIO 43064

TRAFFIC CONTROL SIGNAGE /  
STRIPING PLAN

ISSUED FOR:	
PERMIT	MMDDYY
BID	MMDDYY
CONSTRUCTION	MMDDYY

PROJECT MANAGER	DESIGNER
BLS	MRS

JOB NO.  
10020719

C-500



REV.	DATE	DESCRIPTION

MEIJER STORE JRM  
HYLAND-CROY ROAD  
PLAIN CITY, OHIO 43064

EXTERIOR SIGNAGE DETAILS

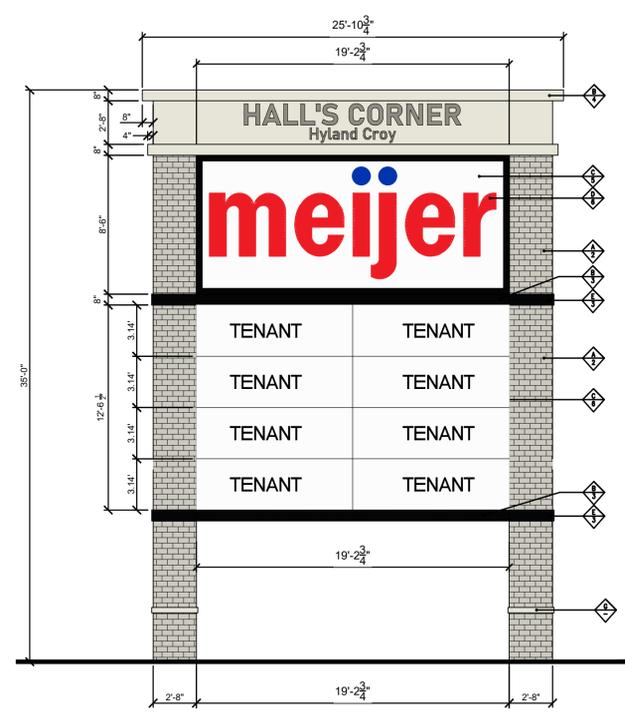
ISSUED FOR:	
PERMIT	MMDDYY
BID	MMDDYY
CONSTRUCTION	MMDDYY

PROJECT MANAGER	DESIGNER
BLS	MRS

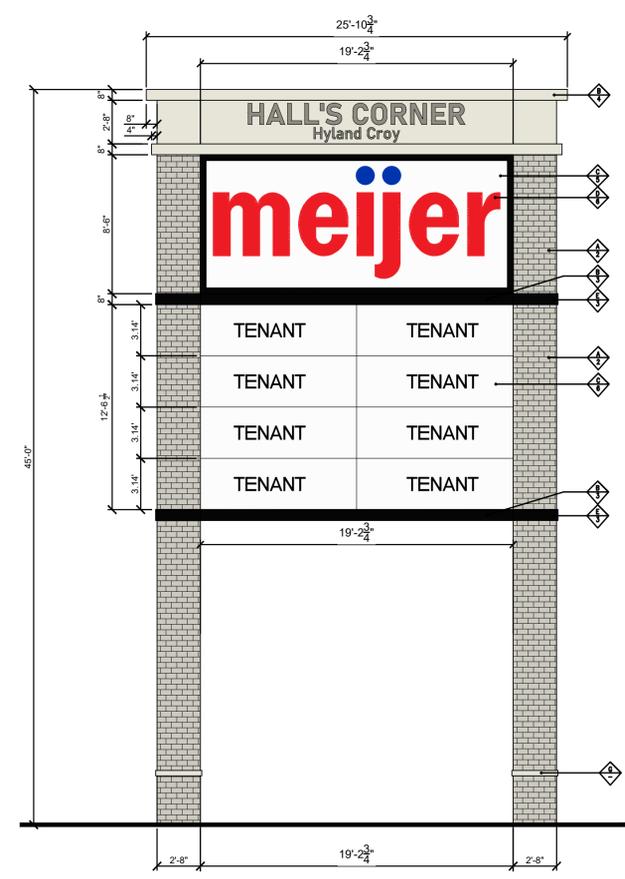
JOB NO.  
10020719

**C-502**

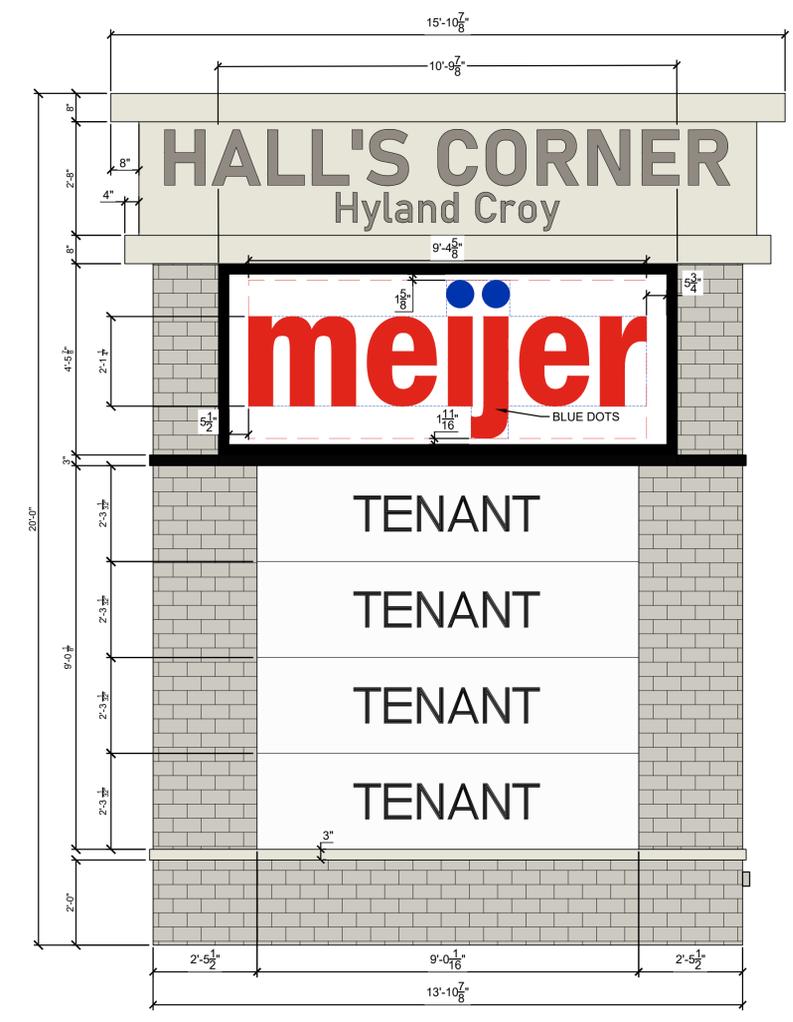
FINISH SCHEDULE	
FINISH MATERIAL	FINISH COLOR
A FULL UTILITY BRICK W/ 1/3 RUNNING BOARD	1 BRICK TO MATCH BELDEN BRICK, DUTCH GRAY VELOUR A
B PRE-FINISHED SHEET METAL	2 BRICK TO MATCH BELDEN BRICK, REPOSE GRAY
C ALUMINUM CABINET	3 BLACK
D MEIJER LOGO - PUSH THRU LETTERS	4 PAC-CLAD - ALMOND
E GLAZED BRICK	5 WHITE
G PRECAST CONCRETE TRIM	6 INTERNALLY ILLUMINATED (DOUBLE SIDED)



**A1** 35 FT. HIGH JOINT DEVELOPMENT SIGN  
NTS TOTAL 404.6 S.F.



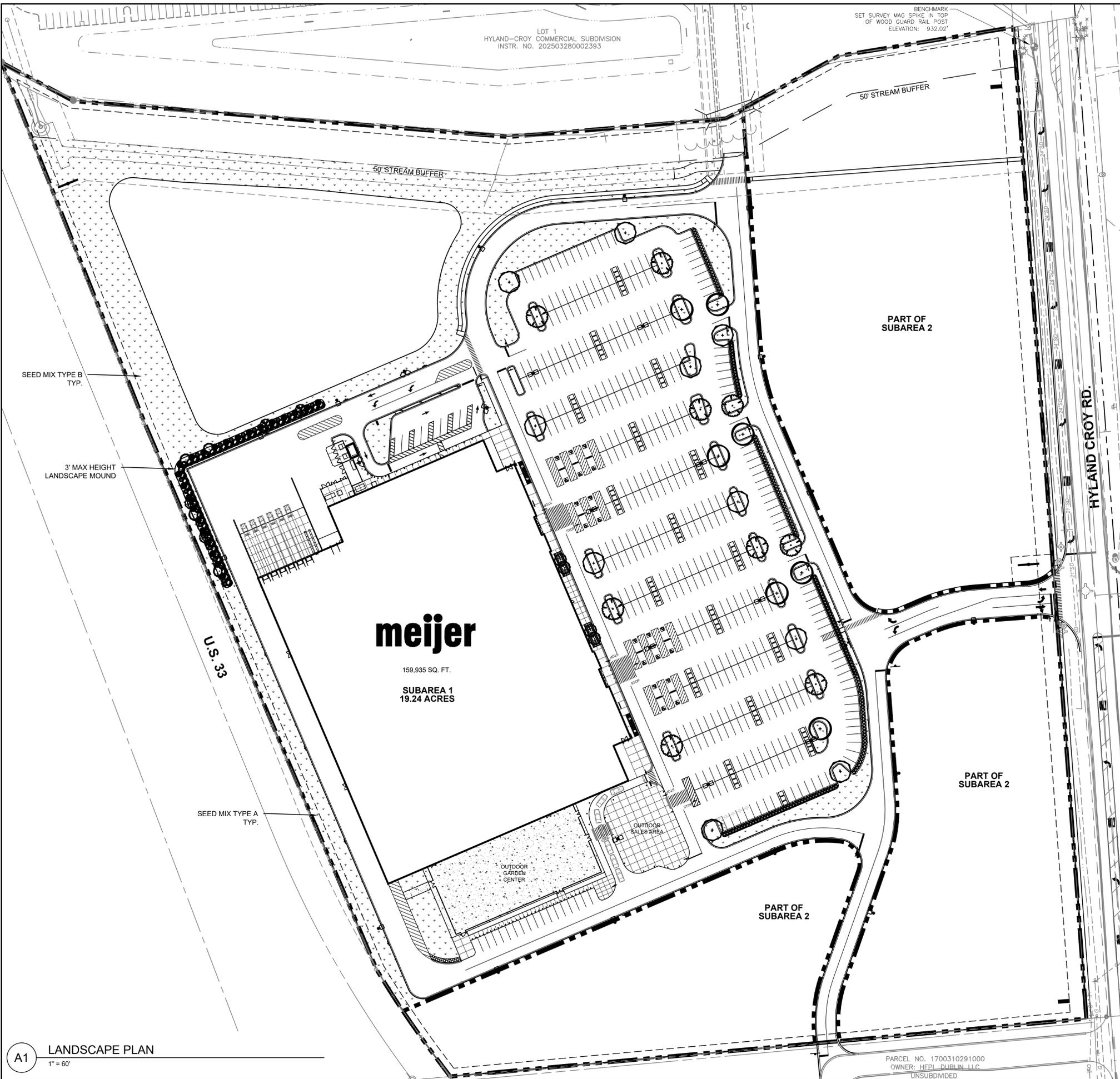
**A3** 45 FT. HIGH JOINT DEVELOPMENT HIGHWAY SIGN  
NTS TOTAL 404.6 S.F.



**A5** 20 FT. HIGH MONUMENT SIGN  
NTS TOTAL 129.7 S.F.

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**LANDSCAPE NOTES**

- COORDINATE PLACEMENT OF PLANTS WITH UTILITY LOCATIONS AND SIGHT LINES TO BUILDING. MAKE ADJUSTMENTS AS REQUIRED TO AVOID PLANTING OVER THE UTILITIES AND/OR WITHIN SIGHT LINES TO ALL MEIJER BUILDING SIGNAGE.
- THE CENTER OF LARGE ISLANDS IS TO BE SIX INCHES HIGHER THAN TOP OF CURB. ENSURE ALL ISLANDS ARE SLOPED FOR POSITIVE DRAINAGE.
- ALL AREAS THAT REQUIRE SEEDING SHALL RECEIVE 4" MINIMUM TOPSOIL, UNLESS NOTED OTHERWISE.
- ALL YARDS AND OPEN SPACE NOT COVERED BY STRUCTURE, PAVING AND THE LIKE SHALL BE LANDSCAPED WITH LAWN AS A MINIMUM.
- SEED ALL AREAS INDICATED ON THE LANDSCAPE PLAN, THE SOIL EROSION CONTROL PLAN AND ALL DISTURBED AREA. REVIEW AREAS OF SEEDING WITH CONSTRUCTION MANAGER PRIOR TO ANY SEEDING. ANY AREAS DISTURBED BY THE CONTRACTOR WHICH ARE BEYOND THE LIMITS OF GRADING AND EARTHWORK SHALL BE SEED AT NO ADDITIONAL COST TO THE OWNER.
- TOPSOIL SHALL BE TESTED AND AMENDED AS NECESSARY DURING FINAL GRADING AND PREPARATION FOR SEEDING BY CONTRACTOR.
- APPLY STARTER FERTILIZER (16-32-4) AT 250 POUNDS/ACRE TO SEEDING AREAS.
- ALL LANDSCAPING SHALL BE INSTALLED A MINIMUM OF 4' FROM THE EDGE OF PAVEMENT WHERE A VEHICLE WILL OVERHANG A LANDSCAPE BED.

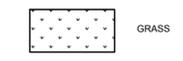
**LANDSCAPE REQUIREMENTS:**

**INTERIOR PARKING REQUIREMENT: (494 SPACES)**  
 REQUIREMENT - 1 TREE EVERY 20 PARKING SPACES. IF NOT TREE CAN BE PLANTED 4 SHRUBS MUST BE PLACED IN THE ISLAND  
 REQUIRED = 25 TREES  
 PROVIDED = 26 TREES

**HEADLIGHT SCREENING REQUIREMENT: (EASTERN PARKING LOT ISLANDS)**  
 REQUIREMENT - CONTINUOUS EVERGREEN HEDGE, 3'-6" IN HEIGHT  
 REQUIRED - CONTINUOUS EVERGREEN HEDGE  
 PROVIDED - CONTINUOUS EVERGREEN HEDGE

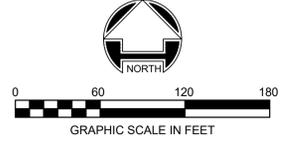
**BUFFER REQUIREMENT: (NORTHWEST PORTION OF BUILDING)**  
 REQUIREMENT - 3' HIGH MOUND AND CONTINUOUS EVERGREEN TREES STAGGERED FOR 100% OPACITY AT 5 YEARS  
 REQUIRED = BUFFER TYPE B  
 PROVIDED = BUFFER TYPE B

**LANDSCAPE LEGEND:**



**BENCHMARK:**

THE BASIS OF ELEVATIONS HEREON IS NAVD 88 PER OBSERVATIONS OF SELECTED STATIONS IN THE NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING REFERENCE STATION (NGS CORS) NETWORK. SURVEY MAG SPIKE SET IN THE TOP OF WOOD GUARD RAIL POST - SEE DRAWING FOR LOCATION.  
 ELEVATION = 932.02'



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 Dayton, OH 45430  
 937.461.5660

**meijer**  
 2929 WALKER AVENUE  
 GRAND RAPIDS, MICHIGAN 49544  
 (616) 453-6711

REV.	DATE	DESCRIPTION

MEIJER STORE JRM  
 HYLAND-CROY ROAD  
 PLAIN CITY, OHIO 43064  
 LANDSCAPE PLAN

ISSUED FOR:	
PERMIT	MMDDYY
BID	MMDDYY
CONSTRUCTION	MMDDYY

PROJECT MANAGER	DESIGNER
BLS	MRS

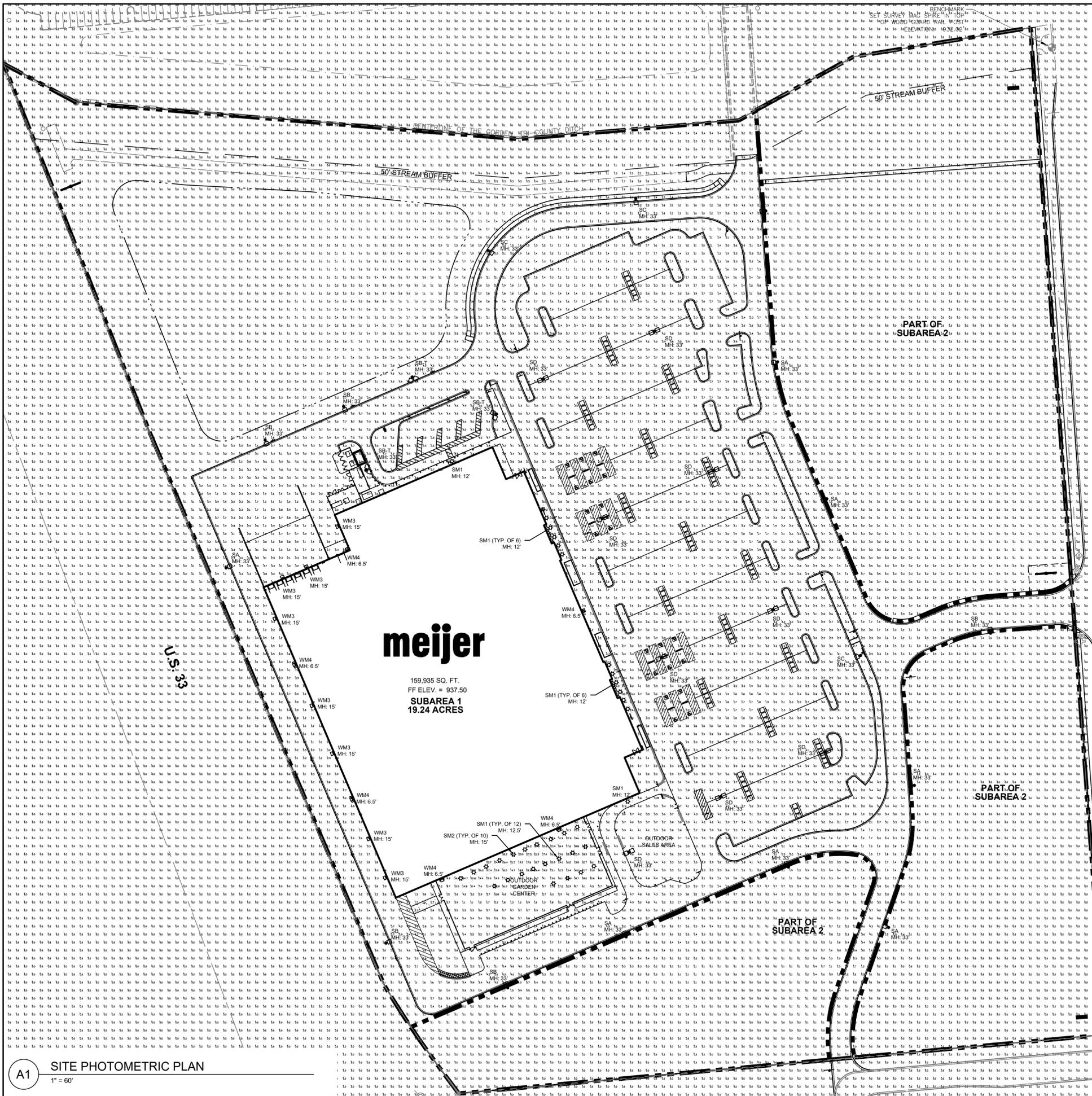
JOB NO.  
 10020719

**C-600**

**A1** LANDSCAPE PLAN  
 1" = 60'

PARCEL NO. 1700310291000  
 OWNER: HEPL DUBLIN LLC  
 UNSUBDIVIDED

Images: Xrefs: 10020719-p.dwg; main store and gc footprint.dwg; EX 10.2.25.dwg; 10020719-photometrics.dwg; NEIGHBOR 10.22.25.dwg  
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Luminaire Label	Qty	Description	LLF	Luminaire Lumens
SB-T	3	LITHONIA RSX3 LED P4 40K R5 HVOLT RPA DBLXD, COMPOSITE POLE, 33' MOUNTING HEIGHT	0.900	41519
SB	5	LITHONIA RSX3 LED P4 40K R4 HVOLT RPA HS DBLXD, COMPOSITE POLE, 33' MOUNTING HEIGHT	0.900	26929
SC	3	LITHONIA RSX3 LED P4 40K R5 HVOLT RPA DBLXD, COMPOSITE POLE, 33' MOUNTING HEIGHT	0.900	41519
WM4	6	Wall mounted, 2,000 lumen LED	0.900	2970
SA	8	LITHONIA RSX3 LED P4 40K R3 HVOLT RPA HS DBLXD, COMPOSITE POLE, 33' MOUNTING HEIGHT	0.900	26386
SM2	10	CANOPY, SURFACE MOUNTED, 13,000 LUMEN, LED	0.900	13636
WM3	8	WALL PACK AREA LIGHTER, LED	0.900	4270
SD	9	LITHONIA RSX3 LED P4 40K R5 HVOLT RPA DBLXD, COMPOSITE POLE, 33' MOUNTING HEIGHT	0.900	41519
SM1	26	CANOPY, SURFACE MOUNTED, 8,000 LUMEN, LED	0.900	8821

STATISTICAL AREA SUMMARY					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
SITE	0.43	32.7	0.0	NA.	NA.
DIGITAL ORDER - CANOPY	20.20	20.2	2.02	1.00	1.00
DIGITAL ORDER - PARKING	4.37	8.5	2.7	1.62	3.15
ENTRY WAY - GENERAL MERCH	30.30	32.7	24.2	1.25	1.35
ENTRY WAY - 24HR	29.58	31.3	27.3	1.08	1.15
GARDEN CENTER - CANOPY	23.98	31.9	16.0	1.50	1.99
GARDEN CENTER - SHADE CLOTH	17.58	26.4	8.4	2.09	3.14
PARKING - MAIN STORE PRIMARY	2.83	15.4	1.0	2.83	15.40
PHARMACY - DRIVE THRU CANOPY	16.40	16.4	16.4	1.00	1.00
PHARMACY - DRIVE THRU LANE	4.49	11.9	2.7	1.66	4.41
RECEIVING DOCK	2.29	8.1	0.7	3.27	11.57
ROADWAY - ENTRANCE DRIVE	1.75	5.8	0.0	NA.	NA.
ROADWAY - INTERNAL DRIVE	2.15	5.5	0.0	NA.	NA.
ROADWAY - NORTH DRIVE	3.32	8.7	0.4	8.30	21.75
ROADWAY - REAR DRIVE	1.93	7.1	0.1	19.30	71.00
ROADWAY - SOUTH DRIVE	2.59	6.0	0.2	12.95	30.00

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 GRAND RAPIDS, MICHIGAN 49544  
 (616) 453-6711

REV.	DATE	DESCRIPTION

MEIJER STORE JRM  
 HYLAND-CROY ROAD  
 PLAIN CITY, OHIO 43064  
**SITE PHOTOMETRIC PLAN**

ISSUED FOR:	
PERMIT	MMDDYY
BID	MMDDYY
CONSTRUCTION	MMDDYY
PROJECT MANAGER	BLS
DESIGNER	MRS

JOB NO.  
 10020719

**C-801**

**BENCHMARK:**  
 THE BASIS OF ELEVATIONS HEREON IS NAVD 88 PER OBSERVATIONS OF SELECTED STATIONS IN THE NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING REFERENCE STATION (NGS CORS) NETWORK SURVEY MAG SPIKE SET IN THE TOP OF WOOD GUARD RAIL POST - SEE DRAWING FOR LOCATION.  
 ELEVATION = 932.02'

Ohio Utilities Protection Service  
**Call 811**  
 before you dig

**A1 SITE PHOTOMETRIC PLAN**  
 1" = 60'

Images: rs3-led-4dbvd\_005.jpg; WM3-WM6 -- Itg-xspw-security-011414-007\_offw=546h=546.jpg; WM4- 1023186.jpg; Xrefs: 10020719-TBLK.dwg; EX 10.2.25.dwg; 10020719-x.dwg; 10020719-photometrics.dwg; NEIGHBOR 10.22.25.dwg  
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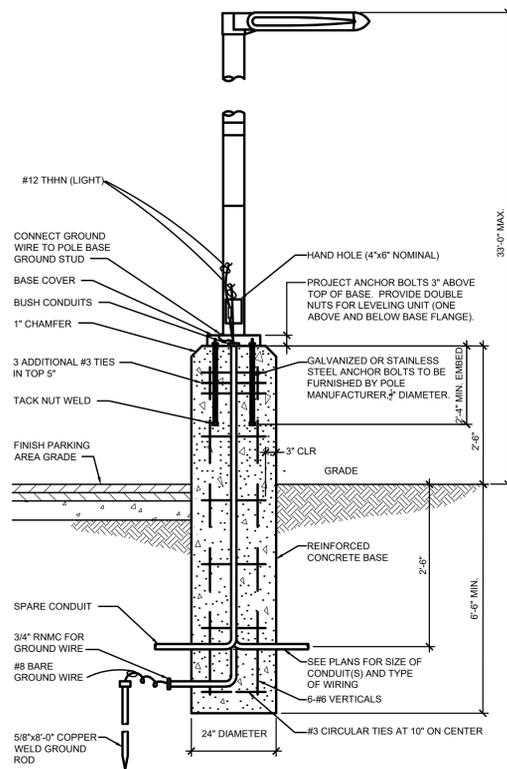
**E4** WALL PACK - TYPE WM3  
NTS



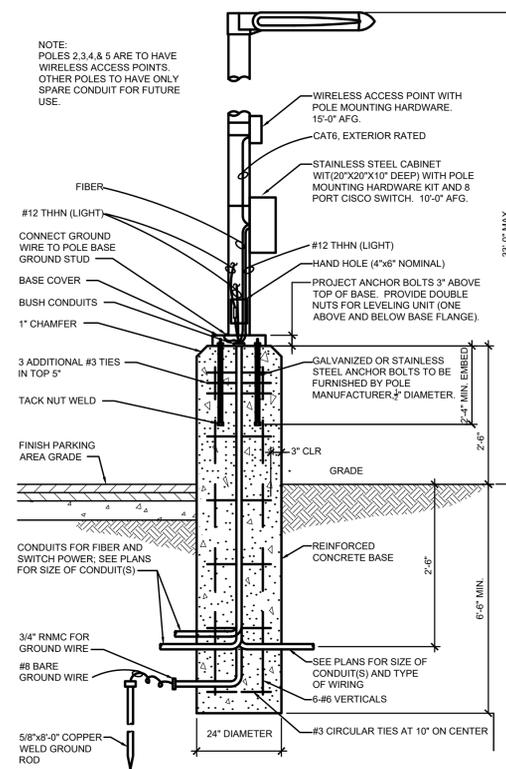
**E5** WALL PACK - TYPE WM4  
NTS



**E6** POLE FIXTURE - TYPE Sx  
NTS



**A5** RAISED CONCRETE LIGHTING BASE DETAIL  
NTS



**A6** RAISED CONCRETE LIGHTING BASE DETAIL  
NTS

REV.	DATE	DESCRIPTION



MEIJER STORE JRM  
HYLAND-CROY ROAD  
PLAIN CITY, OHIO 43064

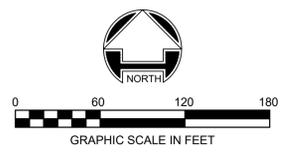
**SITE ELECTRICAL DETAILS**

ISSUED FOR:	
PERMIT	MM/DD/YY
BID	MM/DD/YY
CONSTRUCTION	MM/DD/YY

PROJECT MANAGER	DESIGNER
BLS	MRS

JOB NO.  
10020719

**C-802**



WIRCHANSKI JOHN LAWRENCE  
260 N COLUMBIA AVE  
COLUMBUS OH, 43209

M/I HOMES OOF CENTRAL OHIO, LLC  
4131 WORTH AVE  
COLUMBUS OH, 43219

UNION COUNTY BOARD OF  
COMMISSIONERS  
233 W 6TH ST  
MARYSVILLE OH, 43040

HFPL DUBLIN, LLC  
4592 ULMERTON RD  
CLEARWATER FL, 33762

CITY OF DUBLIN  
5200 EMERALD PKWY  
DUBLIN OH, 43017

HYLAND CROY PROPERTIES TWO,  
LLC  
P.O. BOX 1474  
PATASKALA, OH 43062

OHIO DEPT OF TRANSPORTATION  
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2829 W DUBLIN GRANVILLE RD  
COLUMBUS OH, 43235

WIRCHANSKI JOHN LAWRENCE  
260 N COLUMBIA AVE  
COLUMBUS OH, 43209

M/I HOMES OOF CENTRAL OHIO, LLC  
4131 WORTH AVE  
COLUMBUS OH, 43219

UNION COUNTY BOARD OF  
COMMISSIONERS  
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MARYSVILLE OH, 43040

HFPL DUBLIN, LLC  
4592 ULMERTON RD  
CLEARWATER FL, 33762

CITY OF DUBLIN  
5200 EMERALD PKWY  
DUBLIN OH, 43017

HYLAND CROY PROPERTIES TWO,  
LLC  
P.O. BOX 1474  
PATASKALA, OH 43062

OHIO DEPT OF TRANSPORTATION  
(ODOT)  
2829 W DUBLIN GRANVILLE RD  
COLUMBUS OH, 43235



## Meijer JRM, Jerome Township Schedule

It is expected the development infrastructure including public roadway improvements, private roads, public utility mains, and stormwater management facilities will be constructed with the Meijer project. The construction level civil design, architectural design, permitting, contractor bidding and awards will be completed in 2026. Construction of infrastructure and Meijer project is projected to commence in the spring of 2027. Meijer grand opening is programmed for spring of 2028. The commercial outparcel development will occur in the future as users are identified.



# Preliminary Stormwater Management Summary

**To:** Jerome Township, Union County

**From:** Matt Stechschulte, PE, CFM  
1 Easton Oval #400  
Columbus, OH 43219  
Matthew.Stechschulte@Woolpert.com



**Date:** December 10, 2025

12/11/25

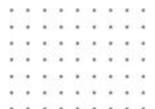
**Subject:** Proposed Meijer Development – Hyland-Croy Road, Jerome Township, Plain City, Union County, Ohio – Stormwater Management Summary

## INTRODUCTION

This stormwater management report provides the explanation/methodology to show how stormwater management of the proposed Meijer development meets the requirements of Jerome Township and Union County. The development will be constructed northwest of Post Road and Hyland-Croy, Plain City, Union County, Ohio. The site will be developed as a Meijer main store.

## SITE DESCRIPTION

1. The existing site is an undeveloped farm field. The site is bordered by The Gorden Tri-County Ditch to the north, farm field to the south, Hyland-Croy Road to the east, and US-33 to the west.
2. A Meijer main store with associated parking areas and access drives will be constructed. One entrance drive will be constructed to access the site on Hyland-Croy. An internal drive will be constructed to connect the Meijer development to the Kia development to the north and proposed commercial development to the south. Storm sewer and utility services will be constructed and connect to the existing utility infrastructure.
3. The proposed stormwater collection and management system is designed to accept and manage runoff from the entire Developer Outlots in addition to the Meijer portion of the development.
4. The site will route 9.05 acres of offsite drainage from the undeveloped area to the south. The above-ground detention basin will be designed to route this offsite flow.



**OVERALL SITE STORMWATER MANAGEMENT STUDY**

For the overall site, stormwater management detention and water quality will be provided in accordance with County requirements. This will include post-developed routing complying with allowable releases.

In pre-developed conditions and post-developed conditions all subareas are within the same watershed as the study area which drains to the Gorden Tri-County Ditch, the stream located immediately north of the Meijer development. The project also accounts for the future development of the outlots along Hyland Croy Road. This design assumes that the proposed outlots will be developed at 85% impervious cover and runoff from it will be routed to the proposed wet basins.

**HYDROLOGIC SUMMARY**

**Pre-Developed Runoff:**

In pre-developed conditions all on-site soils are Brookston silty clay loam (Bs) and Crosby silt loam (CrA). Hydrologic Soil Group of C has been used for the pre-developed conditions. The pre-developed site consists of pervious farm land.

**Table 1  
 Pre-Developed Subarea Characteristics**

Subarea	HydroCAD Node	Land Use	Area (acres)	Hydrologic Soil Group	Curve Number	Time of Concentration (minutes)	1-Year Runoff Volume (ac-ft)
PRE	1S	Farm Field	27.36	C (Bs, CrA)	78	44.5	1.579
OFFSITE	5S	Woods	9.05	C (Bs, CrA)	70	55.2	-

**Post-Developed Runoff:**

All on-site soils are to be treated as HSG Group D, so only cover type will determine CN. CN values are 98 for impervious area and 80 for open space, good condition.

**Table 2  
 Post-Developed Subarea Characteristics**

Subarea	HydroCAD Node	Land Use	Area (acres)	Hydrologic Soil Group	Curve Number	Time of Concentration (minutes)	1-Year Runoff Volume (ac-ft)
POST	2S	Open Space, Impervious Area, 85% impervious commercial development	27.36	D (Bs, CrA)	94	15.0	3.936
OFFSITE	5S	Woods	9.05	C (Bs, CrA)	70	55.2	-

**STORMWATER QUALITY**

Post Construction Water Quality is provided by the proposed wet basin. Calculations supporting the water quality design meeting the requirements of the Ohio EPA are attached to this memo.

**SUMMARY OF STORMWATER RELEASES**

Union County uses the Critical Storm method to determine allowable release rates. This method ensures that post-development peak discharge rates from the Critical Storm and more frequent storms do not exceed pre-development peak discharge rates from a 1-year, 24-hour storm. For less frequent storms, up to the 100-year, 24-hour storm, peak runoff discharge rates must not exceed those from equivalent pre-development storms. The increase in runoff generated from the development generates a 25-year critical storm. Calculations supporting the critical storm determination are provided below.

1-Year Pre-developed Volume = 1.579 ac-ft  
 1-Year Post-Developed Volume = 3.936 ac-ft  
 % increase = 149%  
 Critical Storm = 25-Year

See Table 3 below for basin routing and total post-developed runoff results.

**Table 3  
 Stormwater Summary**

Recurrence Interval	24-Hr Precip (in.)	Pre-Developed Runoff (cfs)	Post-Developed Runoff (cfs)	Offsite Runoff (cfs)	Total Flow to Basin (cfs)	Basin Elevation (ft)	Basin Volume (ac-ft)	Total Post-Developed Runoff (cfs)	Allowable Release Rates* (cfs)
1	2.35	11.25	59.46	1.39	59.57	928.77	2.396	5.88	12.64
2	2.55	13.66	65.70	1.85	65.87	928.88	2.614	7.13	13.10
5	3.30	23.58	88.98	3.94	89.55	929.35	3.567	11.32	15.19
10	3.80	30.78	104.41	5.60	105.41	929.68	4.231	13.99	16.85
25	4.30	38.31	119.76	7.40	121.29	930.01	4.934	15.97	18.65
50	4.75	45.26	133.53	9.11	135.56	930.34	5.631	16.96	54.37
100	5.00	49.18	141.16	10.10	143.49	930.52	5.999	18.38	59.28
HydroCAD Node		1S	2S	5S	3P	3P	3P	3P	

\*Allowable Discharge (includes Offsite) is based on the following:

- 1-year event: 1-year pre-developed runoff + 1-year Offsite Runoff = 11.25 cfs + 1.39 cfs = 12.64 cfs
- 2-year event: 1-year pre-developed runoff + 2-year Offsite Runoff = 11.25 cfs + 1.85 cfs = 13.10 cfs
- 5-year event: 1-year pre-developed runoff + 5-year Offsite Runoff = 11.25 cfs + 3.94 cfs = 15.19 cfs
- 10-year event: 1-year pre-developed runoff + 10-year Offsite Runoff = 11.25 cfs + 5.60 cfs = 16.85 cfs
- 25-year event: 1-year pre-developed runoff + 25-year Offsite Runoff = 11.25 cfs + 7.40 cfs = 18.65 cfs
- 50-year event: 50-year pre-developed runoff + 50-year Offsite Runoff = 45.26 cfs + 9.11 cfs = 54.37 cfs
- 100-year event: 100-year pre-developed runoff + 100-year Offsite Runoff = 49.18 cfs + 10.10 cfs = 59.28 cfs

**CONCLUSION**

The proposed design meets the requirements for detention and water quality described by Union County and the Ohio EPA.

**ATTACHMENTS**

Vicinity Map

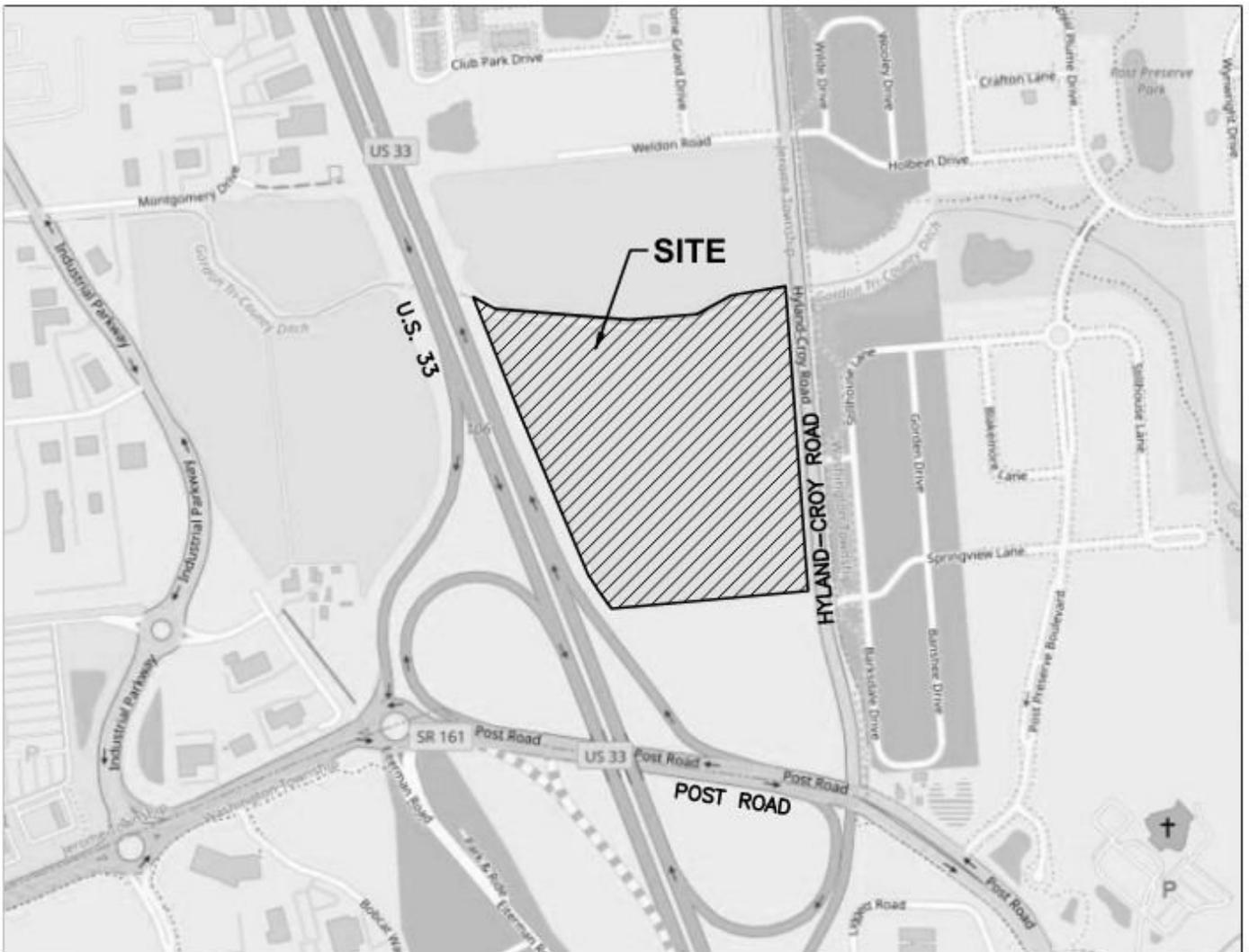
NRCS Web Soil Survey

OEPA Water Quality Volume BMP Compliance Worksheet

HydroCAD Output

EXH 1 – Pre-Developed Drainage Plan

EXH 2 – Post-Developed Drainage Plan



**A5** VICINITY MAP  
NTS



United States  
Department of  
Agriculture

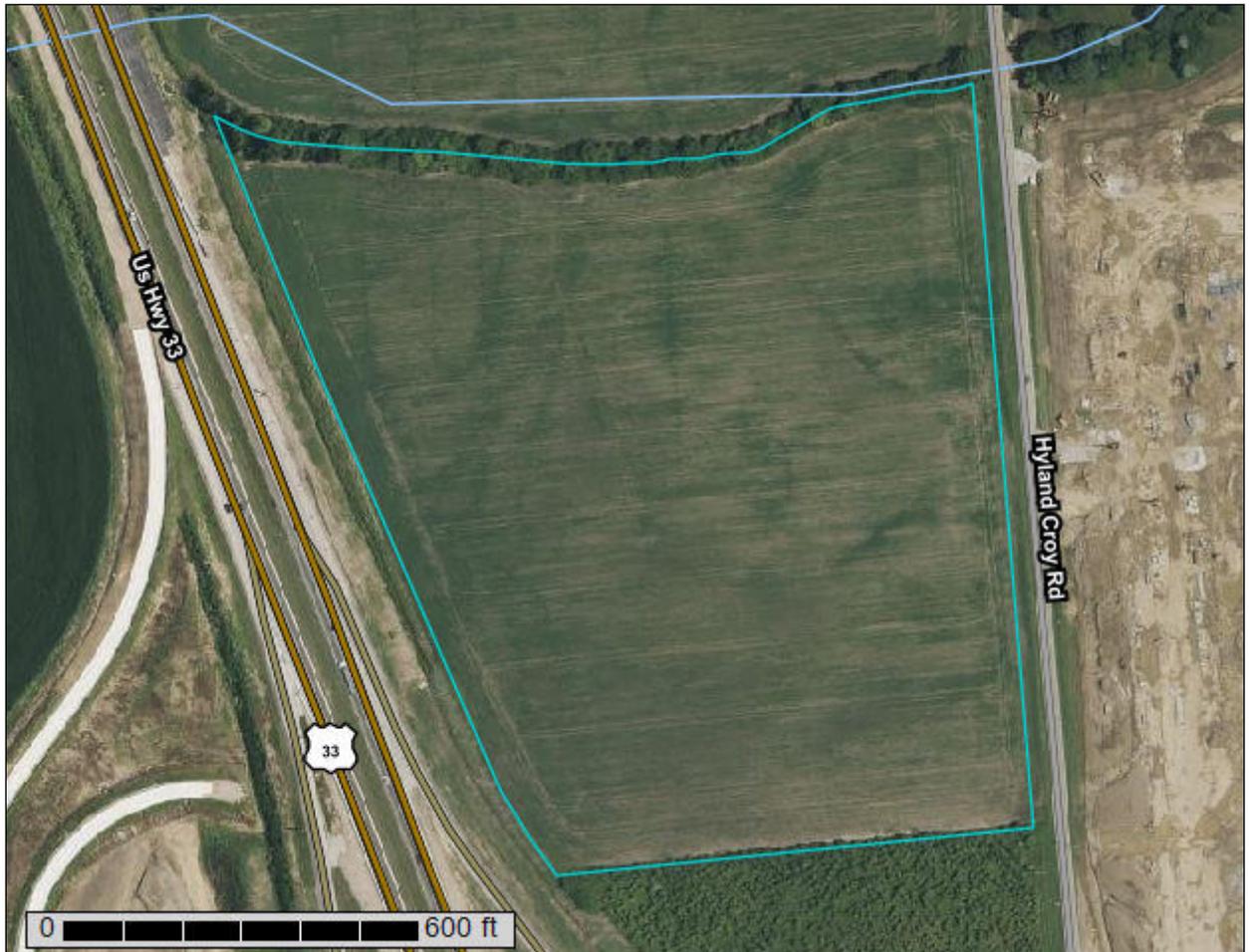
**NRCS**

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**

**Meijer JRM**



# 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

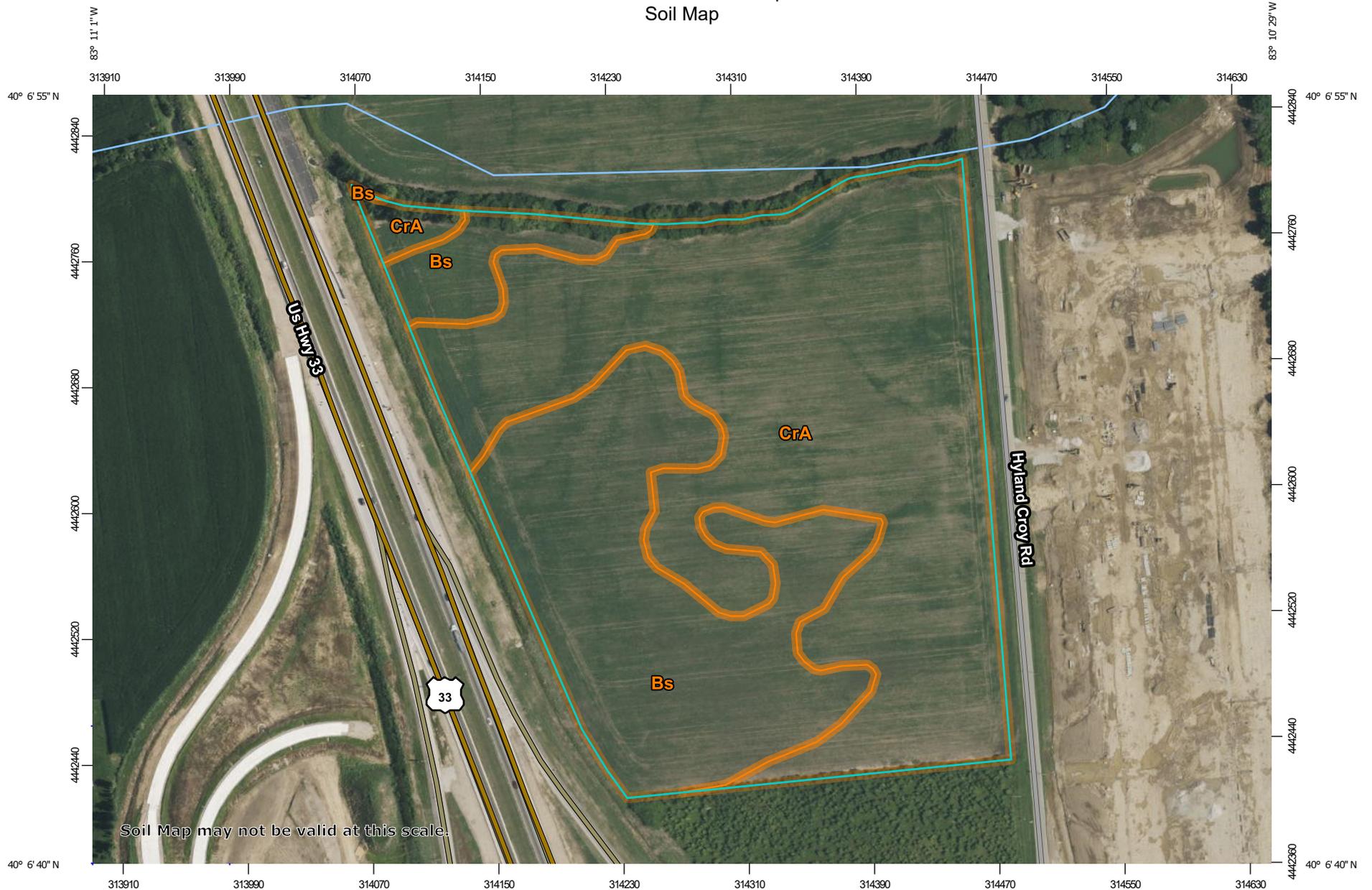
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

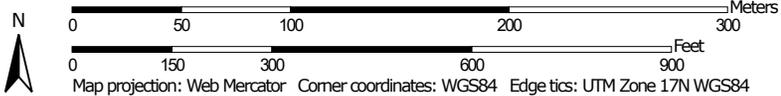
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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce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

# Custom Soil Resource Report Soil Map



Map Scale: 1:3,440 if printed on A landscape (11" x 8.5") sheet.



### 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 22, Sep 11, 2023

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

Date(s) aerial images were photographed: May 21, 2023—Aug 8, 2023

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
Bs	Brookston silty clay loam, fine texture, 0 to 2 percent slopes	11.1	37.5%
CrA	Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	18.4	62.5%
<b>Totals for Area of Interest</b>		<b>29.5</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 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

## Custom Soil Resource Report

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

### Bs—Brookston silty clay loam, fine texture, 0 to 2 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2t98m  
*Elevation:* 820 to 1,140 feet  
*Mean annual precipitation:* 37 to 46 inches  
*Mean annual air temperature:* 48 to 55 degrees F  
*Frost-free period:* 145 to 180 days  
*Farmland classification:* Prime farmland if drained

#### Map Unit Composition

*Brookston and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Brookston

##### Setting

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Loamy glaciofluvial deposits derived from sedimentary rock over loamy till derived from limestone and dolomite

##### Typical profile

*Ap - 0 to 12 inches:* silty clay loam  
*Btg - 12 to 39 inches:* silty clay loam  
*2C - 39 to 60 inches:* silt loam

##### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* 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 content:* 35 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 8.1 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* C/D  
*Ecological site:* F111XA0071N - Till Depression Flatwood  
*Hydric soil rating:* Yes

**Minor Components**

**Celina**

*Percent of map unit:* 5 percent  
*Landform:* Till plains  
*Landform position (two-dimensional):* Summit, shoulder  
*Landform position (three-dimensional):* Crest  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Ecological site:* F111XA009IN - Till Ridge  
*Hydric soil rating:* No

**Crosby**

*Percent of map unit:* 5 percent  
*Landform:* Till plains  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* F111XA008IN - Wet Till Ridge  
*Hydric soil rating:* No

**CrA—Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2thy7  
*Elevation:* 520 to 1,550 feet  
*Mean annual precipitation:* 36 to 44 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 145 to 180 days  
*Farmland classification:* Prime farmland if drained

**Map Unit Composition**

*Crosby and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Crosby**

**Setting**

*Landform:* Recessional moraines, ground moraines, water-lain moraines  
*Landform position (two-dimensional):* Summit, backslope, footslope  
*Landform position (three-dimensional):* Interfluve, rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Silty material or loess over loamy till

**Typical profile**

*Ap - 0 to 8 inches:* silt loam  
*BE - 8 to 11 inches:* silt loam

## Custom Soil Resource Report

*Bt1 - 11 to 14 inches: silt loam*  
*2Bt2 - 14 to 28 inches: silty clay loam*  
*2BCt - 28 to 36 inches: loam*  
*2Cd - 36 to 79 inches: loam*

### Properties and qualities

*Slope: 0 to 2 percent*  
*Depth to restrictive feature: 24 to 40 inches to densic material*  
*Drainage class: Somewhat poorly drained*  
*Runoff class: Medium*  
*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 24 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Calcium carbonate, maximum content: 50 percent*  
*Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*  
*Available water supply, 0 to 60 inches: Low (about 5.7 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 2w*  
*Hydrologic Soil Group: C/D*  
*Ecological site: F111XA008IN - Wet Till Ridge*  
*Hydric soil rating: No*

### Minor Components

#### Kokomo, drained

*Percent of map unit: 5 percent*  
*Landform: Swales, water-lain moraines, depressions*  
*Landform position (two-dimensional): Footslope, toeslope*  
*Landform position (three-dimensional): Base slope, dip*  
*Down-slope shape: Linear*  
*Across-slope shape: Concave*  
*Ecological site: F111XA007IN - Till Depression Flatwood*  
*Hydric soil rating: Yes*

#### Celina, eroded

*Percent of map unit: 4 percent*  
*Landform: Recessional moraines, ground moraines, water-lain moraines*  
*Landform position (two-dimensional): Summit, shoulder, backslope*  
*Landform position (three-dimensional): Head slope, nose slope, side slope, crest, rise*  
*Down-slope shape: Linear, convex*  
*Across-slope shape: Convex, linear*  
*Ecological site: F111XA009IN - Till Ridge*  
*Hydric soil rating: No*

#### Miamian, eroded

*Percent of map unit: 1 percent*  
*Landform: Recessional moraines, ground moraines, water-lain moraines*  
*Landform position (two-dimensional): Summit, shoulder, backslope*  
*Landform position (three-dimensional): Head slope, nose slope, side slope, crest, rise*  
*Down-slope shape: Linear, convex*  
*Across-slope shape: Convex, linear*

Custom Soil Resource Report

*Ecological site:* F111XA009IN - Till Ridge  
*Hydric soil rating:* No

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## Custom Soil Resource Report

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United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

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## Project and Watershed Information; WQv Calculation

version 3.2 2020-07-07

### Project Details

Project Name:	Meijer JRM
Project Location:	Hyland-Croy Road
	Jerome Township, OH 43064
Project Latitude:	40.114502
Project Longitude:	-83.178881
NPDES Permit Applicant:	
Submitted by:	Matt Stechschulte, PE, CFM
Date:	12/11/2025

### Subwatershed Details

Subwatershed ID/Label:	Gorden Tri-County Ditch		
Subwatershed Drainage Area, $A_{total}$ =	36.41 acres	=	1,586,020 ft <sup>2</sup>
Subwatershed Impervious Area, $A_{imp}$ =	23.26 acres	=	1,013,206 ft <sup>2</sup>
Imperviousness fraction, $i$ =	0.64	=	64 %
Volumetric Runoff Coefficient, $R_v$ =	0.62		
Water Quality Volume, $WQ_v$ =	74,339 ft <sup>3</sup>	=	1.707 ac-ft

## Wet Extended Detention Basin WQv Compliance Tool

version 3.2 2020-07-07

### Project Summary

**Project Name:** Meijer JRM  
**Subwatershed ID/Label:** Gorden Tri-County Ditch  
**Submitted by:** Matt Stechschulte, PE, CFM  
**Date:** 12/11/2025

Subwatershed Drainage Area, $A_{total}$ =	36.41	acres	=	1,586,020	ft <sup>2</sup>
Subwatershed Impervious Area, $A_{imp}$ =	23.26	acres	=	1,013,206	ft <sup>2</sup>
Imperviousness fraction, $i$ =	0.64			64	%
Water Quality Volume, $WQv$ =	74,339	ft <sup>3</sup>	=	1.71	ac-ft

### Step 1 - Soil Suitability

Soil Series  
 HSG D

### Step 2 - Wet ED Basin Volume Requirements

Extended Detention Volume, $EDv$ =	74339	ft <sup>3</sup>
Minimum Sediment Storage Volume, $V_{sediment}$ =	14868	ft <sup>3</sup>
Minimum Permanent Pool Volume, $PPv$ =	89207	ft <sup>3</sup>

### Step 3 - Basin Stage-Storage Relationship

	Elevation ft	Area ft <sup>2</sup>	Incremental Volume ft <sup>3</sup>	Cumulative Volume ft <sup>3</sup>
Bottom of Permanent Micropool =	916.00	48380		
	917.00	50271	49,322	49,322
	918.00	52197	51,231	100,553
	919.00	54160	53,176	153,729
	920.00	56158	55,156	208,885
	921.00	58193	57,173	266,058
	922.00	60263	59,225	325,282
	923.00	62369	61,313	386,595
	924.00	64510	63,436	450,031
	925.00	66687	65,596	515,627
	926.00	68901	67,791	583,418
	927.50	79330	111,081	694,500
	928.50	84052	81,680	776,179
	929.50	88875	86,452	862,632
	930.50	93799	91,326	953,958
	931.50	98823	96,300	1,050,257

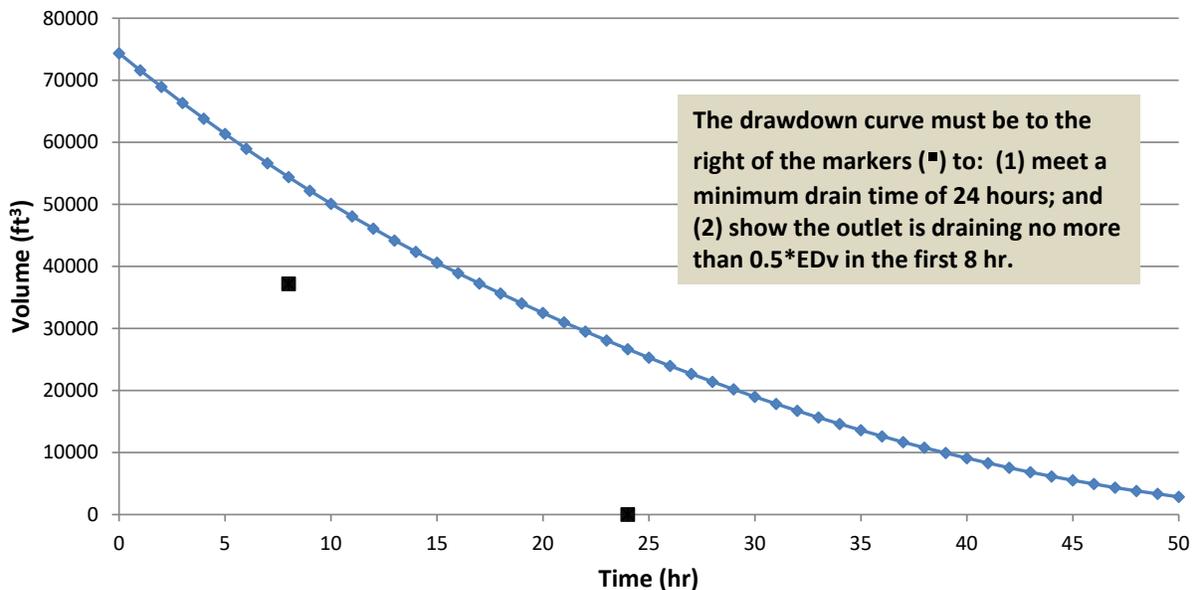
### Step 4 - Outlet Elevations and Storage Volumes

WQ Orifice Invert Elevation =	927.50		
Elevation of Top of EDv =	928.42		
Secondary Outlet Invert Elevation =	928.50		OKAY
WQ Treatment Volume Provided, $V_{\text{treatment}}$ =	81,680	ft <sup>3</sup>	
Treatment Vol Provided Relative to EDv, $V_{\text{treatment}}/\text{EDv}$ =	1.10		= 110% OKAY
Permanent Pool Volume Provided, PPv =	694,500	ft <sup>3</sup>	
Ratio PPv Provided to PPv Required =	7.79		= 779% OKAY

### Step 5 - Outlet (Orifice) Sizing

Maximum Hydraulic Head, $H_{\text{max}}$ =	0.92	ft	
Orifice Coefficient, C =	0.6		
Target (Minimum) Draw-down Time, $T_d$ =	24	hr	
Target Average Discharge, $Q_{\text{avg}}$ =	0.86	cfs	
Average Hydraulic Head, $H_{\text{avg}}$ =	0.46	ft	
Estimated Orifice Area, $A_{\text{orifice}}$ =	37.94	in <sup>2</sup>	= 0.263 ft <sup>2</sup>
Estimated Orifice Diameter, $D_{\text{orifice}}$ =	6.95	in	= 0.58 ft
Design Orifice Diameter, $D_{\text{orifice}}$ =	6.00	in	= 0.50 ft
Design Orifice Area, $A_{\text{orifice}}$ =	28.09	in <sup>2</sup>	= 0.195 ft <sup>2</sup>
Time to Completely Drain EDv, $T_d$ =	60	hr	must be $\geq 24$ hr OKAY
Volume Drained in First 8 hr =	19,953	ft <sup>3</sup>	
% of EDv =	26.8	%	must be $\leq 50\%$ OKAY

### Wet Basin - EDv Drawdown vs Time





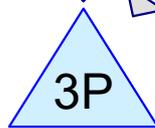
PRE



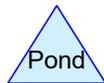
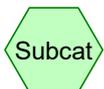
POST



OFFSITE



Wet Basin



## **Project Notes**

Rainfall events imported from "Atlas-14-Rain.txt" for 571 OH Franklin

**Rainfall Events Listing**

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	Type II 24-hr		Default	24.00	1	2.35	2
2	2-Year	Type II 24-hr		Default	24.00	1	2.55	2
3	5-Year	Type II 24-hr		Default	24.00	1	3.30	2
4	10-Year	Type II 24-hr		Default	24.00	1	3.80	2
5	25-Year	Type II 24-hr		Default	24.00	1	4.30	2
6	50-Year	Type II 24-hr		Default	24.00	1	4.75	2
7	100-Year	Type II 24-hr		Default	24.00	1	5.00	2

**Area Listing (selected nodes)**

Area (acres)	CN	Description (subcatchment-numbers)
2.760	74	>75% Grass cover, Good, HSG C (2S)
15.650	98	Paved parking, HSG C (2S)
27.360	78	Row crops, C&T, Good, HSG C (1S)
8.950	94	Urban commercial, 85% imp, HSG C (2S)
9.050	70	Woods, Good, HSG C (5S)
<b>63.770</b>	<b>84</b>	<b>TOTAL AREA</b>

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**Soil Listing (selected nodes)**

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
63.770	HSG C	1S, 2S, 5S
0.000	HSG D	
0.000	Other	
<b>63.770</b>		<b>TOTAL AREA</b>

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**Ground Covers (selected nodes)**

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	2.760	0.000	0.000	2.760	>75% Grass cover, Good	2 S
0.000	0.000	15.650	0.000	0.000	15.650	Paved parking	2 S
0.000	0.000	27.360	0.000	0.000	27.360	Row crops, C&T, Good	1 S
0.000	0.000	8.950	0.000	0.000	8.950	Urban commercial, 85% imp	2 S
0.000	0.000	9.050	0.000	0.000	9.050	Woods, Good	5 S
<b>0.000</b>	<b>0.000</b>	<b>63.770</b>	<b>0.000</b>	<b>0.000</b>	<b>63.770</b>	<b>TOTAL AREA</b>	

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**Pipe Listing (selected nodes)**

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	3P	927.50	926.95	126.7	0.0043	0.013	0.0	24.0	0.0	

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*Type II 24-hr 1-Year Rainfall=2.35"*

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Page 8

Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PRE**

Runoff Area=27.360 ac 0.00% Impervious Runoff Depth=0.69"  
Flow Length=1,196' Tc=44.5 min CN=78 Runoff=11.25 cfs 1.579 af

**Subcatchment 2S: POST**

Runoff Area=27.360 ac 85.01% Impervious Runoff Depth=1.73"  
Tc=15.0 min CN=94 Runoff=59.46 cfs 3.936 af

**Subcatchment 5S: OFFSITE**

Runoff Area=9.050 ac 0.00% Impervious Runoff Depth=0.39"  
Flow Length=747' Tc=55.2 min CN=70 Runoff=1.39 cfs 0.291 af

**Pond 3P: Wet Basin**

Peak Elev=928.77' Storage=2.396 af Inflow=59.57 cfs 4.227 af  
Primary=5.88 cfs 3.901 af Secondary=0.00 cfs 0.000 af Outflow=5.88 cfs 3.901 af

**Total Runoff Area = 63.770 ac Runoff Volume = 5.806 af Average Runoff Depth = 1.09"**  
**63.53% Pervious = 40.512 ac 36.47% Impervious = 23.258 ac**

**Summary for Subcatchment 1S: PRE**

Runoff = 11.25 cfs @ 12.46 hrs, Volume= 1.579 af, Depth= 0.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 1-Year Rainfall=2.35"

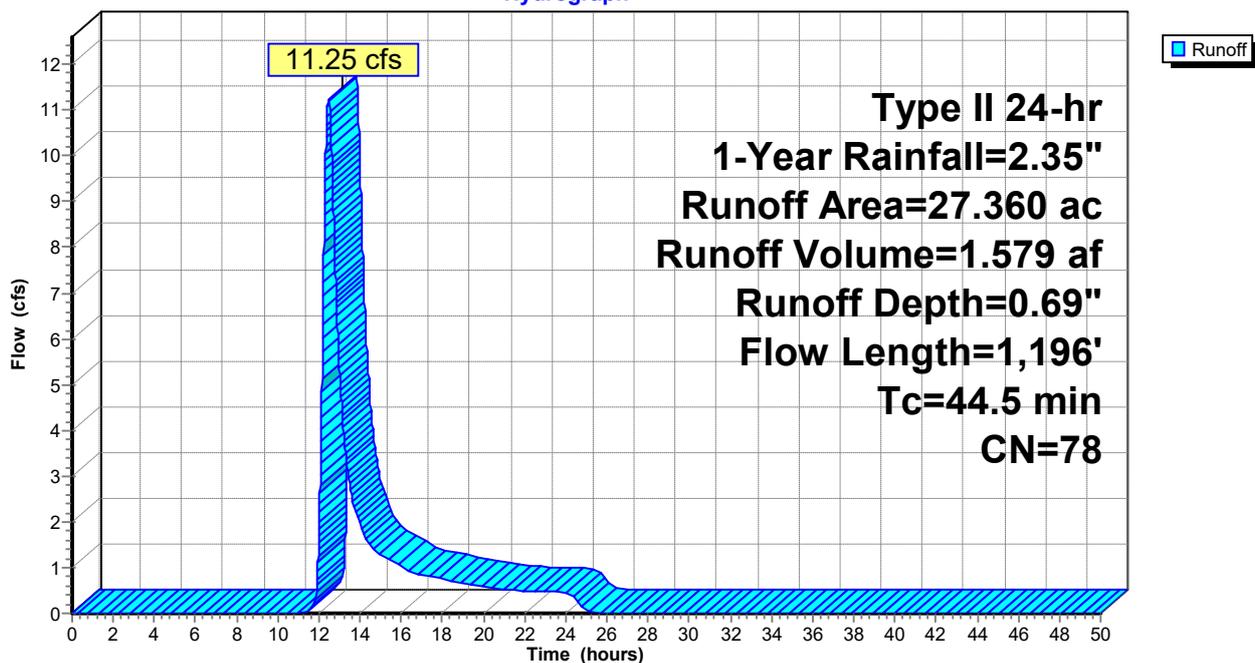
Area (ac)	CN	Description
27.360	78	Row crops, C&T, Good, HSG C
27.360		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0	100	0.0190	0.14		<b>Sheet Flow,</b> Cultivated: Residue>20% n= 0.170 P2= 2.70"
32.5	1,096	0.0039	0.56		<b>Shallow Concentrated Flow,</b> Cultivated Straight Rows Kv= 9.0 fps
44.5	1,196	Total			

**Subcatchment 1S: PRE**

Hydrograph



**Summary for Subcatchment 2S: POST**

Runoff = 59.46 cfs @ 12.07 hrs, Volume= 3.936 af, Depth= 1.73"  
 Routed to Pond 3P : Wet Basin

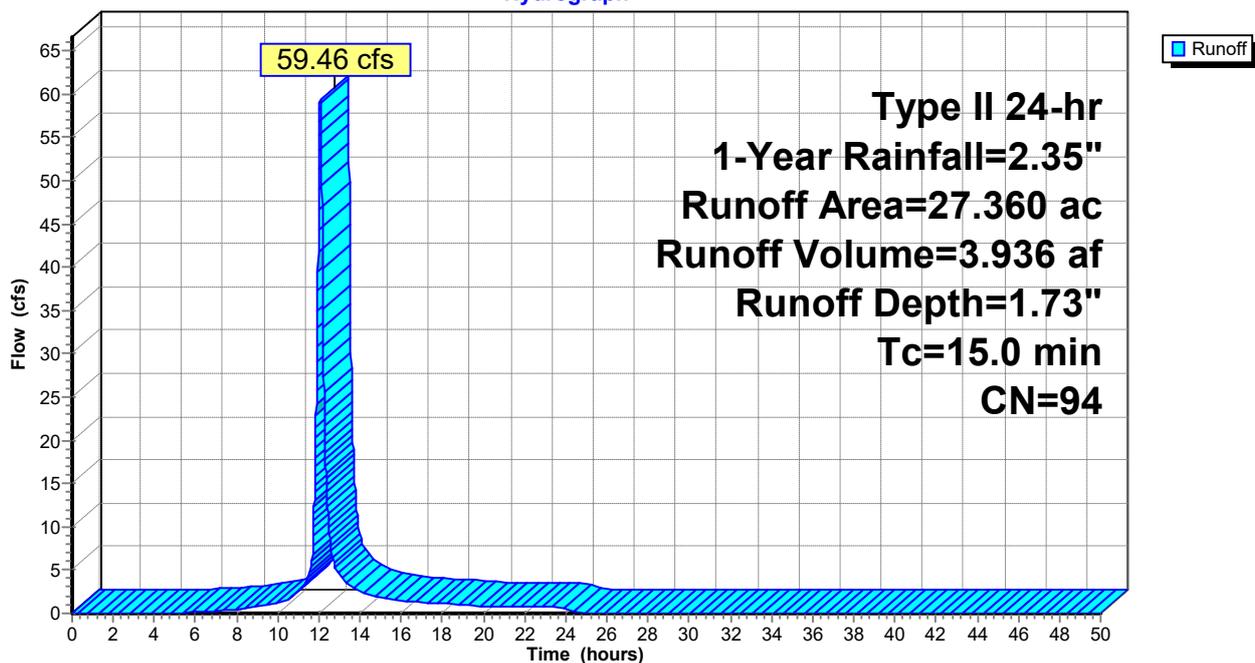
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 1-Year Rainfall=2.35"

Area (ac)	CN	Description
8.950	94	Urban commercial, 85% imp, HSG C
2.760	74	>75% Grass cover, Good, HSG C
15.650	98	Paved parking, HSG C
27.360	94	Weighted Average
4.103		14.99% Pervious Area
23.258		85.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

**Subcatchment 2S: POST**

Hydrograph



**Summary for Subcatchment 5S: OFFSITE**

Runoff = 1.39 cfs @ 12.70 hrs, Volume= 0.291 af, Depth= 0.39"  
 Routed to Pond 3P : Wet Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 1-Year Rainfall=2.35"

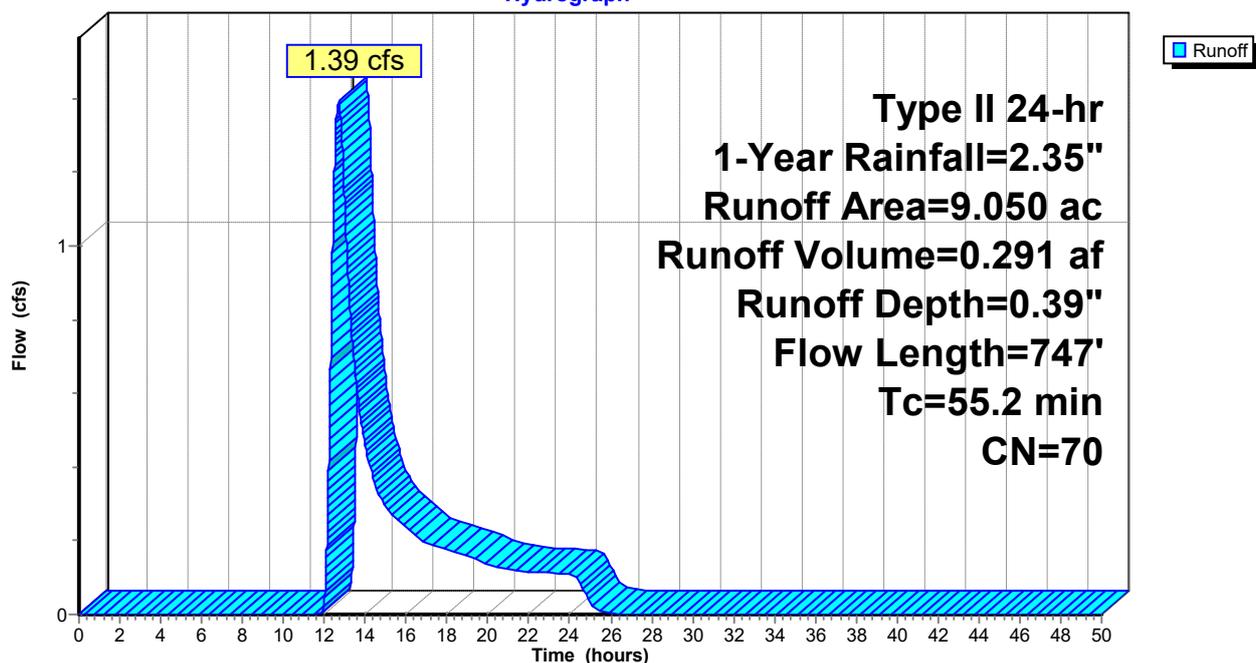
Area (ac)	CN	Description
9.050	70	Woods, Good, HSG C
9.050		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.4	100	0.0199	0.07		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 2.70"
31.8	647	0.0046	0.34		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
55.2	747	Total			

**Subcatchment 5S: OFFSITE**

Hydrograph



### Summary for Pond 3P: Wet Basin

Inflow Area = 36.410 ac, 63.88% Impervious, Inflow Depth = 1.39" for 1-Year event  
 Inflow = 59.57 cfs @ 12.07 hrs, Volume= 4.227 af  
 Outflow = 5.88 cfs @ 12.92 hrs, Volume= 3.901 af, Atten= 90%, Lag= 51.3 min  
 Primary = 5.88 cfs @ 12.92 hrs, Volume= 3.901 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

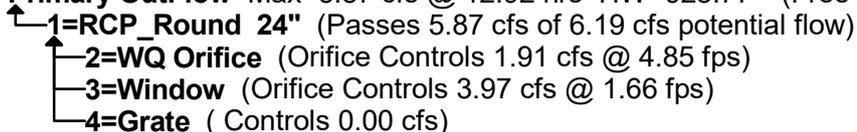
Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Peak Elev= 928.77' @ 12.92 hrs Surf.Area= 1.963 ac Storage= 2.396 af

Plug-Flow detention time= 528.9 min calculated for 3.900 af (92% of inflow)  
 Center-of-Mass det. time= 486.9 min ( 1,299.8 - 812.9 )

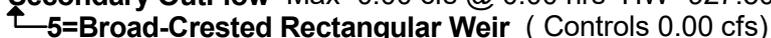
Volume	Invert	Avail.Storage	Storage Description
#1	927.50'	8.180 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
927.50	1.821	0.000	0.000
931.50	2.269	8.180	8.180

Device	Routing	Invert	Outlet Devices
#1	Primary	927.50'	<b>24.0" Round RCP_Round 24"</b> L= 126.7' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 927.50' / 926.95' S= 0.0043 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Device 1	927.50'	<b>6.0" Vert. WQ Orifice X 2.00</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	928.50'	<b>36.0" W x 6.0" H Vert. Window X 3.00</b> C= 0.600 Limited to weir flow at low heads
#4	Device 1	930.30'	<b>1.5" x 5.0" Horiz. Grate X 9.00 columns</b> X 4 rows C= 0.600 in 27.5" x 27.5" Grate (36% open area) Limited to weir flow at low heads
#5	Secondary	930.50'	<b>55.0' long + 4.0 ' SideZ x 8.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

**Primary OutFlow** Max=5.87 cfs @ 12.92 hrs HW=928.77' (Free Discharge)

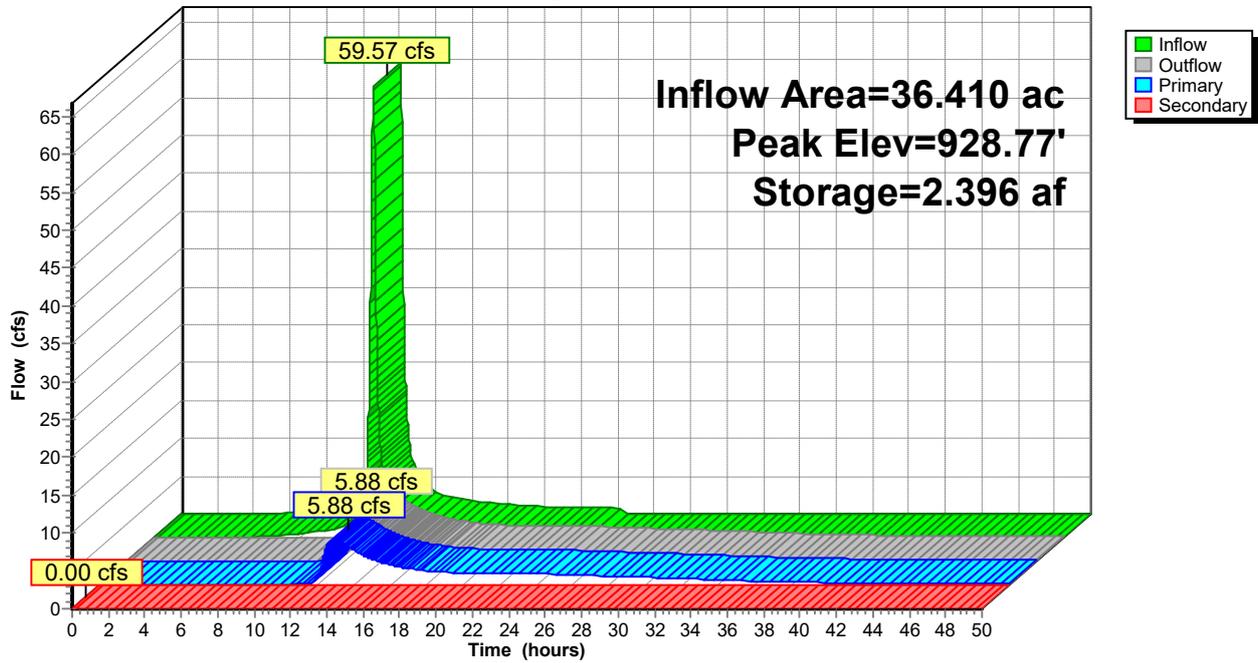


**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=927.50' (Free Discharge)



### Pond 3P: Wet Basin

Hydrograph



**JRM SWM**

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*Type II 24-hr 2-Year Rainfall=2.55"*

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Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PRE**

Runoff Area=27.360 ac 0.00% Impervious Runoff Depth=0.82"  
Flow Length=1,196' Tc=44.5 min CN=78 Runoff=13.66 cfs 1.871 af

**Subcatchment 2S: POST**

Runoff Area=27.360 ac 85.01% Impervious Runoff Depth=1.92"  
Tc=15.0 min CN=94 Runoff=65.70 cfs 4.371 af

**Subcatchment 5S: OFFSITE**

Runoff Area=9.050 ac 0.00% Impervious Runoff Depth=0.48"  
Flow Length=747' Tc=55.2 min CN=70 Runoff=1.85 cfs 0.362 af

**Pond 3P: Wet Basin**

Peak Elev=928.88' Storage=2.614 af Inflow=65.87 cfs 4.733 af  
Primary=7.13 cfs 4.401 af Secondary=0.00 cfs 0.000 af Outflow=7.13 cfs 4.401 af

**Total Runoff Area = 63.770 ac Runoff Volume = 6.603 af Average Runoff Depth = 1.24"**  
**63.53% Pervious = 40.512 ac 36.47% Impervious = 23.258 ac**

**Summary for Subcatchment 1S: PRE**

Runoff = 13.66 cfs @ 12.46 hrs, Volume= 1.871 af, Depth= 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 2-Year Rainfall=2.55"

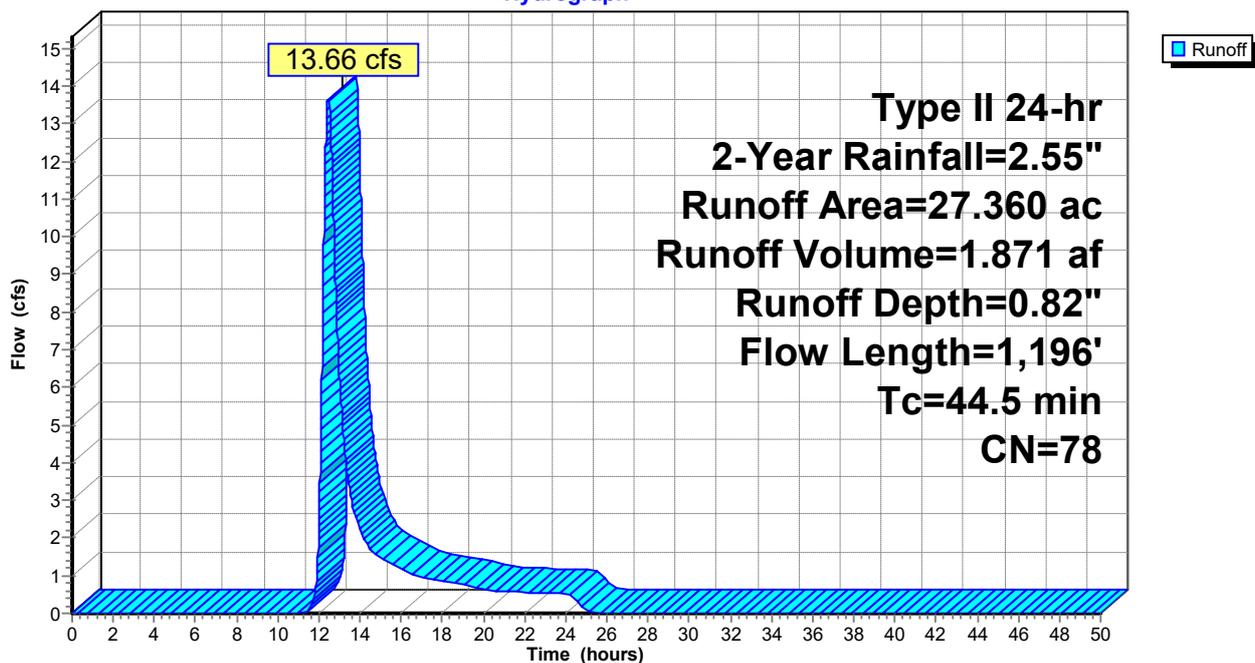
Area (ac)	CN	Description
27.360	78	Row crops, C&T, Good, HSG C
27.360		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0	100	0.0190	0.14		<b>Sheet Flow,</b> Cultivated: Residue>20% n= 0.170 P2= 2.70"
32.5	1,096	0.0039	0.56		<b>Shallow Concentrated Flow,</b> Cultivated Straight Rows Kv= 9.0 fps
44.5	1,196	Total			

**Subcatchment 1S: PRE**

Hydrograph



**Summary for Subcatchment 2S: POST**

Runoff = 65.70 cfs @ 12.07 hrs, Volume= 4.371 af, Depth= 1.92"  
 Routed to Pond 3P : Wet Basin

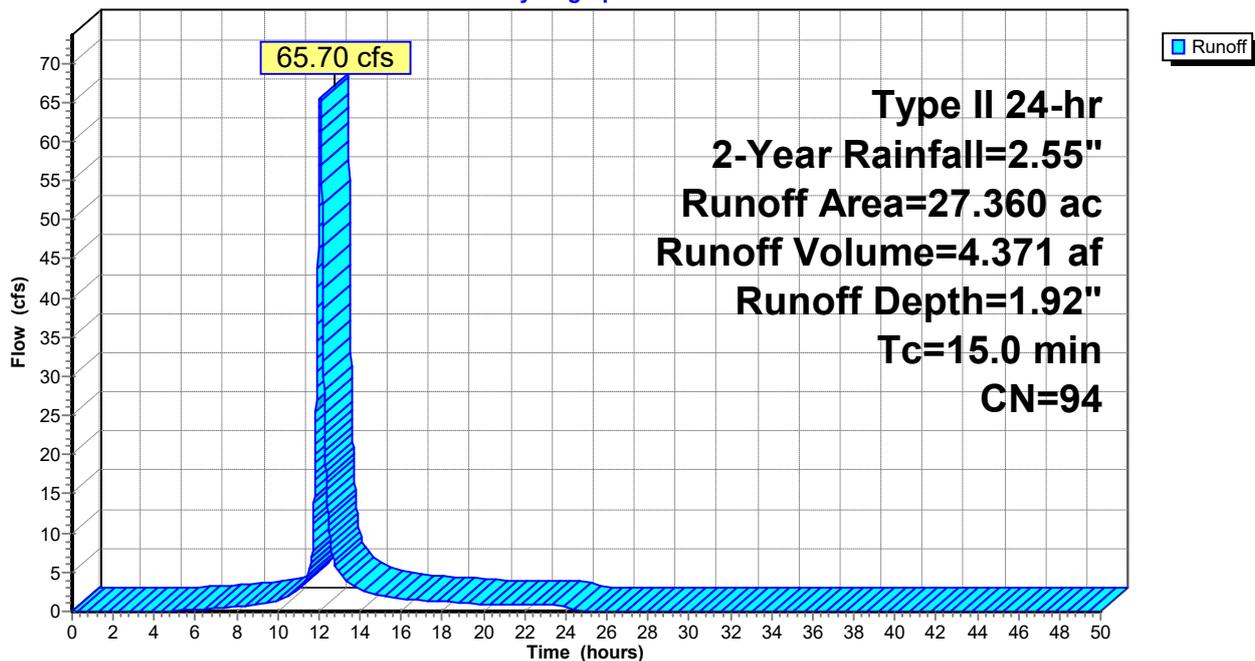
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 2-Year Rainfall=2.55"

Area (ac)	CN	Description
8.950	94	Urban commercial, 85% imp, HSG C
2.760	74	>75% Grass cover, Good, HSG C
15.650	98	Paved parking, HSG C
27.360	94	Weighted Average
4.103		14.99% Pervious Area
23.258		85.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

**Subcatchment 2S: POST**

Hydrograph



**Summary for Subcatchment 5S: OFFSITE**

Runoff = 1.85 cfs @ 12.69 hrs, Volume= 0.362 af, Depth= 0.48"  
 Routed to Pond 3P : Wet Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 2-Year Rainfall=2.55"

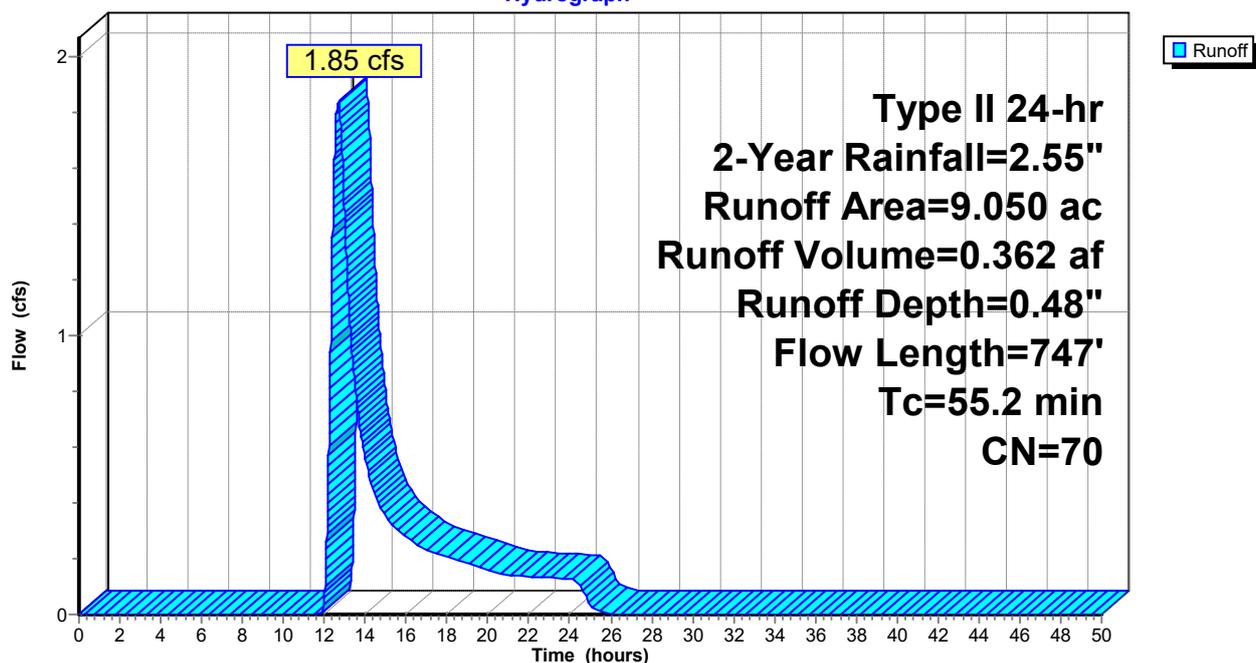
Area (ac)	CN	Description
9.050	70	Woods, Good, HSG C
9.050		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.4	100	0.0199	0.07		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.70"
31.8	647	0.0046	0.34		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
55.2	747	Total			

**Subcatchment 5S: OFFSITE**

Hydrograph



### Summary for Pond 3P: Wet Basin

Inflow Area = 36.410 ac, 63.88% Impervious, Inflow Depth = 1.56" for 2-Year event  
 Inflow = 65.87 cfs @ 12.07 hrs, Volume= 4.733 af  
 Outflow = 7.13 cfs @ 12.85 hrs, Volume= 4.401 af, Atten= 89%, Lag= 47.0 min  
 Primary = 7.13 cfs @ 12.85 hrs, Volume= 4.401 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

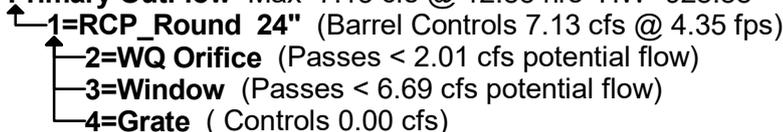
Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Peak Elev= 928.88' @ 12.85 hrs Surf.Area= 1.975 ac Storage= 2.614 af

Plug-Flow detention time= 490.7 min calculated for 4.400 af (93% of inflow)  
 Center-of-Mass det. time= 451.9 min ( 1,262.5 - 810.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	927.50'	8.180 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
927.50	1.821	0.000	0.000
931.50	2.269	8.180	8.180

Device	Routing	Invert	Outlet Devices
#1	Primary	927.50'	<b>24.0" Round RCP_Round 24"</b> L= 126.7' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 927.50' / 926.95' S= 0.0043 '/ Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Device 1	927.50'	<b>6.0" Vert. WQ Orifice X 2.00</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	928.50'	<b>36.0" W x 6.0" H Vert. Window X 3.00</b> C= 0.600 Limited to weir flow at low heads
#4	Device 1	930.30'	<b>1.5" x 5.0" Horiz. Grate X 9.00 columns</b> X 4 rows C= 0.600 in 27.5" x 27.5" Grate (36% open area) Limited to weir flow at low heads
#5	Secondary	930.50'	<b>55.0' long + 4.0 ' SideZ x 8.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

**Primary OutFlow** Max=7.13 cfs @ 12.85 hrs HW=928.88' (Free Discharge)

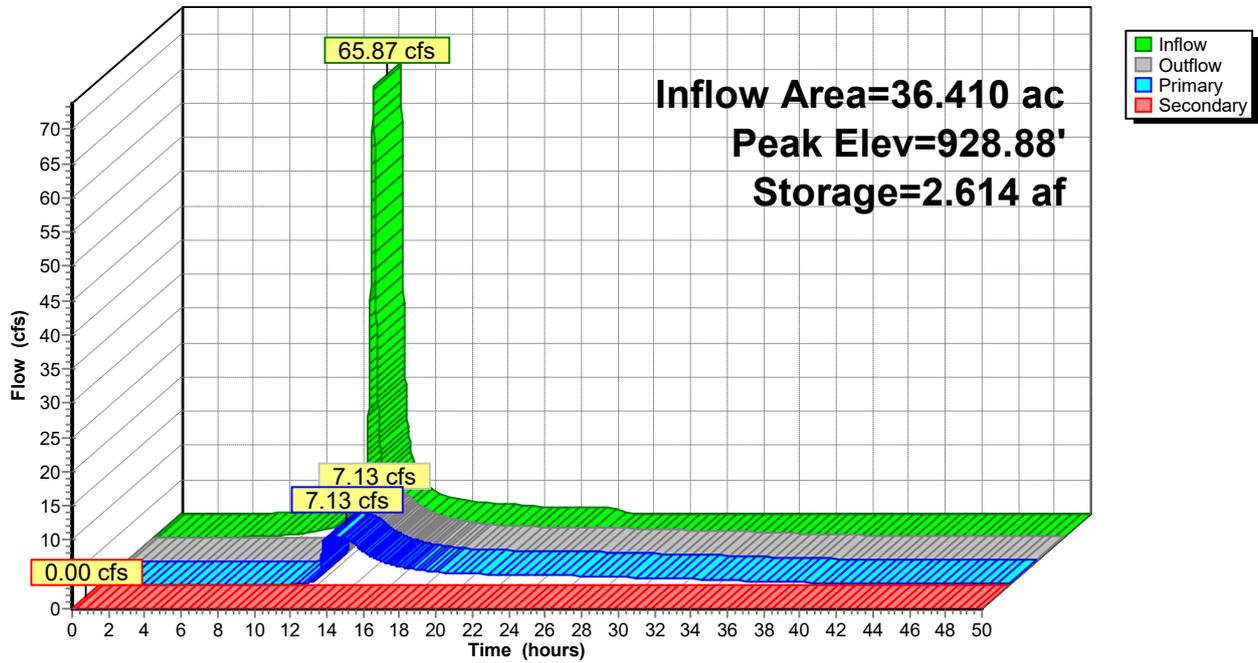


**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=927.50' (Free Discharge)



### Pond 3P: Wet Basin

Hydrograph



**JRM SWM***Type II 24-hr 5-Year Rainfall=3.30"*

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Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PRE**

Runoff Area=27.360 ac 0.00% Impervious Runoff Depth=1.35"  
Flow Length=1,196' Tc=44.5 min CN=78 Runoff=23.58 cfs 3.071 af

**Subcatchment 2S: POST**

Runoff Area=27.360 ac 85.01% Impervious Runoff Depth=2.64"  
Tc=15.0 min CN=94 Runoff=88.98 cfs 6.021 af

**Subcatchment 5S: OFFSITE**

Runoff Area=9.050 ac 0.00% Impervious Runoff Depth=0.89"  
Flow Length=747' Tc=55.2 min CN=70 Runoff=3.94 cfs 0.669 af

**Pond 3P: Wet Basin**

Peak Elev=929.35' Storage=3.567 af Inflow=89.55 cfs 6.690 af  
Primary=11.32 cfs 6.343 af Secondary=0.00 cfs 0.000 af Outflow=11.32 cfs 6.343 af

**Total Runoff Area = 63.770 ac Runoff Volume = 9.762 af Average Runoff Depth = 1.84"**  
**63.53% Pervious = 40.512 ac 36.47% Impervious = 23.258 ac**

**Summary for Subcatchment 1S: PRE**

Runoff = 23.58 cfs @ 12.42 hrs, Volume= 3.071 af, Depth= 1.35"

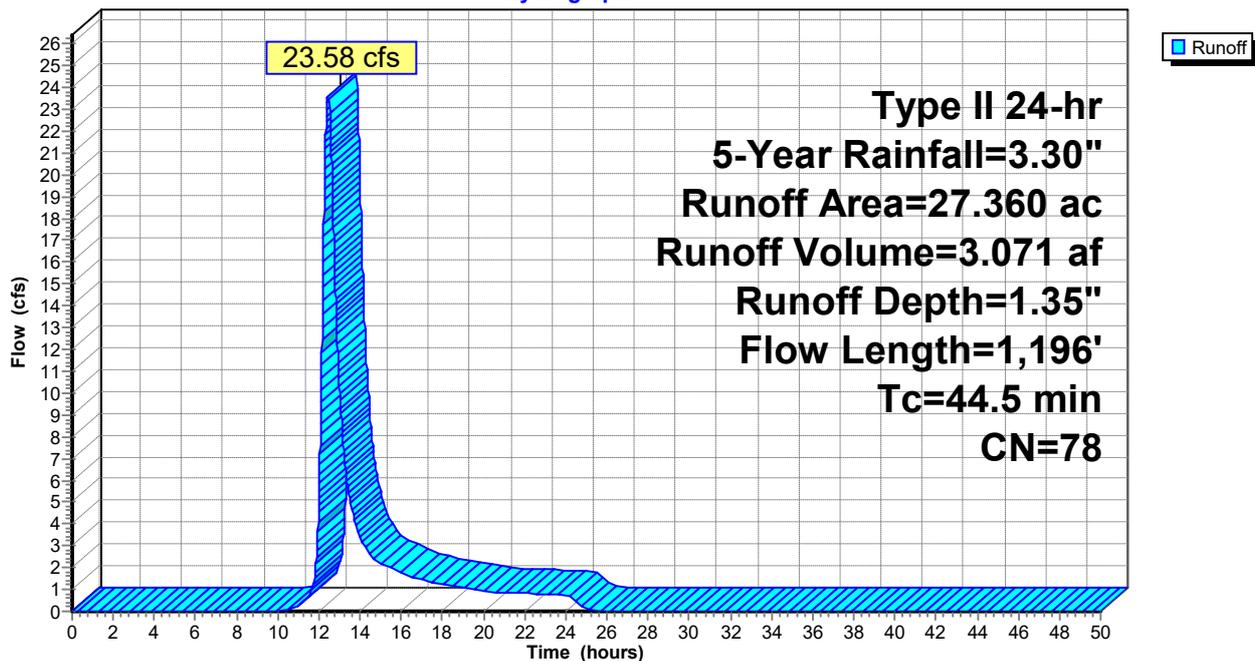
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 5-Year Rainfall=3.30"

Area (ac)	CN	Description
27.360	78	Row crops, C&T, Good, HSG C
27.360		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0	100	0.0190	0.14		<b>Sheet Flow,</b> Cultivated: Residue>20% n= 0.170 P2= 2.70"
32.5	1,096	0.0039	0.56		<b>Shallow Concentrated Flow,</b> Cultivated Straight Rows Kv= 9.0 fps
44.5	1,196	Total			

**Subcatchment 1S: PRE**

Hydrograph



**Summary for Subcatchment 2S: POST**

Runoff = 88.98 cfs @ 12.06 hrs, Volume= 6.021 af, Depth= 2.64"  
 Routed to Pond 3P : Wet Basin

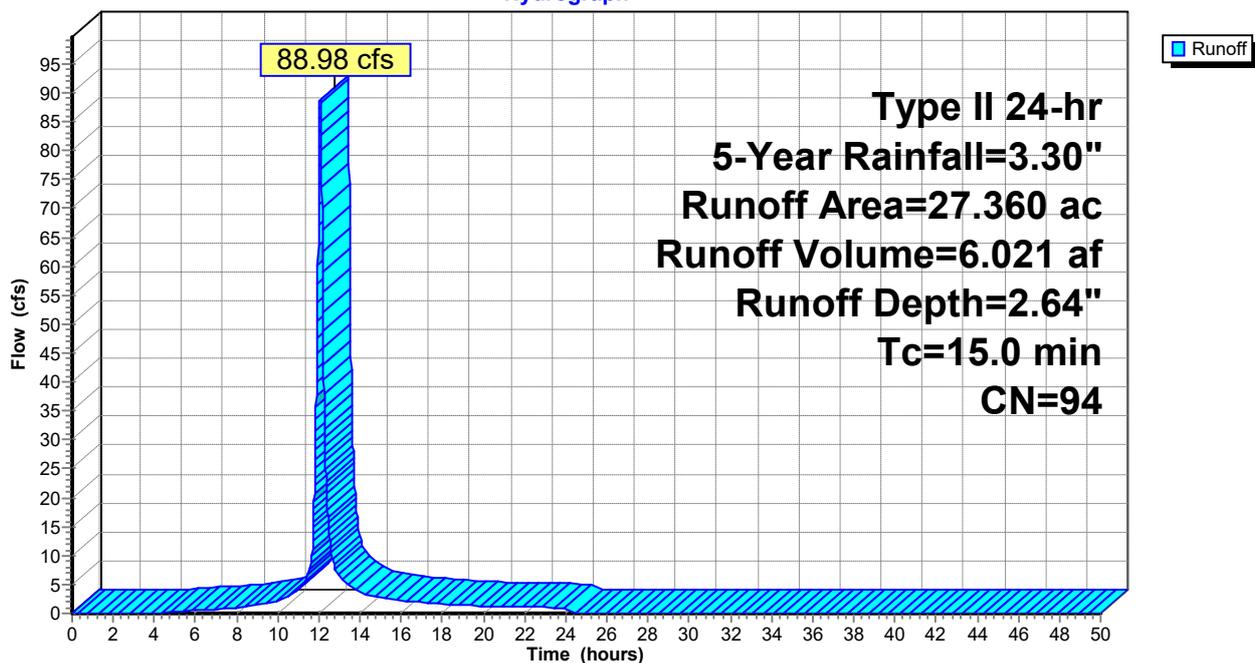
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 5-Year Rainfall=3.30"

Area (ac)	CN	Description
8.950	94	Urban commercial, 85% imp, HSG C
2.760	74	>75% Grass cover, Good, HSG C
15.650	98	Paved parking, HSG C
27.360	94	Weighted Average
4.103		14.99% Pervious Area
23.258		85.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

**Subcatchment 2S: POST**

Hydrograph



**Summary for Subcatchment 5S: OFFSITE**

Runoff = 3.94 cfs @ 12.63 hrs, Volume= 0.669 af, Depth= 0.89"  
 Routed to Pond 3P : Wet Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 5-Year Rainfall=3.30"

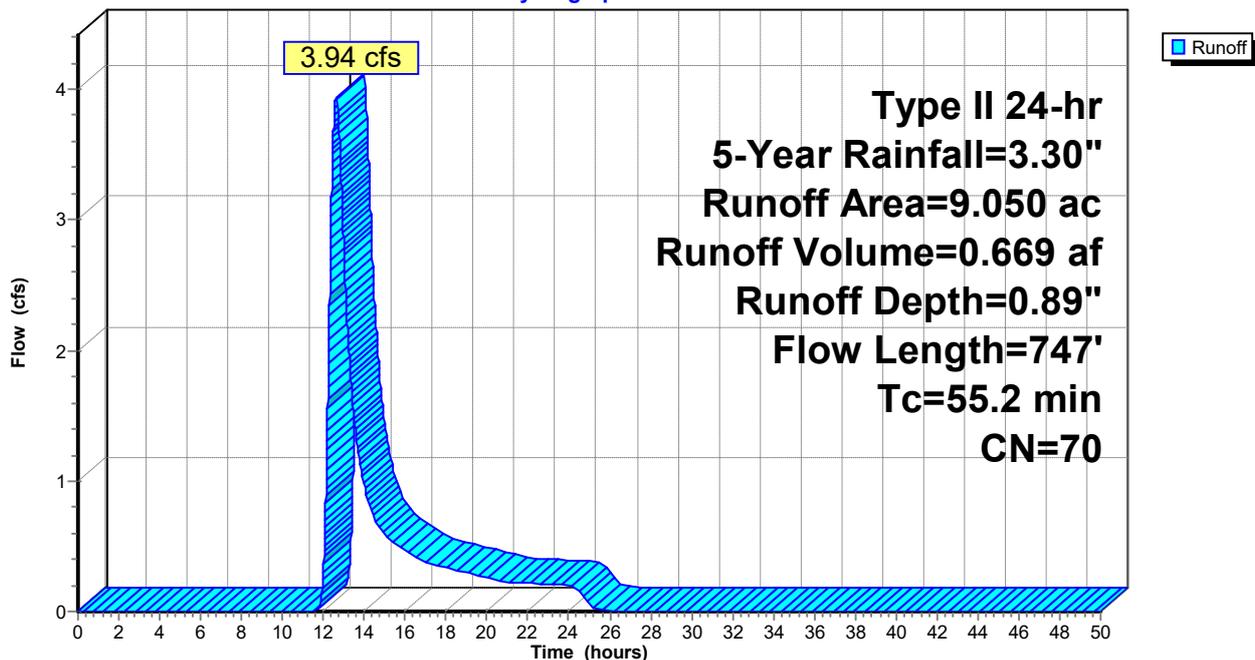
Area (ac)	CN	Description
9.050	70	Woods, Good, HSG C
9.050		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.4	100	0.0199	0.07		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.70"
31.8	647	0.0046	0.34		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
55.2	747	Total			

**Subcatchment 5S: OFFSITE**

Hydrograph



### Summary for Pond 3P: Wet Basin

Inflow Area = 36.410 ac, 63.88% Impervious, Inflow Depth = 2.20" for 5-Year event  
 Inflow = 89.55 cfs @ 12.06 hrs, Volume= 6.690 af  
 Outflow = 11.32 cfs @ 12.79 hrs, Volume= 6.343 af, Atten= 87%, Lag= 43.4 min  
 Primary = 11.32 cfs @ 12.79 hrs, Volume= 6.343 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

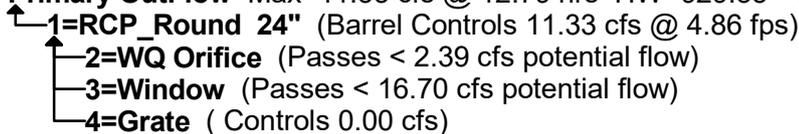
Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Peak Elev= 929.35' @ 12.79 hrs Surf.Area= 2.029 ac Storage= 3.567 af

Plug-Flow detention time= 401.3 min calculated for 6.342 af (95% of inflow)  
 Center-of-Mass det. time= 371.2 min ( 1,174.9 - 803.6 )

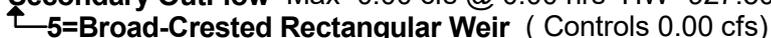
Volume	Invert	Avail.Storage	Storage Description
#1	927.50'	8.180 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
927.50	1.821	0.000	0.000
931.50	2.269	8.180	8.180

Device	Routing	Invert	Outlet Devices
#1	Primary	927.50'	<b>24.0" Round RCP_Round 24"</b> L= 126.7' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 927.50' / 926.95' S= 0.0043 '/ Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Device 1	927.50'	<b>6.0" Vert. WQ Orifice X 2.00</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	928.50'	<b>36.0" W x 6.0" H Vert. Window X 3.00</b> C= 0.600 Limited to weir flow at low heads
#4	Device 1	930.30'	<b>1.5" x 5.0" Horiz. Grate X 9.00 columns</b> X 4 rows C= 0.600 in 27.5" x 27.5" Grate (36% open area) Limited to weir flow at low heads
#5	Secondary	930.50'	<b>55.0' long + 4.0 ' SideZ x 8.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

**Primary OutFlow** Max=11.33 cfs @ 12.79 hrs HW=929.35' (Free Discharge)

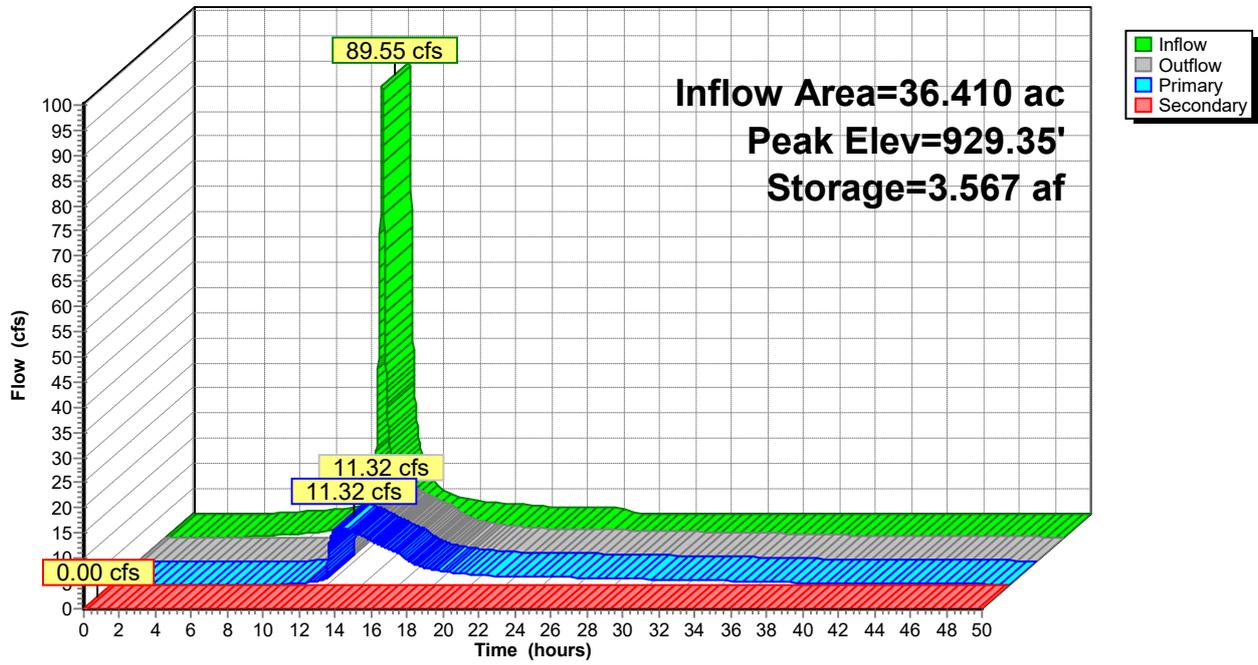


**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=927.50' (Free Discharge)



### Pond 3P: Wet Basin

Hydrograph



**JRM SWM**

Type II 24-hr 10-Year Rainfall=3.80"

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Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PRE**

Runoff Area=27.360 ac 0.00% Impervious Runoff Depth=1.73"  
Flow Length=1,196' Tc=44.5 min CN=78 Runoff=30.78 cfs 3.942 af

**Subcatchment 2S: POST**

Runoff Area=27.360 ac 85.01% Impervious Runoff Depth=3.13"  
Tc=15.0 min CN=94 Runoff=104.41 cfs 7.133 af

**Subcatchment 5S: OFFSITE**

Runoff Area=9.050 ac 0.00% Impervious Runoff Depth=1.20"  
Flow Length=747' Tc=55.2 min CN=70 Runoff=5.60 cfs 0.904 af

**Pond 3P: Wet Basin**

Peak Elev=929.68' Storage=4.231 af Inflow=105.41 cfs 8.037 af  
Primary=13.99 cfs 7.683 af Secondary=0.00 cfs 0.000 af Outflow=13.99 cfs 7.683 af

**Total Runoff Area = 63.770 ac Runoff Volume = 11.979 af Average Runoff Depth = 2.25"**  
**63.53% Pervious = 40.512 ac 36.47% Impervious = 23.258 ac**

**Summary for Subcatchment 1S: PRE**

Runoff = 30.78 cfs @ 12.42 hrs, Volume= 3.942 af, Depth= 1.73"

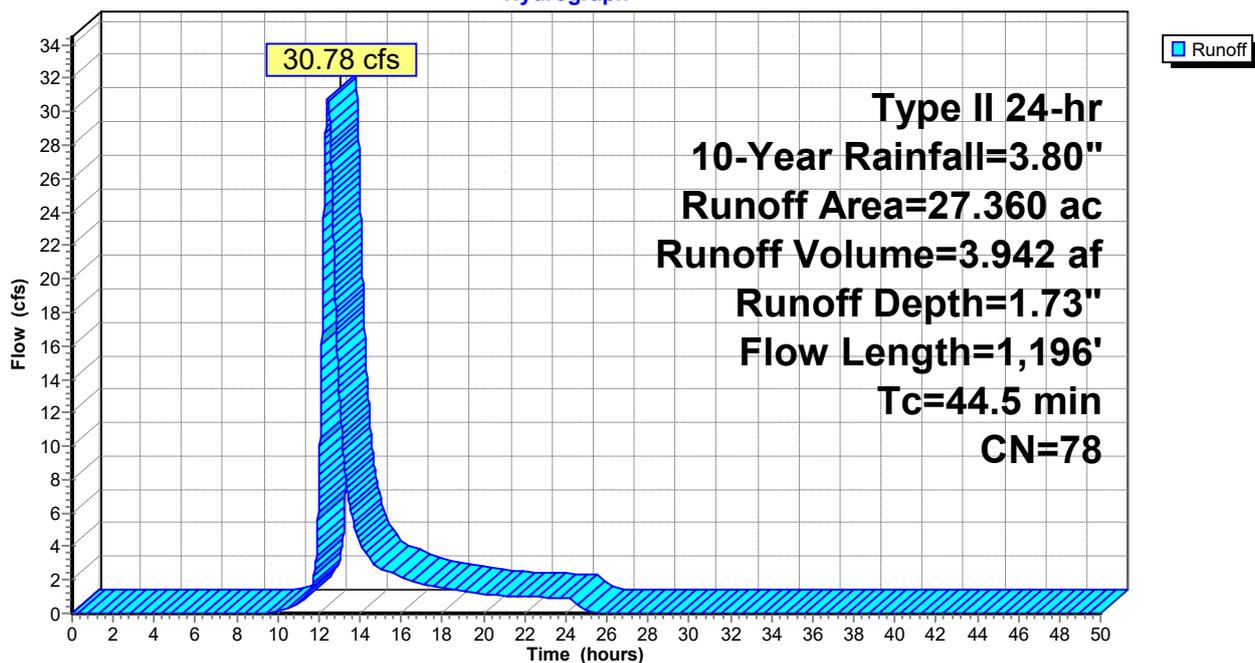
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 10-Year Rainfall=3.80"

Area (ac)	CN	Description
27.360	78	Row crops, C&T, Good, HSG C
27.360		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0	100	0.0190	0.14		<b>Sheet Flow,</b> Cultivated: Residue>20% n= 0.170 P2= 2.70"
32.5	1,096	0.0039	0.56		<b>Shallow Concentrated Flow,</b> Cultivated Straight Rows Kv= 9.0 fps
44.5	1,196	Total			

**Subcatchment 1S: PRE**

Hydrograph



**Summary for Subcatchment 2S: POST**

Runoff = 104.41 cfs @ 12.06 hrs, Volume= 7.133 af, Depth= 3.13"  
 Routed to Pond 3P : Wet Basin

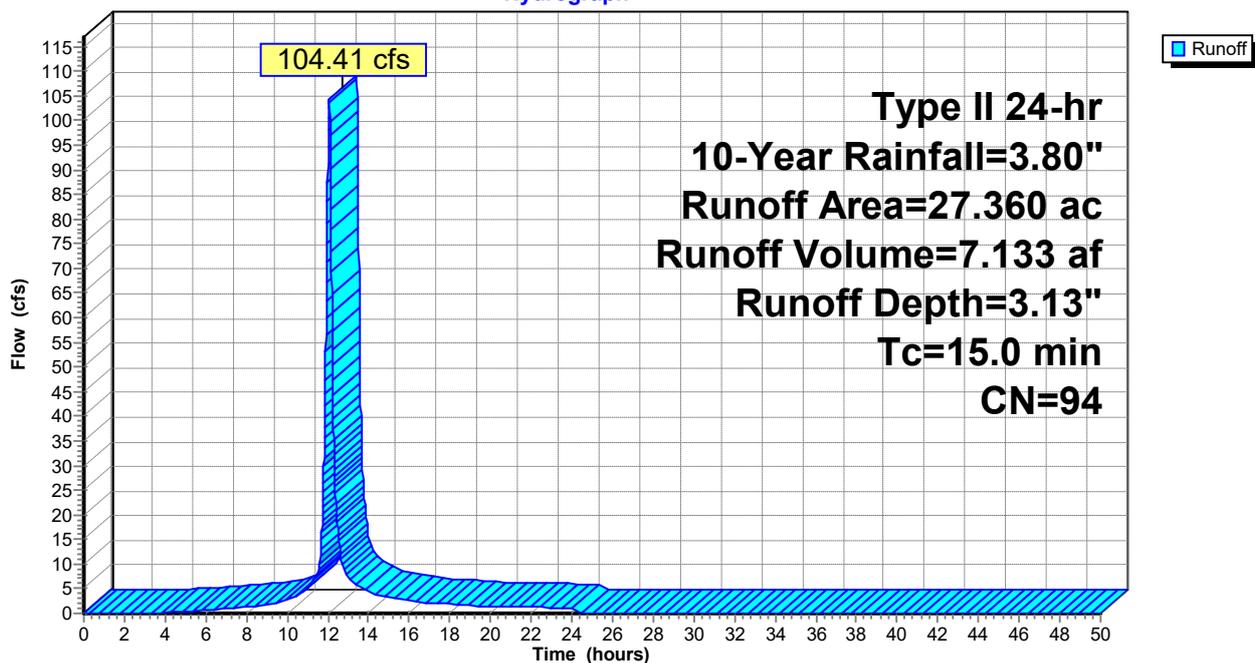
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 10-Year Rainfall=3.80"

Area (ac)	CN	Description
8.950	94	Urban commercial, 85% imp, HSG C
2.760	74	>75% Grass cover, Good, HSG C
15.650	98	Paved parking, HSG C
27.360	94	Weighted Average
4.103		14.99% Pervious Area
23.258		85.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

**Subcatchment 2S: POST**

Hydrograph



**Summary for Subcatchment 5S: OFFSITE**

Runoff = 5.60 cfs @ 12.58 hrs, Volume= 0.904 af, Depth= 1.20"  
 Routed to Pond 3P : Wet Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 10-Year Rainfall=3.80"

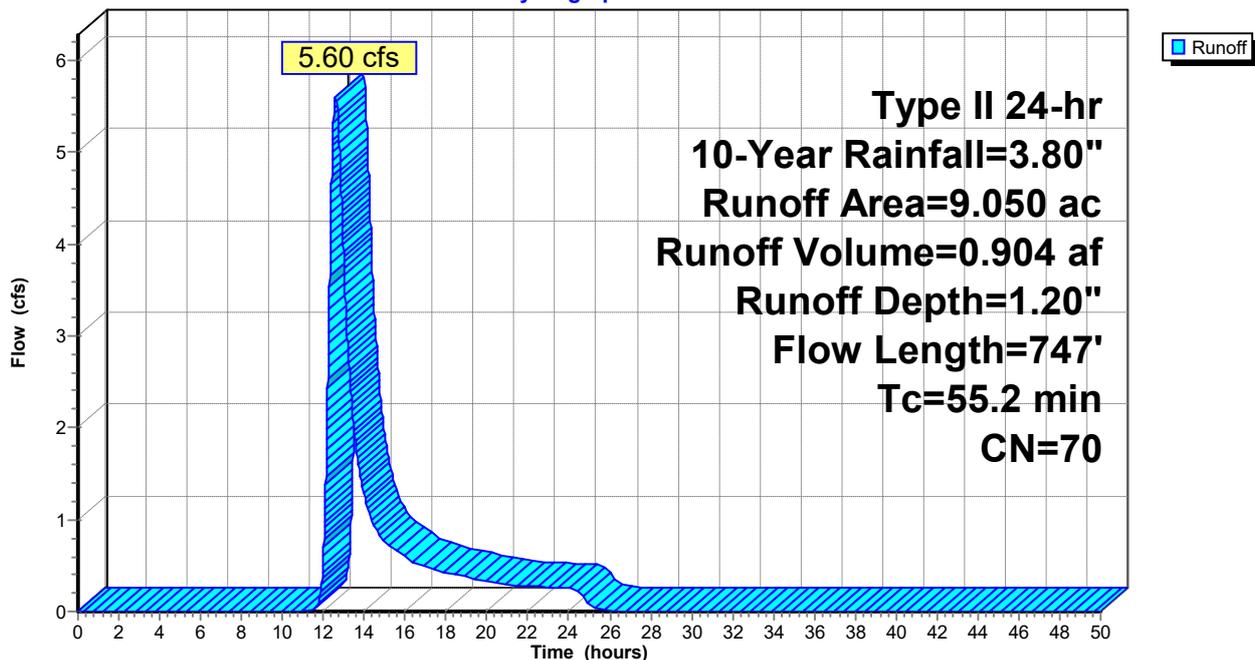
Area (ac)	CN	Description
9.050	70	Woods, Good, HSG C
9.050		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.4	100	0.0199	0.07		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 2.70"
31.8	647	0.0046	0.34		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
55.2	747	Total			

**Subcatchment 5S: OFFSITE**

Hydrograph



**Summary for Pond 3P: Wet Basin**

Inflow Area = 36.410 ac, 63.88% Impervious, Inflow Depth = 2.65" for 10-Year event  
 Inflow = 105.41 cfs @ 12.06 hrs, Volume= 8.037 af  
 Outflow = 13.99 cfs @ 12.79 hrs, Volume= 7.683 af, Atten= 87%, Lag= 43.5 min  
 Primary = 13.99 cfs @ 12.79 hrs, Volume= 7.683 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

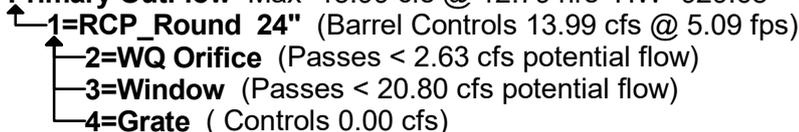
Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Peak Elev= 929.68' @ 12.79 hrs Surf.Area= 2.065 ac Storage= 4.231 af

Plug-Flow detention time= 364.5 min calculated for 7.682 af (96% of inflow)  
 Center-of-Mass det. time= 338.5 min ( 1,138.5 - 800.0 )

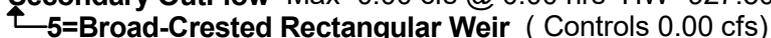
Volume	Invert	Avail.Storage	Storage Description
#1	927.50'	8.180 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
927.50	1.821	0.000	0.000
931.50	2.269	8.180	8.180

Device	Routing	Invert	Outlet Devices
#1	Primary	927.50'	<b>24.0" Round RCP_Round 24"</b> L= 126.7' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 927.50' / 926.95' S= 0.0043 '/ Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Device 1	927.50'	<b>6.0" Vert. WQ Orifice X 2.00</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	928.50'	<b>36.0" W x 6.0" H Vert. Window X 3.00</b> C= 0.600 Limited to weir flow at low heads
#4	Device 1	930.30'	<b>1.5" x 5.0" Horiz. Grate X 9.00 columns</b> X 4 rows C= 0.600 in 27.5" x 27.5" Grate (36% open area) Limited to weir flow at low heads
#5	Secondary	930.50'	<b>55.0' long + 4.0 ' SideZ x 8.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

**Primary OutFlow** Max=13.99 cfs @ 12.79 hrs HW=929.68' (Free Discharge)

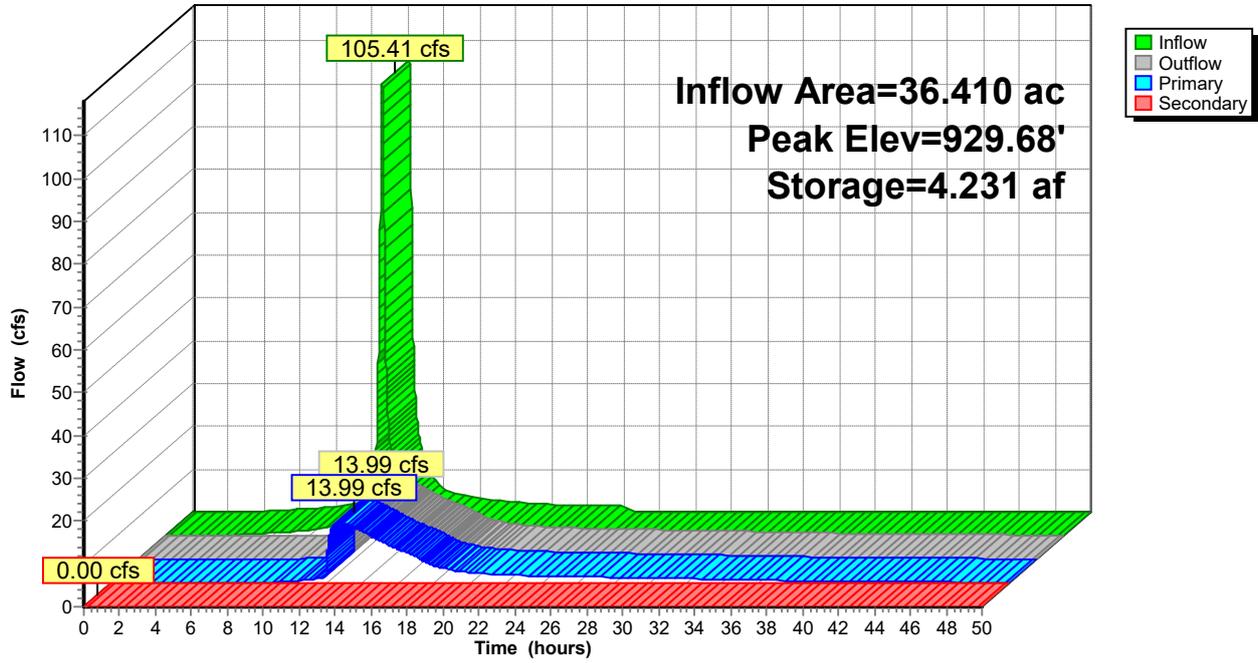


**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=927.50' (Free Discharge)



### Pond 3P: Wet Basin

Hydrograph



**JRM SWM**

Type II 24-hr 25-Year Rainfall=4.30"

Prepared by Woolpert, Inc

Printed 12/11/2025

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Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PRE**

Runoff Area=27.360 ac 0.00% Impervious Runoff Depth=2.13"  
Flow Length=1,196' Tc=44.5 min CN=78 Runoff=38.31 cfs 4.854 af

**Subcatchment 2S: POST**

Runoff Area=27.360 ac 85.01% Impervious Runoff Depth=3.62"  
Tc=15.0 min CN=94 Runoff=119.76 cfs 8.251 af

**Subcatchment 5S: OFFSITE**

Runoff Area=9.050 ac 0.00% Impervious Runoff Depth=1.53"  
Flow Length=747' Tc=55.2 min CN=70 Runoff=7.40 cfs 1.157 af

**Pond 3P: Wet Basin**

Peak Elev=930.01' Storage=4.934 af Inflow=121.29 cfs 9.407 af  
Primary=15.97 cfs 9.050 af Secondary=0.00 cfs 0.000 af Outflow=15.97 cfs 9.050 af

**Total Runoff Area = 63.770 ac Runoff Volume = 14.261 af Average Runoff Depth = 2.68"**  
**63.53% Pervious = 40.512 ac 36.47% Impervious = 23.258 ac**

**Summary for Subcatchment 1S: PRE**

Runoff = 38.31 cfs @ 12.41 hrs, Volume= 4.854 af, Depth= 2.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
Type II 24-hr 25-Year Rainfall=4.30"

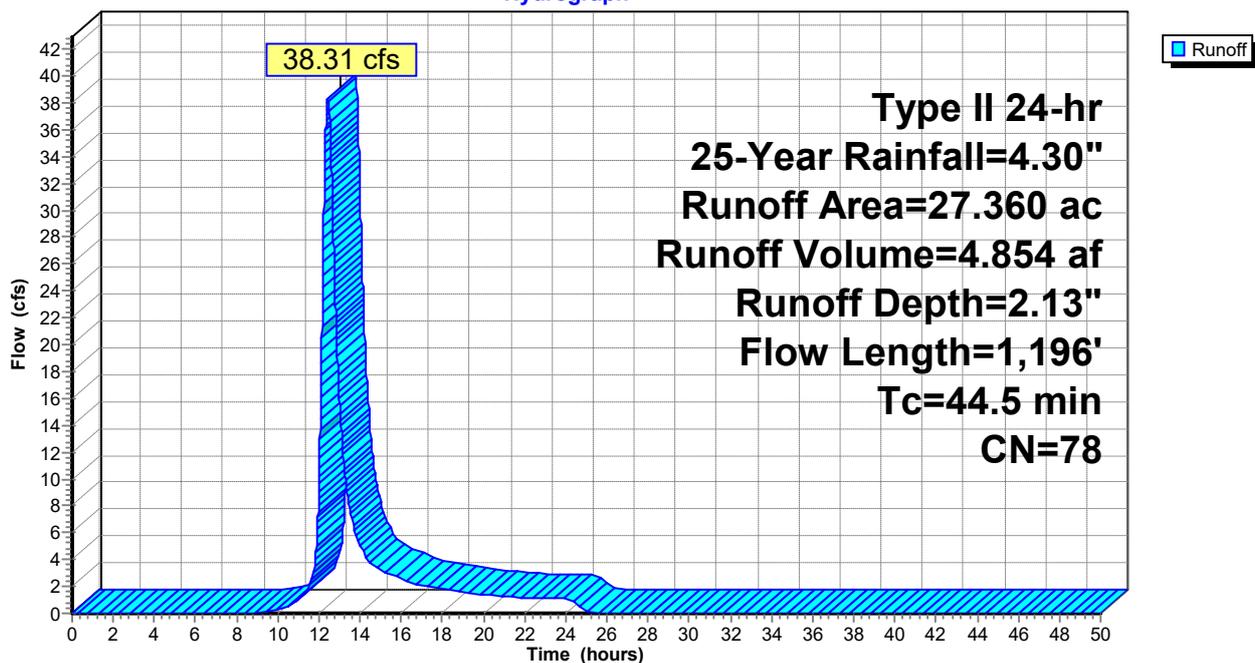
Area (ac)	CN	Description
27.360	78	Row crops, C&T, Good, HSG C
27.360		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0	100	0.0190	0.14		<b>Sheet Flow,</b> Cultivated: Residue>20% n= 0.170 P2= 2.70"
32.5	1,096	0.0039	0.56		<b>Shallow Concentrated Flow,</b> Cultivated Straight Rows Kv= 9.0 fps
44.5	1,196	Total			

**Subcatchment 1S: PRE**

Hydrograph



**Summary for Subcatchment 2S: POST**

Runoff = 119.76 cfs @ 12.06 hrs, Volume= 8.251 af, Depth= 3.62"  
 Routed to Pond 3P : Wet Basin

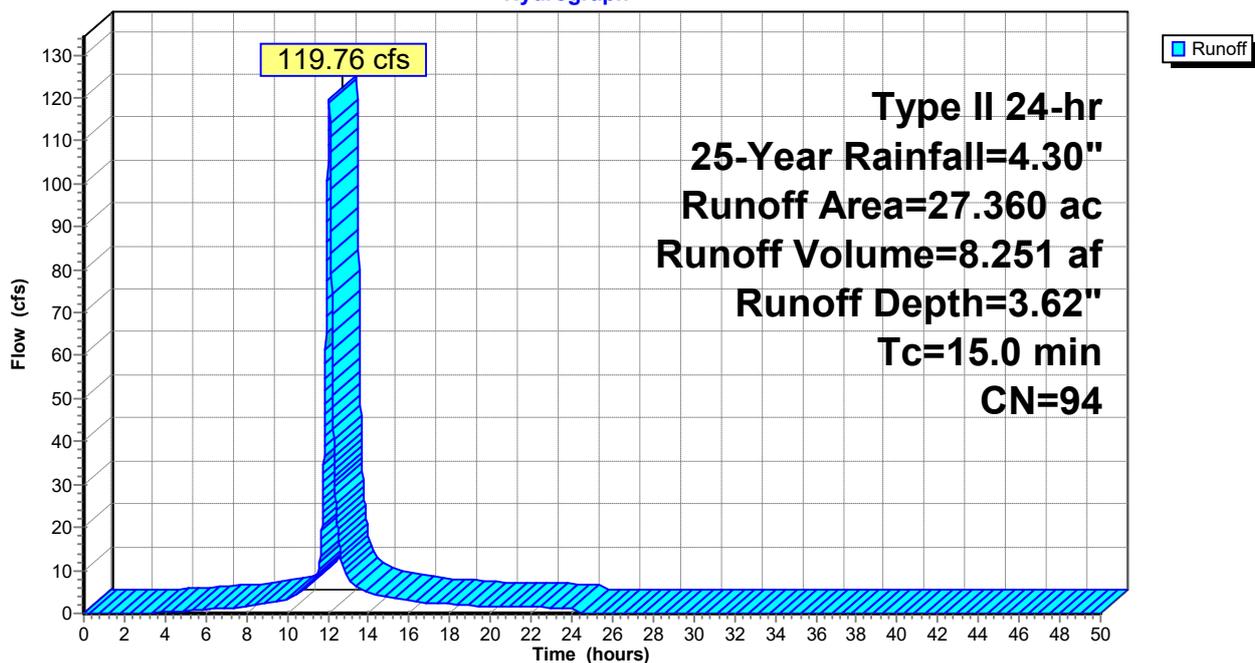
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 25-Year Rainfall=4.30"

Area (ac)	CN	Description
8.950	94	Urban commercial, 85% imp, HSG C
2.760	74	>75% Grass cover, Good, HSG C
15.650	98	Paved parking, HSG C
27.360	94	Weighted Average
4.103		14.99% Pervious Area
23.258		85.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

**Subcatchment 2S: POST**

Hydrograph



**Summary for Subcatchment 5S: OFFSITE**

Runoff = 7.40 cfs @ 12.58 hrs, Volume= 1.157 af, Depth= 1.53"  
 Routed to Pond 3P : Wet Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 25-Year Rainfall=4.30"

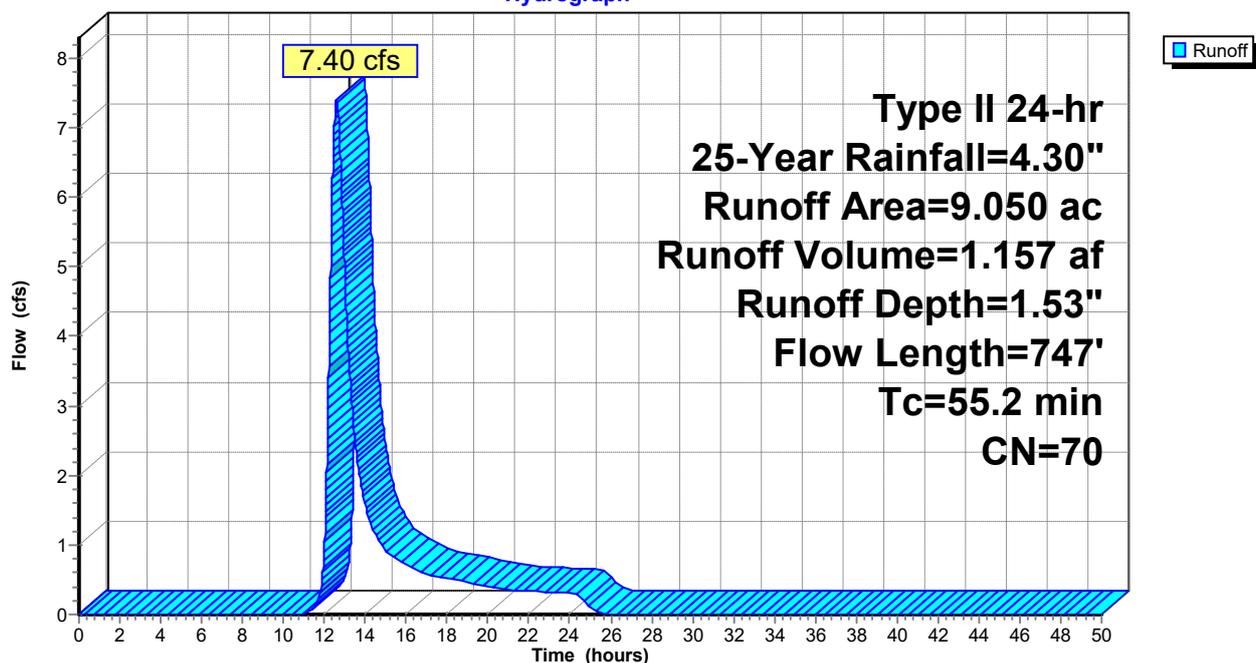
Area (ac)	CN	Description
9.050	70	Woods, Good, HSG C
9.050		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.4	100	0.0199	0.07		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.70"
31.8	647	0.0046	0.34		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
55.2	747	Total			

**Subcatchment 5S: OFFSITE**

Hydrograph



### Summary for Pond 3P: Wet Basin

Inflow Area = 36.410 ac, 63.88% Impervious, Inflow Depth = 3.10" for 25-Year event  
 Inflow = 121.29 cfs @ 12.06 hrs, Volume= 9.407 af  
 Outflow = 15.97 cfs @ 12.83 hrs, Volume= 9.050 af, Atten= 87%, Lag= 46.2 min  
 Primary = 15.97 cfs @ 12.83 hrs, Volume= 9.050 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Peak Elev= 930.01' @ 12.83 hrs Surf.Area= 2.103 ac Storage= 4.934 af

Plug-Flow detention time= 339.3 min calculated for 9.048 af (96% of inflow)  
 Center-of-Mass det. time= 316.4 min ( 1,113.4 - 797.0 )

Volume	Invert	Avail.Storage	Storage Description
#1	927.50'	8.180 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
927.50	1.821	0.000	0.000
931.50	2.269	8.180	8.180

Device	Routing	Invert	Outlet Devices
#1	Primary	927.50'	<b>24.0" Round RCP_Round 24"</b> L= 126.7' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 927.50' / 926.95' S= 0.0043 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Device 1	927.50'	<b>6.0" Vert. WQ Orifice X 2.00</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	928.50'	<b>36.0" W x 6.0" H Vert. Window X 3.00</b> C= 0.600 Limited to weir flow at low heads
#4	Device 1	930.30'	<b>1.5" x 5.0" Horiz. Grate X 9.00 columns</b> X 4 rows C= 0.600 in 27.5" x 27.5" Grate (36% open area) Limited to weir flow at low heads
#5	Secondary	930.50'	<b>55.0' long + 4.0 ' SideZ x 8.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

**Primary OutFlow** Max=15.98 cfs @ 12.83 hrs HW=930.01' (Free Discharge)

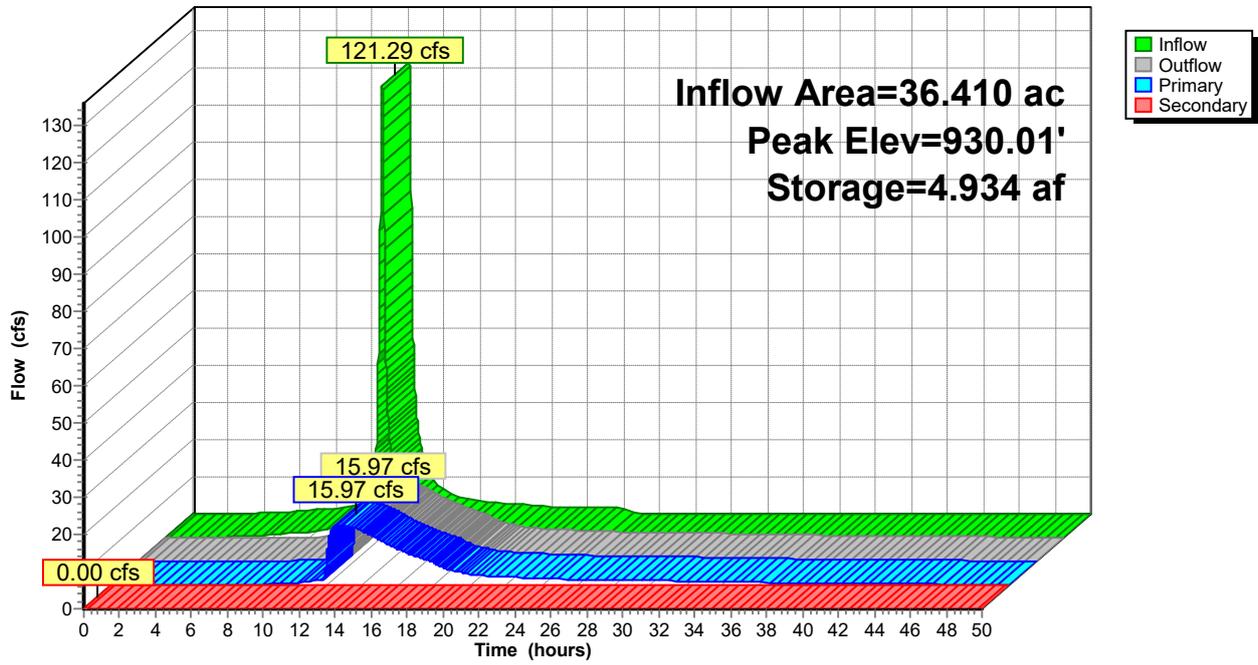
- ↑ 1=RCP\_Round 24" (Barrel Controls 15.98 cfs @ 5.20 fps)
- ↑ 2=WQ Orifice (Passes < 2.85 cfs potential flow)
- ↑ 3=Window (Passes < 24.33 cfs potential flow)
- ↑ 4=Grate ( Controls 0.00 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=927.50' (Free Discharge)

- ↑ 5=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

### Pond 3P: Wet Basin

Hydrograph



**JRM SWM**

Type II 24-hr 50-Year Rainfall=4.75"

Prepared by Woolpert, Inc

Printed 12/11/2025

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Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PRE**

Runoff Area=27.360 ac 0.00% Impervious Runoff Depth=2.50"  
Flow Length=1,196' Tc=44.5 min CN=78 Runoff=45.26 cfs 5.702 af

**Subcatchment 2S: POST**

Runoff Area=27.360 ac 85.01% Impervious Runoff Depth=4.06"  
Tc=15.0 min CN=94 Runoff=133.53 cfs 9.260 af

**Subcatchment 5S: OFFSITE**

Runoff Area=9.050 ac 0.00% Impervious Runoff Depth=1.85"  
Flow Length=747' Tc=55.2 min CN=70 Runoff=9.11 cfs 1.397 af

**Pond 3P: Wet Basin**

Peak Elev=930.34' Storage=5.631 af Inflow=135.56 cfs 10.658 af  
Primary=16.96 cfs 10.297 af Secondary=0.00 cfs 0.000 af Outflow=16.96 cfs 10.297 af

**Total Runoff Area = 63.770 ac Runoff Volume = 16.359 af Average Runoff Depth = 3.08"**  
**63.53% Pervious = 40.512 ac 36.47% Impervious = 23.258 ac**

**Summary for Subcatchment 1S: PRE**

Runoff = 45.26 cfs @ 12.41 hrs, Volume= 5.702 af, Depth= 2.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
Type II 24-hr 50-Year Rainfall=4.75"

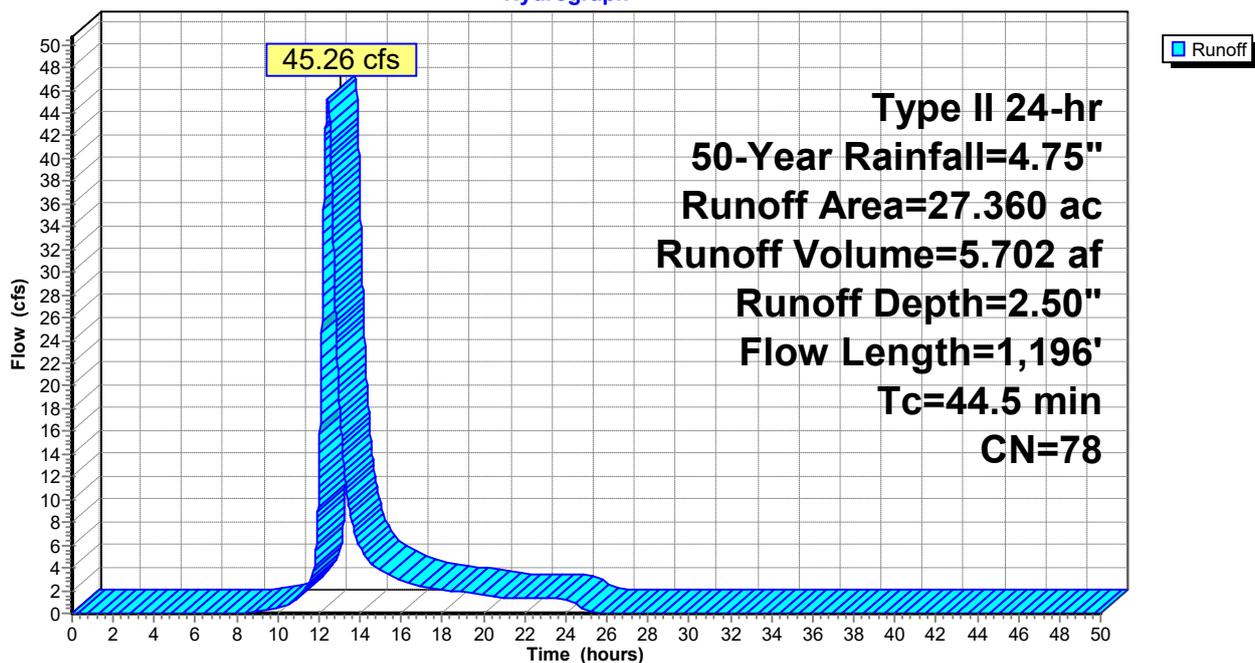
Area (ac)	CN	Description
27.360	78	Row crops, C&T, Good, HSG C
27.360		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0	100	0.0190	0.14		<b>Sheet Flow,</b> Cultivated: Residue>20% n= 0.170 P2= 2.70"
32.5	1,096	0.0039	0.56		<b>Shallow Concentrated Flow,</b> Cultivated Straight Rows Kv= 9.0 fps
44.5	1,196	Total			

**Subcatchment 1S: PRE**

Hydrograph



**Summary for Subcatchment 2S: POST**

Runoff = 133.53 cfs @ 12.06 hrs, Volume= 9.260 af, Depth= 4.06"  
 Routed to Pond 3P : Wet Basin

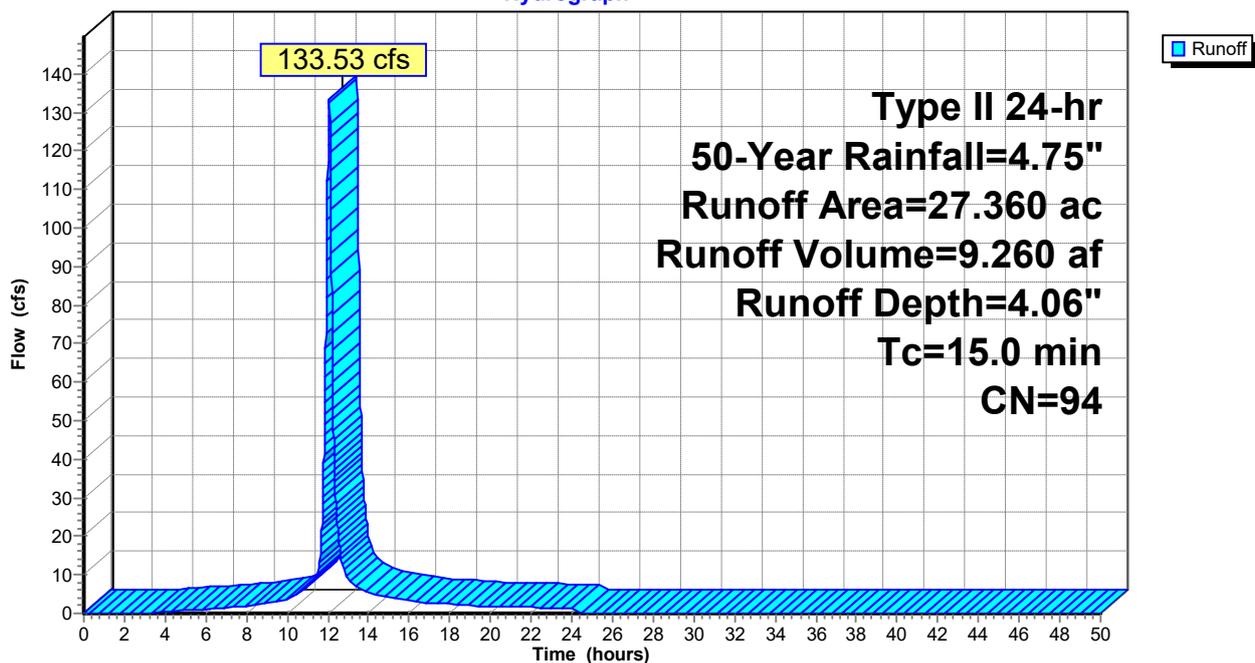
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 50-Year Rainfall=4.75"

Area (ac)	CN	Description
8.950	94	Urban commercial, 85% imp, HSG C
2.760	74	>75% Grass cover, Good, HSG C
15.650	98	Paved parking, HSG C
27.360	94	Weighted Average
4.103		14.99% Pervious Area
23.258		85.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

**Subcatchment 2S: POST**

Hydrograph



**Summary for Subcatchment 5S: OFFSITE**

Runoff = 9.11 cfs @ 12.58 hrs, Volume= 1.397 af, Depth= 1.85"  
 Routed to Pond 3P : Wet Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 50-Year Rainfall=4.75"

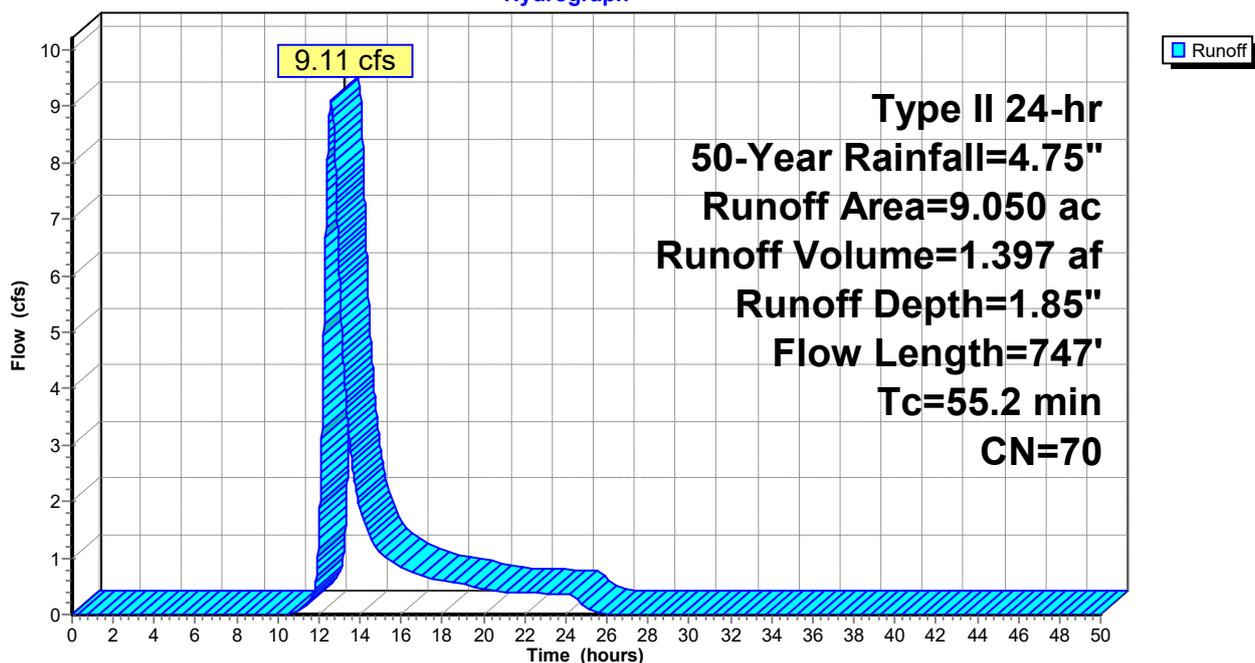
Area (ac)	CN	Description
9.050	70	Woods, Good, HSG C
9.050		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.4	100	0.0199	0.07		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.70"
31.8	647	0.0046	0.34		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
55.2	747	Total			

**Subcatchment 5S: OFFSITE**

Hydrograph



### Summary for Pond 3P: Wet Basin

Inflow Area = 36.410 ac, 63.88% Impervious, Inflow Depth = 3.51" for 50-Year event  
 Inflow = 135.56 cfs @ 12.06 hrs, Volume= 10.658 af  
 Outflow = 16.96 cfs @ 12.91 hrs, Volume= 10.297 af, Atten= 87%, Lag= 50.7 min  
 Primary = 16.96 cfs @ 12.91 hrs, Volume= 10.297 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Peak Elev= 930.34' @ 12.91 hrs Surf.Area= 2.139 ac Storage= 5.631 af

Plug-Flow detention time= 326.1 min calculated for 10.297 af (97% of inflow)  
 Center-of-Mass det. time= 305.2 min ( 1,099.8 - 794.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	927.50'	8.180 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
927.50	1.821	0.000	0.000
931.50	2.269	8.180	8.180

Device	Routing	Invert	Outlet Devices
#1	Primary	927.50'	<b>24.0" Round RCP_Round 24"</b> L= 126.7' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 927.50' / 926.95' S= 0.0043 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Device 1	927.50'	<b>6.0" Vert. WQ Orifice X 2.00</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	928.50'	<b>36.0" W x 6.0" H Vert. Window X 3.00</b> C= 0.600 Limited to weir flow at low heads
#4	Device 1	930.30'	<b>1.5" x 5.0" Horiz. Grate X 9.00 columns</b> X 4 rows C= 0.600 in 27.5" x 27.5" Grate (36% open area) Limited to weir flow at low heads
#5	Secondary	930.50'	<b>55.0' long + 4.0 ' SideZ x 8.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

**Primary OutFlow** Max=16.96 cfs @ 12.91 hrs HW=930.34' (Free Discharge)

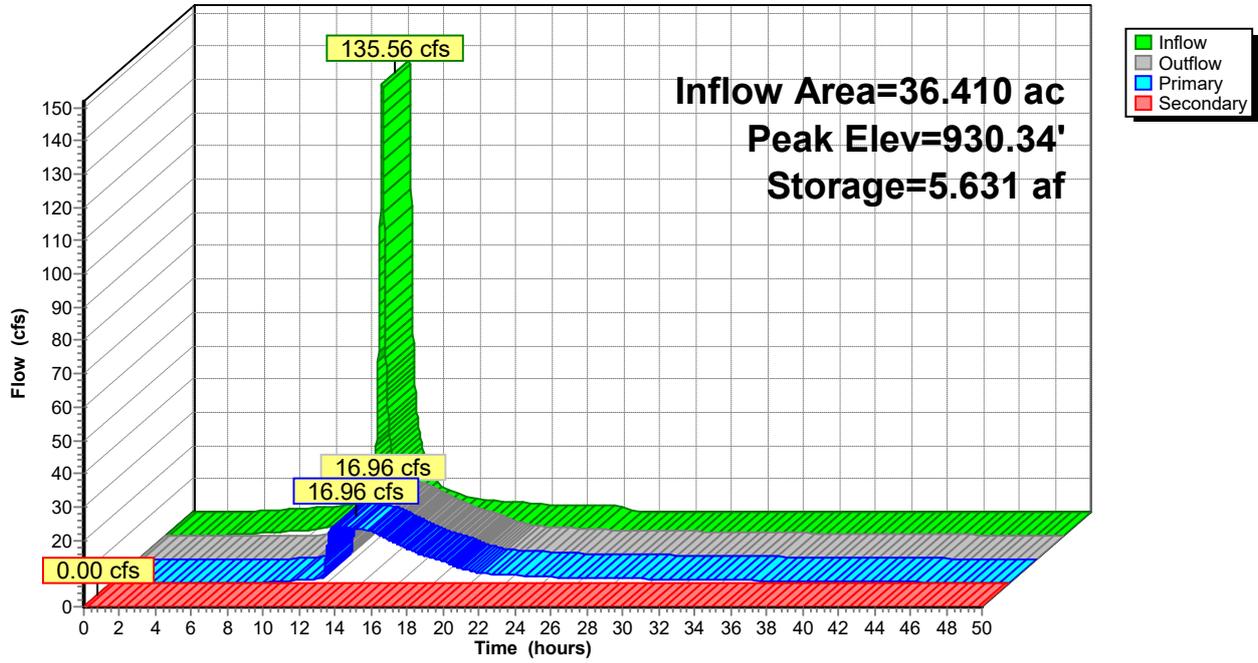
- ↑ 1=RCP\_Round 24" (Barrel Controls 16.96 cfs @ 5.40 fps)
- ↑ 2=WQ Orifice (Passes < 3.05 cfs potential flow)
- ↑ 3=Window (Passes < 27.32 cfs potential flow)
- ↑ 4=Grate (Passes < 0.27 cfs potential flow)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=927.50' (Free Discharge)

- ↑ 5=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

### Pond 3P: Wet Basin

Hydrograph



**JRM SWM**

Type II 24-hr 100-Year Rainfall=5.00"

Prepared by Woolpert, Inc

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Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PRE**

Runoff Area=27.360 ac 0.00% Impervious Runoff Depth=2.71"  
Flow Length=1,196' Tc=44.5 min CN=78 Runoff=49.18 cfs 6.183 af

**Subcatchment 2S: POST**

Runoff Area=27.360 ac 85.01% Impervious Runoff Depth=4.31"  
Tc=15.0 min CN=94 Runoff=141.16 cfs 9.822 af

**Subcatchment 5S: OFFSITE**

Runoff Area=9.050 ac 0.00% Impervious Runoff Depth=2.04"  
Flow Length=747' Tc=55.2 min CN=70 Runoff=10.10 cfs 1.536 af

**Pond 3P: Wet Basin**

Peak Elev=930.52' Storage=5.999 af Inflow=143.49 cfs 11.358 af  
Primary=17.97 cfs 10.987 af Secondary=0.40 cfs 0.009 af Outflow=18.38 cfs 10.995 af

**Total Runoff Area = 63.770 ac Runoff Volume = 17.541 af Average Runoff Depth = 3.30"**  
**63.53% Pervious = 40.512 ac 36.47% Impervious = 23.258 ac**

**Summary for Subcatchment 1S: PRE**

Runoff = 49.18 cfs @ 12.41 hrs, Volume= 6.183 af, Depth= 2.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 100-Year Rainfall=5.00"

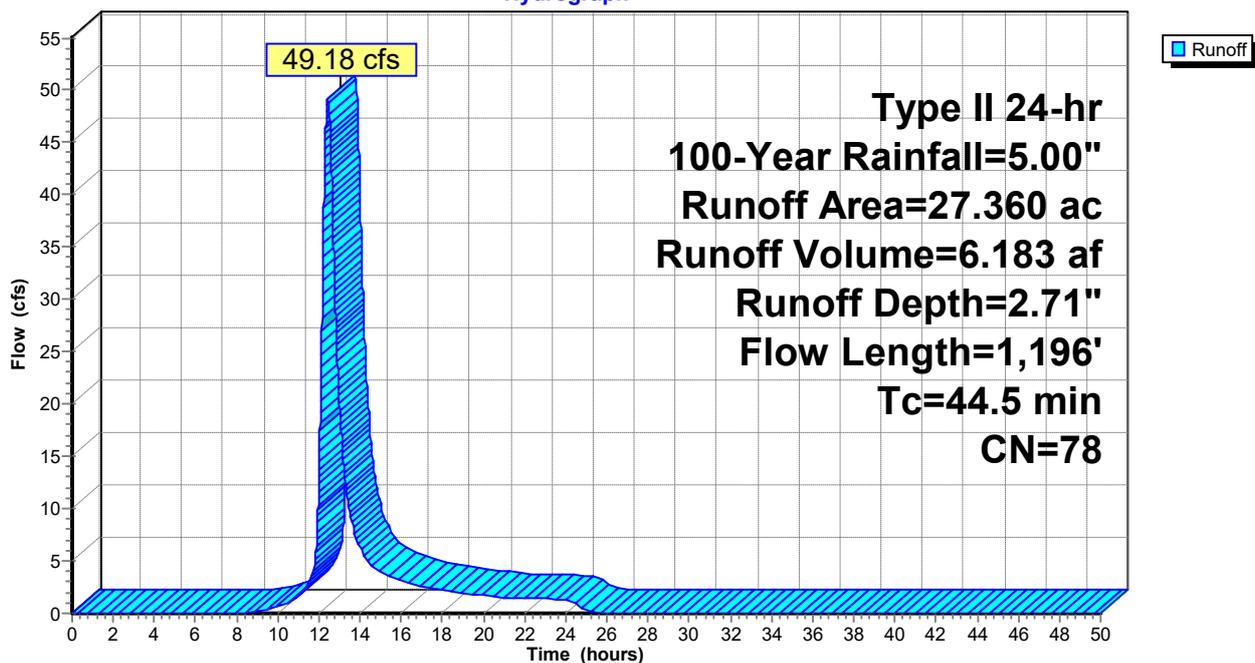
Area (ac)	CN	Description
27.360	78	Row crops, C&T, Good, HSG C
27.360		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0	100	0.0190	0.14		<b>Sheet Flow,</b> Cultivated: Residue>20% n= 0.170 P2= 2.70"
32.5	1,096	0.0039	0.56		<b>Shallow Concentrated Flow,</b> Cultivated Straight Rows Kv= 9.0 fps
44.5	1,196	Total			

**Subcatchment 1S: PRE**

Hydrograph



**Summary for Subcatchment 2S: POST**

Runoff = 141.16 cfs @ 12.06 hrs, Volume= 9.822 af, Depth= 4.31"  
 Routed to Pond 3P : Wet Basin

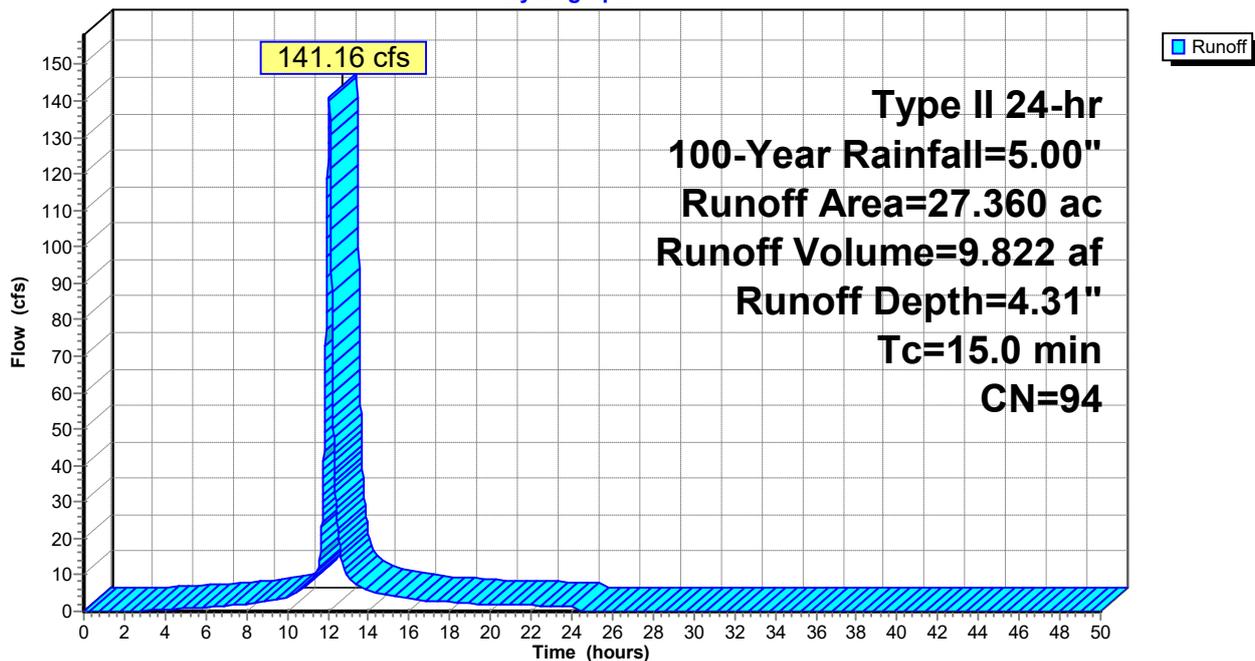
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 100-Year Rainfall=5.00"

Area (ac)	CN	Description
8.950	94	Urban commercial, 85% imp, HSG C
2.760	74	>75% Grass cover, Good, HSG C
15.650	98	Paved parking, HSG C
27.360	94	Weighted Average
4.103		14.99% Pervious Area
23.258		85.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

**Subcatchment 2S: POST**

Hydrograph



**Summary for Subcatchment 5S: OFFSITE**

Runoff = 10.10 cfs @ 12.57 hrs, Volume= 1.536 af, Depth= 2.04"  
 Routed to Pond 3P : Wet Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 100-Year Rainfall=5.00"

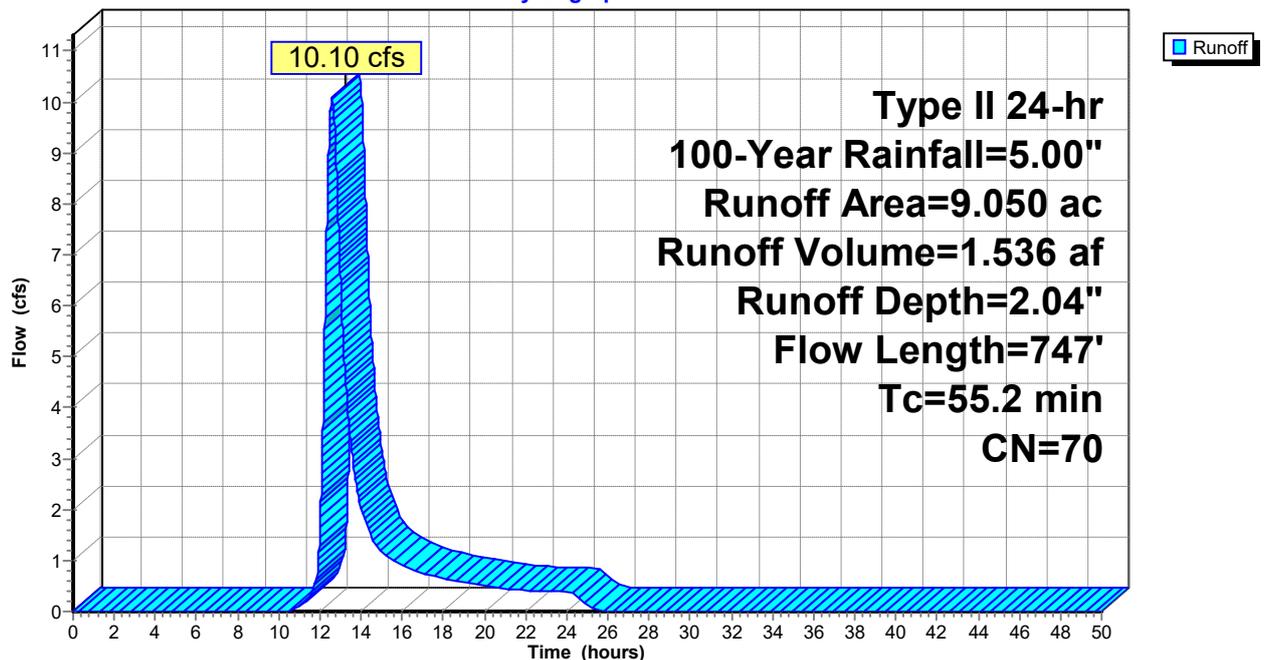
Area (ac)	CN	Description
9.050	70	Woods, Good, HSG C
9.050		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.4	100	0.0199	0.07		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 2.70"
31.8	647	0.0046	0.34		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
55.2	747	Total			

**Subcatchment 5S: OFFSITE**

Hydrograph



### Summary for Pond 3P: Wet Basin

Inflow Area = 36.410 ac, 63.88% Impervious, Inflow Depth = 3.74" for 100-Year event  
 Inflow = 143.49 cfs @ 12.06 hrs, Volume= 11.358 af  
 Outflow = 18.38 cfs @ 12.90 hrs, Volume= 10.995 af, Atten= 87%, Lag= 50.2 min  
 Primary = 17.97 cfs @ 12.90 hrs, Volume= 10.987 af  
 Secondary = 0.40 cfs @ 12.90 hrs, Volume= 0.009 af

Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs  
 Peak Elev= 930.52' @ 12.90 hrs Surf.Area= 2.158 ac Storage= 5.999 af

Plug-Flow detention time= 319.3 min calculated for 10.993 af (97% of inflow)  
 Center-of-Mass det. time= 299.8 min ( 1,093.2 - 793.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	927.50'	8.180 af	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
927.50	1.821	0.000	0.000
931.50	2.269	8.180	8.180

Device	Routing	Invert	Outlet Devices
#1	Primary	927.50'	<b>24.0" Round RCP_Round 24"</b> L= 126.7' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 927.50' / 926.95' S= 0.0043 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Device 1	927.50'	<b>6.0" Vert. WQ Orifice X 2.00</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	928.50'	<b>36.0" W x 6.0" H Vert. Window X 3.00</b> C= 0.600 Limited to weir flow at low heads
#4	Device 1	930.30'	<b>1.5" x 5.0" Horiz. Grate X 9.00 columns</b> X 4 rows C= 0.600 in 27.5" x 27.5" Grate (36% open area) Limited to weir flow at low heads
#5	Secondary	930.50'	<b>55.0' long + 4.0 ' SideZ x 8.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

**Primary OutFlow** Max=17.97 cfs @ 12.90 hrs HW=930.52' (Free Discharge)

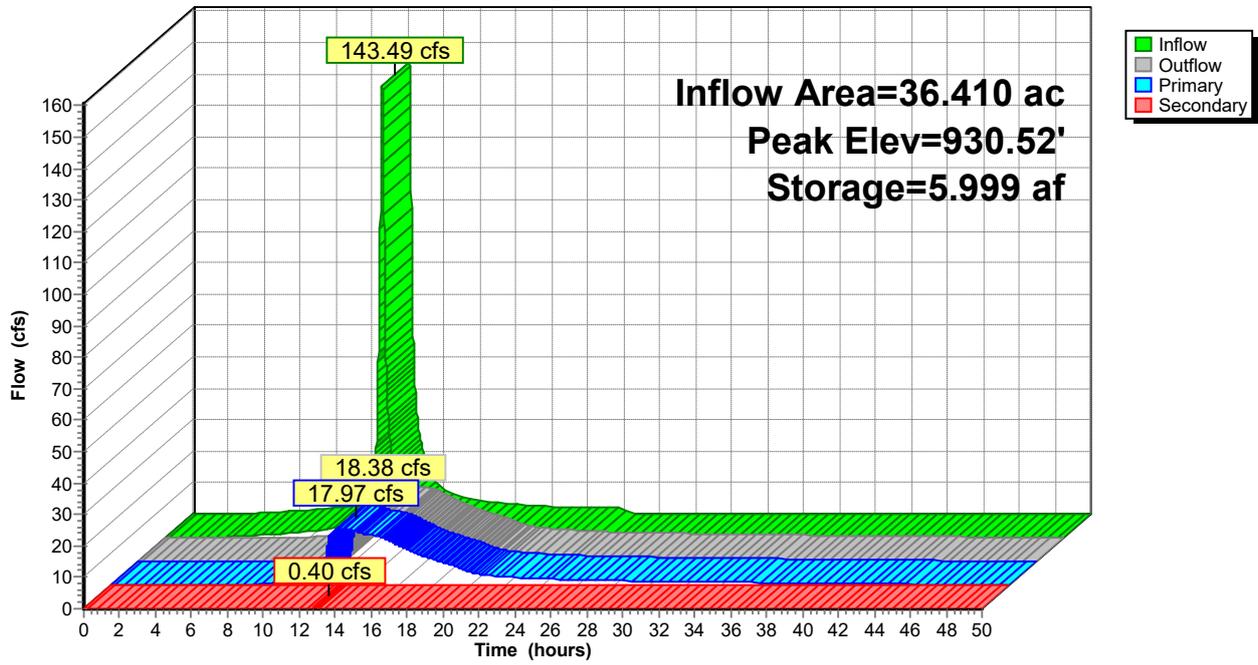
- ↑ 1=RCP\_Round 24" (Barrel Controls 17.97 cfs @ 5.72 fps)
- ↑ 2=WQ Orifice (Passes < 3.14 cfs potential flow)
- ↑ 3=Window (Passes < 28.76 cfs potential flow)
- ↑ 4=Grate (Passes < 2.99 cfs potential flow)

**Secondary OutFlow** Max=0.25 cfs @ 12.90 hrs HW=930.52' (Free Discharge)

- ↑ 5=Broad-Crested Rectangular Weir (Weir Controls 0.25 cfs @ 0.30 fps)

### Pond 3P: Wet Basin

Hydrograph



**Events for Subcatchment 1S: PRE**

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-Year	2.35	11.25	1.579	0.69
2-Year	2.55	13.66	1.871	0.82
5-Year	3.30	23.58	3.071	1.35
10-Year	3.80	30.78	3.942	1.73
25-Year	4.30	38.31	4.854	2.13
50-Year	4.75	45.26	5.702	2.50
100-Year	<b>5.00</b>	<b>49.18</b>	<b>6.183</b>	<b>2.71</b>

**Events for Subcatchment 2S: POST**

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-Year	2.35	59.46	3.936	1.73
2-Year	2.55	65.70	4.371	1.92
5-Year	3.30	88.98	6.021	2.64
10-Year	3.80	104.41	7.133	3.13
25-Year	4.30	119.76	8.251	3.62
50-Year	4.75	133.53	9.260	4.06
100-Year	<b>5.00</b>	<b>141.16</b>	<b>9.822</b>	<b>4.31</b>

**Events for Subcatchment 5S: OFFSITE**

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-Year	2.35	1.39	0.291	0.39
2-Year	2.55	1.85	0.362	0.48
5-Year	3.30	3.94	0.669	0.89
10-Year	3.80	5.60	0.904	1.20
25-Year	4.30	7.40	1.157	1.53
50-Year	4.75	9.11	1.397	1.85
100-Year	<b>5.00</b>	<b>10.10</b>	<b>1.536</b>	<b>2.04</b>

**Events for Pond 3P: Wet Basin**

Event	Inflow (cfs)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Storage (acre-feet)
1-Year	59.57	5.88	5.88	0.00	928.77	2.396
2-Year	65.87	7.13	7.13	0.00	928.88	2.614
5-Year	89.55	11.32	11.32	0.00	929.35	3.567
10-Year	105.41	13.99	13.99	0.00	929.68	4.231
25-Year	121.29	15.97	15.97	0.00	930.01	4.934
50-Year	135.56	16.96	16.96	0.00	930.34	5.631
100-Year	<b>143.49</b>	<b>18.38</b>	<b>17.97</b>	<b>0.40</b>	<b>930.52</b>	<b>5.999</b>

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## **JRM SWM**

Prepared by Woolpert, Inc

HydroCAD® 10.20-7a s/n 00728 © 2025 HydroCAD Software Solutions LLC

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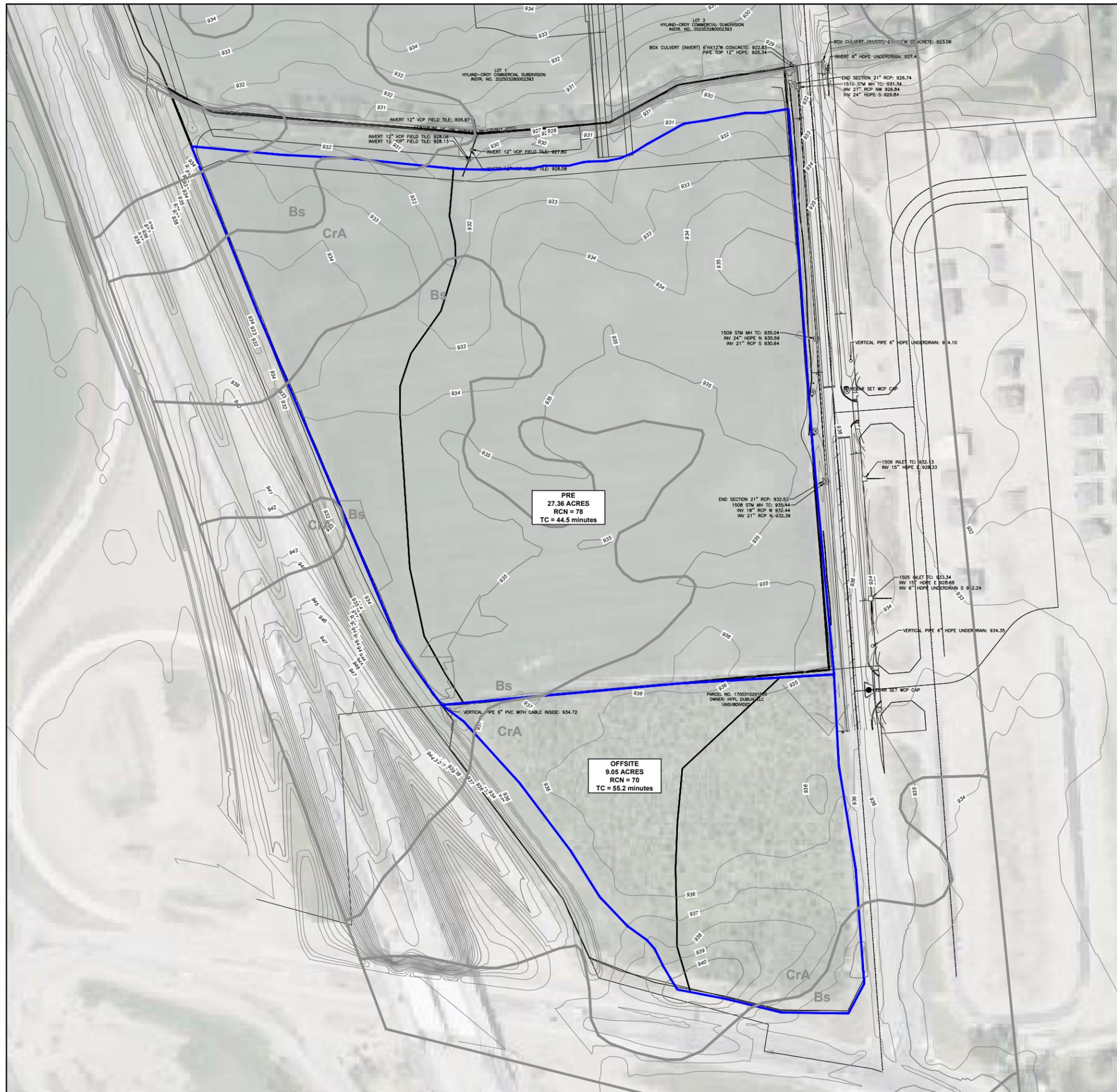
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- 53 Pond 3P: Wet Basin

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- LEGEND**
- ⊙ □ □ EXISTING DRAINAGE STRUCTURE
  - SD --- EXISTING STORM SEWER
  - 1170 --- EXISTING 1' CONTOUR
  - 1180 --- EXISTING 5' CONTOUR
  - 790 --- PROPOSED 1' CONTOUR
  - 800 --- PROPOSED 5' CONTOUR
  - S --- STORM SEWER
  - ● ● DRAINAGE STRUCTURE
  - X □ STORM STRUCTURE ID
  - --- PROJECT BOUNDARY
  - --- DRAINAGE AREA BOUNDARY

- SOILS LEGEND**
- Bs** BROOKSTON SILTY CLAY LOAM, 0-2% SLOPES, HYDROLOGIC GROUP: C/D
  - CrA** CROSBY SILT LOAM, 0-2% SLOPES, HYDROLOGIC GROUP: C/D

**DRAINAGE AREA SUMMARY**

PRE	27.36 AC
OFFSITE	9.05 AC
TOTAL DRAINAGE AREA	36.41 ACRES

**WOOLPERT**  
 ARCHITECTURE | ENGINEERING | GEOSPATIAL  
 4454 Idea Center Boulevard  
 Dayton, OH 45430  
 937.461.5660

**meijer**  
 2929 WALKER AVENUE  
 GRAND RAPIDS, MICHIGAN 49544  
 (616) 453-6711

REV.	DATE	DESCRIPTION

MEIJER STORE JRM  
 HYLAND-CROY ROAD  
 PLAIN CITY, OHIO 43064

**PRE-DEVELOPED DRAINAGE PLAN**

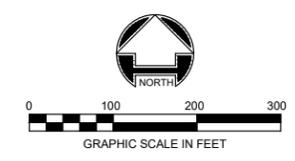
ISSUED FOR:

PERMIT	MMDDYY
BID	MMDDYY
CONSTRUCTION	MMDDYY

PROJECT MANAGER	DESIGNER
BLS	MRS

JOB NO.  
 10020719

**EXH-1**



Images: Xrefs: 10020719--p.dwg; main store and gc footprint.dwg; 10020719--p County all.dwg; 10020719--x.dwg; 10020719TBLK.dwg  
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**LEGEND**

- ⊙ □ □ EXISTING DRAINAGE STRUCTURE
- SD --- EXISTING STORM SEWER
- 1170 --- EXISTING 1' CONTOUR
- 1180 --- EXISTING 5' CONTOUR
- 790 --- PROPOSED 1' CONTOUR
- 800 --- PROPOSED 5' CONTOUR
- S --- STORM SEWER
- ● ● DRAINAGE STRUCTURE
- X □ STORM STRUCTURE ID
- --- PROJECT BOUNDARY
- --- DRAINAGE AREA BOUNDARY

**SOILS LEGEND**

**Bs** BROOKSTON SILTY CLAY LOAM, 0-2% SLOPES, HYDROLOGIC GROUP: C/D

**CrA** CROSBY SILT LOAM, 0-2% SLOPES, HYDROLOGIC GROUP: C/D

**DRAINAGE AREA SUMMARY**

POST	27.36 AC
OFFSITE	9.05 AC
TOTAL DRAINAGE AREA	36.41 ACRES

**WOOLPERT**  
 ARCHITECTURE | ENGINEERING | GEOSPATIAL  
 4454 Idea Center Boulevard  
 Dayton, OH 45430  
 937.461.5660

**meijer**  
 2929 WALKER AVENUE  
 GRAND RAPIDS, MICHIGAN 49544  
 (616) 453-6711

REV.	DATE	DESCRIPTION

MEIJER STORE JRM  
 HYLAND-CROY ROAD  
 PLAIN CITY, OHIO 43064

**POST-DEVELOPED DRAINAGE PLAN**

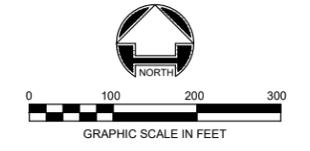
ISSUED FOR:

PERMIT	MMDDYY
BID	MMDDYY
CONSTRUCTION	MMDDYY

PROJECT MANAGER	DESIGNER
BLS	MRS

JOB NO.  
 10020719

**EXH-2**

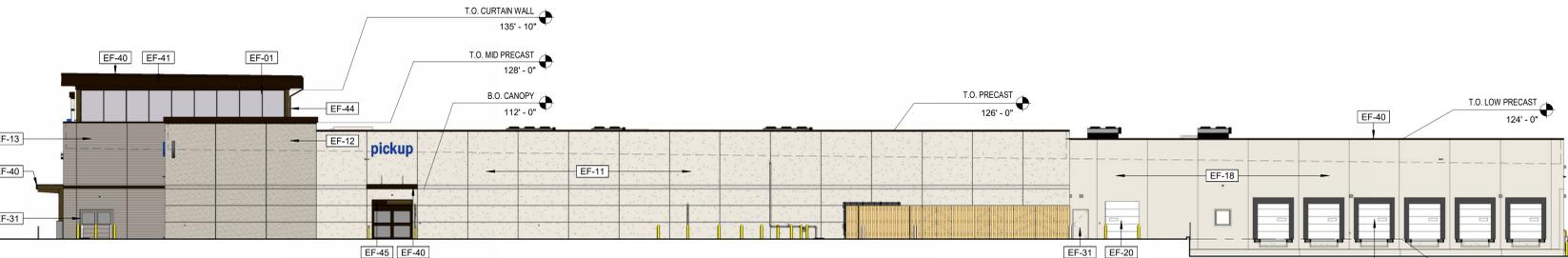




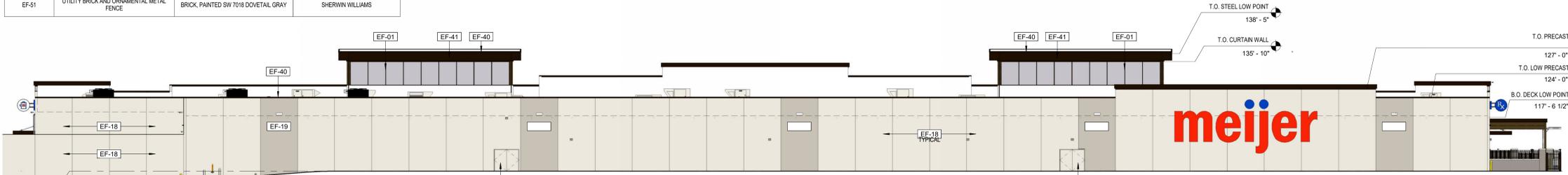
RENDERING MATERIAL & FINISH LEGEND			
MARK	ITEM	COLOR/FINISH	MANUFACTURER/NOTES
EF-01	ENTRANCES, DOORS AND STOREFRONTS	DARK BRONZE ANODIZED ALUMINUM FRAME IG-1 = SN 68 CRYSTAL GRAY GLAZING	GUARDIAN GLASS GLAZING
EF-11	INSULATED PRECAST CONCRETE WALL (TEXTURED CONCRETE)	AP FORMLINER - EFS #410 SW 7015 REPOSE GRAY	SHERWIN WILLIAMS
EF-12	INSULATED PRECAST CONCRETE WALL (TEXTURED CONCRETE)	AP FORMLINER - EFS #410 SW 7015 REPOSE GRAY	SHERWIN WILLIAMS
EF-13	INSULATED PRECAST CONCRETE WALL (WOOD PLANK PATTERN)	AP FORMLINER - CUSTOM MEIJER WOOD #616 SW 7017 DORIAN GRAY	SHERWIN WILLIAMS
EF-18	INSULATED PRECAST CONCRETE WALL (SMOOTH CONCRETE)	SW 7015 REPOSE GRAY	SHERWIN WILLIAMS
EF-19	INSULATED PRECAST CONCRETE WALL (SMOOTH CONCRETE)	SW 7017 DORIAN GRAY	SHERWIN WILLIAMS
EF-20	SECTIONAL OVERHEAD DOORS	WHITE	--
EF-21	FIELD PAINTED CONCRETE FOUNDATION WALL	SW 7015 REPOSE GRAY	SHERWIN WILLIAMS
EF-30	FIELD PAINTED STEEL *STEEL TUBE FRAMING AT ENTRANCES AND CANOPIES *METAL DECK AT CANOPIES *STEEL HANGER ASSEMBLIES AT CANOPIES *GUARDRAILS	MEIJER BRONZE	SHERWIN WILLIAMS PRO INDUSTRIAL MULTI SURFACE ACRYLIC
EF-31	FIELD PAINTED STEEL *BENT STEEL PLATE FRAME AT SECTIONAL OVERHEAD DOORS *EXTERIOR HOLLOW METAL DOORS AND FRAMES	MATCH ADJACENT WALL COLOR	SHERWIN WILLIAMS
EF-40	SHEET METAL FLASHING AND TRIM *EDGE FLASHING AND COUNTER FLASHING AT CANOPIES *COPING AND EDGE FLASHING AT ROOF AND PARAPET *PAINTED UTILITIES	DARK BRONZE ANODIZED ALUMINUM	--
EF-41	INSULATED METAL PANELS	DARK BRONZE ANODIZED ALUMINUM	FIRESTONE
EF-44	GUTTERS AND DOWNSPOUTS	DARK BRONZE ANODIZED ALUMINUM	--
EF-45	AIR CURTAIN METAL PROFILE	DARK BRONZE ANODIZED ALUMINUM	TORMAX
EF-46	CLERESTORY VENTED SOFFIT PANEL	DARK BRONZE ANODIZED ALUMINUM	FIRESTONE
EF-50	GALVANIZED CHAIN LINK FENCE	--	--
EF-51	UTILITY BRICK AND ORNAMENTAL METAL FENCE	BRICK, PAINTED SW 7018 DOVETAIL GRAY	SHERWIN WILLIAMS



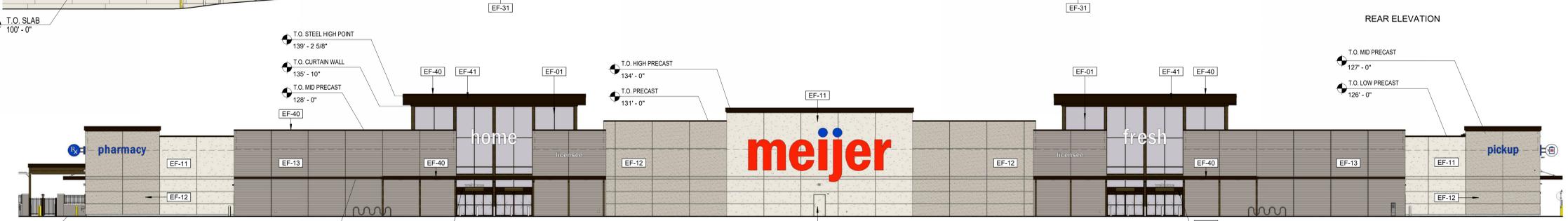
LEFT ELEVATION



RIGHT ELEVATION



REAR ELEVATION



FRONT ELEVATION



**MEIJER STORE #JRM**  
HYLAND CROY ROAD, JEROME TOWNSHIP  
UNION COUNTY, OHIO 43064

FUTURE NS - 00JRM  
08/04/2025



2 WEST 6TH STREET, SUITE 100  
TULSA, OK 74119  
918.587.2282  
WWW.NARRATE.DESIGN

**Statement on The Relationship of the Proposed Amendment to the Official Zoning Map to  
the Jerome Township Comprehensive Plan**

**HALL'S CORNER HYLAND-CROY PLANNED DEVELOPMENT DISTRICT**

The proposed Planned Development District consists of 29.57+/- gross acres bounded by U.S. Route 33 on the west, Hyland-Croy Road on the east, and the centerline of the Gordon Tri-County Ditch on the north. Subarea 1 consists of 19.24+/- acres located within the western and central portions of the site, beginning at U.S. Route 33 and extending northward to the northern boundary of the district and eastward and southward to shared boundaries with Subarea 2. Subarea 2 consists of the balance of the district including 10.33+/- acres running along the eastern and southern perimeters of the site.

The subject property is undeveloped and is presently located in the Hall's Corner Planned Development District, which has an approved zoning text and a plan dated May 2007. That zoning would accommodate a "regional power shopping center" according to the approved text. Following this rezoning, the existing Hall's Corner zoning will no longer apply and the plans and text which accompany the current application will apply to the site.

The Hall's Corner Hyland-Croy Planned District is being created in order to facilitate the development of a Meijer supercenter store to be located in the east central portion of the subject property and the development of outparcels along the eastern and southern perimeter boundaries of the new zoning district. It is consistent with use rights that have been in place for the property for nearly two decades. The rezoning will update development standards to facilitate the development needs of the Meijer store. It will also provide development standards for outparcels which are consistent with those that apply to property located to the north of and adjacent to this new zoning district and are owned by an affiliate of Coughlin Investments, Ltd., who is a co-applicant on this application with Meijer Store Limited Partnership. In this regard, it will provide for a cohesive development pattern between properties to the north and south of the Gordon Tri-County Ditch.

The proposal furthers many principles as set forth in the 2025 Jerome Township Comprehensive Plan. It provides high-quality retail and service-type uses anchored by a respected major retailer. It consolidates access from a single location on Hyland-Croy Road with secondary access routes internal to the site connecting to the north and south. It takes advantage of existing infrastructure by being located adjacent to U.S. Route 33 as well as the recently improved Hyland-Croy Road. The property is recommended for mixed commercial and retail uses under the Comprehensive Plan, and this proposal meets that recommendation. Regional retail uses are recommended along major arterials and near interchanges. The proposed Meijer store and additional commercial uses are appropriately located along the U.S. Route 33 corridor where there is high visibility and there are traffic volumes which will support the uses in a manner that is convenient for residents of the community and the traveling public.

**PLANNED DEVELOPMENT DISTRICT REGULATION TEXT**

**Development Name:** Hall's Corner Hyland-Croy

**Applicants:** Meijer Stores Limited Partnership  
Attn: Crisman S. Jones, Senior Real Estate Manager  
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Grand Rapids, MI 49544  
[Cris.JonesJr@meijer.com](mailto:Cris.JonesJr@meijer.com)

and

Coughlin Investments, Ltd.  
Attn: Al Coughlin  
P.O. Box 1474  
Pataskala, OH 43062  
[al@coughlincars.com](mailto:al@coughlincars.com)

**Legal Counsel:** Underhill & Hodge LLC  
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[aaron@uhlfirm.com](mailto:aaron@uhlfirm.com)

**Engineers:** Advanced Civil Design, Inc.  
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Gahanna, OH 43230  
[twarner@advancedcivildesign.com](mailto:twarner@advancedcivildesign.com)

and

Woolpert  
Brian L. Smallwood, P.E.  
Abby Jacobs, P.E.  
1203 Walnut Street, Second Floor  
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[Brian.Smallwood@Woolpert.com](mailto:Brian.Smallwood@Woolpert.com)  
[Abby.Jacobs@Woolpert.com](mailto:Abby.Jacobs@Woolpert.com)

**Application Date:** December 18, 2025

**Date of Adoption:** \_\_\_\_\_, 2026

## **I. INTRODUCTION**

This regulation text is a part of the preliminary development plan provided for by Chapter 500 of the Zoning Resolution and is adopted in accordance with provisions of that Chapter and governed by the regulations provided therein. The preliminary development plan attached to this application for an amendment of the Official Zoning Map is adopted for the purposes provided for in Section 500.001 and as may be further described in the document entitled: "The Relationship of the Proposed Amendment to the Official Zoning Map to the Jerome Township Comprehensive Plan" as attached to this application.

**II. DISTRICT AND SUBAREAS.** This Planned Development District consists of 29.57+/- gross acres in Jerome Township bounded by U.S. Route 33 on the west, Hyland-Croy Road on the east, and the centerline of the Gordon Tri-County Ditch on the north. This District will include two subareas. Subarea 1 consists of 19.24+/- acres located within the western and central portions of the site, beginning at U.S. Route 33 and extending northward to the northern boundary of the District and eastward and southward to shared boundaries with Subarea 2. Subarea 2 consists of the balance of the district including 10.33+/- acres running along the eastern and southern perimeters of the site.

**III. DEVELOPMENT STANDARDS NOT PROVIDED.** In accordance with Section 500.04(2) of the Zoning Resolution, the standards and regulations provided in this regulation text shall constitute the zoning regulations for and shall apply only to this Planned Development District. All development standards not specifically addressed by this regulation text shall be regulated by those general development standards set forth in the Zoning Resolution; however, in the event of any ambiguity, the preliminary development plan, including this regulation text, all incorporated maps, plans, and exhibits, shall be interpreted in order to give effect to and resolve any ambiguities in favor of the zoning regulations contained herein. In accordance with the Zoning Resolution, minor deviations from the plans and exhibits submitted with this regulation text (the "preliminary development plan") may be approved in conjunction with review and approval of the applicable detailed development plan(s).

## **IV. SUBAREA 1.**

**A. Permitted Uses.** Permitted uses in Subarea 1 shall include the permitted uses listed in Zoning Resolution Section 460.01, Regional Retail District (RR). For purposes of clarity, these uses shall include, but not be limited to:

1. "Supercenter", defined to mean a retail store combining (1) a supermarket and (2) a general merchandise store, pharmacy, specialty store, or other retail store (including in-store lessees/licensees). An example of a Supercenter is a typical Meijer store.
2. Drive-throughs as defined in Zoning Resolution Chapter 300. For the avoidance of doubt, in addition to Drive-throughs that are customarily associated with uses located on outlots. Drive-throughs shall include those which are operated in association with customer order fulfillment within a building containing a Supercenter.
3. Ancillary uses, such as but not limited to, banks or other financial services, coffee shops and coffee kiosks, dry cleaners, veterinary clinics, medical/dental/optical offices, barbershops and beauty salons, photographic

services, and other uses which are customary as licensees of or tenants or occupants in a Supercenter or grocery store and are secondary to the primary use of the building as a Supercenter.

4. Outdoor garden and nursery centers and related sales activities, provided they are accessory to a Supercenter, are located to the side of the building, and have pedestrian access both from the building and from outside parking and pedestrian areas.
5. Outdoor display and sales areas which are accessory to a Supercenter or another permitted use, provided that such displays are located in areas as designated on a detailed development plan.
6. Outdoor storage areas in association with a Supercenter or another permitted use, provided that such areas are located in areas as designated on a detailed development plan and are screened as required elsewhere in this text.
7. Electric vehicle charging stations as an accessory use to a Supercenter or another permitted use. Level 1, Level 2, Level 3, Level 4 charging stations are permitted outright as an accessory use to any principal use.

**B. Development Standards.** Within Subarea 1, all uses shall comply with Zoning Resolution Sections 461.03 through 461.09 (Regional Retail District), as well as other applicable provisions of the Zoning Resolution, with respect to development standards which are not addressed in this text.

**C. Number of Buildings:** A single primary building shall be permitted in Subarea 1. Accessory structures shall be permitted in accordance with relevant provisions of the Zoning Resolution.

**D. Setbacks.** Minimum setbacks shall be as provided in this section. Setbacks indicated as applying to or from a public street shall apply from the right-of-way line after any required right-of-way dedications have been completed.

1. **U.S. Route 33.** There shall be a minimum pavement setback of 10 feet and a minimum building setback of 30 feet from the right-of-way of U.S. Route 33.

2. **Other Perimeter Setbacks:** The following minimum setbacks shall be provided around other perimeter boundaries of Subarea 1.

- a. **Northern Perimeter.** 10 feet for pavement and 20 feet for buildings, as measured from the northern boundary line of Subarea 1. The setbacks to the existing ditch along the northern boundary line of Subarea 1 shall be established in compliance with the appropriate regulating agency and setbacks required by other regulating agencies shall govern in lieu of the setbacks provided in the preceding sentence if they are greater than the minimums provided in the preceding sentence. The location of any riparian buffers or setback areas from the ditch are subject to final design and engineering and may be revised in order to meet the regulations or requirements established by the Union County Engineer, OEPA, USACE

and/or any other state or federal regulatory agency having jurisdiction over such matters.

**b. Southern Perimeter.** Zero feet for pavement and 20 feet for buildings, as measured from the southern boundary line of Subarea 1, provided that (a) no parking spaces or landscape islands shall be located closer than 10 feet from that boundary line.

**c. Eastern Perimeter.** Zero feet for pavement and 100 feet for primary buildings, as measured from the eastern boundary line of Subarea 1, provided, however, that no parking spaces or landscape islands shall be located closer than 25 feet from that boundary line. Accessory structures shall be located no closer than 25 feet from the boundary line.

**3. Internal Setbacks.** There shall be a zero-foot pavement and building setback requirement for buildings as measured from any parcel lines which are interior to Subarea 1.

#### **E. Building Standards.**

**1. Maximum Floor Area.** There shall be no maximum floor area, provided that all other applicable zoning standards and requirements are met.

**2. Materials.** Permitted exterior materials for buildings shall include those which are identified in the architectural elevations and other architectural plans which have been submitted as part of the preliminary development plan. In addition, to the extent that such materials are not identified in such elevations and plans, brick, brick veneer, stone, stone veneer, smooth or textured precast concrete panels, and cementitious siding or similar materials shall be permitted as primary exterior façade materials. The building shall be substantially similar in character and design as shown in the architectural exhibits that accompany the preliminary development plan. Final architecture shall be in accordance with the elevations, renderings, and other plans which are approved as part of a detailed development plan. In addition to primary architectural details, final architecture shall include details relating to awnings, plant shade structures for an outdoor garden center, and a pre-manufactured greenhouse structure, all of which need not be designed with the primary permitted exterior materials for the primary building in this subarea but which shall utilize materials that are customary for such elements and structures.

**3. Building Height.** The maximum height of all structures shall not exceed 45 feet, measured as defined in Zoning Resolution Chapter 300.

**4. Features.** The following architectural features shall be required and shall be scaled according to the building:

**a.** Roof may be sloped or flat.

**b.** Screening of roof-mounted equipment shall be required on the front building elevation of the primary building with materials that are consistent and

harmonious with the building's façade and character, as presented in the building elevations in the Preliminary Development Plan.

- c. Exterior walls on all sides of the building shall generally conform with the building elevations as approved in the preliminary development plan.

**5. Loading, Delivery, and Service Areas.** All loading, delivery, service, or similar areas shall be screened in accordance with the provisions of Chapter 620.

**F. Off-Street Parking.** A minimum of 450 parking spaces shall be provided in Subarea 1.

**G. Access, Roads, and Other Improvements.**

**1. Public Street Access.** Vehicular access to and from Subarea 1 is to be provided directly to Hyland-Croy Road through a private road system as shown in the preliminary development plan, subject to the approval of other relevant public regulatory agencies. This private road system shall connect to a private road/drive to the north of and adjacent to this Planned Development District which connects or will connect to Weldon Road, and also shall be stubbed to the zoning district's southern boundary line.

**2. Private Roads and Drives.** All roads and drives within Subarea 1 shall be privately constructed, owned, and maintained. Internal roads, drives, and external public street improvements adjacent to the development shall meet the requirements of the county subdivision regulations unless otherwise approved by the County Engineer's Office or other relevant regulatory agency.

**3. Easements.** In order to receive a zoning certificate for the first building that is constructed in Subarea 1, a declaration of reciprocal easements or a reciprocal easement agreement shall be recorded against the real property within this Planned Development District to provide for perpetual vehicular and pedestrian cross access easements, cross utility easements, and other easements which are necessary or desirable for the efficient development of the district. A copy of the relevant recorded instrument as contemplated by this paragraph shall be submitted to the Township along with or prior to the submission of the first application for a zoning certificate in this district. The instrument may be amended in the future as needed to address the access needs of future parcels/lots that are created after the instrument is recorded.

**H. Signage.** Large retail stores/Supercenters contain a dynamic and broad mix of products and uses and therefore require signage that promotes vehicular and pedestrian wayfinding and easy identification of use locations and product types found within and along the building. The provisions of this subsection provide details concerning the various signage types that will be permitted to serve the Supercenter building within Subarea 1.

**1. Primary Wall Signs.** A primary use/user identification sign shall be permitted on each of the front and rear building facades. Each of these signs shall not exceed 800 square feet in area as measured in accordance with Zoning Resolution Section 615.07.1. Other dimensions for each of these signs shall conform to the

specifications which are shown in signage plans that are included in the preliminary development plan.

2. **Secondary Wall Signs.** Secondary wall signs and blade signs shall be permitted to be installed on the building in locations which are approved in a detailed development plan, which shall substantially comply with the locations demonstrated in signage plans that are included in the preliminary development plan. These signs may identify (a) departments or general product types within the building (for example, “pharmacy”, “grocery”, “home”, “garden”, “pickup”, etc.), (b) licensees or tenants of the primary user of the building, and (c) pedestrian entry identifiers (for example, “welcome”, “entrance”, etc.). Each of these wall signs shall not exceed 75 square feet in area and blade signs shall not exceed 16 square feet in area, both as measured in accordance with Zoning Resolution Section 615.07.1. Other dimensions for each of these signs shall conform to the specifications which are shown in signage plans that are included in the preliminary development plan.
3. **Directional Signs.** Directional signs promoting wayfinding for vehicular traffic to identify routes of ingress and egress to the building in Subarea 1 and/or or uses or departments within it may be provided. Such signs shall comply with the dimensional requirements approved as part of a detailed development plan, provided that they are substantially similar to those which are provided in signage plans which accompany the preliminary development plan. Locations and quantities for these types of signs shall not be subject to any restrictions.
4. **Accessory Signs.** Accessory signs shall be permitted throughout the subarea to identify shopping cart corrals, electric vehicle charging stations, and product pickup locations. Such signs shall not exceed 7 feet in height nor 8 square feet of sign area. Locations and quantities for these types of signs shall not be subject to any restrictions except that they shall comply with Zoning Resolution Section 615.03.
5. **Other Signs.** All other signage and all standards relating to any signage that is not specifically addressed in this text shall be permitted in Subarea 1 in accordance with relevant provisions of the Zoning Resolution Regional Retail District (RR).

**V. SUBAREA 2.**

- A. **Permitted Uses.** Permitted uses in Subarea 2 shall include the permitted uses listed in Zoning Resolution Section 455.01, Local Retail District (LR), as well as (i) automotive parts, accessories, and tire stores, (ii) rental car services, (iii) specialty food stores, (iv) medical and dental offices; and (v) urgent care and outpatient emergency room services. Outdoor display and sales areas shall be permitted as part of a fuel station/convenience store use.
- B. **Conditional Uses.** Conditional uses in Subarea 2 shall include retail car washes.
- C. **Development Standards.** Within Subarea 2, all permitted or conditional uses shall comply with Zoning Resolution Sections 455.03 through 455.09 (Local Retail District),

as well as other applicable provisions of the Zoning Resolution, except as expressly provided in this Article V.

- D. Number of Lots.** In the preliminary development plan no specific boundaries for outlots are illustrated within Subarea 2. The boundaries of each outlot shall meet the dimensional requirements of this text and the requirements of applicable subdivision regulations (unless otherwise approved by applicable reviewing authorities), and the total number of outlots shall be determined by compliance with the same and market conditions which will influence development patterns in this subarea. Final dimensions of each outlot shall be determined in approved detailed development plans and related parcel splits or plats under the applicable subdivision regulations.
- E. Setbacks.** Minimum setbacks and yard areas in Subarea 2 shall be as indicated in this section. Setbacks indicated as applying to or from a public street shall apply from the right-of-way line after any required right-of-way dedications have been completed.

  - 1. Hyland-Croy Road.** There shall be a minimum pavement setback of 15 feet and a minimum building setback of 30 feet from the right-of-way of Hyland-Croy Road.
  - 2. Northern Perimeter.** There shall be a minimum setback of 10 feet for pavement and 20 feet for buildings as measured from the northern boundary line of Subarea 2 which is shared with the northern boundary of the Zoning District. The setbacks to the existing ditch along said northern boundary line shall be established in compliance with the appropriate regulating agency and setbacks required by other regulating agencies shall govern in lieu of the setbacks provided in the preceding sentence if they are greater than those minimums. The location of any riparian buffers or setback areas from the ditch are subject to final design and engineering and may be revised in order to meet the regulations or requirements established by the Union County Engineer, OEPA, USACE and/or any other state or federal regulatory having jurisdiction over such matters.
  - 3. Private Road.** There shall be a zero-foot minimum pavement setback and a minimum building setback of 20 feet as measured from the edge of pavement for all portions of the private road.
  - 4. Internal Parcel Lines.** There shall be a zero-foot minimum pavement setback and a minimum building setback of 10 feet as measured from any parcel lines which are shared by two outlots. Shared common access drives between parcels shall be permitted to cross and/or run along internal parcel lines.
  - 5. Southern Perimeter.** There shall be a minimum pavement setback of 10 feet and a minimum building setback of 20 feet as measured from the southern boundary line of Subarea 2.
  - 6. U.S. Route 33.** There shall be a minimum pavement setback of 10 feet and a minimum building setback of 30 feet as measured from the right-of-way of U.S. Route 33.
- F. Minimum Lot Width and Area.** The minimum dimensions for lots shall be as follows:

1. **Minimum Lot Width:** 100 feet for any parcels having frontage along Hyland-Croy Road or on a private road. The requirements of Zoning Resolution 600.8 shall not apply to Subarea 2.
2. **Minimum Lot Area:** 0.75 acres

**G. Building Standards.**

1. **Maximum Floor Area.** There shall be no maximum floor area, provided that all other applicable zoning standards and requirements are met.
2. **Materials.** Permitted primary exterior materials for buildings shall include brick, brick veneer, metal, smooth or textured precast concrete panels, and cementitious products or equivalent. Notwithstanding the foregoing, retail, restaurant, and other permitted or conditionally approved uses may incorporate regionally and/or nationally recognized features in their building architecture in order to facilitate brand identity. Architecture shall be designed in accordance with relevant elevations, renderings, and/or other plans which are approved as part of a detailed development plan.
3. **Building Height.** The maximum height of all structures shall not exceed 35 feet, measured as provided in Zoning Resolution Chapter 300.
4. **Style.** The architectural details, materials, and colors of all buildings within this subarea shall be compatible. Buildings shall be designed with a comparable level of detail on all sides, taking into account unique features for particular building facade such as, but not limited to, drive-thrus and pick-up windows.
5. **Features.** The following architectural features shall be required and shall be scaled according to the size of the individual tenant. These features may be scaled to a group of smaller side-by-side tenants when architecturally appropriate:
  - a. Roofs may be sloped or flat.
  - b. Screening of roof-mounted equipment shall be required on all four sides of buildings with materials that are consistent and harmonious with the building's façade and character. Such screening shall be provided in order to screen the equipment from off-site view from Hyland-Croy Road.
  - c. Complete screening of all ground-mounted mechanical and other equipment at ground level by walls, fencing, and/or landscaping shall be required.
  - d. The same palette of exterior finishes and color shall be used on all sides of a building. Unfinished rear facades of buildings shall be prohibited.
6. The following standards shall apply to canopies used to cover fueling pumps and/or charging stations associated with a fuel station:

- a. Canopy clearance height, as measured from finished grade to the lowest point on a canopy fascia, shall not exceed 16 feet. The overall height for a canopy shall not exceed 20 feet.
- b. Support elements of the canopy may be of a material consistent with the material of the canopy.
- c. Colors of the canopy fascia and support elements shall match the colors used in the branding package or colors of the convenience store building with which the canopy and fuel station are associated.
- d. Outdoor merchandise sales are allowed within the canopy area near fuel pumps and along the front and/or side building facades, not to exceed 10% of the gross floor area under the fuel canopy.

**H. Access, Roads, and Related Improvements.**

- 1. **Public Street Access.** Vehicular access to and from this subarea is to be provided from Hyland-Croy Road, subject to the approval of the relevant public regulatory agencies. An internal vehicular circulation system shall be provided and shall consist of private roads and drives with a connection to Hyland-Croy Road. The private road system shall connect to a private road/drive to the north of and adjacent to this Planned Development District which connects or will connect to Weldon Road and also shall be stubbed to the zoning district's southern boundary line.
- 2. **Private Roads and Drives.** All roads and drives within Subarea 2 shall be privately constructed, owned, and maintained. Internal roads, drives, and external street improvements adjacent to the development shall meet the requirements of the county subdivision regulations unless otherwise approved by the County Engineer's Office or other relevant regulatory agency. Shared vehicular access routes between outlots shall be permitted.
- 3. **Easements.** In order to receive a zoning certificate for the first building that is constructed in Subarea 2, a declaration of reciprocal easements or a reciprocal easement agreement shall be recorded against the real property within this zoning district to provide for perpetual vehicular and pedestrian cross access easements, cross utility easements, and other easements which are necessary or desirable for the efficient development of the district. A copy of the relevant recorded instrument as contemplated by this paragraph shall be submitted to the Township along with the first application for a zoning certificate in this district. The instrument may be amended in the future as needed to address the access needs of future parcels/lots that are created after the instrument is recorded.

**I. Outlot Signage.**

- 1. **Wall Signs – Parcels With Public Street Frontage.** For a building on each parcel within Subarea 2 that has frontage on Hyland-Croy Road, one wall sign shall be permitted on the front facade (i.e., the façade facing Hyland-Croy Road) and the rear façade of a building for each tenant/user. Each of these signs shall have a maximum area of 125 square feet. In addition, for parcels within Subarea

2 that have a side lot line along the private main entry road into the zoning district from Hyland-Croy Road, an additional wall sign for each tenant/user shall be permitted along the side building façade which faces the entry drive. The sign area for these side façade wall signs shall not exceed one-third of the permitted sign area for the front and rear façade wall signs on those parcels.

2. **Wall Signs – Parcel With No Public Street Frontage.** For the outlot located within Subarea 2 having no frontage on Hyland-Croy Road and located to the south of the anchor retail store that is located in Subarea 1, one wall sign shall be permitted on each of the northern and eastern facing building facades. Each of these signs shall have a maximum area of 125 square feet.
3. **Wall Signs on Fuel Station Canopies.** Canopy signs shall be permitted on up to three sides of the canopy and shall not exceed 35 square feet per sign.
4. **Ground Signs – Individual Outlots.** One ground sign shall be permitted on each outlot in Subarea 2 to identify tenants/users on that outlot in accordance with the requirements and standards of Zoning Resolution Section 615.08. For a fuel station use, a ground sign may include fuel pricing information using electronic changeable copy. No additional ground signs shall be permitted on parcels within Subarea 2 except for directional signs as provided in the following subsection and joint identification signs as provided in Section VI.F.
5. **Directional Signs.** Directional signs promoting wayfinding for vehicular traffic to access individual outlots or outlots with shared access drives may be provided at each vehicular entry point into an outlot from the private road within the zoning district. Such signs shall be subject to the requirements of Zoning Resolution Section 615.05.3.
6. **Other Signs.** All other signage or standards relating to any signage that are not specifically addressed in this text shall be permitted in Subarea 2 in accordance with relevant provisions of the Zoning Resolution Local Retail District (LR).

## VI. STANDARDS APPLICABLE TO BOTH SUBAREAS.

- A. **Open Space.** Open space shall be owned and maintained by the owner of the real property on which it is located.
- B. **Screening & Landscaping.** Landscaping for Subarea 1 shall be as generally depicted in the preliminary development plan, with locations, sizes, spacing, and numbers of plantings to be reviewed and approved as part of a detailed development plan. Landscaping for each outlot in Subarea 2 shall be provided for review and approval as part of each final development plan.
- C. **Signage.** The following signage rights and requirements shall apply to the entirety of the Planned Development District:
  1. **Main Entry Joint Identification Sign.** One joint identification ground sign shall be permitted to be located to the northwest of the intersection of Hyland-Croy Road and the entry from that street into the zoning district (the “Main Entry Sign”). This sign generally shall be placed perpendicular to Hyland-Croy Road so that vehicular and

pedestrian traffic can view one side of the sign while traveling northward and another side of the sign while traveling southward. The sign shall be permitted to identify any and all uses/users within the Planned Development District, provided that there shall be a maximum of 9 sign panels per side plus a general sign on each side identifying the overall development. This sign shall be subject to the following additional standards:

- a. It shall have a minimum setback from the right-of-way of Hyland-Croy Road and from the main entry road into the zoning district that is the greater of (a) 15 feet and (b) the minimum distance from either of the aforementioned vehicular access routes as necessary to preserve a clear vision triangle for vehicular traffic.
  - b. It shall have a maximum height of 35 feet.
  - c. Up to two individual sign panels shall be permitted for each use/user within the zoning district and for the shopping center identification panel, with one facing northward and the other facing southward. The highest use/user sign panel shall not be subject to the requirement in Zoning Resolution Section 615.07.4.a.ii to have sign copy silhouetted on an opaque background.
  - d. It shall be permitted to identify all of the following:
    - i. The name or some other identifier of the overall development (for example, "Hall's Corner Hyland Croy");
    - ii. The name and/or logo of the use/user located in Subarea 1 and any related accessory use (e.g., "pharmacy") or accessory user;
    - iii. The name and/or logo of each use/user located in Subarea 2.
  - e. The Main Entry Sign shall have the appearance, specifications, and dimensions which are provided in signage plans which are approved as part of a detailed development plan. Said signage plans shall be substantially similar to the signage plans that have been submitted along with the preliminary development plan.
- 2. U.S. Route 33 Joint Identification Sign.** One joint identification ground sign shall be permitted to be located adjacent to U.S. Route 33 within the northwestern portion of the Planned Development District (the "U.S. 33 Sign"). This sign generally shall be placed perpendicular to U.S. Route 33 so that vehicular traffic can view one side of the sign while traveling northward and another side of the sign while traveling southward. The sign shall be permitted to identify any and all uses/users within the Planned Development District, provided that there shall be a maximum of 9 sign panels per side, plus a general sign on each side identifying the overall development. This sign shall be subject to the following additional standards:
- a. It shall have a minimum setback from the right-of-way of 5 feet from the right-of-way of U.S. Route 33.
  - b. It shall have a maximum height of 45 feet.

- c. Up to two individual sign panels shall be permitted for each use/user and for the shopping center identification panel, with one facing northward and the other facing southward. The highest use/user sign panel shall not be subject to the requirement in Zoning Resolution Section 615.07.4.a.ii to have sign copy silhouetted on an opaque background.
  - d. It shall be permitted to identify all of the following:
    - i. The name or some other identifier of the overall development (for example, "Hall's Corner Hyland Croy");
    - ii. The name and/or logo of the use/user located in Subarea 1 and any related accessory use (e.g., "pharmacy") or accessory user;
    - iii. The name and/or logo of each use/user located in Subarea 2.
  - e. The U.S. 33 Sign shall have the appearance, specifications, and dimensions which are provided in signage plans which are approved as part of a detailed development plan. Said signage plans shall be substantially similar to the signage plans that have been submitted along with the preliminary development plan.
- 3. Hyland-Croy Secondary Joint Identification Signs.** Two joint identification ground signs shall be permitted to be located adjacent to Hyland-Croy Road (together, the "Hyland-Croy Signs"), with one to be located within the northeastern portion of the Planned Development District on the northernmost outlot in Subarea 2 and the other to be located in the southeastern portion of the Planned Development District on the southernmost outlot with frontage on Hyland-Croy Road in Subarea 2. These signs generally shall be placed perpendicular to Hyland-Croy Road so that vehicular traffic can view one side of the sign while traveling northward and another side of the sign while traveling southward. The sign shall be permitted to identify any uses/users within the Planned Development District, provided that there shall be a maximum of 5 sign panels per side plus a general sign on each side identifying the overall development. These signs shall be subject to the following additional standards:
- a. They shall have a minimum setback of 10 feet from the right-of-way of Hyland-Croy Road. The Hyland-Croy Sign located in the northeastern portion of the Planned Development District shall have a minimum setback of 50 feet from the northern boundary line of the Planned Development District. The Hyland-Croy Sign located in the southeastern portion of the Planned Development District shall have a minimum setback of 15 feet from the southern boundary line of the Planned Development District.
  - b. Each sign shall have a maximum height of 20 feet.
  - c. Up to two individual sign panels shall be permitted for each use/user and for the general sign identifying the overall development, with one facing northward and the other facing southward. The individual sign panels may be substituted for electronic changeable copy in order to display fuel pricing. The highest use/user sign panel shall not be subject to the requirement in Zoning Resolution Section 615.07.4.a.ii to have sign copy silhouetted on an opaque background.

- d. Each sign shall be permitted to identify all of the following:
    - i. The name or some other identifier of the overall development (for example, "Hall's Corner Hyland Croy");
    - ii. The name and/or logo of one use/user located in Subarea 1;
    - iii. The name and/or logo of one use/user on up to four outlots located in Subarea 2 or fuel pricing associated with a fuel station/convenience store.
  - e. The Hyland-Croy Signs shall have the appearances, specifications, and dimensions which are provided in signage plans which are approved as part of a detailed development plan. Said signage plans shall be substantially similar to the signage plans that have been submitted along with the preliminary development plan.
4. **Sign Easements.** In order to receive a zoning certificate for the first building that is constructed in the Planned Development District, one or more easement agreements shall be recorded against the real property within this zoning district to provide perpetual rights for each property owner and its tenant(s) to display on-premises or off-premises signage on the Main Entry Sign and identifying which parcel owners and tenants are permitted to display on-premises or off-premises signage on the U.S. Route 33 Sign and the Hyland-Croy Signs. Said easements shall provide, among other provisions, details concerning responsibilities for the maintenance, repair, replacement, and operation of each of these signs. Said easements may be amended in the future as needed, provided that a copy of any such amended instrument(s) shall be provided to the Township Zoning Administrator within a reasonable time after it/they are recorded.
- D. **Lighting.** The maximum height of parking lot lighting poles shall be 33 feet within Subarea 1 and 27 feet within Subarea 2.

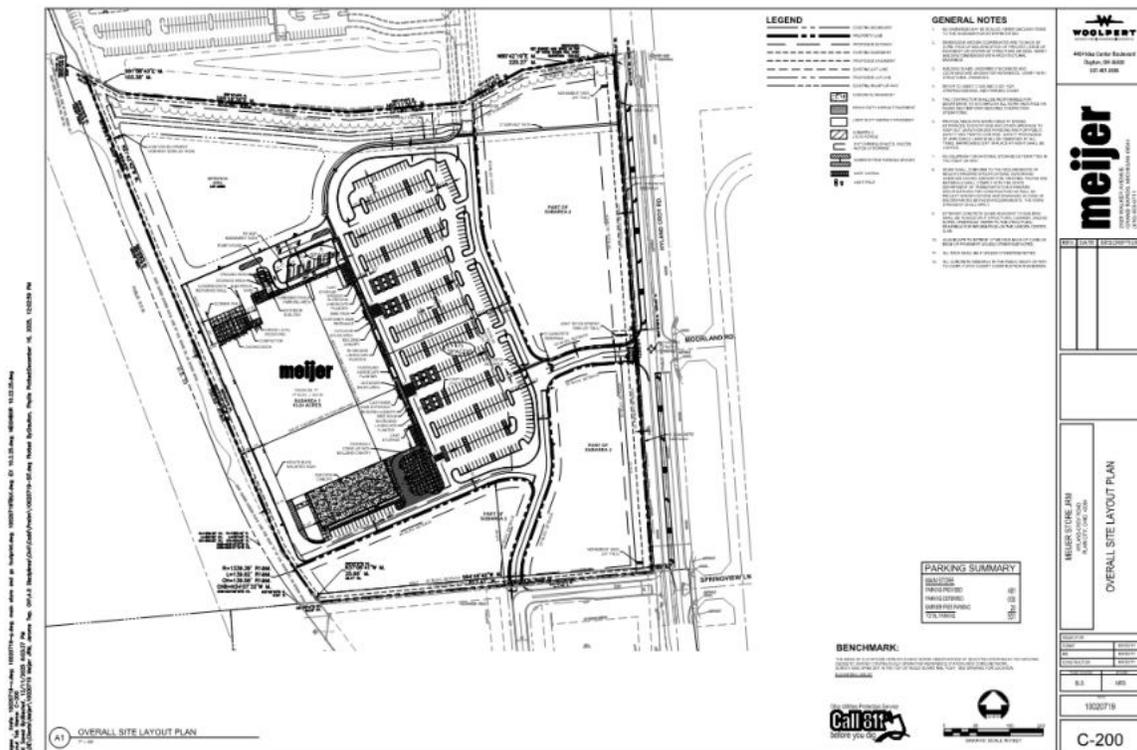
## TRAFFIC MEMO

**Date:** December 16, 2025

**Re:** Hyland Croy – Meijer Development  
Hyland Croy Road, Union County, Ohio

**Attn:** Union County Engineer's Office

Coughlin Investments is proposing to develop approximately 20.62 acres into a Meijer Retail Development along with 7 out lots for other development. The development will be located immediately south of the Gordon Tri-County Ditch and west of Hyland Croy Road. Hyland Croy has a 45 MPH speed limit through this corridor. The access to the development site will be from a single signalized access point making a 4-way intersection with Moorland Road. (see below Site Plan).



An internal north/south roadway will connect to the development to the north and provide access to Weldon Rd and the traffic signal at Park Mill Drive. It will also provide future access to the south.

The site is divided into 7 out lots plus the Meijer Retail Development. End users for the 7 out lots are not known at this time but land uses appropriate for this area and level of development have been assigned to the lots in order to develop trips to and from the development and determine any impacts this traffic may have on the surrounding public roadways.

ITE Land Use Codes (LUC) are listed in the below table, along with use descriptions and possible sizes. The table also shows the trip volumes for each of the land uses listed for the development for AM and PM peak hours.

Trip Generation												
Description	Land Use Code (LUC)	Total Trips	Pass By % Trips	Enter	Exit	Peak Hour	Pass By Trips In	Primary Trips In	Pass By Trips Out	Primary Trips Out	Total IN	Total OUT
Tire Superstore (15,000 sq. ft.)	912	35		58%	42%	AM	0	20	0	15	20	15
		74		50%	50%	PM	0	37	0	37	37	37
Coffee/ Donuts - (2,300 sq.ft.)	937	198	50%	51%	49%	AM	50	50	49	49	101	97
		90	50%	50%	50%	PM	23	23	23	23	45	45
Fast Food - (2,300 sq.ft.)	934	103	50%	51%	49%	AM	26	26	25	25	53	50
		76	50%	52%	48%	PM	20	20	18	18	40	36
Strip Center Retail (15,000 sq.ft.)	934	103	50%	51%	49%	AM	26	26	25	25	53	50
		76	50%	52%	48%	PM	20	20	18	18	40	36
Drinking Place - (5,000 sq.ft.)	934	103		51%	49%	AM	0	53	0	50	53	50
		76		52%	48%	PM	0	40	0	36	40	36
Hardware/ Paint - (10,000 sq.ft.)	937	198		51%	49%	AM	0	101	0	97	101	97
		90		50%	50%	PM	0	45	0	45	45	45
Convenience Store/ Gas Station (12 fuel Positions)	945	193	76%	50%	50%	AM	73	23	73	23	97	97
		221	75%	50%	50%	PM	83	28	83	28	111	111
Free Standing Discount Superstore ( 160k sq ft)	813	298	29%	56%	44%	AM	48	118	38	93	167	131
		693	29%	50%	50%	PM	100	246	100	246	347	347
						Total AM					643	588
						Total PM					703	693

Intersections along Hyland Croy that may be affected by traffic from this development are:

- Hyland Croy & Moorland Drive (signalized);
- Hyland Croy & Weldon Road (un-signalized);
- Hyland Croy & Park Mill Drive (signalized).

With the projected volume of trips generated by this development and the Opening Year of 2026 the design year for this analysis will be 2046

## **Projected Traffic, Traffic Signal Warrants & Intersection Analysis**

Background traffic data was collected from various sources including previous traffic studies and ODOT. New turning movement counts were collected where existing data was unavailable. A background traffic growth rate was calculated from ODOT provide traffic volumes to be 1.0%/ year. This was used to project background traffic volumes to the Opening Year (2026) and the design year (2046).

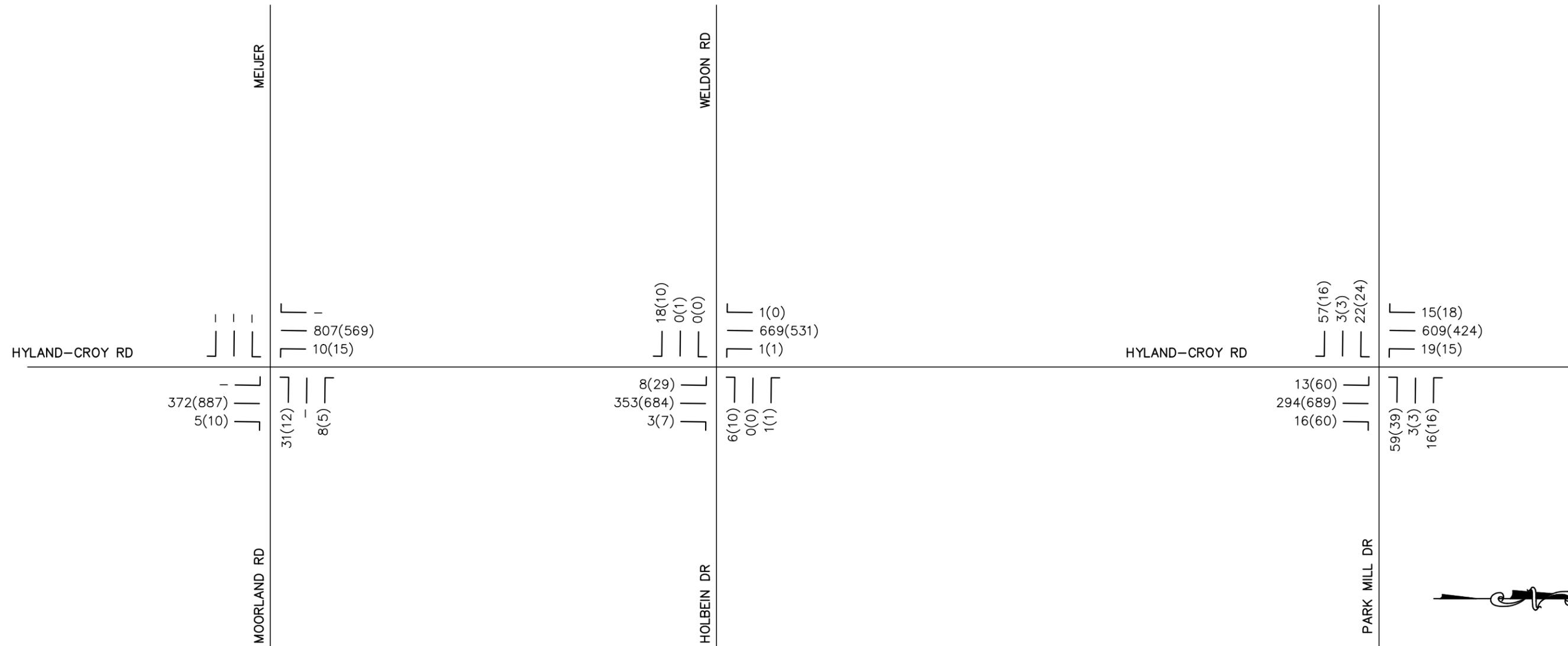
A new 14-hour count was collected at the Hyland Croy & Weldon Road intersection. A traffic signal warrant analysis was conducted using this data and the ODOT Traffic Signal Warrant Spreadsheet.

The site traffic was distributed on Hyland Croy based on the AM and PM distributions from the various background traffic data collected. In the AM 62% of the traffic is southbound towards the Post Road interchange at US 33 and 38% northbound. In the PM 48% are southbound and 52% northbound.

Pass-By trips were calculated and directed to and from the site appropriately.

The below traffic volume exhibits show the No Build 2026 traffic volumes using the recently collected data, projected data from the ODOT study and trips estimate for the Kia and out lot development. Volumes have not been balanced or smoothed, however, primary and pass by trips to the subject development remain consistent throughout the study corridor.

The 2026 and 2046 exhibits reflect the same development trip volumes and background volumes have been projected to the design year using the calculated 1.0%/ year growth from the ODOT study.



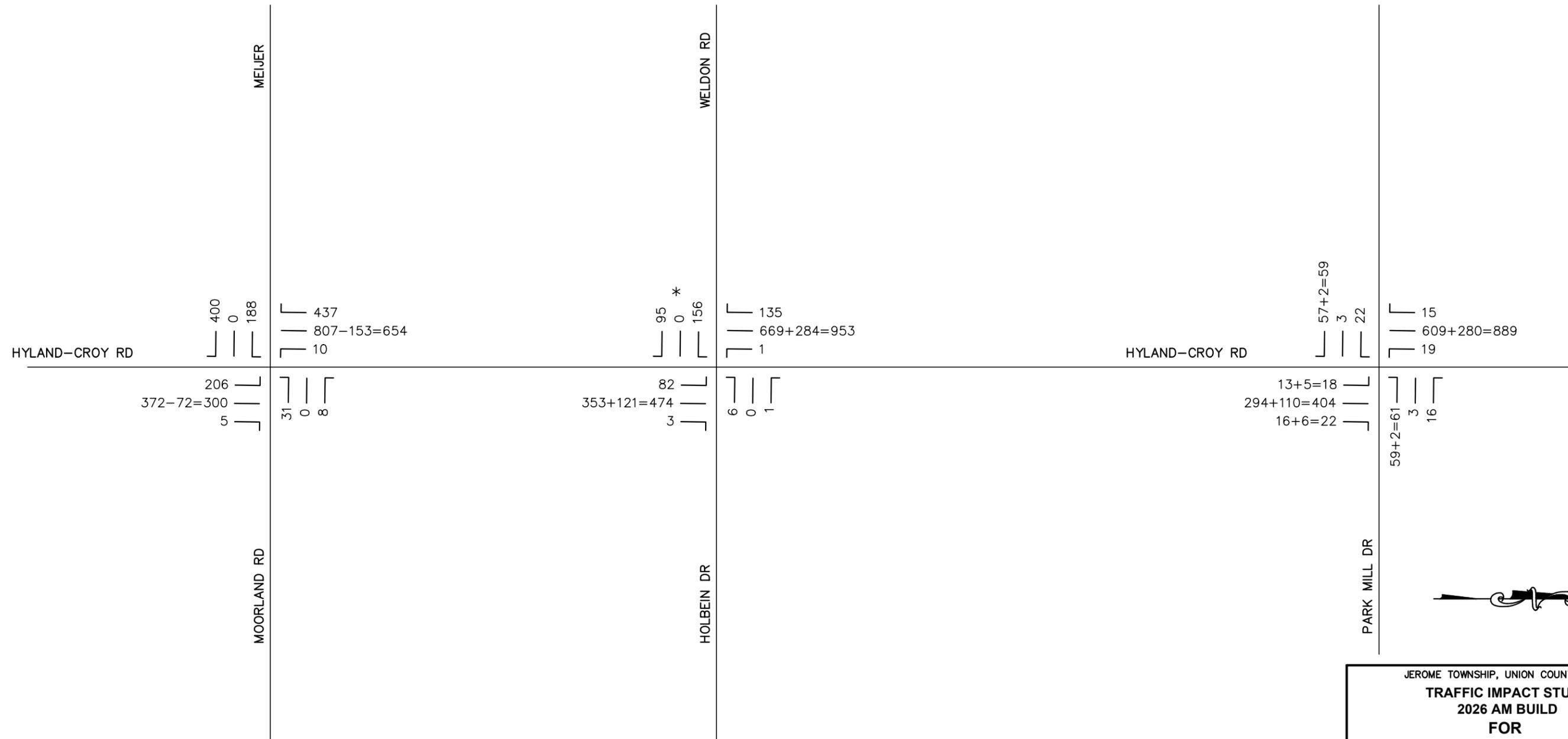
JEROME TOWNSHIP, UNION COUNTY, OHIO  
**TRAFFIC IMPACT STUDY**  
**2026 AM(PM) NO BUILD**  
**FOR**  
**HYLAND-CROY RD**

PLAN PREPARED BY:



**ADVANCED**  
 CIVIL DESIGN  
 ENGINEERS SURVEYORS

781 Science Boulevard, Suite 100  
 Gahanna, Ohio 43230  
 ph 614.428.7750  
 fax 614.428.7755



NOTE:  
 \* = VOLUMES FROM HYLAND-CROY 1 (KIA)

JEROME TOWNSHIP, UNION COUNTY, OHIO  
**TRAFFIC IMPACT STUDY**  
**2026 AM BUILD**  
**FOR**  
**HYLAND-CROY RD**

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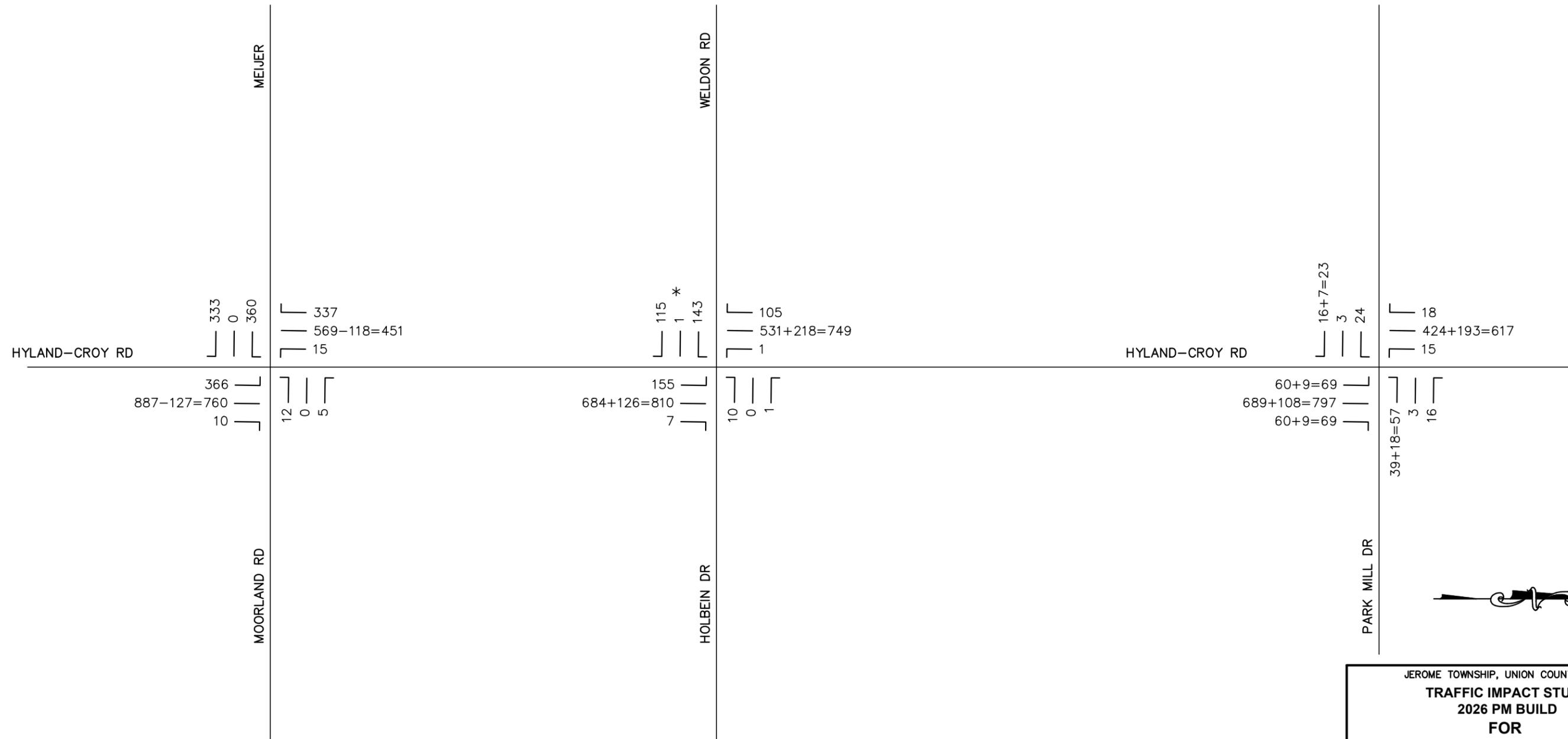
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SCALE: NTS DATE: 12/12/2025	SHEET 2 / 5
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NOTE:  
 \* = VOLUMES FROM HYLAND-CROY 1 (KIA)

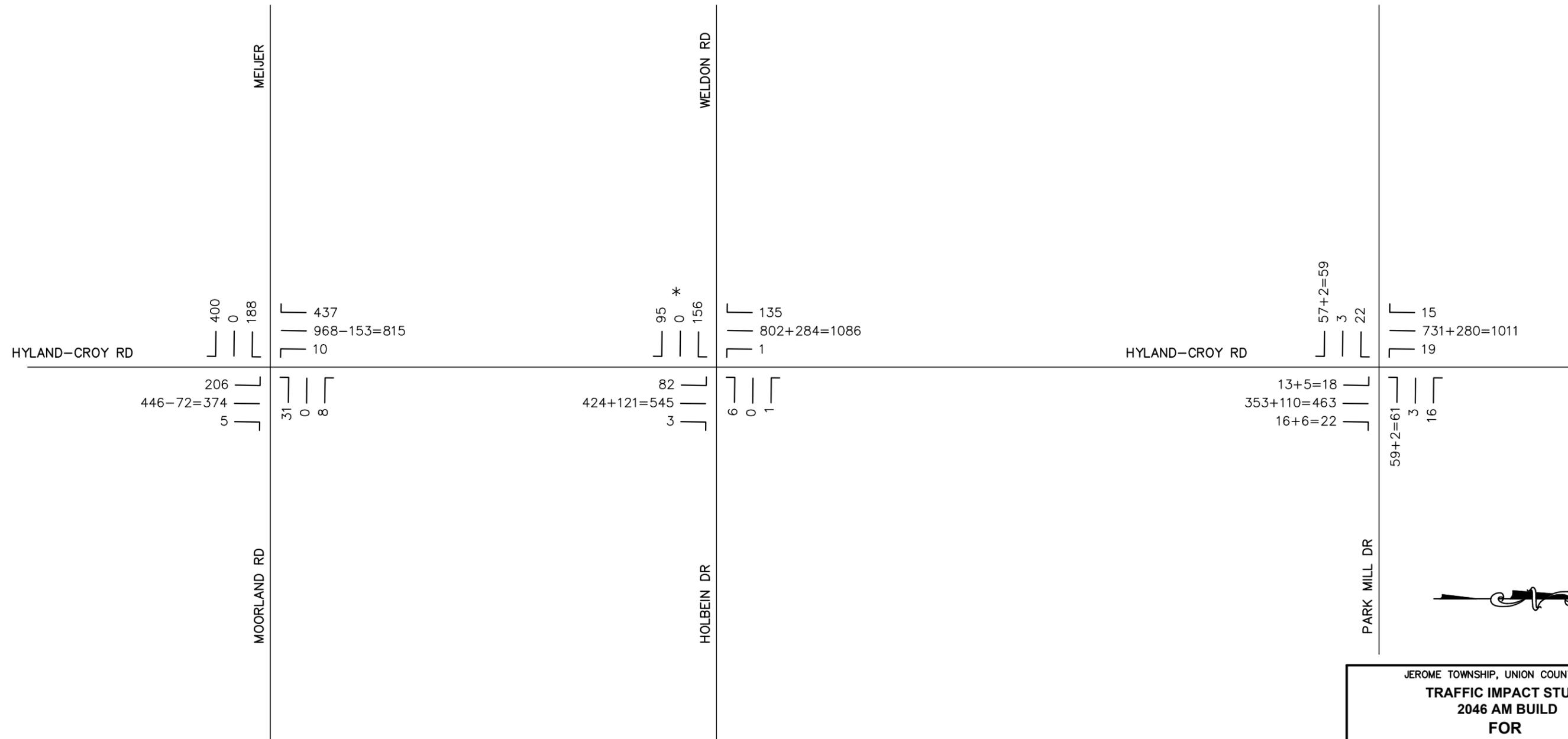
JEROME TOWNSHIP, UNION COUNTY, OHIO  
**TRAFFIC IMPACT STUDY**  
**2026 PM BUILD**  
**FOR**  
**HYLAND-CROY RD**

PLAN PREPARED BY:



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JEROME TOWNSHIP, UNION COUNTY, OHIO  
**TRAFFIC IMPACT STUDY**  
**2046 AM BUILD**  
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**HYLAND-CROY RD**

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PLAN PREPARED BY:

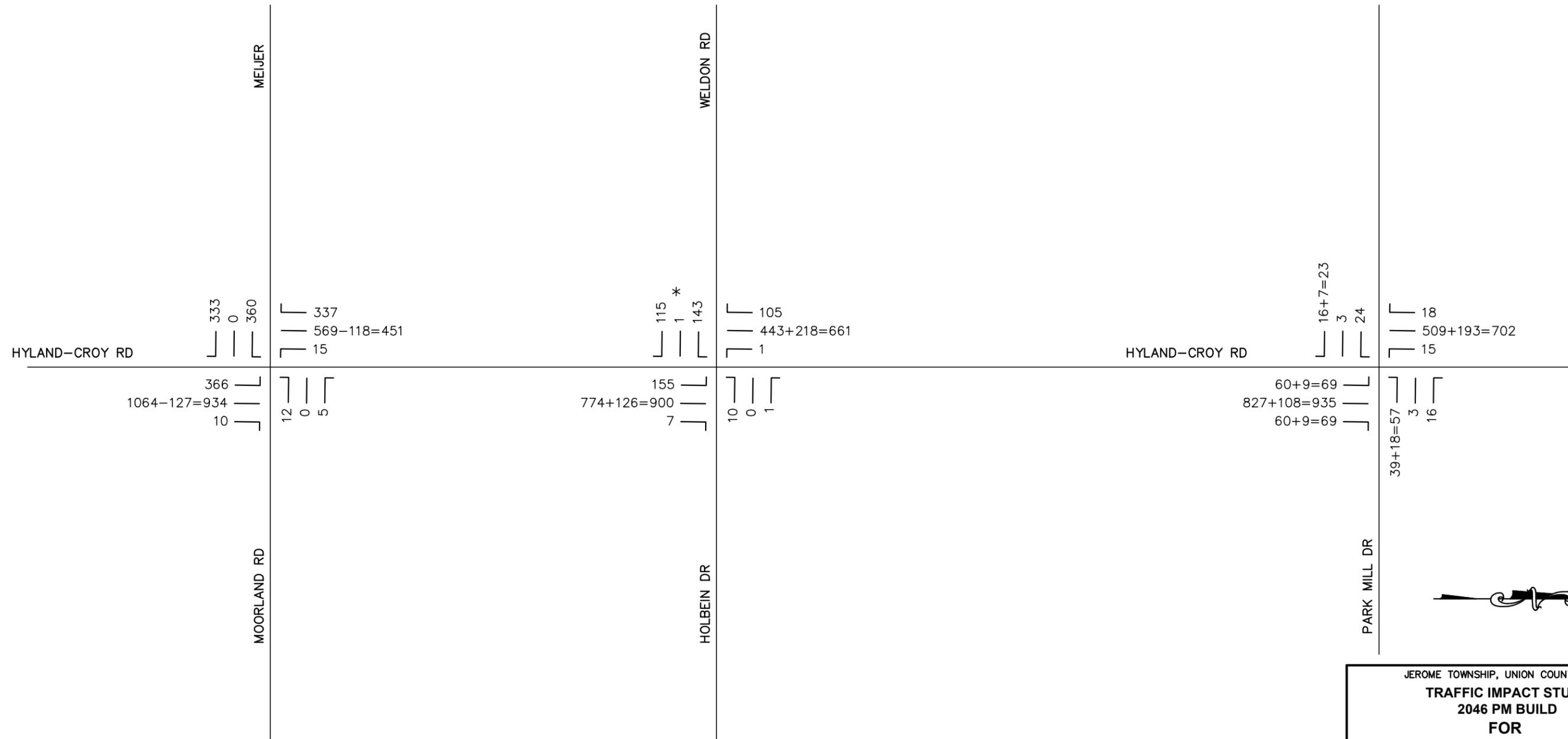


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SCALE: NTS DATE: 12/12/2025	SHEET 4 / 5
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NOTE:  
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JEROME TOWNSHIP, UNION COUNTY, OHIO  
**TRAFFIC IMPACT STUDY**  
**2046 PM BUILD**  
**FOR**  
**HYLAND-CROY RD**

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**ENGINEERS SURVEYORS**

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SCALE: NTS DATE: 12/12/2025	SHEET <b>5 / 5</b>
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## Results & Conclusions

A Traffic Signal Warrant Analysis shows that a traffic signal is not warranted for the Hyland Croy & Weldon intersection based on the 2025 traffic data collected. Side street volumes do not, in general, meet the lower thresholds required to satisfy the warrants.

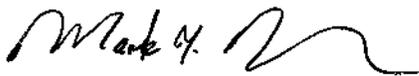
Utilizing the HCS module in SYNCHRO the un-signalized intersection at Hyland Croy & Weldon Road has eastbound and westbound left turn movements that are at LOS F with delays exceeding 300 seconds per vehicle for one or more of these movements. This is not unusual at intersections with low volume side streets that do not meet a signal warrant.

Utilizing the HCS module in SYNCHRO the signalized intersection at Hyland Croy & Park Mill has good LOS for all movements for all time periods for both the 2026 Build and the 2046 Build traffic volumes.

Utilizing the HCS module in SYNCHRO the signalized intersection at Hyland Croy & Moorland/ Meijer Access the results of the analysis shows the eastbound right turn movement drops to LOS F in the 2046 AM Peak. It also shows an exclusive right turn lane southbound and a northbound left turn lane are required to maintain the acceptable LOS at the intersection for all time periods analyzed.

The exclusive right turn lane is required to be 600 feet long, including the 50 feet taper, and the left turn lane is required to be 525 feet long, including the 50 feet taper. These lane lengths are based on ODOT Design Standards.

The developer for this project is committed to redesigning and rebuilding the mast arm traffic signal at the Hyland Croy & Moorland intersection. They are also committed to designing and constructing the 600 feet long southbound exclusive right turn lane at the same intersection and the exclusive northbound left turn lane in to the site at the traffic signal.



Mark I. Mann, PE  
Director – Transportation Service



## **Appendices**

## **Traffic Count Data**

Hyland Croy Rd & Weldon Rd - TMC

Thu Nov 20, 2025

Full Length (6 AM-8 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1360872, Location: 40.116995, -83.177285



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Weldon Rd Eastbound						Weldon Rd Westbound						Hyland Croy Rd Northbound						Hyland Croy Rd Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2025-11-20																									
6:00AM	0	0	0	0	0	0	1	0	0	0	1	0	0	13	1	0	14	0	0	58	0	0	58	0	73
6:15AM	0	0	1	0	1	0	0	0	0	0	0	0	0	13	0	0	13	0	0	67	0	0	67	0	81
6:30AM	0	0	1	0	1	0	1	0	0	0	1	0	2	27	0	0	29	0	0	89	0	0	89	0	120
6:45AM	0	0	1	0	1	0	3	0	0	0	3	0	7	46	2	0	55	0	0	109	2	0	111	0	170
Hourly Total	0	0	3	0	3	0	5	0	0	0	5	0	9	99	3	0	111	0	0	323	2	0	325	0	444
7:00AM	0	0	4	0	4	0	0	0	0	0	0	0	7	78	4	0	89	0	0	153	0	0	153	0	246
7:15AM	1	0	4	0	5	0	4	0	0	0	4	0	1	91	2	0	94	0	0	118	0	0	118	0	221
7:30AM	0	0	3	0	3	0	4	0	1	0	5	0	3	94	1	0	98	0	1	135	0	0	136	0	242
7:45AM	0	0	5	0	5	0	2	0	0	0	2	0	3	77	1	0	81	0	0	165	1	0	166	0	254
Hourly Total	1	0	16	0	17	0	10	0	1	0	11	0	14	340	8	0	362	0	1	571	1	0	573	0	963
8:00AM	0	0	7	0	7	0	2	0	1	0	3	0	2	92	1	0	95	0	0	162	0	0	162	0	267
8:15AM	0	0	2	0	2	0	0	0	0	0	0	0	3	84	1	0	88	0	0	182	0	0	182	0	272
8:30AM	0	0	4	0	4	0	2	0	0	0	2	0	0	100	0	0	100	0	1	160	0	0	161	0	267
8:45AM	1	0	7	0	8	0	2	0	3	0	5	0	1	74	2	0	77	0	2	148	0	0	150	0	240
Hourly Total	1	0	20	0	21	0	6	0	4	0	10	0	6	350	4	0	360	0	3	652	0	0	655	0	1046
9:00AM	0	0	1	0	1	0	0	0	0	0	0	0	0	75	2	0	77	0	0	167	0	0	167	0	245
9:15AM	0	0	5	0	5	0	1	0	0	0	1	1	2	84	5	0	91	0	1	119	0	0	120	0	217
9:30AM	0	0	2	0	2	0	2	0	3	0	5	0	1	92	1	0	94	0	0	116	0	0	116	0	217
9:45AM	0	0	2	0	2	0	1	0	1	0	2	0	2	78	3	0	83	0	0	123	0	0	123	0	210
Hourly Total	0	0	10	0	10	0	4	0	4	0	8	1	5	329	11	0	345	0	1	525	0	0	526	0	889
10:00AM	0	0	6	0	6	0	1	0	2	0	3	0	4	76	4	0	84	0	3	94	0	0	97	0	190
10:15AM	0	0	5	0	5	0	0	0	1	0	1	0	5	62	3	0	70	0	0	94	0	0	94	0	170
10:30AM	1	0	1	0	2	0	6	0	0	0	6	0	0	87	1	0	88	0	0	94	1	0	95	0	191
10:45AM	0	0	3	0	3	0	2	0	1	0	3	0	2	87	3	0	92	0	1	111	1	0	113	0	211
Hourly Total	1	0	15	0	16	0	9	0	4	0	13	0	11	312	11	0	334	0	4	393	2	0	399	0	762
11:00AM	0	0	5	0	5	0	2	2	0	0	4	0	2	65	3	0	70	0	0	122	0	0	122	0	201
11:15AM	0	0	5	0	5	0	1	0	1	0	2	0	0	74	1	0	75	0	0	133	0	0	133	0	215
11:30AM	0	0	8	0	8	0	4	0	1	0	5	0	4	72	1	0	77	0	0	124	0	0	124	0	214
11:45AM	0	0	4	0	4	0	1	0	1	0	2	0	3	105	3	0	111	0	1	90	0	0	91	0	208
Hourly Total	0	0	22	0	22	0	8	2	3	0	13	0	9	316	8	0	333	0	1	469	0	0	470	0	838
12:00PM	0	0	3	0	3	0	3	0	2	0	5	0	3	99	0	0	102	0	0	107	0	0	107	0	217
12:15PM	0	0	2	0	2	0	6	0	0	0	6	0	9	92	2	0	103	0	0	131	0	0	131	0	242
12:30PM	1	0	2	0	3	0	1	0	0	0	1	0	3	93	1	0	97	0	0	108	0	0	108	0	209
12:45PM	0	0	5	0	5	0	0	0	1	0	1	0	6	90	2	0	98	0	0	105	0	0	105	0	209
Hourly Total	1	0	12	0	13	0	10	0	3	0	13	0	21	374	5	0	400	0	0	451	0	0	451	0	877
1:00PM	0	0	0	0	0	0	2	0	1	0	3	0	2	97	3	0	102	0	1	90	0	0	91	0	196
1:15PM	0	0	2	0	2	0	2	0	0	0	2	0	1	82	4	0	87	0	0	87	0	0	87	0	178
1:30PM	0	0	0	0	0	0	2	0	1	0	3	0	3	94	2	0	99	0	0	112	0	0	112	0	214
1:45PM	0	0	5	0	5	0	1	0	1	0	2	0	4	114	0	1	119	0	0	86	0	0	86	0	212
Hourly Total	0	0	7	0	7	0	7	0	3	0	10	0	10	387	9	1	407	0	1	375	0	0	376	0	800
2:00PM	0	0	0	0	0	0	5	0	0	0	5	0	5	94	2	0	101	0	0	94	0	0	94	0	200
2:15PM	0	0	1	0	1	0	1	0	0	0	1	0	5	91	2	0	98	0	0	94	0	1	95	0	195
2:30PM	2	0	4	0	6	0	2	0	1	0	3	0	2	128	1	0	131	0	0	93	0	0	93	0	233
2:45PM	0	0	3	0	3	0	0	0	0	0	0	0	5	94	5	0	104	0	2	138	0	0	140	0	247
Hourly Total	2	0	8	0	10	0	8	0	1	0	9	0	17	407	10	0	434	0	2	419	0	1	422	0	875
3:00PM	0	0	5	0	5	0	2	0	2	0	4	0	3	117	3	0	123	0	0	112	0	0	112	0	244
3:15PM	1	0	1	0	2	0	2	0	0	0	2	0	4	121	2	0	127	0	1	125	0	0	126	0	257
3:30PM	1	0	11	0	12	0	3	0	0	0	3	0	8	151	2	0	161	0	1	115	0	0	116	0	292
3:45PM	0	0	6	0	6	0	1	0	0	0	1	0	2	129	3	0	134	0	1	149	1	0	151	0	292
Hourly Total	2	0	23	0	25	0	8	0	2	0	10	0	17	518	10	0	545	0	3	501	1	0	505	0	1085
4:00PM	0	0	3	0	3	0	4	0	1	0	5	0	6	150	3	0	159	0	0	139	0	0	139	0	306
4:15PM	1	0	2	0	3	0	0	0	0	0	0	0	4	158	4	0	166	0	0	110	0	0	110	0	279
4:30PM	0	0	3	0	3	0	3	0	0	0	3	0	6	160	1	0	167	0	2	135	0	0	137	0	310
4:45PM	0	0	5	0	5	0	0	0	0	0	0	0	3	179	5	0	187	0	0	93	0	0	93	0	285

Leg Direction	Weldon Rd Eastbound						Weldon Rd Westbound						Hyland Croy Rd Northbound						Hyland Croy Rd Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
Hourly Total	1	0	13	0	14	0	7	0	1	0	8	0	19	647	13	0	679	0	2	477	0	0	479	0	1180
5:00PM	0	0	3	0	3	0	1	0	0	0	1	0	8	161	5	0	174	0	0	124	0	0	124	0	302
5:15PM	0	0	1	0	1	0	5	0	0	0	5	0	7	188	0	0	195	0	0	127	0	0	127	0	328
5:30PM	0	0	3	0	3	0	2	0	1	0	3	0	5	168	1	0	174	0	0	138	0	0	138	0	318
5:45PM	0	1	3	0	4	0	2	0	0	0	2	0	9	167	1	0	177	0	1	142	0	0	143	0	326
Hourly Total	0	1	10	0	11	0	10	0	1	0	11	0	29	684	7	0	720	0	1	531	0	0	532	0	1274
6:00PM	0	0	0	0	0	0	3	0	0	0	3	0	3	162	3	0	168	0	0	117	0	0	117	0	288
6:15PM	0	0	3	0	3	0	2	0	0	0	2	0	1	166	5	0	172	0	0	111	0	0	111	0	288
6:30PM	0	0	0	0	0	0	4	0	1	0	5	0	6	135	2	0	143	0	0	87	0	0	87	0	235
6:45PM	0	0	1	0	1	0	0	0	0	0	0	0	1	137	2	0	140	0	0	99	0	0	99	0	240
Hourly Total	0	0	4	0	4	0	9	0	1	0	10	0	11	600	12	0	623	0	0	414	0	0	414	0	1051
7:00PM	0	0	2	0	2	0	0	0	0	0	0	0	3	104	5	0	112	0	0	73	0	0	73	0	187
7:15PM	0	0	1	0	1	0	1	0	0	0	1	0	4	107	3	0	114	0	0	73	0	0	73	0	189
7:30PM	0	0	2	0	2	0	0	0	1	0	1	0	3	90	3	0	96	0	0	54	0	0	54	0	153
7:45PM	0	0	1	0	1	0	1	0	0	0	1	0	6	92	4	0	102	0	0	49	0	0	49	0	153
Hourly Total	0	0	6	0	6	0	2	0	1	0	3	0	16	393	15	0	424	0	0	249	0	0	249	0	682
<b>Total</b>	9	1	169	0	179	0	103	2	29	0	134	1	194	5756	126	1	6077	0	19	6350	6	1	6376	0	12766
<b>% Approach</b>	5.0%	0.6%	94.4%	0%	-	-	76.9%	1.5%	21.6%	0%	-	-	3.2%	94.7%	2.1%	0%	-	-	0.3%	99.6%	0.1%	0%	-	-	-
<b>% Total</b>	0.1%	0%	1.3%	0%	1.4%	-	0.8%	0%	0.2%	0%	1.0%	-	1.5%	45.1%	1.0%	0%	47.6%	-	0.1%	49.7%	0%	0%	49.9%	-	-
<b>Lights and Motorcycles</b>	2	0	151	0	153	-	97	2	26	0	125	-	181	5594	117	1	5893	-	16	6169	6	1	6192	-	12363
<b>% Lights and Motorcycles</b>	22.2%	0%	89.3%	0%	85.5%	-	94.2%	100%	89.7%	0%	93.3%	-	93.3%	97.2%	92.9%	100%	97.0%	-	84.2%	97.1%	100%	100%	97.1%	-	96.8%
<b>Heavy</b>	7	1	18	0	26	-	6	0	3	0	9	-	13	162	9	0	184	-	3	181	0	0	184	-	403
<b>% Heavy</b>	77.8%	100%	10.7%	0%	14.5%	-	5.8%	0%	10.3%	0%	6.7%	-	6.7%	2.8%	7.1%	0%	3.0%	-	15.8%	2.9%	0%	0%	2.9%	-	3.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-

\*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Hyland Croy Rd & Weldon Rd - TMC

Thu Nov 20, 2025

Full Length (6 AM-8 PM)

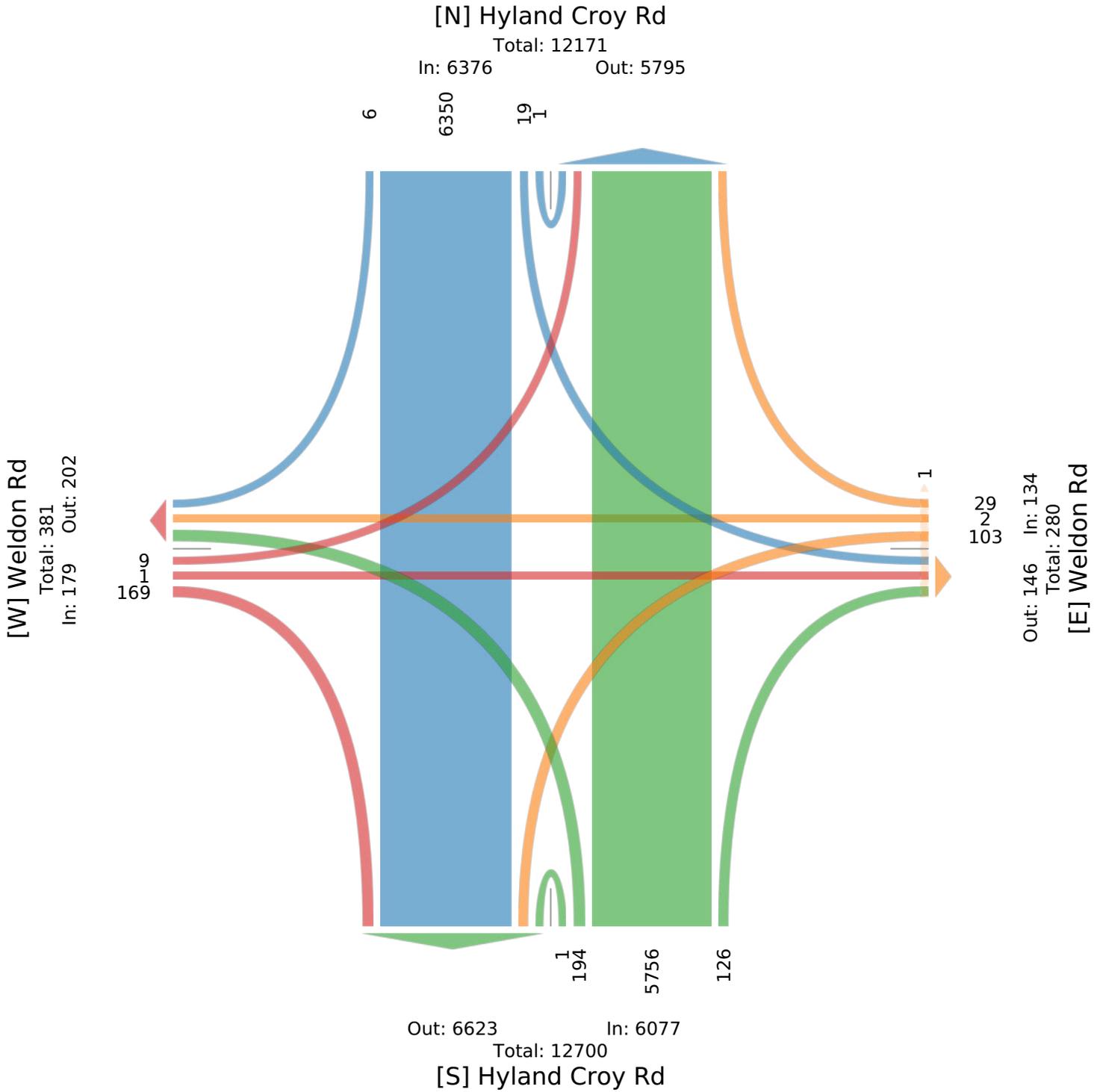
All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1360872, Location: 40.116995, -83.177285



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US



Hyland Croy Rd & Weldon Rd - TMC

Thu Nov 20, 2025

AM Peak (7:45 AM - 8:45 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1360872, Location: 40.116995, -83.177285



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Weldon Rd Eastbound					Weldon Rd Westbound					Hyland Croy Rd Northbound					Hyland Croy Rd Southbound					Int				
Time	L	T	R	U	App Ped*	L	T	R	U	App Ped*	L	T	R	U	App Ped*	L	T	R	U	App Ped*	Int				
2025-11-20 7:45AM	0	0	5	0	5	0	2	0	0	0	2	0	3	77	1	0	81	0	0	165	1	0	166	0	254
8:00AM	0	0	7	0	7	0	2	0	1	0	3	0	2	92	1	0	95	0	0	162	0	0	162	0	267
8:15AM	0	0	2	0	2	0	0	0	0	0	0	0	3	84	1	0	88	0	0	182	0	0	182	0	272
8:30AM	0	0	4	0	4	0	2	0	0	0	2	0	0	100	0	0	100	0	1	160	0	0	161	0	267
<b>Total</b>	0	0	18	0	18	0	6	0	1	0	7	0	8	353	3	0	364	0	1	669	1	0	671	0	1060
<b>% Approach</b>	0%	0%	100%	0%	-	-	85.7%	0%	14.3%	0%	-	-	2.2%	97.0%	0.8%	0%	-	-	0.1%	99.7%	0.1%	0%	-	-	-
<b>% Total</b>	0%	0%	1.7%	0%	1.7%	-	0.6%	0%	0.1%	0%	0.7%	-	0.8%	33.3%	0.3%	0%	34.3%	-	0.1%	63.1%	0.1%	0%	63.3%	-	-
<b>PHF</b>	-	-	0.643	-	0.643	-	0.750	-	0.250	-	0.583	-	0.667	0.883	0.750	-	0.910	-	0.250	0.919	0.250	-	0.922	-	0.974
<b>Lights and Motorcycles</b>	0	0	17	0	17	-	6	0	1	0	7	-	8	326	3	0	337	-	1	665	1	0	667	-	1028
<b>% Lights and Motorcycles</b>	0%	0%	94.4%	0%	94.4%	-	100%	0%	100%	0%	100%	-	100%	92.4%	100%	0%	92.6%	-	100%	99.4%	100%	0%	99.4%	-	97.0%
<b>Heavy</b>	0	0	1	0	1	-	0	0	0	0	0	-	0	27	0	0	27	-	0	4	0	0	4	-	32
<b>% Heavy</b>	0%	0%	5.6%	0%	5.6%	-	0%	0%	0%	0%	0%	-	0%	7.6%	0%	0%	7.4%	-	0%	0.6%	0%	0%	0.6%	-	3.0%
<b>Pedestrians</b>	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
<b>% Pedestrians</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Hyland Croy Rd & Weldon Rd - TMC

Thu Nov 20, 2025

AM Peak (7:45 AM - 8:45 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1360872, Location: 40.116995, -83.177285



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

[N] Hyland Croy Rd

Total: 1025

In: 671

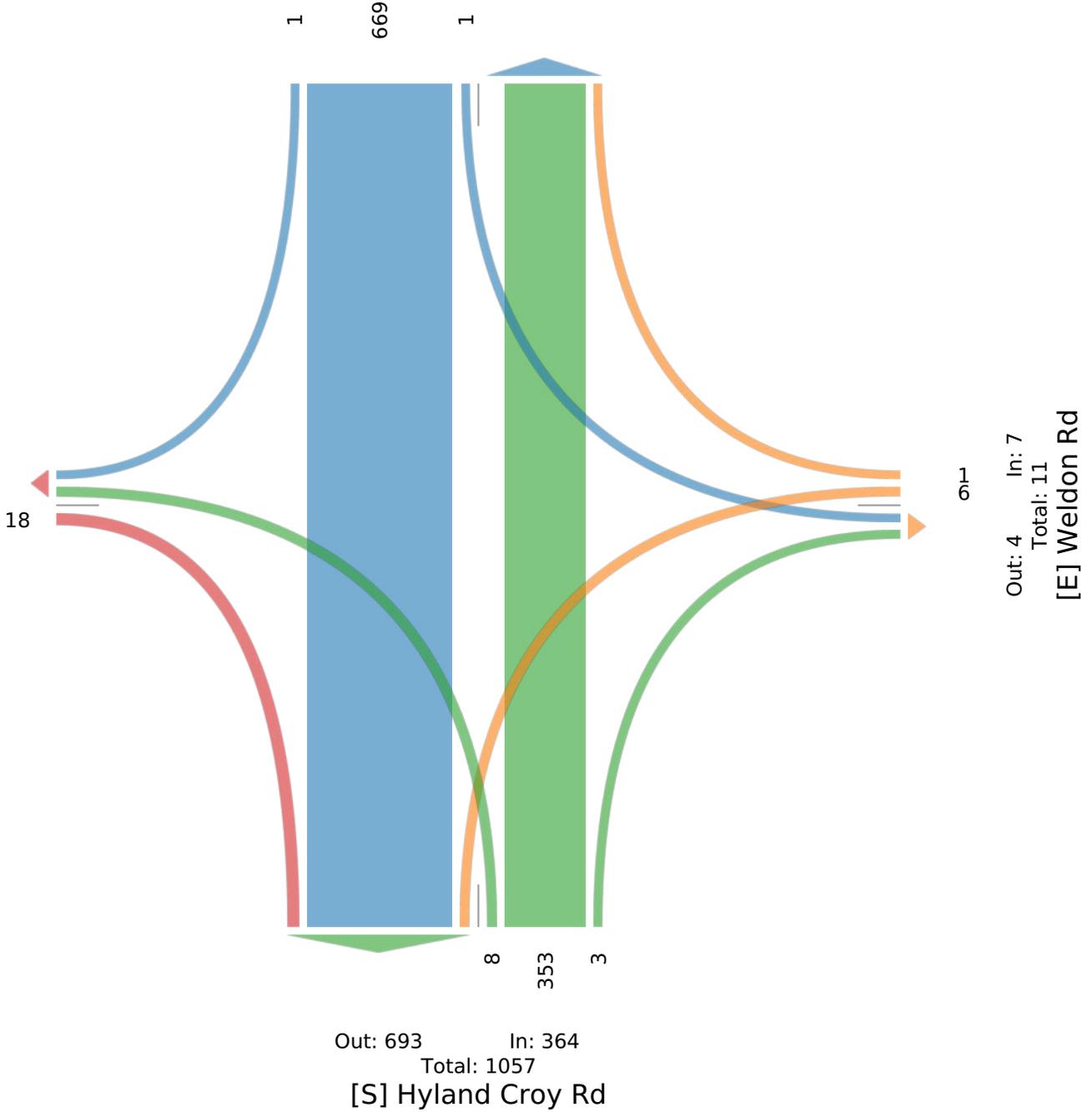
Out: 354

[W] Weldon Rd

Total: 27

In: 18

Out: 9



Hyland Croy Rd & Weldon Rd - TMC

Thu Nov 20, 2025

Midday Peak (11:30 AM - 12:30 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1360872, Location: 40.116995, -83.177285



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Weldon Rd Eastbound						Weldon Rd Westbound						Hyland Croy Rd Northbound						Hyland Croy Rd Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2025-11-20 11:30AM	0	0	8	0	8	0	4	0	1	0	5	0	4	72	1	0	77	0	0	124	0	0	124	0	214
11:45AM	0	0	4	0	4	0	1	0	1	0	2	0	3	105	3	0	111	0	1	90	0	0	91	0	208
12:00PM	0	0	3	0	3	0	3	0	2	0	5	0	3	99	0	0	102	0	0	107	0	0	107	0	217
12:15PM	0	0	2	0	2	0	6	0	0	0	6	0	9	92	2	0	103	0	0	131	0	0	131	0	242
<b>Total</b>	0	0	17	0	17	0	14	0	4	0	18	0	19	368	6	0	393	0	1	452	0	0	453	0	881
<b>% Approach</b>	0%	0%	100%	0%	-	-	77.8%	0%	22.2%	0%	-	-	4.8%	93.6%	1.5%	0%	-	-	0.2%	99.8%	0%	0%	-	-	-
<b>% Total</b>	0%	0%	1.9%	0%	1.9%	-	1.6%	0%	0.5%	0%	2.0%	-	2.2%	41.8%	0.7%	0%	44.6%	-	0.1%	51.3%	0%	0%	51.4%	-	-
<b>PHF</b>	-	-	0.531	-	0.531	-	0.583	-	0.500	-	0.750	-	0.528	0.876	0.500	-	0.885	-	0.250	0.863	-	-	0.865	-	0.910
<b>Lights and Motorcycles</b>	0	0	17	0	17	-	11	0	4	0	15	-	17	353	5	0	375	-	1	435	0	0	436	-	843
<b>% Lights and Motorcycles</b>	0%	0%	100%	0%	100%	-	78.6%	0%	100%	0%	83.3%	-	89.5%	95.9%	83.3%	0%	95.4%	-	100%	96.2%	0%	0%	96.2%	-	95.7%
<b>Heavy</b>	0	0	0	0	0	-	3	0	0	0	3	-	2	15	1	0	18	-	0	17	0	0	17	-	38
<b>% Heavy</b>	0%	0%	0%	0%	0%	-	21.4%	0%	0%	0%	16.7%	-	10.5%	4.1%	16.7%	0%	4.6%	-	0%	3.8%	0%	0%	3.8%	-	4.3%
<b>Pedestrians</b>	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
<b>% Pedestrians</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Hyland Croy Rd & Weldon Rd - TMC

Thu Nov 20, 2025

Midday Peak (11:30 AM - 12:30 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1360872, Location: 40.116995, -83.177285



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

[N] Hyland Croy Rd

Total: 825

In: 453

Out: 372

452

1

[W] Weldon Rd

Total: 36

In: 17

Out: 19

17

4  
14

Out: 7

In: 18

Total: 25

[E] Weldon Rd

Out: 483

In: 393

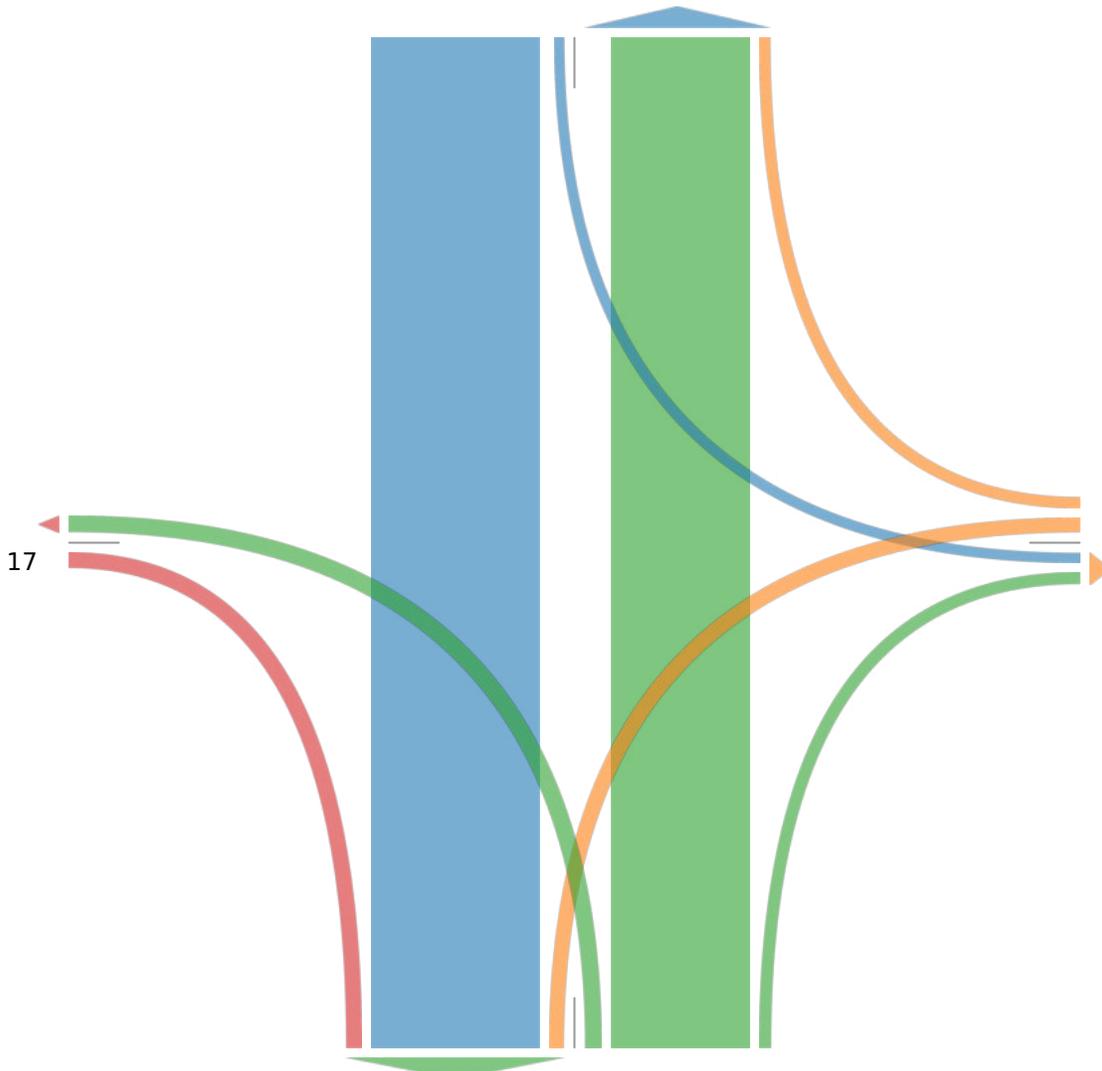
Total: 876

[S] Hyland Croy Rd

19

368

6



# Hyland Croy Rd & Weldon Rd - TMC

Thu Nov 20, 2025

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1360872, Location: 40.116995, -83.177285



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Weldon Rd Eastbound						Weldon Rd Westbound						Hyland Croy Rd Northbound						Hyland Croy Rd Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2025-11-20 5:00PM	0	0	3	0	3	0	1	0	0	0	1	0	8	161	5	0	174	0	0	124	0	0	124	0	302
5:15PM	0	0	1	0	1	0	5	0	0	0	5	0	7	188	0	0	195	0	0	127	0	0	127	0	328
5:30PM	0	0	3	0	3	0	2	0	1	0	3	0	5	168	1	0	174	0	0	138	0	0	138	0	318
5:45PM	0	1	3	0	4	0	2	0	0	0	2	0	9	167	1	0	177	0	1	142	0	0	143	0	326
<b>Total</b>	0	1	10	0	11	0	10	0	1	0	11	0	29	684	7	0	720	0	1	531	0	0	532	0	1274
<b>% Approach</b>	0%	9.1%	90.9%	0%	-	-	90.9%	0%	9.1%	0%	-	-	4.0%	95.0%	1.0%	0%	-	-	0.2%	99.8%	0%	0%	-	-	-
<b>% Total</b>	0%	0.1%	0.8%	0%	0.9%	-	0.8%	0%	0.1%	0%	0.9%	-	2.3%	53.7%	0.5%	0%	56.5%	-	0.1%	41.7%	0%	0%	41.8%	-	-
<b>PHF</b>	-0.250	0.833	-	-	0.688	-	0.500	-0.250	-	-	0.550	-	0.806	0.910	0.350	-	0.923	-	0.250	0.935	-	-	0.930	-	0.971
<b>Lights and Motorcycles</b>	0	0	10	0	10	-	10	0	1	0	11	-	29	682	7	0	718	-	1	521	0	0	522	-	1261
<b>% Lights and Motorcycles</b>	0%	0%	100%	0%	90.9%	-	100%	0%	100%	0%	100%	-	100%	99.7%	100%	0%	99.7%	-	100%	98.1%	0%	0%	98.1%	-	99.0%
<b>Heavy</b>	0	1	0	0	1	-	0	0	0	0	0	-	0	2	0	0	2	-	0	10	0	0	10	-	13
<b>% Heavy</b>	0%	100%	0%	0%	9.1%	-	0%	0%	0%	0%	0%	-	0%	0.3%	0%	0%	0.3%	-	0%	1.9%	0%	0%	1.9%	-	1.0%
<b>Pedestrians</b>	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
<b>% Pedestrians</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Hyland Croy Rd & Weldon Rd - TMC

Thu Nov 20, 2025

PM Peak (5 PM - 6 PM) - Overall Peak Hour

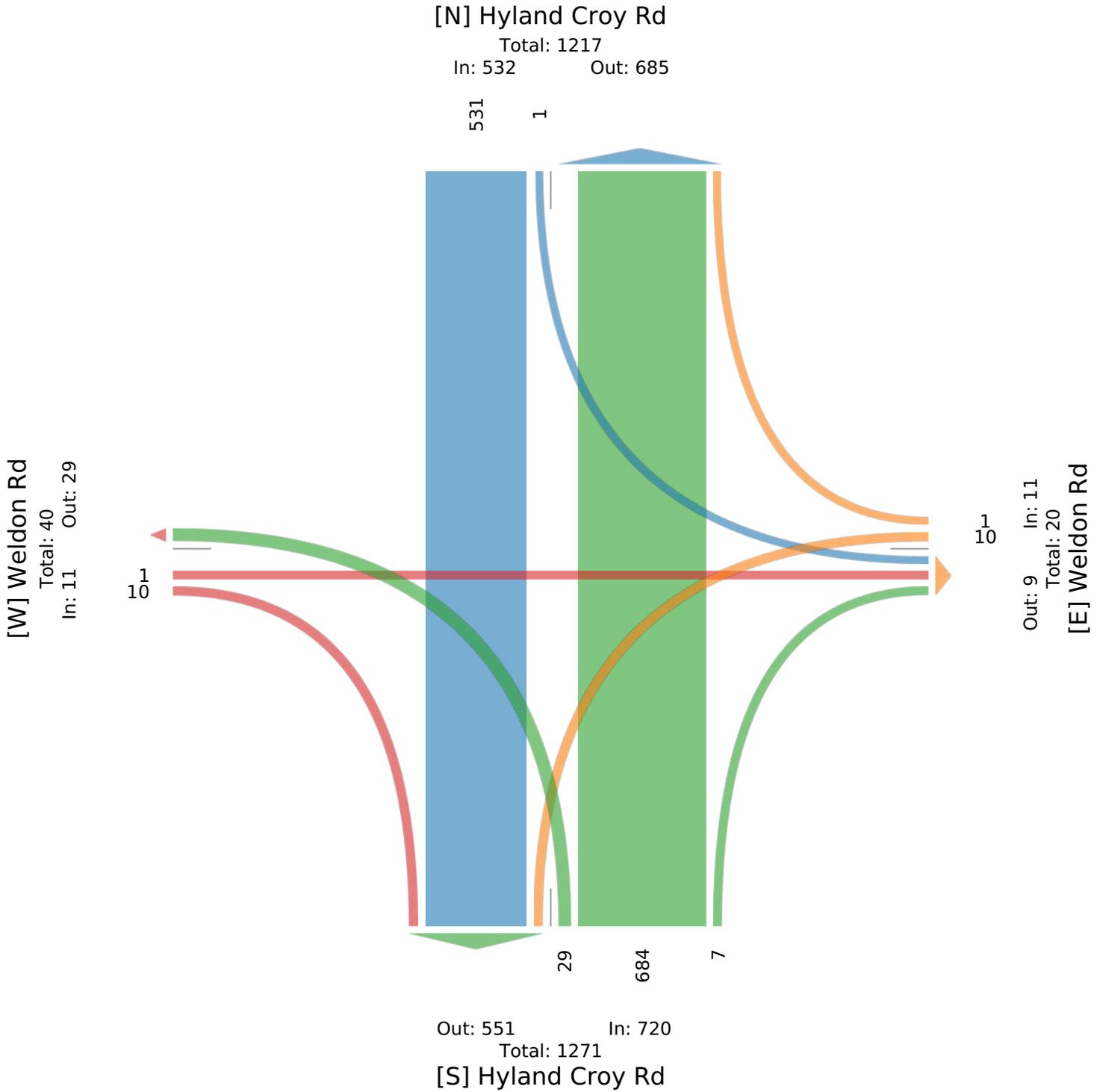
All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1360872, Location: 40.116995, -83.177285



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US



# Hyland-Croy Road & Moorland Road - TMC

Tue Sep 30, 2025

Full Length (6 AM-8 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342105, Location: 40.113234, -83.176828



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Moorland Road Westbound					Hyland-Croy Road Northbound					Hyland-Croy Road Southbound					Int
	L	R	U	App	Ped*	T	R	U	App	Ped*	L	T	U	App	Ped*	
2025-09-30 6:00AM	2	1	0	3	2	14	1	0	15	0	0	81	0	81	0	99
6:15AM	2	0	0	2	1	13	0	0	13	0	0	76	0	76	0	91
6:30AM	4	1	0	5	0	32	0	0	32	0	1	106	0	107	0	144
6:45AM	6	0	0	6	0	53	0	0	53	0	1	138	0	139	0	198
Hourly Total	14	2	0	16	3	112	1	0	113	0	2	401	0	403	0	532
7:00AM	8	0	0	8	0	90	2	0	92	0	0	145	0	145	0	245
7:15AM	9	3	0	12	0	91	0	0	91	0	0	142	0	142	0	245
7:30AM	5	7	0	12	0	84	2	0	86	0	1	146	0	147	0	245
7:45AM	9	3	0	12	0	79	1	0	80	0	6	183	0	189	0	281
Hourly Total	31	13	0	44	0	344	5	0	349	0	7	616	0	623	0	1016
8:00AM	9	0	0	9	0	96	1	0	97	0	3	162	0	165	0	271
8:15AM	5	3	0	8	0	67	2	0	69	0	1	184	0	185	0	262
8:30AM	8	2	0	10	0	96	1	0	97	0	0	205	0	205	0	312
8:45AM	10	3	0	13	0	73	1	0	74	0	1	159	0	160	0	247
Hourly Total	32	8	0	40	0	332	5	0	337	0	5	710	0	715	0	1092
9:00AM	7	2	0	9	0	95	1	0	96	0	4	182	1	187	0	292
9:15AM	5	0	0	5	0	64	0	0	64	0	1	117	0	118	0	187
9:30AM	5	2	0	7	0	67	1	0	68	0	1	146	0	147	0	222
9:45AM	8	0	0	8	0	63	3	0	66	0	2	120	0	122	0	196
Hourly Total	25	4	0	29	0	289	5	0	294	0	8	565	1	574	0	897
10:00AM	2	0	0	2	0	93	0	0	93	0	1	85	0	86	0	181
10:15AM	6	1	0	7	0	64	1	0	65	0	4	101	0	105	0	177
10:30AM	4	0	0	4	0	66	0	0	66	0	0	116	0	116	0	186
10:45AM	4	1	0	5	1	77	0	0	77	0	1	106	0	107	0	189
Hourly Total	16	2	0	18	1	300	1	0	301	0	6	408	0	414	0	733
11:00AM	2	1	0	3	1	76	0	0	76	0	0	100	0	100	0	179
11:15AM	3	1	0	4	0	85	0	0	85	0	0	98	0	98	0	187
11:30AM	2	1	0	3	1	76	2	0	78	0	3	103	0	106	0	187
11:45AM	4	0	0	4	0	82	0	0	82	0	1	102	0	103	0	189
Hourly Total	11	3	0	14	2	319	2	0	321	0	4	403	0	407	0	742
12:00PM	2	1	0	3	0	103	1	0	104	0	3	106	0	109	0	216
12:15PM	5	1	0	6	0	116	1	0	117	0	1	106	0	107	0	230
12:30PM	3	1	0	4	0	109	0	0	109	0	0	95	0	95	0	208
12:45PM	2	2	0	4	0	99	2	0	101	0	0	95	0	95	0	200
Hourly Total	12	5	0	17	0	427	4	0	431	0	4	402	0	406	0	854
1:00PM	2	0	0	2	1	92	0	0	92	0	2	114	0	116	0	210
1:15PM	3	0	0	3	0	87	2	0	89	0	2	98	0	100	0	192
1:30PM	3	1	0	4	0	125	1	0	126	0	0	91	0	91	0	221
1:45PM	5	1	0	6	0	95	0	0	95	0	5	78	0	83	0	184
Hourly Total	13	2	0	15	1	399	3	0	402	0	9	381	0	390	0	807
2:00PM	4	1	0	5	0	92	3	0	95	0	2	80	1	83	0	183
2:15PM	6	0	0	6	0	119	4	0	123	0	1	118	0	119	0	248
2:30PM	2	0	0	2	0	116	1	0	117	0	0	89	0	89	0	208
2:45PM	4	2	0	6	0	112	3	0	115	0	7	129	0	136	0	257
Hourly Total	16	3	0	19	0	439	11	0	450	0	10	416	1	427	0	896
3:00PM	5	3	0	8	0	131	0	0	131	0	1	141	0	142	0	281
3:15PM	3	2	0	5	0	136	3	0	139	0	2	123	0	125	0	269
3:30PM	2	1	0	3	0	139	2	0	141	0	1	102	0	103	0	247
3:45PM	5	0	0	5	0	126	3	0	129	0	1	112	0	113	0	247
Hourly Total	15	6	0	21	0	532	8	0	540	0	5	478	0	483	0	1044
4:00PM	6	2	0	8	0	138	2	0	140	0	2	118	0	120	0	268
4:15PM	3	1	0	4	0	174	1	0	175	0	3	125	0	128	0	307
4:30PM	8	1	0	9	0	180	5	0	185	0	1	133	0	134	0	328
4:45PM	7	1	0	8	0	208	4	0	212	0	1	104	0	105	0	325

Leg Direction	Moorland Road Westbound					Hyland-Croy Road Northbound					Hyland-Croy Road Southbound					Int
	L	R	U	App	Ped*	T	R	U	App	Ped*	L	T	U	App	Ped*	
Hourly Total	24	5	0	29	0	700	12	0	712	0	7	480	0	487	0	1228
5:00PM	7	2	0	9	0	221	0	0	221	0	2	117	0	119	0	349
5:15PM	6	3	0	9	0	197	5	0	202	0	3	135	0	138	0	349
5:30PM	5	1	0	6	0	207	0	0	207	0	8	123	0	131	0	344
5:45PM	8	0	0	8	0	181	5	0	186	0	2	142	0	144	0	338
Hourly Total	26	6	0	32	0	806	10	0	816	0	15	517	0	532	0	1380
6:00PM	7	1	0	8	0	162	2	0	164	0	0	144	0	144	0	316
6:15PM	11	3	0	14	0	164	1	0	165	0	1	126	0	127	0	306
6:30PM	2	2	0	4	0	168	3	0	171	0	3	125	0	128	0	303
6:45PM	2	1	0	3	0	162	2	0	164	0	1	95	0	96	0	263
Hourly Total	22	7	0	29	0	656	8	0	664	0	5	490	0	495	0	1188
7:00PM	3	1	0	4	0	134	2	0	136	0	0	88	0	88	0	228
7:15PM	8	1	1	10	0	109	3	0	112	0	0	95	0	95	0	217
7:30PM	5	1	0	6	0	104	0	0	104	0	0	87	0	87	0	197
7:45PM	4	0	0	4	2	134	5	0	139	0	0	68	0	68	0	211
Hourly Total	20	3	1	24	2	481	10	0	491	0	0	338	0	338	0	853
<b>Total</b>	277	69	1	347	9	6136	85	0	6221	0	87	6605	2	6694	0	13262
<b>% Approach</b>	79.8%	19.9%	0.3%	-	-	98.6%	1.4%	0%	-	-	1.3%	98.7%	0%	-	-	-
<b>% Total</b>	2.1%	0.5%	0%	2.6%	-	46.3%	0.6%	0%	46.9%	-	0.7%	49.8%	0%	50.5%	-	-
<b>Lights and Motorcycles</b>	266	66	1	333	-	5874	83	0	5957	-	80	6319	2	6401	-	12691
<b>% Lights and Motorcycles</b>	96.0%	95.7%	100%	96.0%	-	95.7%	97.6%	0%	95.8%	-	92.0%	95.7%	100%	95.6%	-	95.7%
<b>Heavy</b>	11	3	0	14	-	262	2	0	264	-	7	286	0	293	-	571
<b>% Heavy</b>	4.0%	4.3%	0%	4.0%	-	4.3%	2.4%	0%	4.2%	-	8.0%	4.3%	0%	4.4%	-	4.3%
Pedestrians	-	-	-	-	9	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-

\*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Hyland-Croy Road & Moorland Road - TMC

Tue Sep 30, 2025

Full Length (6 AM-8 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342105, Location: 40.113234, -83.176828



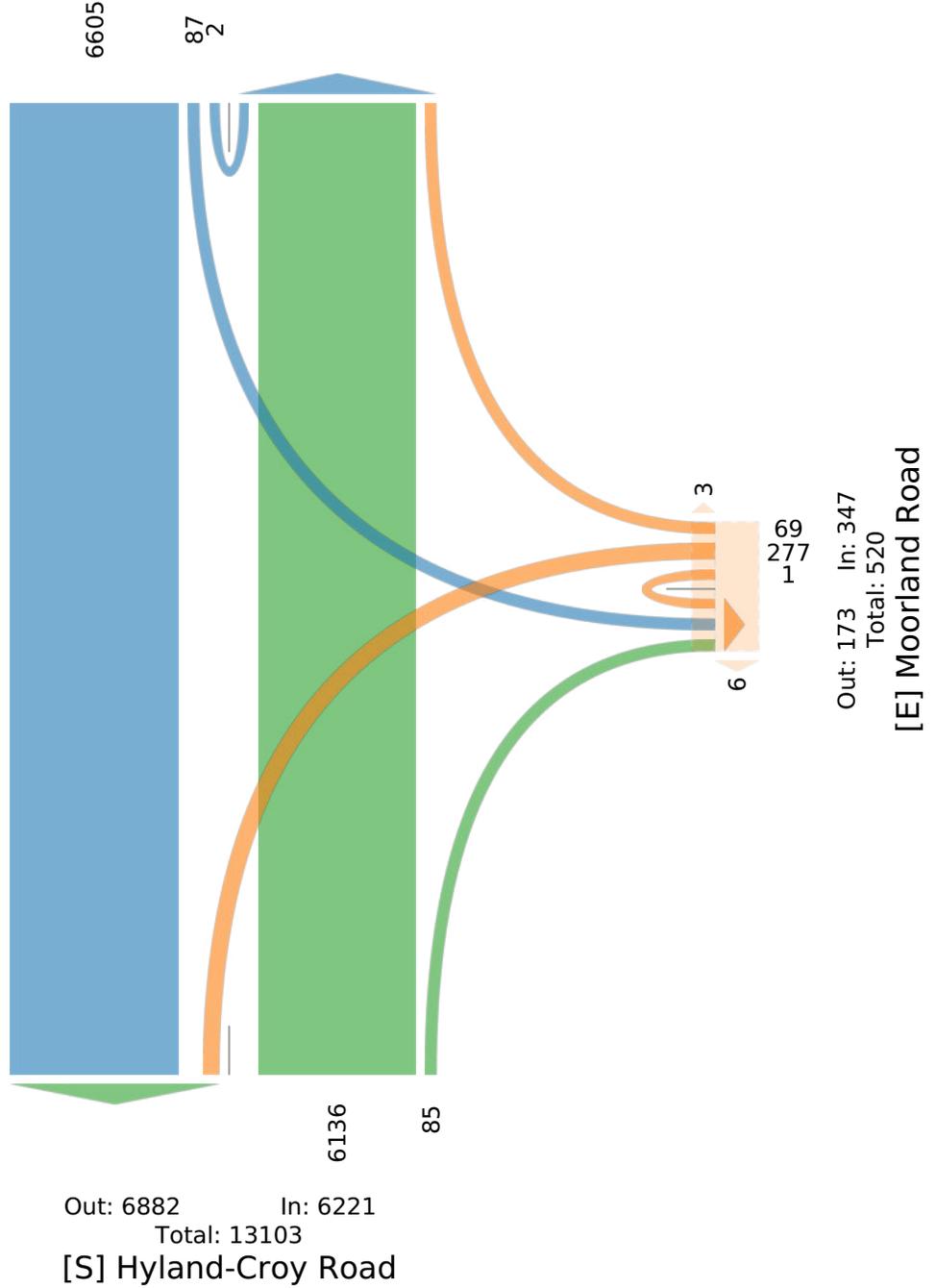
Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

[N] Hyland-Croy Road

Total: 12901

In: 6694

Out: 6207



# Hyland-Croy Road & Moorland Road - TMC

Tue Sep 30, 2025

AM Peak (7:45 AM - 8:45 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342105, Location: 40.113234, -83.176828



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Moorland Road Westbound					Hyland-Croy Road Northbound					Hyland-Croy Road Southbound					
Time	L	R	U	App	Ped*	T	R	U	App	Ped*	L	T	U	App	Ped*	Int
2025-09-30 7:45AM	9	3	0	12	0	79	1	0	80	0	6	183	0	189	0	281
8:00AM	9	0	0	9	0	96	1	0	97	0	3	162	0	165	0	271
8:15AM	5	3	0	8	0	67	2	0	69	0	1	184	0	185	0	262
8:30AM	8	2	0	10	0	96	1	0	97	0	0	205	0	205	0	312
<b>Total</b>	31	8	0	39	0	338	5	0	343	0	10	734	0	744	0	1126
<b>% Approach</b>	79.5%	20.5%	0%	-	-	98.5%	1.5%	0%	-	-	1.3%	98.7%	0%	-	-	-
<b>% Total</b>	2.8%	0.7%	0%	3.5%	-	30.0%	0.4%	0%	30.5%	-	0.9%	65.2%	0%	66.1%	-	-
<b>PHF</b>	0.861	0.667	-	0.813	-	0.880	0.625	-	0.884	-	0.417	0.895	-	0.907	-	0.902
<b>Lights and Motorcycles</b>	31	8	0	39	-	310	5	0	315	-	9	714	0	723	-	1077
<b>% Lights and Motorcycles</b>	100%	100%	0%	100%	-	91.7%	100%	0%	91.8%	-	90.0%	97.3%	0%	97.2%	-	95.6%
<b>Heavy</b>	0	0	0	0	-	28	0	0	28	-	1	20	0	21	-	49
<b>% Heavy</b>	0%	0%	0%	0%	-	8.3%	0%	0%	8.2%	-	10.0%	2.7%	0%	2.8%	-	4.4%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Hyland-Croy Road & Moorland Road - TMC

Tue Sep 30, 2025

AM Peak (7:45 AM - 8:45 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342105, Location: 40.113234, -83.176828

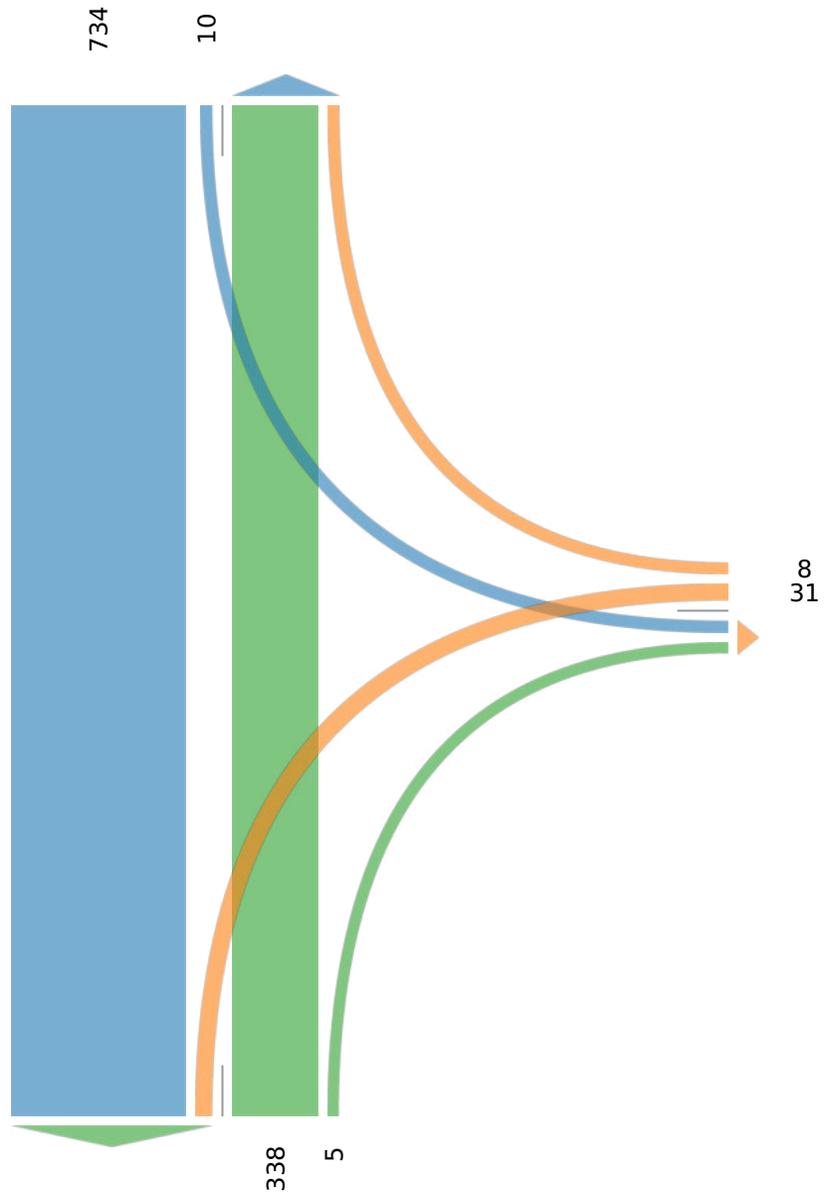


Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

[N] Hyland-Croy Road

Total: 1090

In: 744 Out: 346



Out: 15 In: 39

Total: 54

[E] Moorland Road

Out: 765 In: 343

Total: 1108

[S] Hyland-Croy Road

Hyland-Croy Road & Moorland Road - TMC

Tue Sep 30, 2025

Midday Peak (12 PM - 1 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342105, Location: 40.113234, -83.176828



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Moorland Road Westbound					Hyland-Croy Road Northbound					Hyland-Croy Road Southbound					
Time	L	R	U	App	Ped*	T	R	U	App	Ped*	L	T	U	App	Ped*	Int
2025-09-30 12:00PM	2	1	0	3	0	103	1	0	104	0	3	106	0	109	0	216
12:15PM	5	1	0	6	0	116	1	0	117	0	1	106	0	107	0	230
12:30PM	3	1	0	4	0	109	0	0	109	0	0	95	0	95	0	208
12:45PM	2	2	0	4	0	99	2	0	101	0	0	95	0	95	0	200
<b>Total</b>	12	5	0	17	0	427	4	0	431	0	4	402	0	406	0	854
<b>% Approach</b>	70.6%	29.4%	0%	-	-	99.1%	0.9%	0%	-	-	1.0%	99.0%	0%	-	-	-
<b>% Total</b>	1.4%	0.6%	0%	2.0%	-	50.0%	0.5%	0%	50.5%	-	0.5%	47.1%	0%	47.5%	-	-
<b>PHF</b>	0.600	0.625	-	0.708	-	0.920	0.500	-	0.921	-	0.333	0.948	-	0.931	-	0.928
<b>Lights and Motorcycles</b>	12	5	0	17	-	402	4	0	406	-	4	366	0	370	-	793
<b>% Lights and Motorcycles</b>	100%	100%	0%	100%	-	94.1%	100%	0%	94.2%	-	100%	91.0%	0%	91.1%	-	92.9%
<b>Heavy</b>	0	0	0	0	-	25	0	0	25	-	0	36	0	36	-	61
<b>% Heavy</b>	0%	0%	0%	0%	-	5.9%	0%	0%	5.8%	-	0%	9.0%	0%	8.9%	-	7.1%
<b>Pedestrians</b>	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
<b>% Pedestrians</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Hyland-Croy Road & Moorland Road - TMC

Tue Sep 30, 2025

Midday Peak (12 PM - 1 PM)

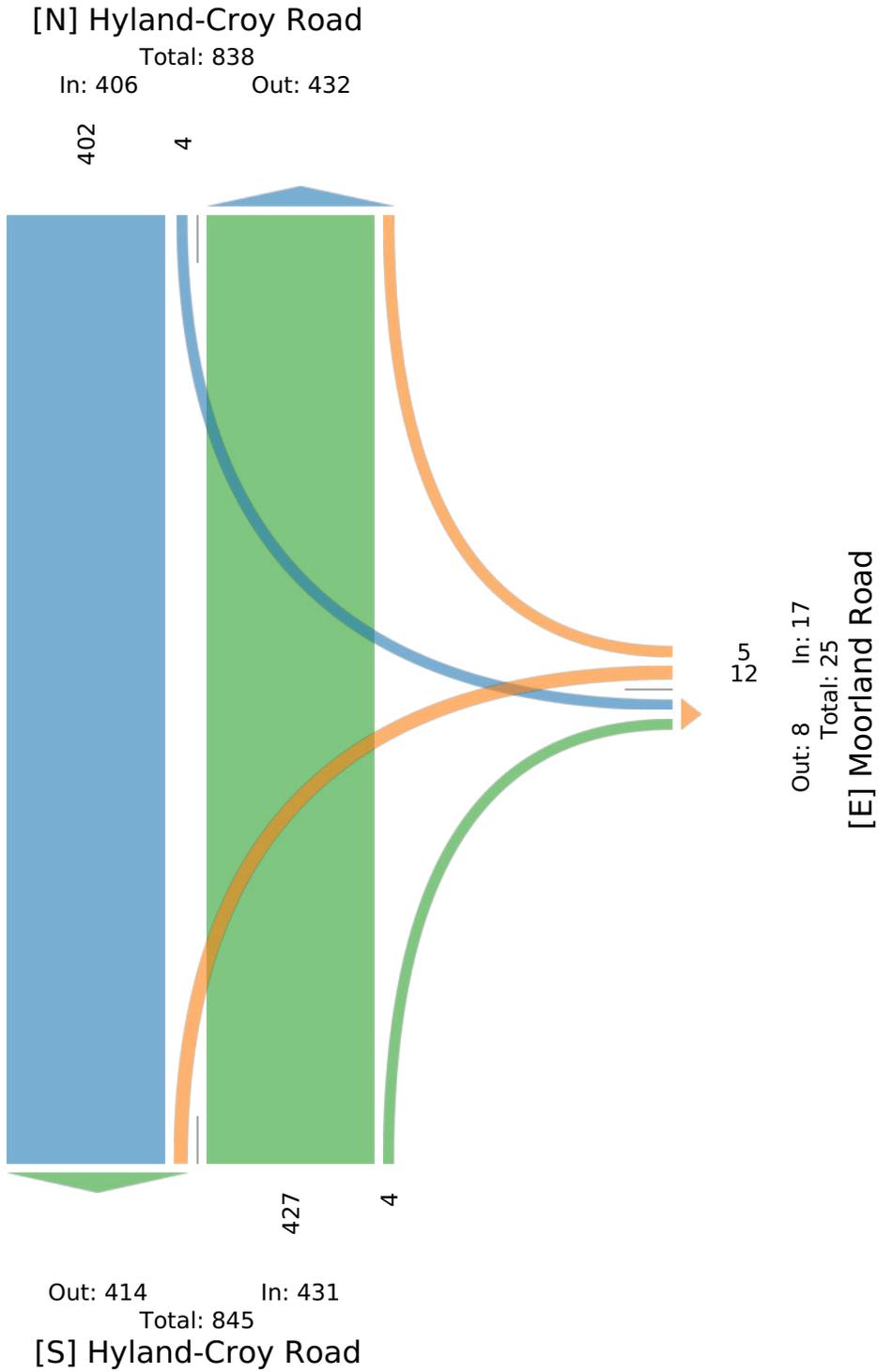
All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342105, Location: 40.113234, -83.176828



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US



# Hyland-Croy Road & Moorland Road - TMC

Tue Sep 30, 2025

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342105, Location: 40.113234, -83.176828



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Moorland Road Westbound					Hyland-Croy Road Northbound					Hyland-Croy Road Southbound					
Time	L	R	U	App	Ped*	T	R	U	App	Ped*	L	T	U	App	Ped*	Int
2025-09-30 5:00PM	7	2	0	9	0	221	0	0	221	0	2	117	0	119	0	349
5:15PM	6	3	0	9	0	197	5	0	202	0	3	135	0	138	0	349
5:30PM	5	1	0	6	0	207	0	0	207	0	8	123	0	131	0	344
5:45PM	8	0	0	8	0	181	5	0	186	0	2	142	0	144	0	338
<b>Total</b>	26	6	0	32	0	806	10	0	816	0	15	517	0	532	0	1380
<b>% Approach</b>	81.3%	18.8%	0%	-	-	98.8%	1.2%	0%	-	-	2.8%	97.2%	0%	-	-	-
<b>% Total</b>	1.9%	0.4%	0%	2.3%	-	58.4%	0.7%	0%	59.1%	-	1.1%	37.5%	0%	38.6%	-	-
<b>PHF</b>	0.813	0.500	-	0.889	-	0.912	0.500	-	0.923	-	0.469	0.910	-	0.924	-	0.989
<b>Lights and Motorcycles</b>	26	6	0	32	-	803	10	0	813	-	14	511	0	525	-	1370
<b>% Lights and Motorcycles</b>	100%	100%	0%	100%	-	99.6%	100%	0%	99.6%	-	93.3%	98.8%	0%	98.7%	-	99.3%
<b>Heavy</b>	0	0	0	0	-	3	0	0	3	-	1	6	0	7	-	10
<b>% Heavy</b>	0%	0%	0%	0%	-	0.4%	0%	0%	0.4%	-	6.7%	1.2%	0%	1.3%	-	0.7%
<b>Pedestrians</b>	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0
<b>% Pedestrians</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

**Hyland-Croy Road & Moorland Road - TMC**  
 Tue Sep 30, 2025  
 PM Peak (5 PM - 6 PM) - Overall Peak Hour  
 All Classes (Lights and Motorcycles, Heavy, Pedestrians)  
 All Movements  
 ID: 1342105, Location: 40.113234, -83.176828

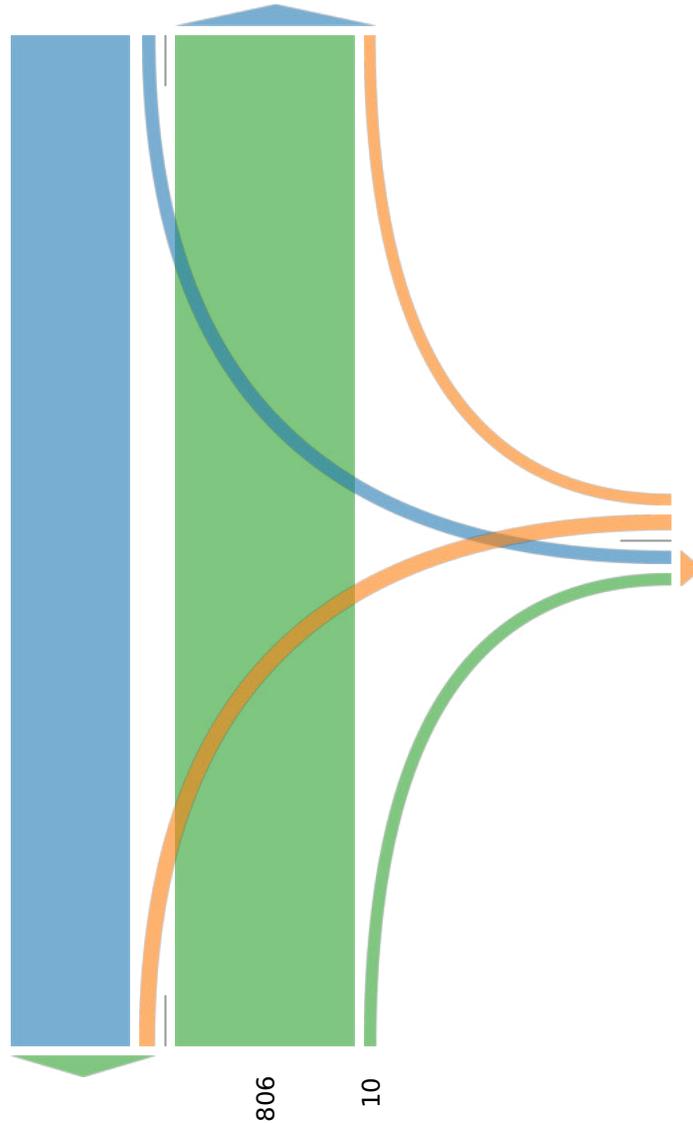


Provided by: Smart Services, Inc.  
 88 W. Church Street, Newark, OH, 43055, US

**[N] Hyland-Croy Road**

Total: 1344  
 In: 532      Out: 812

517      15



26

Out: 25    In: 32  
 Total: 57

**[E] Moorland Road**

Out: 543      In: 816  
 Total: 1359  
**[S] Hyland-Croy Road**

# Hyland-Croy Road & Park Mill Drive - TMC

Tue Sep 30, 2025

Full Length (6 AM-8 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342116, Location: 40.119052, -83.17746



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Park Mill Drive Eastbound						Park Mill Drive Westbound						Hyland-Croy Road Northbound						Hyland-Croy Road Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2025-09-30																									
6:00AM	0	1	9	0	10	0	4	1	0	0	5	1	1	11	0	0	12	1	0	66	1	0	67	0	94
6:15AM	1	0	7	0	8	0	6	0	1	0	7	0	0	14	0	0	14	0	0	62	0	0	62	0	91
6:30AM	2	0	7	0	9	0	6	0	1	0	7	1	3	27	0	0	30	2	0	89	1	0	90	0	136
6:45AM	2	0	11	0	13	0	8	0	2	0	10	1	0	48	2	0	50	0	0	115	0	0	115	0	188
Hourly Total	5	1	34	0	40	0	24	1	4	0	29	3	4	100	2	0	106	3	0	332	2	0	334	0	509
7:00AM	5	0	11	0	16	0	17	1	1	0	19	2	5	77	1	0	83	1	0	117	0	0	117	0	235
7:15AM	8	0	23	0	31	0	14	1	7	0	22	0	3	84	8	0	95	0	2	105	1	0	108	0	256
7:30AM	12	0	10	0	22	0	12	0	26	0	38	1	3	76	3	0	82	1	4	103	2	0	109	0	251
7:45AM	4	1	9	0	14	0	8	1	8	0	17	0	4	68	5	0	77	0	13	169	11	0	193	0	301
Hourly Total	29	1	53	0	83	0	51	3	42	0	96	3	15	305	17	0	337	2	19	494	14	0	527	0	1043
8:00AM	7	2	18	0	27	0	17	0	4	0	21	0	3	85	2	0	90	2	4	120	0	0	124	0	262
8:15AM	2	0	18	1	21	0	18	1	1	0	20	0	2	61	4	0	67	0	2	156	2	0	160	0	268
8:30AM	9	0	12	0	21	0	16	1	3	0	20	1	4	80	5	0	89	0	0	164	2	0	166	0	296
8:45AM	8	2	10	0	20	0	12	3	4	0	19	0	5	72	4	0	81	1	0	144	0	0	144	0	264
Hourly Total	26	4	58	1	89	0	63	5	12	0	80	1	14	298	15	0	327	3	6	584	4	0	594	0	1090
9:00AM	6	1	9	0	16	0	14	1	2	0	17	2	4	82	6	0	92	4	6	150	13	0	169	0	294
9:15AM	3	1	5	0	9	0	6	1	2	0	9	0	3	55	5	0	63	1	2	110	0	0	112	0	193
9:30AM	2	1	4	0	7	0	7	0	3	0	10	1	4	59	3	0	66	3	0	117	4	0	121	0	204
9:45AM	3	1	11	0	15	0	9	0	0	0	9	0	5	55	3	0	63	1	0	101	4	0	105	0	192
Hourly Total	14	4	29	0	47	0	36	2	7	0	45	3	16	251	17	0	284	9	8	478	21	0	507	0	883
10:00AM	0	0	2	0	2	0	4	1	1	0	6	0	7	68	5	0	80	0	1	76	1	0	78	0	166
10:15AM	6	2	7	0	15	0	6	1	0	0	7	0	3	55	6	0	64	1	0	94	2	0	96	0	182
10:30AM	3	0	9	0	12	0	8	0	2	0	10	0	2	59	3	0	64	0	1	94	2	0	97	0	183
10:45AM	1	0	2	0	3	0	6	0	2	0	8	0	5	62	5	0	72	2	0	89	2	0	91	0	174
Hourly Total	10	2	20	0	32	0	24	2	5	0	31	0	17	244	19	0	280	3	2	353	7	0	362	0	705
11:00AM	1	0	6	0	7	0	5	0	0	0	5	0	5	63	4	0	72	0	0	92	2	0	94	0	178
11:15AM	2	0	1	0	3	0	6	0	0	0	6	1	7	69	3	0	79	1	2	82	3	0	87	0	175
11:30AM	3	1	5	0	9	0	1	2	0	1	4	1	6	70	8	0	84	0	1	94	2	0	97	0	194
11:45AM	6	0	13	0	19	0	5	1	1	0	7	0	5	60	9	0	74	4	0	81	3	0	84	0	184
Hourly Total	12	1	25	0	38	0	17	3	1	1	22	2	23	262	24	0	309	5	3	349	10	0	362	0	731
12:00PM	2	0	10	0	12	0	5	2	2	0	9	0	13	81	8	0	102	3	2	91	6	0	99	0	222
12:15PM	8	1	6	0	15	0	5	1	0	0	6	0	14	88	9	0	111	0	1	94	5	0	100	0	232
12:30PM	5	2	6	0	13	0	9	1	4	0	14	0	10	91	10	0	111	2	3	77	1	0	81	0	219
12:45PM	4	1	10	0	15	0	5	0	2	0	7	0	12	81	5	0	98	1	1	75	0	0	76	0	196
Hourly Total	19	4	32	0	55	0	24	4	8	0	36	0	49	341	32	0	422	6	7	337	12	0	356	0	869
1:00PM	2	1	8	0	11	0	6	0	0	0	6	0	3	71	5	0	79	0	3	96	5	0	104	0	200
1:15PM	3	1	6	0	10	0	9	1	1	0	11	0	7	78	5	0	90	0	0	89	1	0	90	0	201
1:30PM	0	0	6	0	6	0	2	0	1	0	3	1	9	97	6	0	112	0	0	83	2	0	85	0	206
1:45PM	1	0	5	0	6	0	6	0	3	0	9	0	6	82	6	0	94	0	3	67	3	0	73	0	182
Hourly Total	6	2	25	0	33	0	23	1	5	0	29	1	25	328	22	0	375	0	6	335	11	0	352	0	789
2:00PM	2	1	6	0	9	0	6	1	0	0	7	0	10	73	8	0	91	0	2	68	2	0	72	0	179
2:15PM	9	1	13	0	23	0	8	0	3	0	11	0	8	103	4	0	115	0	2	100	4	0	106	0	255
2:30PM	5	1	3	0	9	0	5	0	4	0	9	0	2	105	10	0	117	0	1	83	0	0	84	0	219
2:45PM	5	2	7	0	14	0	6	3	3	0	12	0	6	102	8	0	116	1	11	117	6	0	134	0	276
Hourly Total	21	5	29	0	55	0	25	4	10	0	39	0	26	383	30	0	439	1	16	368	12	0	396	0	929
3:00PM	4	0	5	0	9	0	11	1	4	0	16	0	8	102	9	0	119	0	5	119	1	0	125	0	269
3:15PM	7	2	9	0	18	0	4	2	5	0	11	0	12	112	12	0	136	0	2	108	1	0	111	0	276
3:30PM	4	0	7	0	11	0	2	1	0	0	3	0	7	116	8	0	131	0	4	91	8	0	103	0	248
3:45PM	2	0	6	0	8	0	4	1	2	0	7	0	6	103	9	0	118	0	5	98	12	0	115	0	248
Hourly Total	17	2	27	0	46	0	21	5	11	0	37	0	33	433	38	0	504	0	16	416	22	0	454	0	1041
4:00PM	2	1	3	0	6	0	5	1	5	0	11	0	7	114	13	0	134	0	3	109	5	0	117	0	268
4:15PM	3	0	5	0	8	0	3	0	6	0	9	0	12	141	16	0	169	0	7	111	2	0	120	0	306
4:30PM	1	1	9	0	11	0	10	1	3	0	14	1	11	149	9	0	169	1	1	116	3	0	120	0	314
4:45PM	7	0	1	0	8	0	6	1	4	0	11	0	14	170	14	0	198	0	3	98	5	0	106	0	323
Hourly Total	13	2	18	0	33	0	24	3	18	0	45	1	44	574	52	0	670	1	14	434	15	0	463	0	1211

Leg Direction	Park Mill Drive Eastbound						Park Mill Drive Westbound						Hyland-Croy Road Northbound						Hyland-Croy Road Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
5:00PM	4	0	6	0	10	0	6	0	5	0	11	1	12	196	15	0	223	2	4	102	5	0	111	0	355
5:15PM	7	2	3	0	12	0	16	0	4	0	20	0	14	162	10	0	186	1	6	117	5	0	128	0	346
5:30PM	6	1	6	0	13	0	11	2	3	0	16	1	20	161	21	0	202	2	2	107	3	0	112	0	343
5:45PM	6	2	10	0	18	0	9	0	2	0	11	0	12	144	15	0	171	0	5	114	1	0	120	0	320
Hourly Total	23	5	25	0	53	0	42	2	14	0	58	2	58	663	61	0	782	5	17	440	14	0	471	0	1364
6:00PM	6	1	8	0	15	0	8	0	4	0	12	2	7	131	20	0	158	3	3	126	3	0	132	0	317
6:15PM	5	1	6	0	12	0	6	2	4	0	12	0	17	130	18	0	165	4	6	112	1	0	119	0	308
6:30PM	5	0	6	0	11	0	13	3	4	0	20	3	9	127	16	0	152	6	4	102	3	0	109	0	292
6:45PM	1	1	8	0	10	0	10	1	3	0	14	2	15	131	14	0	160	2	3	78	1	0	82	0	266
Hourly Total	17	3	28	0	48	0	37	6	15	0	58	7	48	519	68	0	635	15	16	418	8	0	442	0	1183
7:00PM	2	1	6	0	9	0	8	0	1	0	9	0	7	110	11	0	128	2	0	81	5	0	86	0	232
7:15PM	2	0	7	0	9	0	8	0	2	0	10	0	6	95	9	0	110	3	4	76	6	0	86	0	215
7:30PM	3	0	4	0	7	0	2	1	3	0	6	1	12	87	10	0	109	4	2	77	5	0	84	0	206
7:45PM	3	0	3	0	6	0	3	0	2	0	5	0	14	94	17	0	125	3	6	60	3	0	69	0	205
Hourly Total	10	1	20	0	31	0	21	1	8	0	30	1	39	386	47	0	472	12	12	294	19	0	325	0	858
<b>Total</b>	222	37	423	1	683	0	432	42	160	1	635	24	411	5087	444	0	5942	65	142	5632	171	0	5945	0	13205
<b>% Approach</b>	32.5%	5.4%	61.9%	0.1%	-	-	68.0%	6.6%	25.2%	0.2%	-	-	6.9%	85.6%	7.5%	0%	-	-	2.4%	94.7%	2.9%	0%	-	-	-
<b>% Total</b>	1.7%	0.3%	3.2%	0%	5.2%	-	3.3%	0.3%	1.2%	0%	4.8%	-	3.1%	38.5%	3.4%	0%	45.0%	-	1.1%	42.7%	1.3%	0%	45.0%	-	-
<b>Lights and Motorcycles</b>	217	36	416	1	670	-	428	36	154	1	619	-	407	4855	430	0	5692	-	137	5367	166	0	5670	-	12651
<b>% Lights and Motorcycles</b>	97.7%	97.3%	98.3%	100%	98.1%	-	99.1%	85.7%	96.3%	100%	97.5%	-	99.0%	95.4%	96.8%	0%	95.8%	-	96.5%	95.3%	97.1%	0%	95.4%	-	95.8%
<b>Heavy</b>	5	1	7	0	13	-	4	6	6	0	16	-	4	232	14	0	250	-	5	265	5	0	275	-	554
<b>% Heavy</b>	2.3%	2.7%	1.7%	0%	1.9%	-	0.9%	14.3%	3.8%	0%	2.5%	-	1.0%	4.6%	3.2%	0%	4.2%	-	3.5%	4.7%	2.9%	0%	4.6%	-	4.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	24	-	-	-	-	-	65	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	

\*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Hyland-Croy Road & Park Mill Drive - TMC

Tue Sep 30, 2025

Full Length (6 AM-8 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342116, Location: 40.119052, -83.17746



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

[N] Hyland-Croy Road

Total: 11414

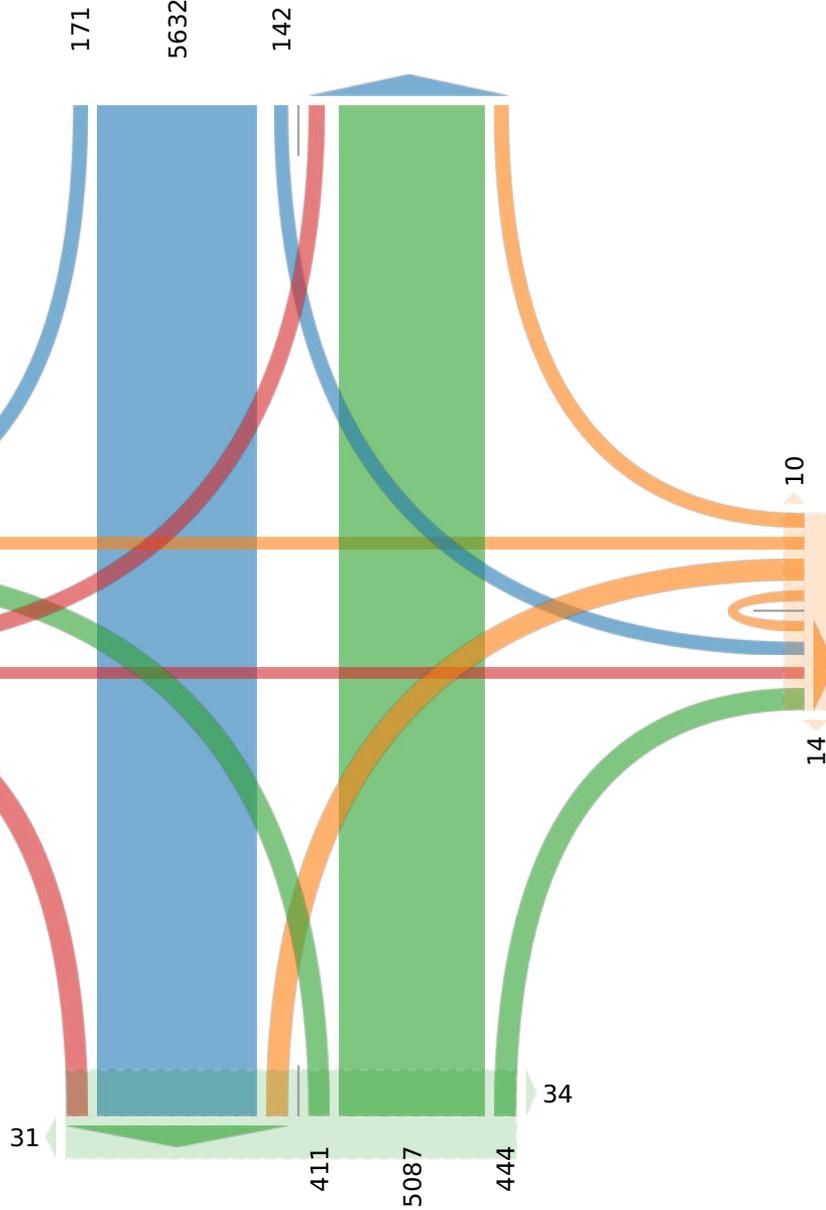
In: 5945

Out: 5469

[W] Park Mill Drive

Total: 1308  
In: 683 Out: 625

1  
222  
37  
423



Out: 624 In: 635  
Total: 1259

[E] Park Mill Drive

Out: 6487

In: 5942

Total: 12429

[S] Hyland-Croy Road

# Hyland-Croy Road & Park Mill Drive - TMC

Tue Sep 30, 2025

AM Peak (7:45 AM - 8:45 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342116, Location: 40.119052, -83.17746



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Park Mill Drive Eastbound							Park Mill Drive Westbound							Hyland-Croy Road Northbound							Hyland-Croy Road Southbound									
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2025-09-30 7:45AM	4	1	9	0	14	0	8	1	8	0	17	0	4	68	5	0	77	0	13	169	11	0	193	0							301
8:00AM	7	2	18	0	27	0	17	0	4	0	21	0	3	85	2	0	90	2	4	120	0	0	124	0							262
8:15AM	2	0	18	1	21	0	18	1	1	0	20	0	2	61	4	0	67	0	2	156	2	0	160	0							268
8:30AM	9	0	12	0	21	0	16	1	3	0	20	1	4	80	5	0	89	0	0	164	2	0	166	0							296
<b>Total</b>	22	3	57	1	83	0	59	3	16	0	78	1	13	294	16	0	323	2	19	609	15	0	643	0							1127
<b>% Approach</b>	26.5%	3.6%	68.7%	1.2%	-	-	75.6%	3.8%	20.5%	0%	-	-	4.0%	91.0%	5.0%	0%	-	-	3.0%	94.7%	2.3%	0%	-	-							-
<b>% Total</b>	2.0%	0.3%	5.1%	0.1%	7.4%	-	5.2%	0.3%	1.4%	0%	6.9%	-	1.2%	26.1%	1.4%	0%	28.7%	-	1.7%	54.0%	1.3%	0%	57.1%	-							-
<b>PHF</b>	0.611	0.375	0.792	0.250	0.769	-	0.819	0.750	0.500	-	0.929	-	0.813	0.865	0.800	-	0.897	-	0.365	0.901	0.341	-	0.833	-							0.936
<b>Lights and Motorcycles</b>	21	3	57	1	82	-	59	3	15	0	77	-	13	267	15	0	295	-	19	589	15	0	623	-							1077
<b>% Lights and Motorcycles</b>	95.5%	100%	100%	100%	98.8%	-	100%	100%	93.8%	0%	98.7%	-	100%	90.8%	93.8%	0%	91.3%	-	100%	96.7%	100%	0%	96.9%	-							95.6%
<b>Heavy</b>	1	0	0	0	1	-	0	0	1	0	1	-	0	27	1	0	28	-	0	20	0	0	20	-							50
<b>% Heavy</b>	4.5%	0%	0%	0%	1.2%	-	0%	0%	6.3%	0%	1.3%	-	0%	9.2%	6.3%	0%	8.7%	-	0%	3.3%	0%	0%	3.1%	-							4.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0							0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-100%	-	-	-	-	-	-100%	-	-	-	-	-	-	-							-

\* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Hyland-Croy Road & Park Mill Drive - TMC

Tue Sep 30, 2025

AM Peak (7:45 AM - 8:45 AM)

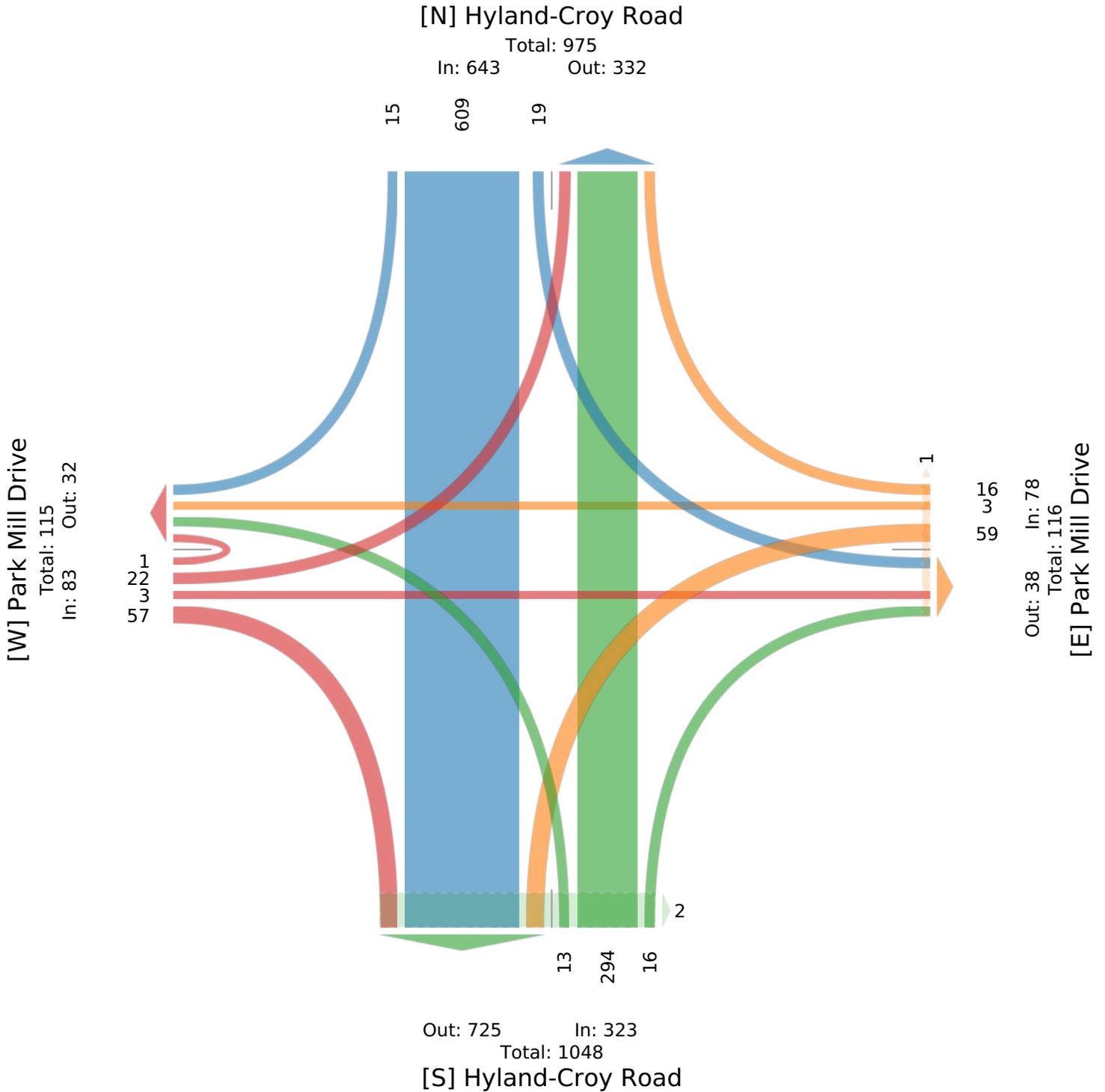
All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342116, Location: 40.119052, -83.17746



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US



# Hyland-Croy Road & Park Mill Drive - TMC

Tue Sep 30, 2025

Midday Peak (12 PM - 1 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342116, Location: 40.119052, -83.17746



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

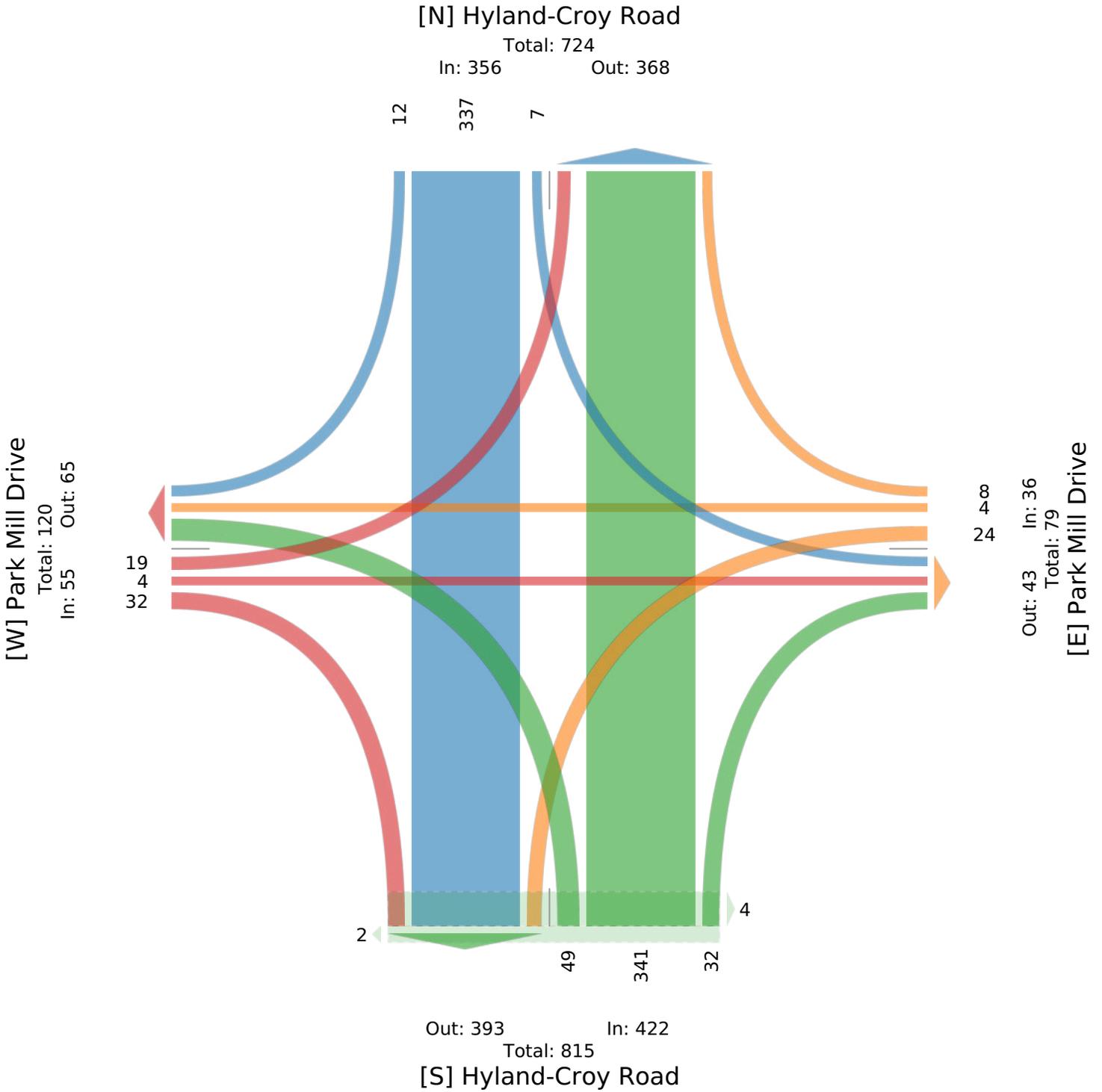
Leg Direction	Park Mill Drive Eastbound					Park Mill Drive Westbound					Hyland-Croy Road Northbound					Hyland-Croy Road Southbound					Int				
Time	L	T	R	U	App Ped*	L	T	R	U	App Ped*	L	T	R	U	App Ped*	L	T	R	U	App Ped*	Int				
2025-09-30 12:00PM	2	0	10	0	12	0	5	2	2	0	9	0	13	81	8	0	102	3	2	91	6	0	99	0	222
12:15PM	8	1	6	0	15	0	5	1	0	0	6	0	14	88	9	0	111	0	1	94	5	0	100	0	232
12:30PM	5	2	6	0	13	0	9	1	4	0	14	0	10	91	10	0	111	2	3	77	1	0	81	0	219
12:45PM	4	1	10	0	15	0	5	0	2	0	7	0	12	81	5	0	98	1	1	75	0	0	76	0	196
<b>Total</b>	19	4	32	0	55	0	24	4	8	0	36	0	49	341	32	0	422	6	7	337	12	0	356	0	869
<b>% Approach</b>	34.5%	7.3%	58.2%	0%	-	-	66.7%	11.1%	22.2%	0%	-	-	11.6%	80.8%	7.6%	0%	-	-	2.0%	94.7%	3.4%	0%	-	-	-
<b>% Total</b>	2.2%	0.5%	3.7%	0%	6.3%	-	2.8%	0.5%	0.9%	0%	4.1%	-	5.6%	39.2%	3.7%	0%	48.6%	-	0.8%	38.8%	1.4%	0%	41.0%	-	-
<b>PHF</b>	0.594	0.500	0.800	-	0.917	-	0.667	0.500	0.500	-	0.643	-	0.875	0.937	0.800	-	0.950	-	0.583	0.896	0.500	-	0.890	-	0.936
<b>Lights and Motorcycles</b>	18	4	32	0	54	-	23	4	8	0	35	-	48	319	30	0	397	-	7	308	10	0	325	-	811
<b>% Lights and Motorcycles</b>	94.7%	100%	100%	0%	98.2%	-	95.8%	100%	100%	0%	97.2%	-	98.0%	93.5%	93.8%	0%	94.1%	-	100%	91.4%	83.3%	0%	91.3%	-	93.3%
<b>Heavy</b>	1	0	0	0	1	-	1	0	0	0	1	-	1	22	2	0	25	-	0	29	2	0	31	-	58
<b>% Heavy</b>	5.3%	0%	0%	0%	1.8%	-	4.2%	0%	0%	0%	2.8%	-	2.0%	6.5%	6.3%	0%	5.9%	-	0%	8.6%	16.7%	0%	8.7%	-	6.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-

\*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Hyland-Croy Road & Park Mill Drive - TMC  
 Tue Sep 30, 2025  
 Midday Peak (12 PM - 1 PM)  
 All Classes (Lights and Motorcycles, Heavy, Pedestrians)  
 All Movements  
 ID: 1342116, Location: 40.119052, -83.17746



Provided by: Smart Services, Inc.  
 88 W. Church Street, Newark, OH, 43055, US



# Hyland-Croy Road & Park Mill Drive - TMC

Tue Sep 30, 2025

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1342116, Location: 40.119052, -83.17746



Provided by: Smart Services, Inc.  
88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Park Mill Drive Eastbound						Park Mill Drive Westbound						Hyland-Croy Road Northbound						Hyland-Croy Road Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2025-09-30 4:45PM	7	0	1	0	<b>8</b>	0	6	1	4	0	<b>11</b>	0	14	170	14	0	<b>198</b>	0	3	98	5	0	<b>106</b>	0	<b>323</b>
5:00PM	4	0	6	0	<b>10</b>	0	6	0	5	0	<b>11</b>	1	12	196	15	0	<b>223</b>	2	4	102	5	0	<b>111</b>	0	<b>355</b>
5:15PM	7	2	3	0	<b>12</b>	0	16	0	4	0	<b>20</b>	0	14	162	10	0	<b>186</b>	1	6	117	5	0	<b>128</b>	0	<b>346</b>
5:30PM	6	1	6	0	<b>13</b>	0	11	2	3	0	<b>16</b>	1	20	161	21	0	<b>202</b>	2	2	107	3	0	<b>112</b>	0	<b>343</b>
<b>Total</b>	24	3	16	0	<b>43</b>	0	39	3	16	0	<b>58</b>	2	60	689	60	0	<b>809</b>	5	15	424	18	0	<b>457</b>	0	<b>1367</b>
<b>% Approach</b>	55.8%	7.0%	37.2%	0%	-	-	67.2%	5.2%	27.6%	0%	-	-	7.4%	85.2%	7.4%	0%	-	-	3.3%	92.8%	3.9%	0%	-	-	-
<b>% Total</b>	1.8%	0.2%	1.2%	0%	<b>3.1%</b>	-	2.9%	0.2%	1.2%	0%	<b>4.2%</b>	-	4.4%	50.4%	4.4%	0%	<b>59.2%</b>	-	1.1%	31.0%	1.3%	0%	<b>33.4%</b>	-	-
<b>PHF</b>	0.857	0.375	0.667	-	<b>0.827</b>	-	0.609	0.375	0.800	-	<b>0.725</b>	-	0.750	0.879	0.714	-	<b>0.907</b>	-	0.625	0.906	0.900	-	<b>0.893</b>	-	0.963
<b>Lights and Motorcycles</b>	23	3	16	0	<b>42</b>	-	39	2	16	0	<b>57</b>	-	60	684	60	0	<b>804</b>	-	15	417	18	0	<b>450</b>	-	1353
<b>% Lights and Motorcycles</b>	95.8%	100%	100%	0%	<b>97.7%</b>	-	100%	66.7%	100%	0%	<b>98.3%</b>	-	100%	99.3%	100%	0%	<b>99.4%</b>	-	100%	98.3%	100%	0%	<b>98.5%</b>	-	99.0%
<b>Heavy</b>	1	0	0	0	<b>1</b>	-	0	1	0	0	<b>1</b>	-	0	5	0	0	<b>5</b>	-	0	7	0	0	<b>7</b>	-	14
<b>% Heavy</b>	4.2%	0%	0%	0%	<b>2.3%</b>	-	0%	33.3%	0%	0%	<b>1.7%</b>	-	0%	0.7%	0%	0%	<b>0.6%</b>	-	0%	1.7%	0%	0%	<b>1.5%</b>	-	1.0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	5	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	

\*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Hyland-Croy Road & Park Mill Drive - TMC  
 Tue Sep 30, 2025  
 PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour  
 All Classes (Lights and Motorcycles, Heavy, Pedestrians)  
 All Movements  
 ID: 1342116, Location: 40.119052, -83.17746



Provided by: Smart Services, Inc.  
 88 W. Church Street, Newark, OH, 43055, US

[N] Hyland-Croy Road

Total: 1186

In: 457

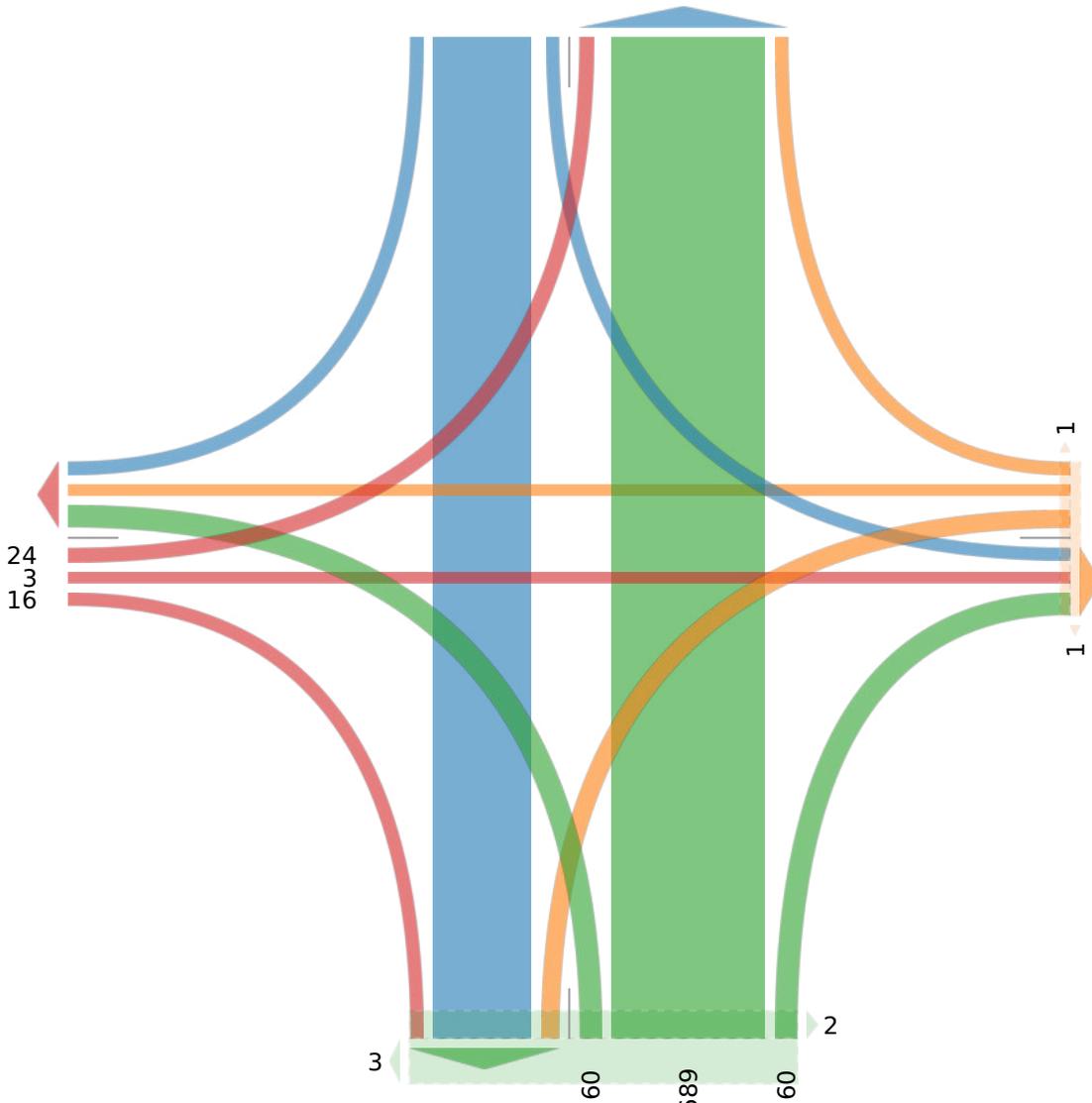
Out: 729

18 424 15

[W] Park Mill Drive

Total: 124  
 In: 43 Out: 81

24  
 3  
 16



16  
 3  
 39

Out: 78 In: 58  
 Total: 136

[E] Park Mill Drive

Out: 479 In: 809  
 Total: 1288  
 [S] Hyland-Croy Road

3

60

689

60

2

## **Trip Generation Data**

# Hardware/Paint Store (816)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 7 and 9 a.m.**

**Setting/Location: General Urban/Suburban**

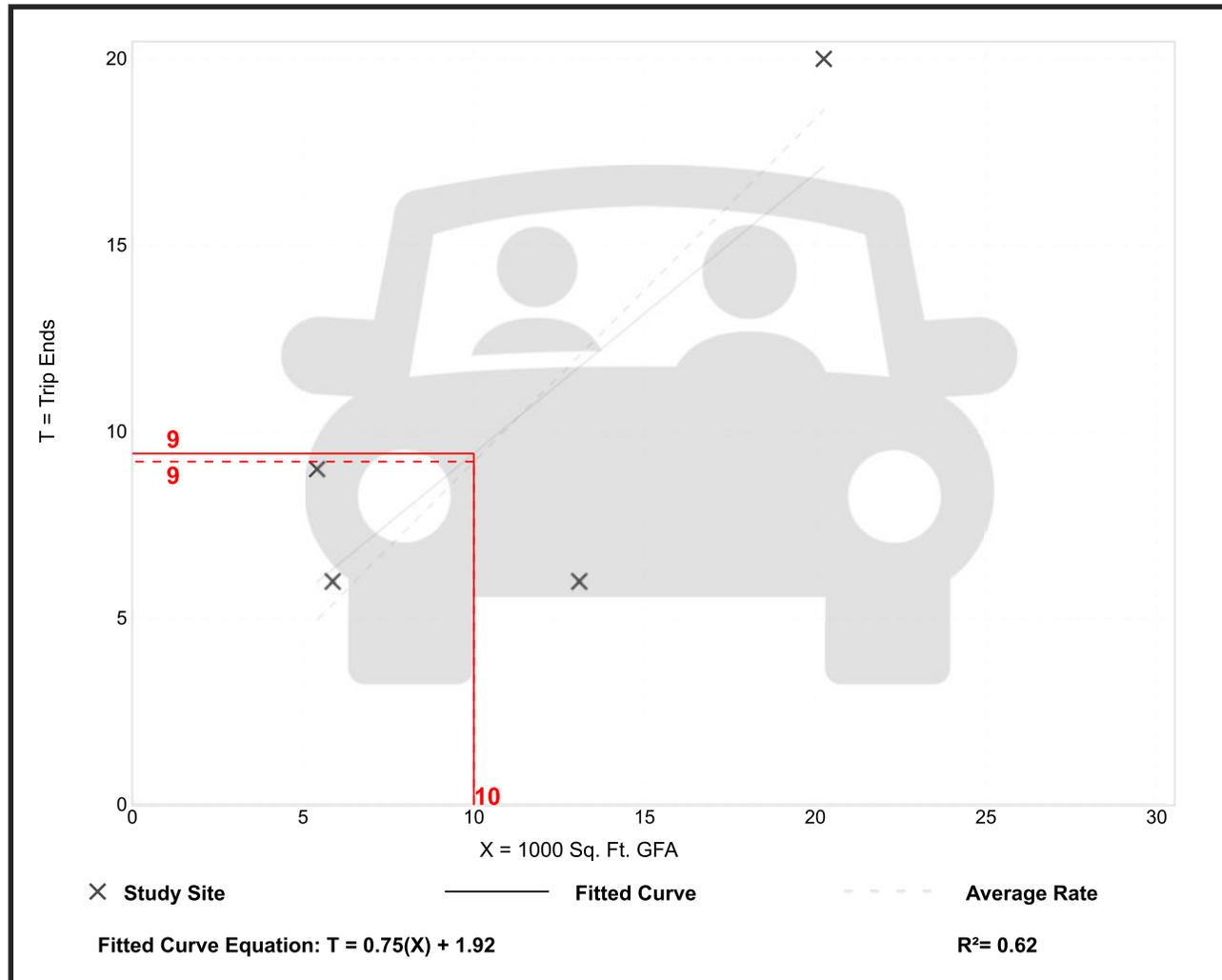
Number of Studies: 4  
 Avg. 1000 Sq. Ft. GFA: 11  
 Directional Distribution: 54% entering, 46% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.92	0.46 - 1.66	0.42

## Data Plot and Equation

*Caution – Small Sample Size*



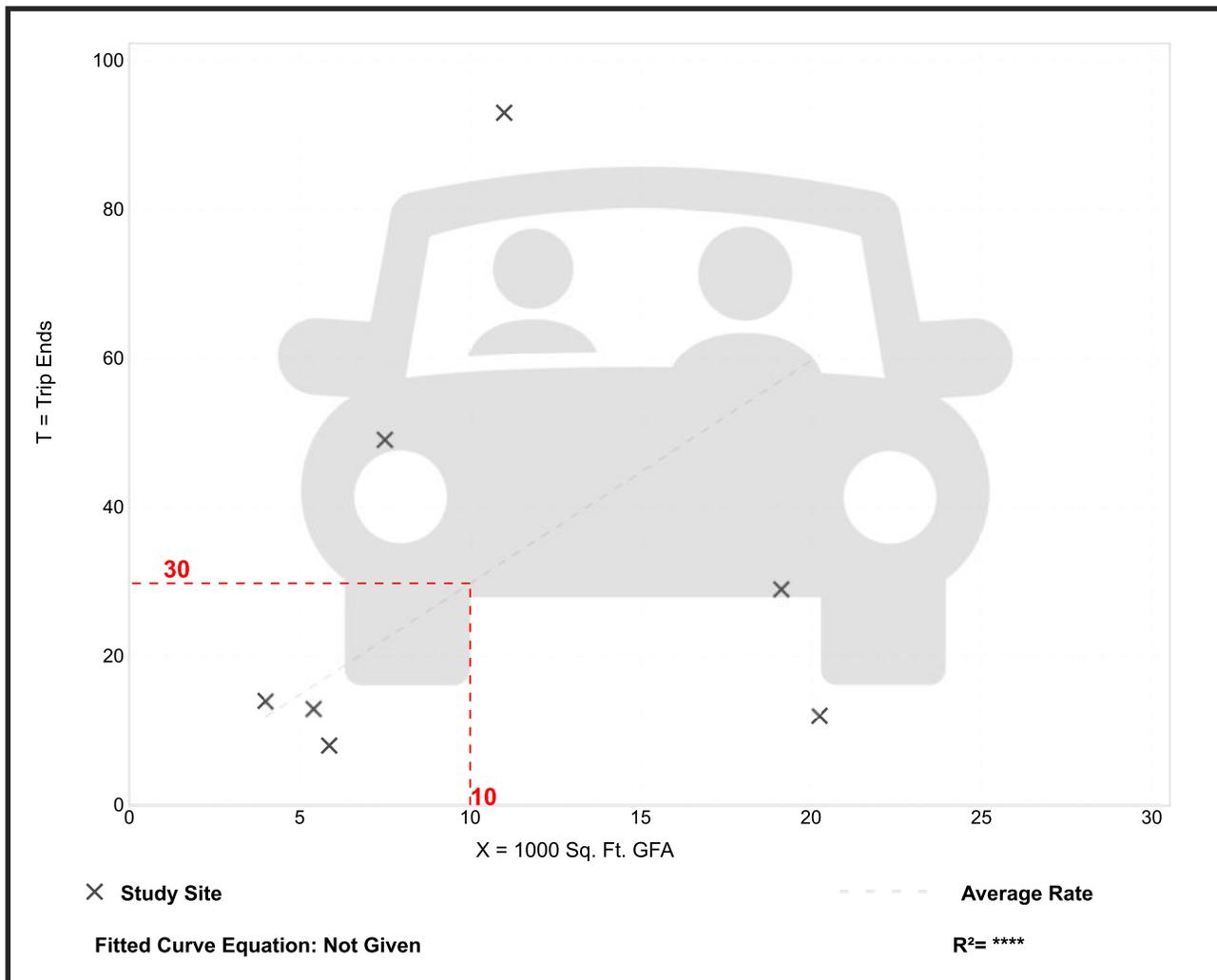
# Hardware/Paint Store (816)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 4 and 6 p.m.**  
**Setting/Location: General Urban/Suburban**  
 Number of Studies: 7  
 Avg. 1000 Sq. Ft. GFA: 10  
 Directional Distribution: 46% entering, 54% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.98	0.59 - 8.45	3.09

## Data Plot and Equation



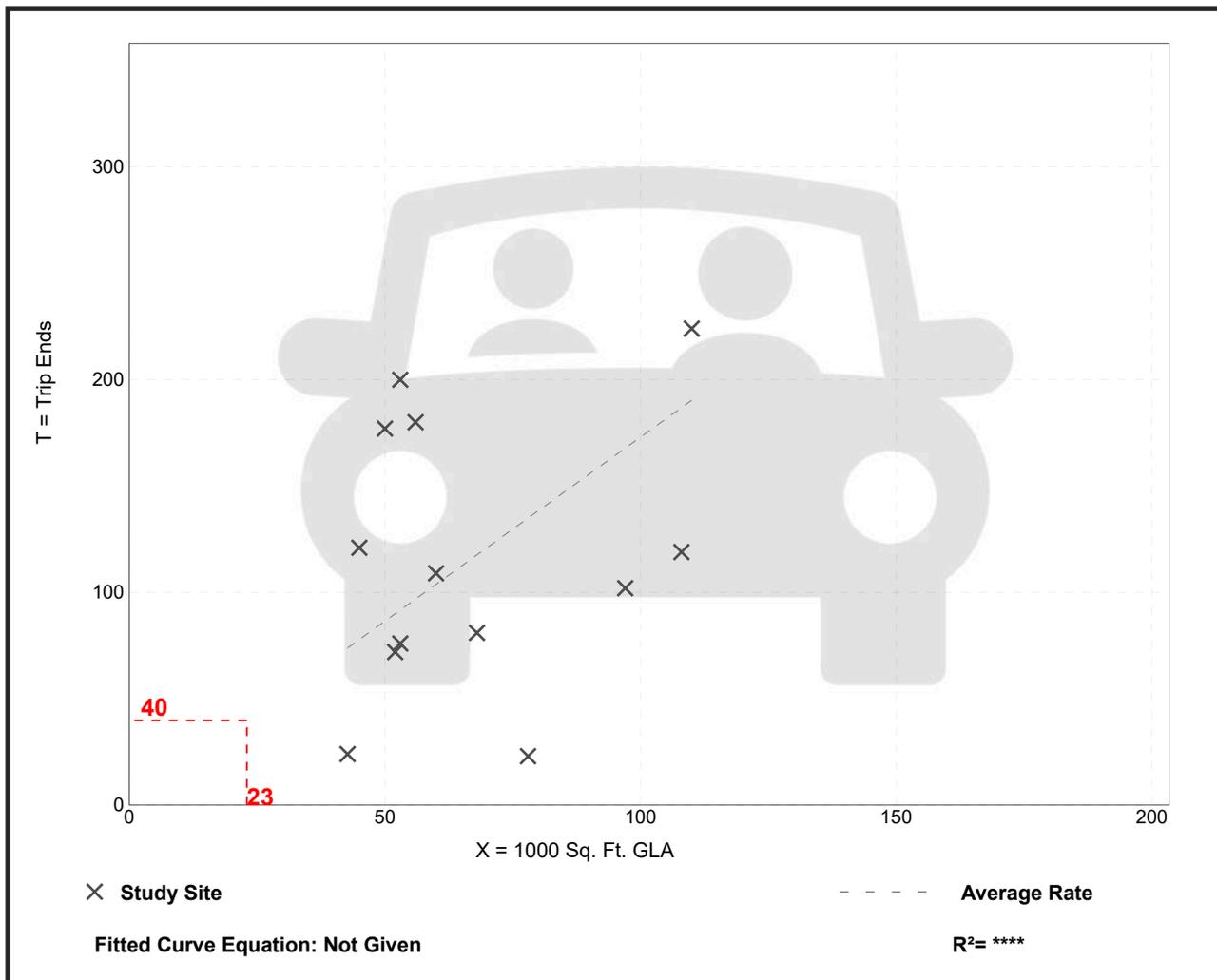
# Shopping Plaza (40-150k) - Supermarket - No (821)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GLA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 7 and 9 a.m.**  
**Setting/Location: General Urban/Suburban**  
 Number of Studies: 13  
 Avg. 1000 Sq. Ft. GLA: 67  
 Directional Distribution: 62% entering, 38% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
1.73	0.29 - 3.77	1.06

## Data Plot and Equation



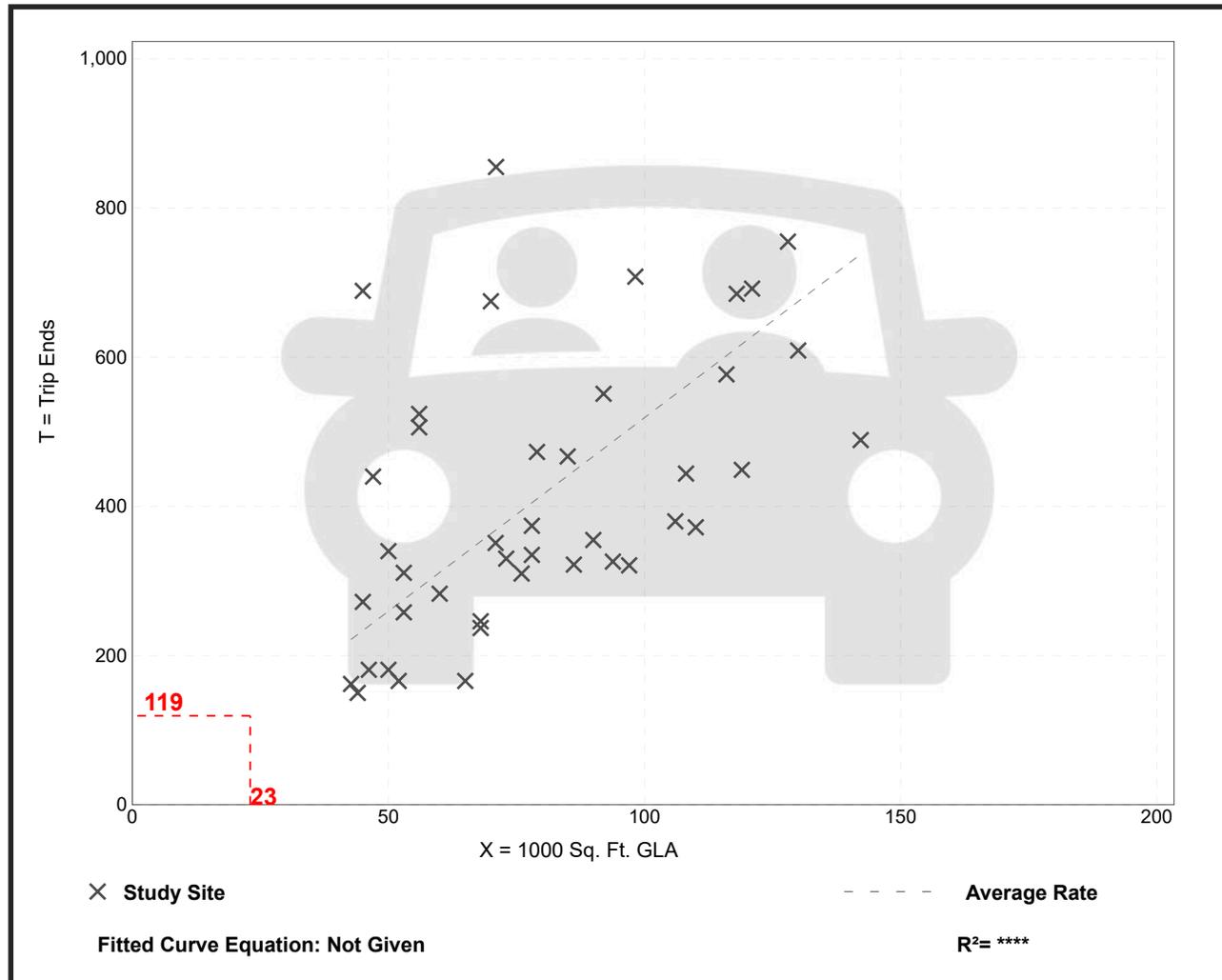
# Shopping Plaza (40-150k) - Supermarket - No (821)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GLA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 4 and 6 p.m.**  
**Setting/Location: General Urban/Suburban**  
 Number of Studies: 42  
 Avg. 1000 Sq. Ft. GLA: 79  
 Directional Distribution: 49% entering, 51% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
5.19	2.55 - 15.31	2.28

## Data Plot and Equation



# Strip Retail Plaza (<40k) (822)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GLA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 7 and 9 a.m.**

**Setting/Location: General Urban/Suburban**

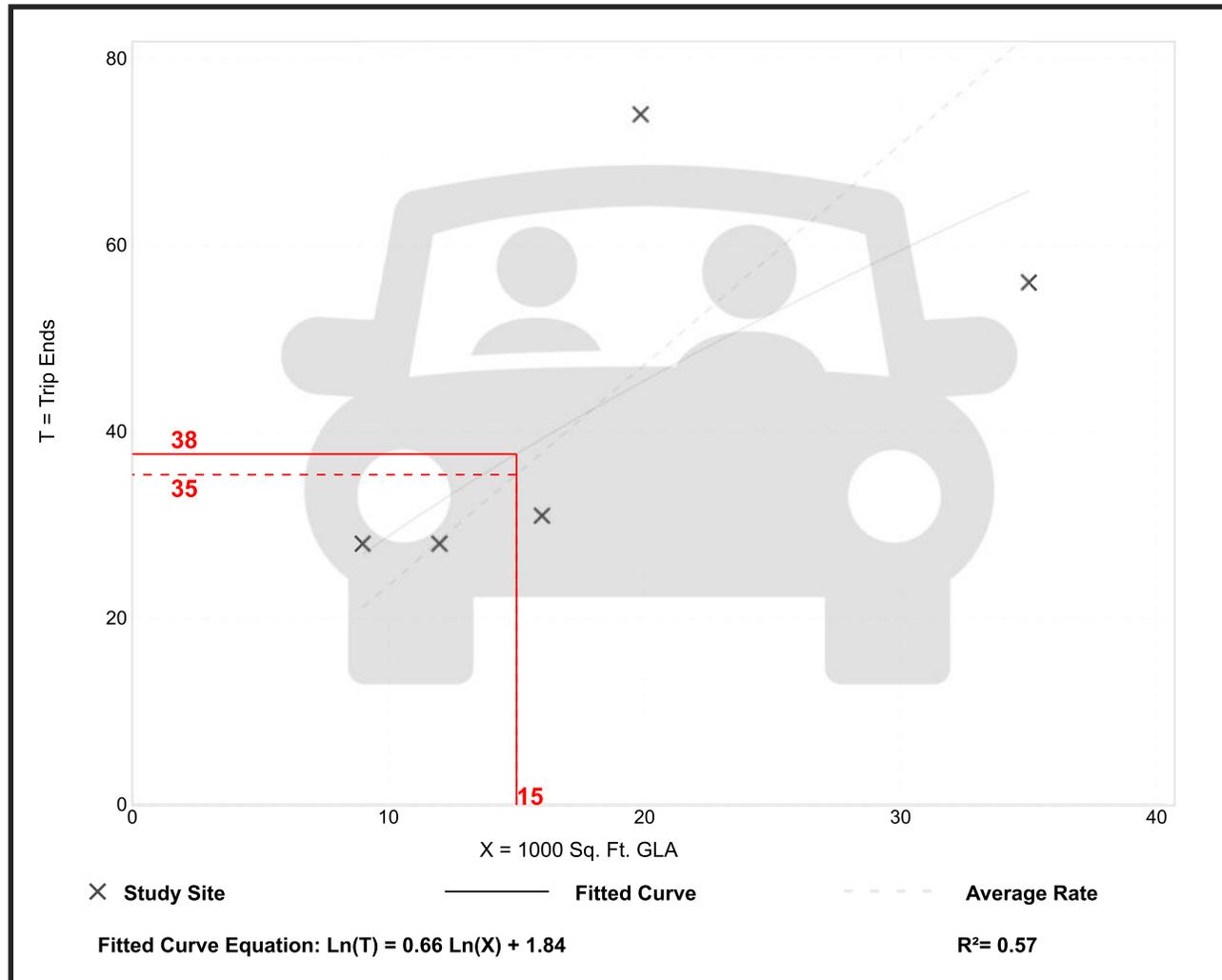
Number of Studies: 5  
 Avg. 1000 Sq. Ft. GLA: 18  
 Directional Distribution: 60% entering, 40% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
2.36	1.60 - 3.73	0.94

## Data Plot and Equation

*Caution – Small Sample Size*



# Strip Retail Plaza (<40k) (822)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GLA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 4 and 6 p.m.**

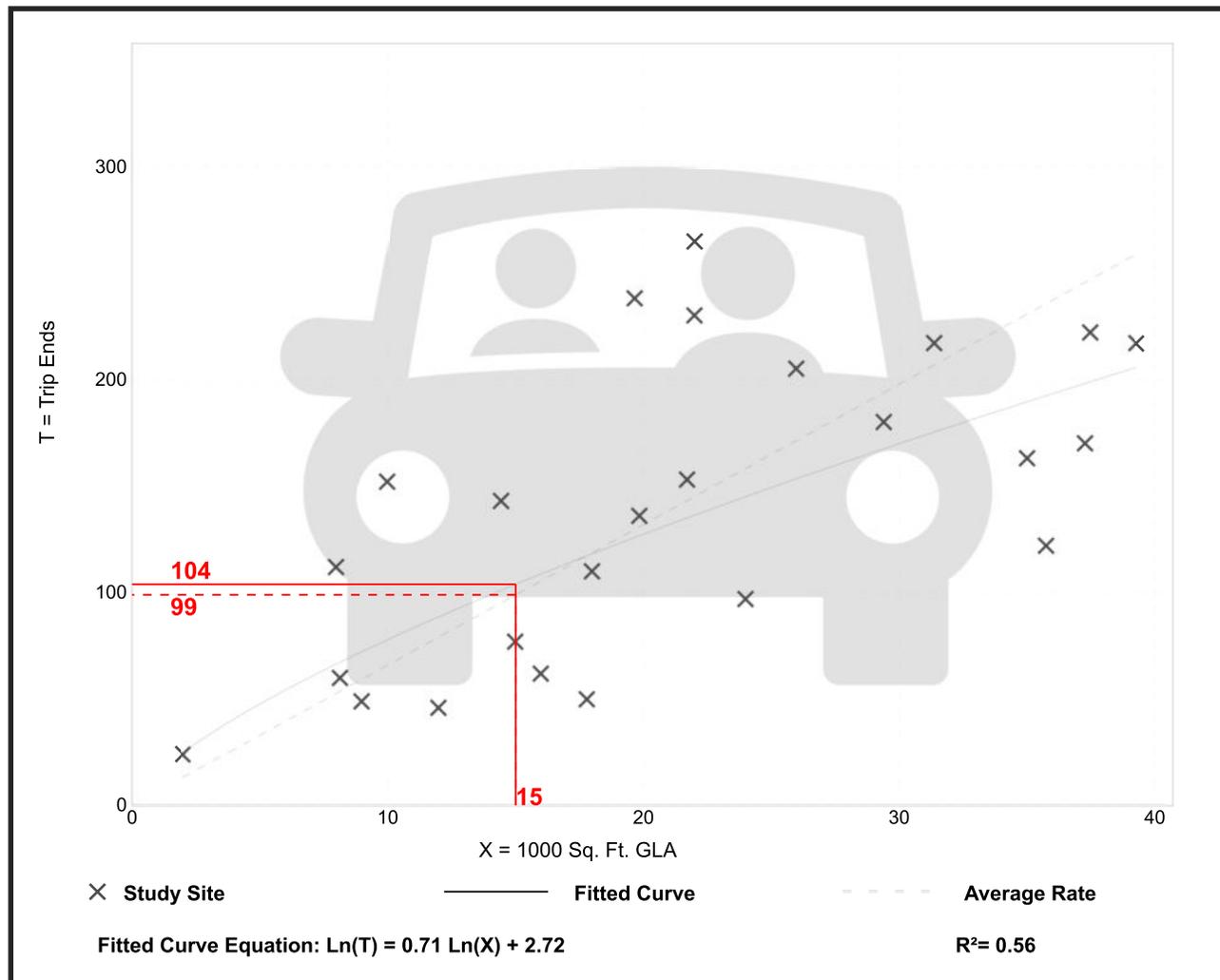
**Setting/Location: General Urban/Suburban**

Number of Studies: 25  
 Avg. 1000 Sq. Ft. GLA: 21  
 Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.59	2.81 - 15.20	2.94

## Data Plot and Equation



# Tire Superstore (849)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 7 and 9 a.m.**

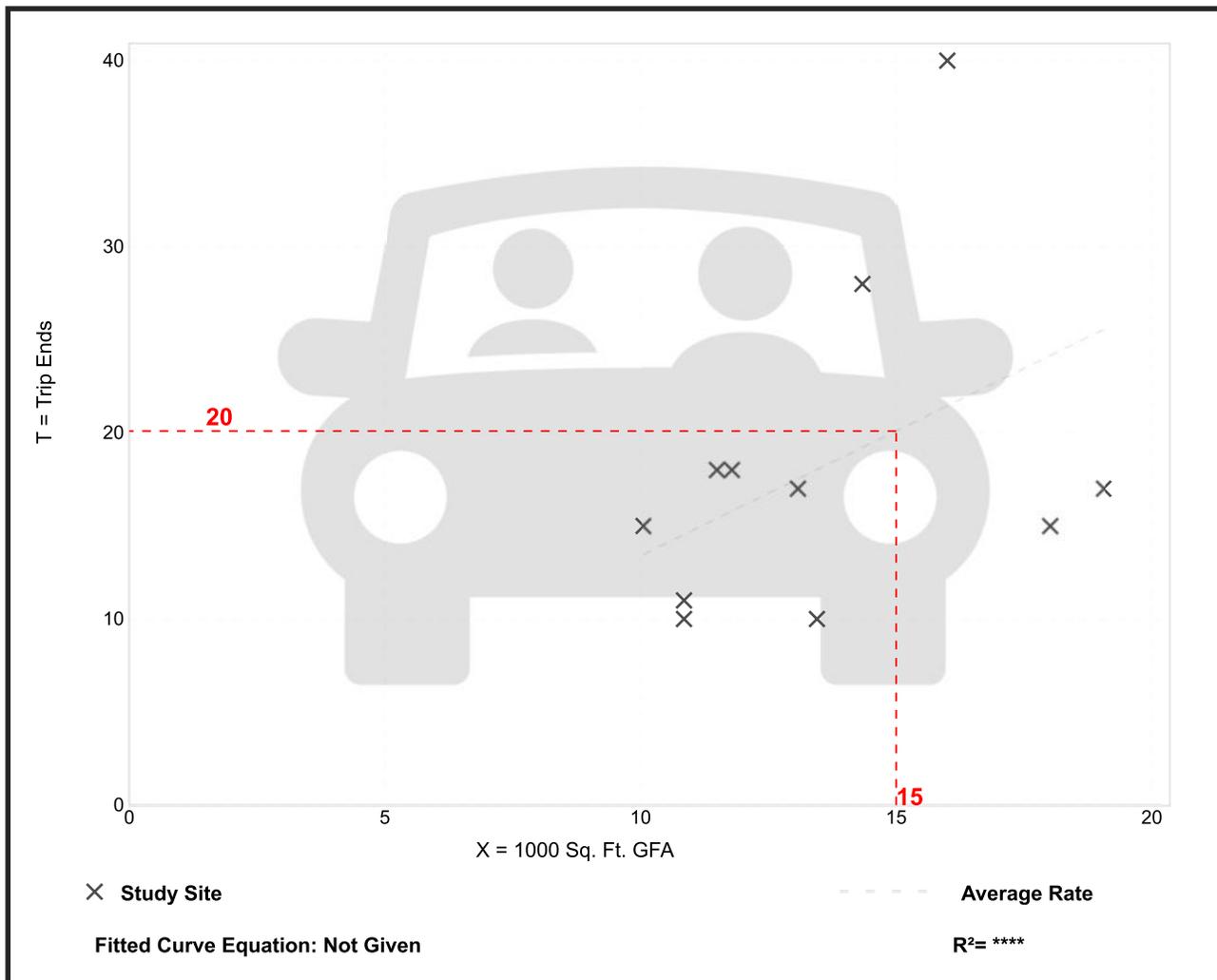
**Setting/Location: General Urban/Suburban**

Number of Studies: 11  
 Avg. 1000 Sq. Ft. GFA: 14  
 Directional Distribution: 65% entering, 35% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.34	0.74 - 2.50	0.57

## Data Plot and Equation



# Tire Superstore (849)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 4 and 6 p.m.**

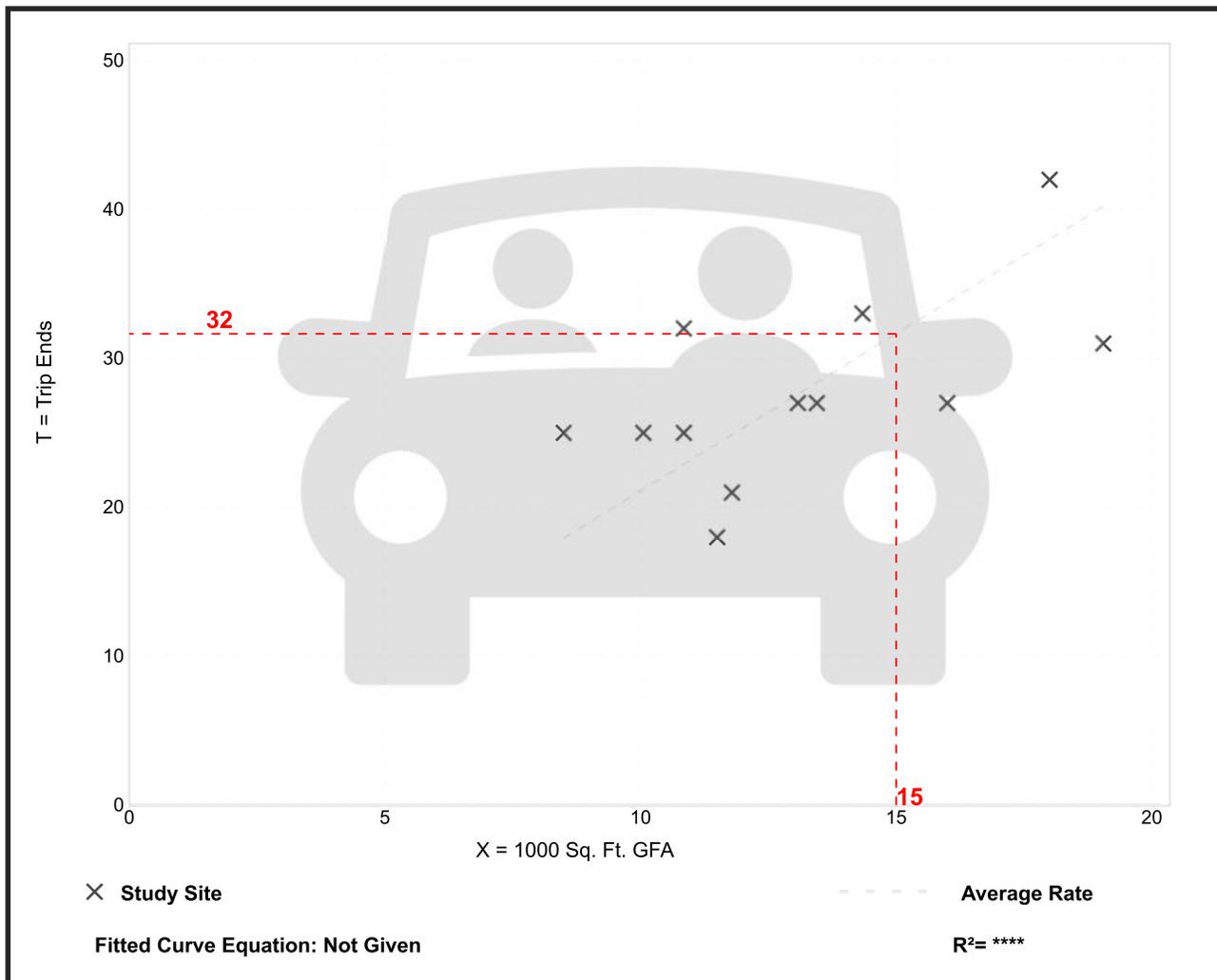
**Setting/Location: General Urban/Suburban**

Number of Studies: 12  
 Avg. 1000 Sq. Ft. GFA: 13  
 Directional Distribution: 47% entering, 53% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.11	1.57 - 2.95	0.45

## Data Plot and Equation



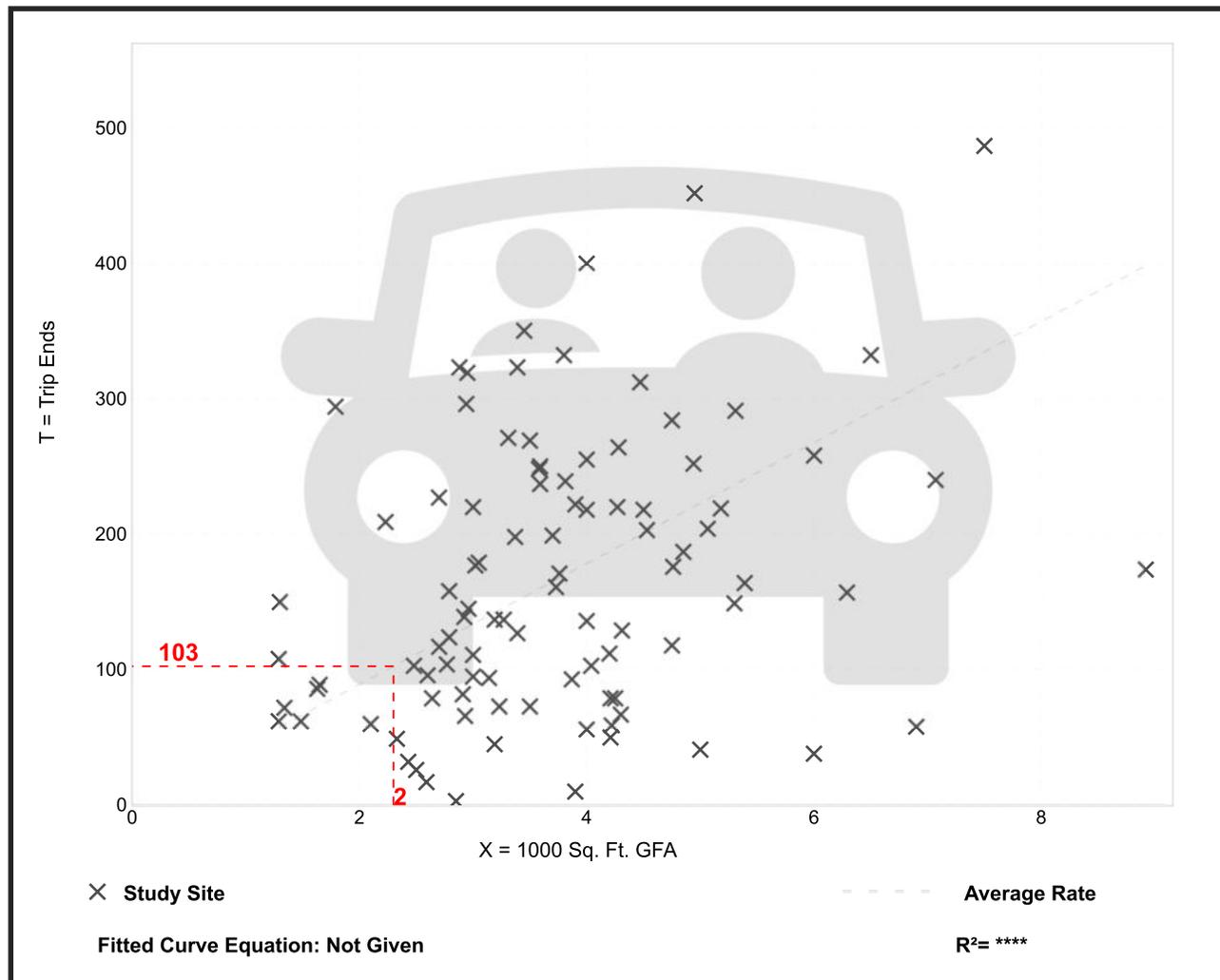
# Fast-Food Restaurant with Drive-Through Window (934)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 7 and 9 a.m.**  
**Setting/Location: General Urban/Suburban**  
 Number of Studies: 96  
 Avg. 1000 Sq. Ft. GFA: 4  
 Directional Distribution: 51% entering, 49% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14

## Data Plot and Equation



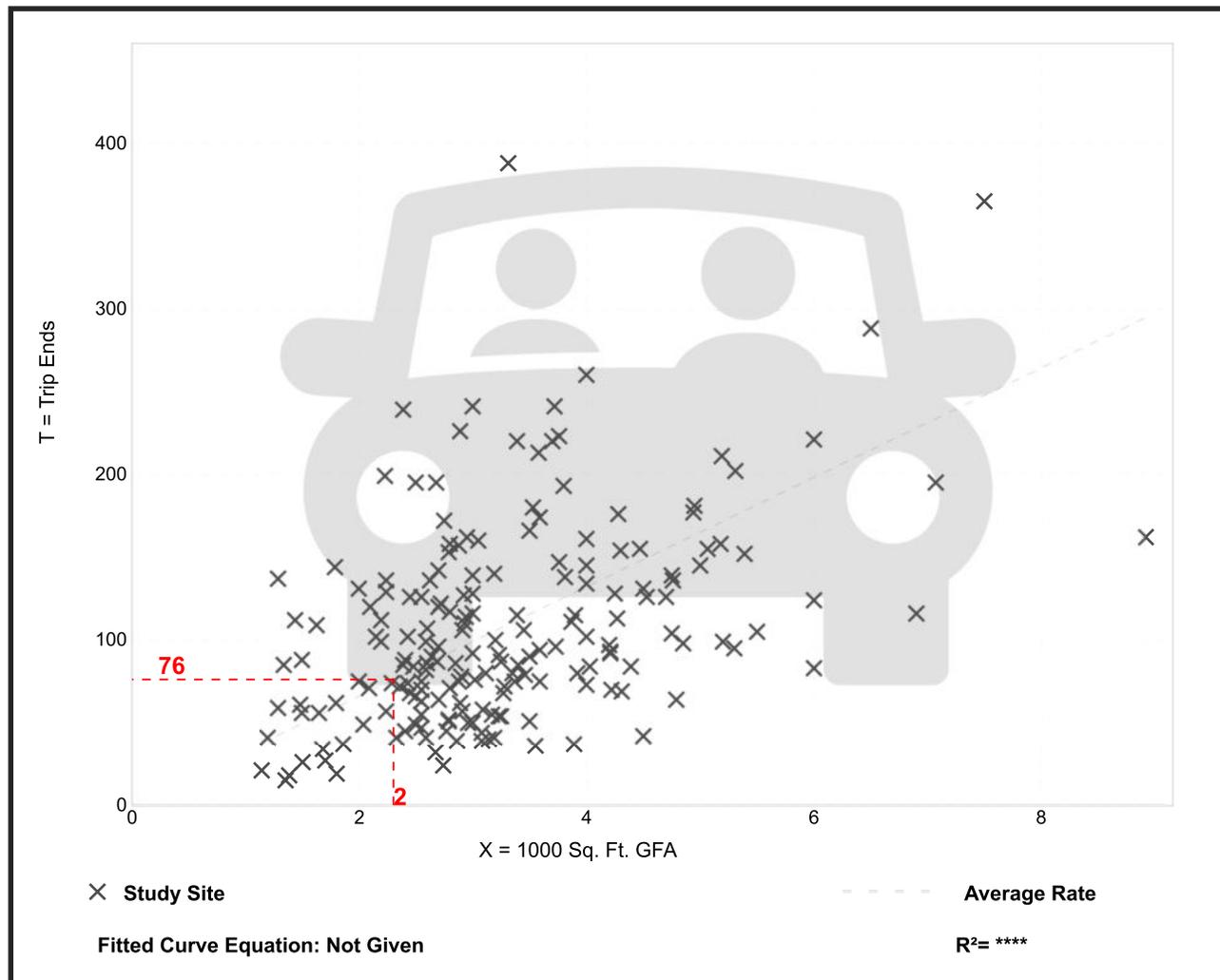
# Fast-Food Restaurant with Drive-Through Window (934)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 4 and 6 p.m.**  
**Setting/Location: General Urban/Suburban**  
 Number of Studies: 190  
 Avg. 1000 Sq. Ft. GFA: 3  
 Directional Distribution: 52% entering, 48% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59

## Data Plot and Equation



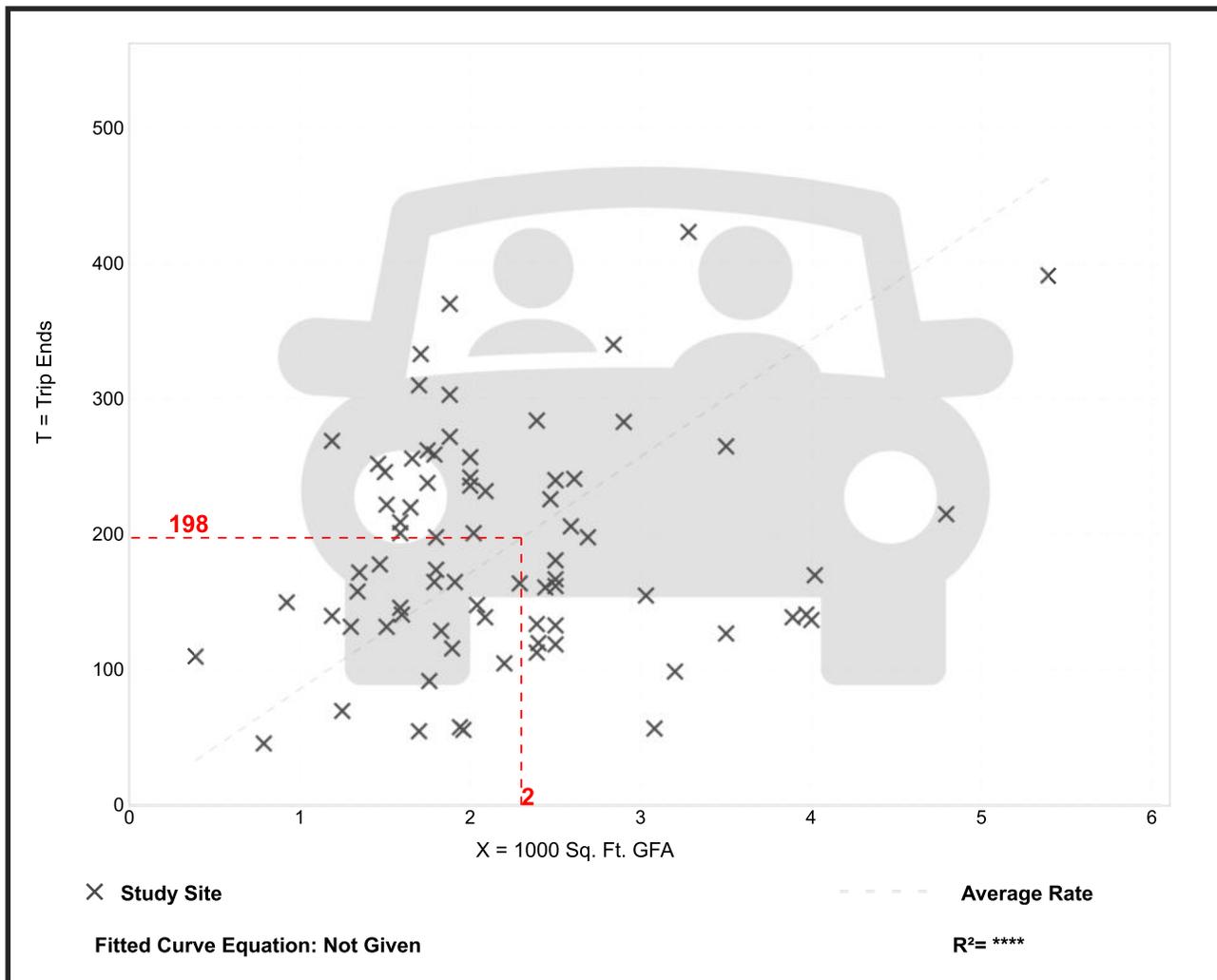
# Coffee/Donut Shop with Drive-Through Window (937)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA  
 On a: Weekday,  
 Peak Hour of Adjacent Street Traffic,  
 One Hour Between 7 and 9 a.m.  
 Setting/Location: General Urban/Suburban  
 Number of Studies: 78  
 Avg. 1000 Sq. Ft. GFA: 2  
 Directional Distribution: 51% entering, 49% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
85.88	18.51 - 282.05	44.92

## Data Plot and Equation



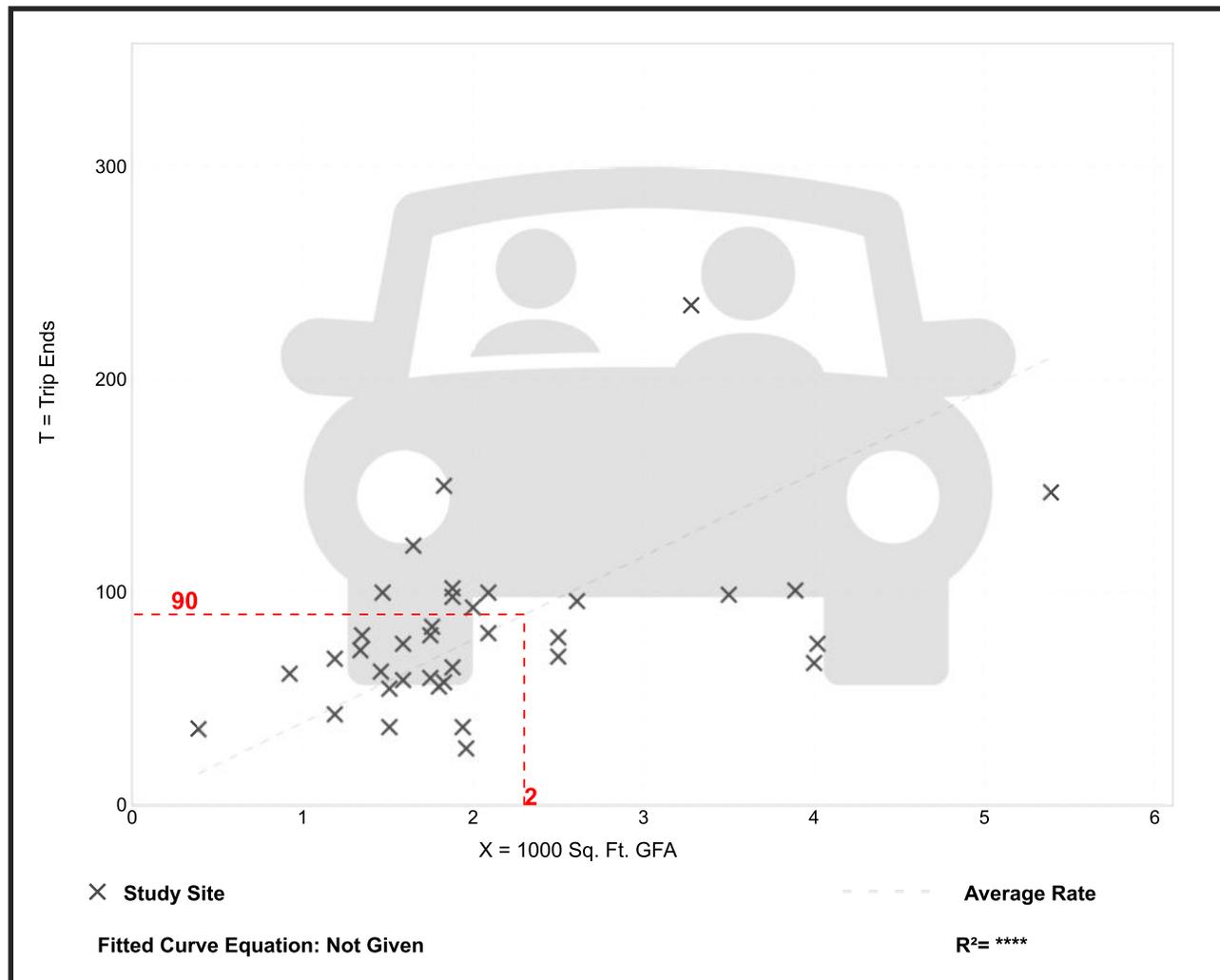
# Coffee/Donut Shop with Drive-Through Window (937)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 4 and 6 p.m.**  
**Setting/Location: General Urban/Suburban**  
 Number of Studies: 36  
 Avg. 1000 Sq. Ft. GFA: 2  
 Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
38.99	13.78 - 92.31	17.79

## Data Plot and Equation



# Drinking Place (975)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 4 and 6 p.m.**

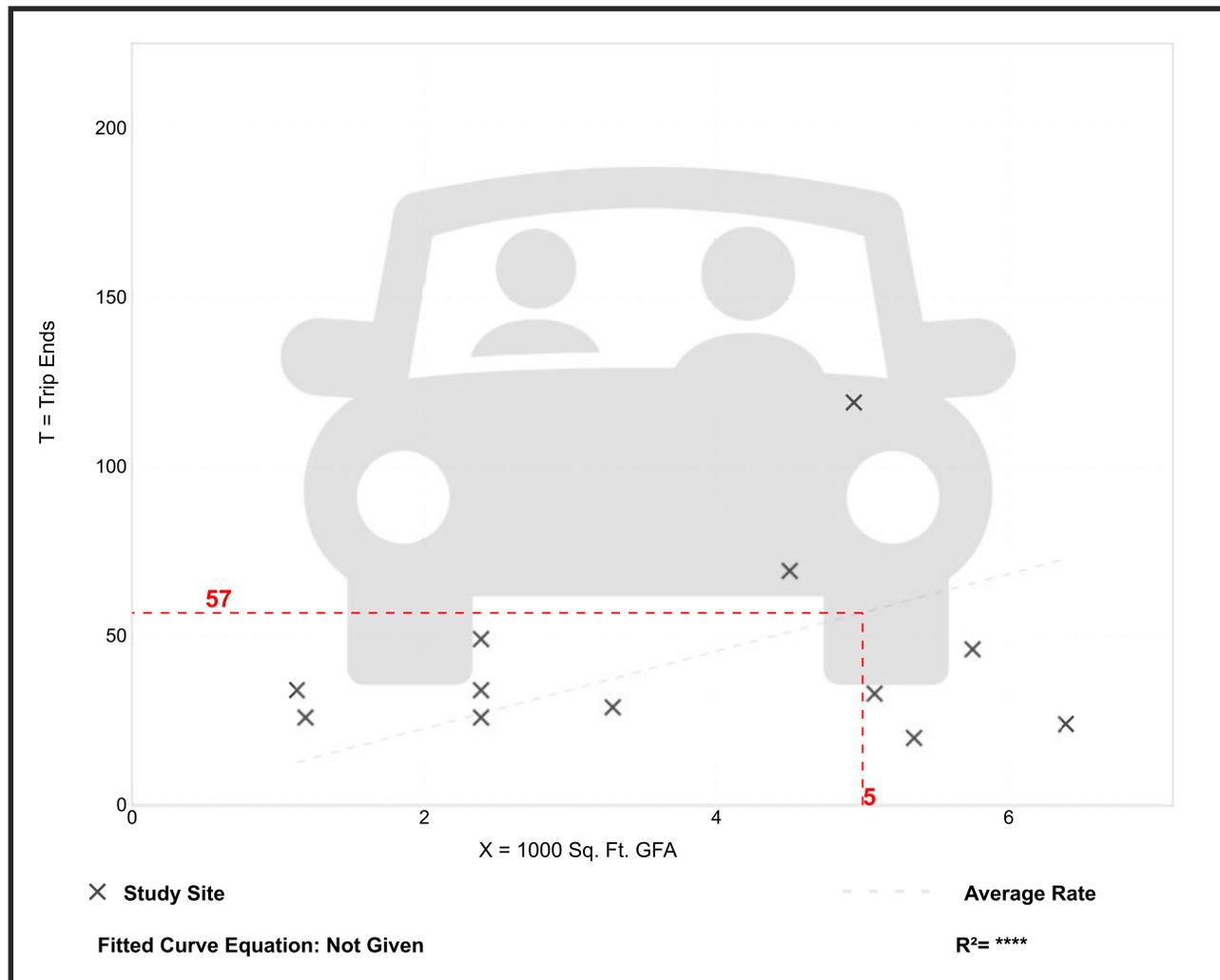
**Setting/Location: General Urban/Suburban**

Number of Studies: 12  
 Avg. 1000 Sq. Ft. GFA: 4  
 Directional Distribution: 66% entering, 34% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.36	3.74 - 30.09	7.81

## Data Plot and Equation



## Turn Lane Length Computation Worksheet (Based on ODOT's Location Design Manual)

Project Name: Hyland Croy - Meijer Retail Dev  
 Project Number: \_\_\_\_\_  
 Compiled By: MIM - ACD, Inc.

Intersection: Hyland Croy & Moorland  
 Year: 2046  
 Condition: \_\_\_\_\_

**General Information:**

<b>Approach</b>	Southbound	Northbound		
<b>Movement</b>	Right	Left		
<b>Peak Hour</b>	AM Peak	PM Peak		

**Type of Traffic Control**

<b>Signalized</b>	YES	YES	YES	YES
<b>Unsignalized Stopped Crossroad</b>	NO	NO	NO	NO
<b>Unsignalized Through Road</b>	NO	NO	NO	NO

**Design Parameters**

<b>Design Speed</b>	45	45		
<b>Turn Volume (vph)</b>	437	366		
<b>Approach Volume (vph)</b>	1091	1313		
<b>Turn Percentage</b>	40%	28%	#DIV/0!	#DIV/0!
<b>High or Low</b>	HIGH	HIGH	#DIV/0!	#DIV/0!
<b>Applicable Design Condition (A, B or C)</b>	Greater of B or C	Greater of B or C	A	A
<b>Cycle Length (sec)</b>	100	100		
<b>Cycles/Hour</b>	36	36	#DIV/0!	#DIV/0!
<b>Average Number of Vehicles/Cycle</b>	13	11	#DIV/0!	#DIV/0!
<b>Storage Length (ft)</b>	475	400	#DIV/0!	#DIV/0!

**Design Method**

<b>Condition A (Storage Only)</b>	<b>Taper</b>	-	-	50	50
	<b>Storage</b>	-	-	#DIV/0!	#DIV/0!
	<b>Total</b>	-	-	#DIV/0!	#DIV/0!
<b>Condition B (High Speed Decel Only)</b>	<b>Taper</b>	50	50	-	-
	<b>Decel Length</b>	125	125	-	-
	<b>Total</b>	175	175	-	-
<b>Condition C (Moderate Speed Deceleration &amp; Storage)</b>	<b>Taper</b>	50	50	-	-
	<b>Decel Length</b>	75	75	-	-
	<b>Storage</b>	475	400	-	-
	<b>Total</b>	600	525	-	-

<b>Required Storage and/or Decel Length (ft/lane) =</b>	<b>550</b>	<b>475</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>
<b>Required Turn Lane Length, including 50' taper (ft/lane) =</b>	<b>600</b>	<b>525</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>

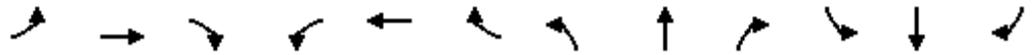
Note: EB - Eastbound, WB - Westbound, NB - Northbound, SB - Southbound

Source: January 2006 ODOT L&D Manual-Volume I: 401 - 9E, 401 -10E

## **Synchro Intersection Analysis**

HCM 6th Signalized Intersection Summary  
 10: Hyland Croy & Park Mill

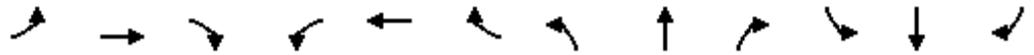
2026 AM Peak  
 12/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Volume (veh/h)	22	3	59	61	3	16	18	404	22	19	889	15
Future Volume (veh/h)	22	3	59	61	3	16	18	404	22	19	889	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	3	64	66	3	17	20	439	24	21	966	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	12	90	161	5	23	445	1446	79	791	1539	1305
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.82	0.82	0.82	0.82	0.82	0.82
Sat Flow, veh/h	343	161	1196	1186	71	310	573	1757	96	929	1870	1585
Grp Volume(v), veh/h	91	0	0	86	0	0	20	0	463	21	966	16
Grp Sat Flow(s),veh/h/ln	1700	0	0	1567	0	0	573	0	1853	929	1870	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	1.2	0.0	5.2	0.5	16.8	0.2
Cycle Q Clear(g_c), s	4.4	0.0	0.0	4.5	0.0	0.0	17.9	0.0	5.2	5.7	16.8	0.2
Prop In Lane	0.26		0.70	0.77		0.20	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	180	0	0	190	0	0	445	0	1525	791	1539	1305
V/C Ratio(X)	0.51	0.00	0.00	0.45	0.00	0.00	0.04	0.00	0.30	0.03	0.63	0.01
Avail Cap(c_a), veh/h	376	0	0	367	0	0	445	0	1525	791	1539	1305
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	0.0	40.0	0.0	0.0	6.2	0.0	1.8	2.5	2.9	1.4
Incr Delay (d2), s/veh	2.2	0.0	0.0	1.7	0.0	0.0	0.2	0.0	0.5	0.1	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	1.9	0.0	0.0	0.1	0.0	0.7	0.1	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.2	0.0	0.0	41.7	0.0	0.0	6.3	0.0	2.4	2.6	4.8	1.4
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		91			86			483			1003	
Approach Delay, s/veh		42.2			41.7			2.5			4.7	
Approach LOS		D			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		77.5		11.2		77.5		11.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		73.0		18.0		73.0		18.0				
Max Q Clear Time (g_c+I1), s		19.9		6.4		18.8		6.5				
Green Ext Time (p_c), s		3.1		0.3		9.2		0.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				8.0								
HCM 6th LOS				A								

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	0	400	31	0	8	206	300	5	10	654	437
Future Volume (veh/h)	188	0	400	31	0	8	206	300	5	10	654	437
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	204	0	435	34	0	9	224	326	5	11	711	475
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	483	0	502	141	0	275	287	1080	915	540	811	831
Arrive On Green	0.09	0.00	0.32	0.17	0.00	0.17	0.09	0.58	0.58	0.43	0.43	0.43
Sat Flow, veh/h	1781	0	1585	954	0	1585	1781	1870	1585	1049	1870	1585
Grp Volume(v), veh/h	204	0	435	34	0	9	224	326	5	11	711	475
Grp Sat Flow(s),veh/h/ln	1781	0	1585	954	0	1585	1781	1870	1585	1049	1870	1585
Q Serve(g_s), s	7.7	0.0	22.0	3.0	0.0	0.4	5.5	7.6	0.1	0.5	29.5	17.3
Cycle Q Clear(g_c), s	7.7	0.0	22.0	12.7	0.0	0.4	5.5	7.6	0.1	0.5	29.5	17.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	483	0	502	141	0	275	287	1080	915	540	811	831
V/C Ratio(X)	0.42	0.00	0.87	0.24	0.00	0.03	0.78	0.30	0.01	0.02	0.88	0.57
Avail Cap(c_a), veh/h	483	0	563	177	0	335	358	1337	1133	642	994	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	0.0	27.3	39.1	0.0	29.2	18.2	9.2	7.6	13.8	22.0	13.7
Incr Delay (d2), s/veh	0.6	0.0	12.4	0.9	0.0	0.0	8.5	0.2	0.0	0.0	7.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	9.8	0.7	0.0	0.2	2.5	2.6	0.0	0.1	13.0	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	0.0	39.7	40.0	0.0	29.3	26.7	9.4	7.6	13.8	29.6	14.4
LnGrp LOS	C	A	D	D	A	C	C	A	A	B	C	B
Approach Vol, veh/h		639			43			555			1197	
Approach Delay, s/veh		35.0			37.7			16.3			23.4	
Approach LOS		D			D			B			C	
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		53.6		31.5	12.2	41.4	12.2	19.3				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s		60.8		30.2	11.1	45.2	7.7	18.0				
Max Q Clear Time (g_c+I1), s		9.6		24.0	7.5	31.5	9.7	14.7				
Green Ext Time (p_c), s		1.9		1.6	0.2	5.4	0.0	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				25.1								
HCM 6th LOS				C								

Intersection												
Int Delay, s/veh	141.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↑	↔	↔	↑	↔
Traffic Vol, veh/h	156	0	95	16	0	4	82	474	3	1	953	135
Future Vol, veh/h	156	0	95	16	0	4	82	474	3	1	953	135
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	170	0	103	17	0	4	89	515	3	1	1036	147

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1735	1734	1036	1856	1878	515	1183	0	0	518	0	0
Stage 1	1038	1038	-	693	693	-	-	-	-	-	-	-
Stage 2	697	696	-	1163	1185	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 69	88	281	56	71	560	590	-	-	1048	-	-
Stage 1	279	308	-	434	445	-	-	-	-	-	-	-
Stage 2	431	443	-	237	263	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 61	75	281	31	60	560	590	-	-	1048	-	-
Mov Cap-2 Maneuver	~ 61	75	-	31	60	-	-	-	-	-	-	-
Stage 1	237	308	-	368	378	-	-	-	-	-	-	-
Stage 2	363	376	-	150	263	-	-	-	-	-	-	-

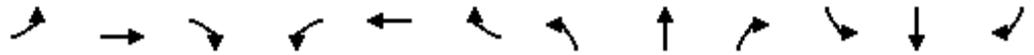
Approach	EB		WB		NB		SB	
HCM Control Delay, \$	1064.9		178.3		1.8		0	
HCM LOS	F		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	590	-	-	87	31	560	1048	-	-
HCM Lane V/C Ratio	0.151	-	-	3.136	0.561	0.008	0.001	-	-
HCM Control Delay (s)	12.2	-	-	\$ 1064.9	220	11.5	8.4	-	-
HCM Lane LOS	B	-	-	F	F	B	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	27	1.8	0	0	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

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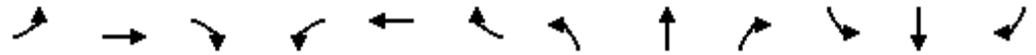
2026 PM Peak  
 12/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↘		↗	↘	↗
Traffic Volume (veh/h)	24	3	23	57	3	16	69	797	69	15	802	18
Future Volume (veh/h)	24	3	23	57	3	16	69	797	69	15	802	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	3	25	62	3	17	75	866	75	16	872	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	19	56	158	5	23	471	1281	111	413	1356	1149
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.05	0.75	0.75	0.02	0.72	0.72
Sat Flow, veh/h	648	265	787	1186	69	328	1781	1697	147	1781	1870	1585
Grp Volume(v), veh/h	54	0	0	82	0	0	75	0	941	16	872	20
Grp Sat Flow(s),veh/h/ln	1700	0	0	1584	0	0	1781	0	1844	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	0.0	0.9	0.0	22.2	0.2	20.9	0.3
Cycle Q Clear(g_c), s	2.5	0.0	0.0	4.2	0.0	0.0	0.9	0.0	22.2	0.2	20.9	0.3
Prop In Lane	0.48		0.46	0.76		0.21	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	183	0	0	186	0	0	471	0	1392	413	1356	1149
V/C Ratio(X)	0.30	0.00	0.00	0.44	0.00	0.00	0.16	0.00	0.68	0.04	0.64	0.02
Avail Cap(c_a), veh/h	386	0	0	380	0	0	498	0	1392	483	1356	1149
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	0.0	0.0	39.3	0.0	0.0	5.2	0.0	5.3	5.2	6.2	3.3
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.6	0.0	0.0	0.2	0.0	2.7	0.0	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	1.8	0.0	0.0	0.2	0.0	5.6	0.0	5.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.5	0.0	0.0	40.9	0.0	0.0	5.3	0.0	8.0	5.2	8.5	3.4
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		54			82			1016			908	
Approach Delay, s/veh		39.5			40.9			7.8			8.3	
Approach LOS		D			D			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	70.1		10.7	8.7	67.5		10.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	63.5		18.0	5.5	63.0		18.0				
Max Q Clear Time (g_c+I1), s	2.2	24.2		4.5	2.9	22.9		6.2				
Green Ext Time (p_c), s	0.0	8.3		0.2	0.0	7.2		0.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				10.2								
HCM 6th LOS				B								

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	0	333	12	0	5	366	760	10	15	451	337
Future Volume (veh/h)	360	0	333	12	0	5	366	760	10	15	451	337
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	391	0	362	13	0	5	398	826	11	16	490	366
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	554	0	515	227	0	515	456	1031	874	228	590	500
Arrive On Green	0.32	0.00	0.32	0.32	0.00	0.32	0.17	0.55	0.55	0.32	0.32	0.32
Sat Flow, veh/h	1411	0	1585	1020	0	1585	1781	1870	1585	657	1870	1585
Grp Volume(v), veh/h	391	0	362	13	0	5	398	826	11	16	490	366
Grp Sat Flow(s),veh/h/ln	1411	0	1585	1020	0	1585	1781	1870	1585	657	1870	1585
Q Serve(g_s), s	18.8	0.0	14.5	0.8	0.0	0.2	10.1	25.8	0.2	1.5	17.6	14.9
Cycle Q Clear(g_c), s	19.0	0.0	14.5	15.3	0.0	0.2	10.1	25.8	0.2	10.1	17.6	14.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	554	0	515	227	0	515	456	1031	874	228	590	500
V/C Ratio(X)	0.71	0.00	0.70	0.06	0.00	0.01	0.87	0.80	0.01	0.07	0.83	0.73
Avail Cap(c_a), veh/h	670	0	644	310	0	644	551	1327	1125	297	786	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	0.0	21.4	28.2	0.0	16.6	14.9	13.1	7.4	24.0	23.0	22.1
Incr Delay (d2), s/veh	2.6	0.0	2.5	0.1	0.0	0.0	12.6	2.8	0.0	0.1	5.7	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	5.5	0.2	0.0	0.1	4.7	8.9	0.1	0.2	7.7	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	0.0	24.0	28.3	0.0	16.6	27.5	15.9	7.4	24.2	28.7	24.9
LnGrp LOS	C	A	C	C	A	B	C	B	A	C	C	C
Approach Vol, veh/h		753			18			1235			872	
Approach Delay, s/veh		24.9			25.0			19.5			27.1	
Approach LOS		C			C			B			C	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		44.5		28.1	17.1	27.4		28.1				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		51.5		29.5	16.5	30.5		29.5				
Max Q Clear Time (g_c+I1), s		27.8		21.0	12.1	19.6		17.3				
Green Ext Time (p_c), s		5.9		2.6	0.5	3.3		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				23.2								
HCM 6th LOS				C								

Intersection												
Int Delay, s/veh	305.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↵	↶		↵	↶	↶	↵	↶	↶
Traffic Vol, veh/h	143	0	115	16	0	4	155	810	7	1	887	105
Future Vol, veh/h	143	0	115	16	0	4	155	810	7	1	887	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	155	0	125	17	0	4	168	880	8	1	964	114

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2188	2190	964	2302	2296	880	1078	0	0	888	0	0
Stage 1	966	966	-	1216	1216	-	-	-	-	-	-	-
Stage 2	1222	1224	-	1086	1080	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 33	45	310	27	39	346	647	-	-	763	-	-
Stage 1	306	333	-	221	254	-	-	-	-	-	-	-
Stage 2	220	252	-	262	294	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 26	33	310	~ 13	29	346	647	-	-	763	-	-
Mov Cap-2 Maneuver	~ 26	33	-	~ 13	29	-	-	-	-	-	-	-
Stage 1	226	333	-	164	188	-	-	-	-	-	-	-
Stage 2	161	186	-	156	294	-	-	-	-	-	-	-

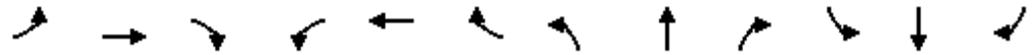
Approach	EB		WB		NB		SB	
HCM Control Delay, \$	2598.3		621.7		2		0	
HCM LOS	F		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	647	-	-	44	13	346	763	-	-
HCM Lane V/C Ratio	0.26	-	-	6.374	1.338	0.013	0.001	-	-
HCM Control Delay (s)	12.5	-	-	2598.3	773.2	15.5	9.7	-	-
HCM Lane LOS	B	-	-	F	F	C	A	-	-
HCM 95th %tile Q(veh)	1	-	-	32.8	2.8	0	0	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th Signalized Intersection Summary  
 10: Hyland Croy & Park Mill

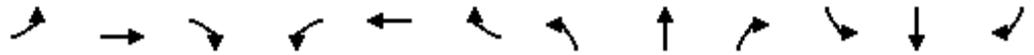
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Volume (veh/h)	22	3	59	61	3	16	18	463	22	19	1011	15
Future Volume (veh/h)	22	3	59	61	3	16	18	463	22	19	1011	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	3	64	66	3	17	20	503	24	21	1099	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	12	90	166	5	24	315	1316	63	687	1392	1179
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.02	0.74	0.74	0.02	0.74	0.74
Sat Flow, veh/h	343	160	1192	1206	70	314	1781	1771	84	1781	1870	1585
Grp Volume(v), veh/h	91	0	0	86	0	0	20	0	527	21	1099	16
Grp Sat Flow(s),veh/h/ln	1694	0	0	1590	0	0	1781	0	1855	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	8.7	0.2	31.1	0.2
Cycle Q Clear(g_c), s	4.3	0.0	0.0	4.2	0.0	0.0	0.2	0.0	8.7	0.2	31.1	0.2
Prop In Lane	0.26		0.70	0.77		0.20	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	182	0	0	195	0	0	315	0	1379	687	1392	1179
V/C Ratio(X)	0.50	0.00	0.00	0.44	0.00	0.00	0.06	0.00	0.38	0.03	0.79	0.01
Avail Cap(c_a), veh/h	389	0	0	383	0	0	380	0	1379	750	1392	1179
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	0.0	0.0	38.4	0.0	0.0	8.3	0.0	3.9	2.8	6.8	2.8
Incr Delay (d2), s/veh	2.1	0.0	0.0	1.6	0.0	0.0	0.1	0.0	0.8	0.0	4.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	1.8	0.0	0.0	0.1	0.0	2.2	0.0	8.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	0.0	0.0	40.0	0.0	0.0	8.3	0.0	4.7	2.8	11.4	2.8
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	B	A
Approach Vol, veh/h		91			86			547			1136	
Approach Delay, s/veh		40.6			40.0			4.9			11.1	
Approach LOS		D			D			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	68.0		11.0	6.4	68.1		11.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	63.5		18.0	5.0	63.5		18.0				
Max Q Clear Time (g_c+I1), s	2.2	10.7		6.3	2.2	33.1		6.2				
Green Ext Time (p_c), s	0.0	3.4		0.3	0.0	10.5		0.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				12.1								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary  
 100: Hyland Croy & Moorland

2046 AM Peak  
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	0	400	31	0	8	206	374	5	10	815	437
Future Volume (veh/h)	188	0	400	31	0	8	206	374	5	10	815	437
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	204	0	435	34	0	9	224	407	5	11	886	475
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	0	314	129	0	270	255	1071	908	540	921	874
Arrive On Green	0.06	0.00	0.20	0.03	0.00	0.17	0.09	0.57	0.57	0.01	0.49	0.49
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	204	0	435	34	0	9	224	407	5	11	886	475
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	5.7	0.0	19.3	1.5	0.0	0.5	7.2	11.6	0.1	0.3	44.5	18.7
Cycle Q Clear(g_c), s	5.7	0.0	19.3	1.5	0.0	0.5	7.2	11.6	0.1	0.3	44.5	18.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	411	0	314	129	0	270	255	1071	908	540	921	874
V/C Ratio(X)	0.50	0.00	1.38	0.26	0.00	0.03	0.88	0.38	0.01	0.02	0.96	0.54
Avail Cap(c_a), veh/h	411	0	314	165	0	303	255	1071	908	608	934	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.9	0.0	39.0	33.1	0.0	33.7	26.6	11.4	8.9	12.0	23.8	14.0
Incr Delay (d2), s/veh	0.9	0.0	191.6	1.1	0.0	0.0	27.6	0.2	0.0	0.0	20.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	24.2	0.7	0.0	0.2	4.6	4.2	0.0	0.1	22.4	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	0.0	230.7	34.1	0.0	33.7	54.3	11.6	8.9	12.1	44.4	14.7
LnGrp LOS	C	A	F	C	A	C	D	B	A	B	D	B
Approach Vol, veh/h		639			43			636			1372	
Approach Delay, s/veh		167.8			34.1			26.6			33.9	
Approach LOS		F			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.8	60.3	7.5	23.8	13.6	52.5	10.2	21.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	52.7	5.0	19.3	9.1	48.6	5.7	18.6				
Max Q Clear Time (g_c+I1), s	2.3	13.6	3.5	21.3	9.2	46.5	7.7	2.5				
Green Ext Time (p_c), s	0.0	2.4	0.0	0.0	0.0	1.5	0.0	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			64.0									
HCM 6th LOS			E									

Intersection												
Int Delay, s/veh	209.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕		↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	156	0	95	16	0	4	82	545	3	1	1086	135
Future Vol, veh/h	156	0	95	16	0	4	82	545	3	1	1086	135
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	170	0	103	17	0	4	89	592	3	1	1180	147

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1956	1955	1180	2077	2099	592	1327	0	0	595	0	0
Stage 1	1182	1182	-	770	770	-	-	-	-	-	-	-
Stage 2	774	773	-	1307	1329	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 48	64	232	39	52	506	520	-	-	981	-	-
Stage 1	231	263	-	393	410	-	-	-	-	-	-	-
Stage 2	391	409	-	196	224	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 41	53	232	19	43	506	520	-	-	981	-	-
Mov Cap-2 Maneuver	~ 41	53	-	19	43	-	-	-	-	-	-	-
Stage 1	191	263	-	326	340	-	-	-	-	-	-	-
Stage 2	321	339	-	109	224	-	-	-	-	-	-	-

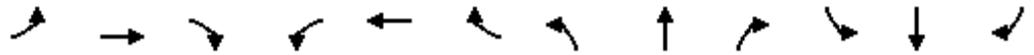
Approach	EB		WB		NB		SB	
HCM Control Delay, \$	1734.7		366.8		1.7		0	
HCM LOS	F		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	520	-	-	60	19	506	981	-	-
HCM Lane V/C Ratio	0.171	-	-	4.547	0.915	0.009	0.001	-	-
HCM Control Delay (s)	13.3	-	-	\$ 1734.7	\$ 455.4	12.2	8.7	-	-
HCM Lane LOS	B	-	-	F	F	B	A	-	-
HCM 95th %tile Q(veh)	0.6	-	-	30	2.5	0	0	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th Signalized Intersection Summary  
 10: Hyland Croy & Park Mill

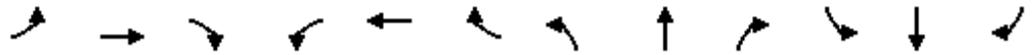
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Volume (veh/h)	24	3	23	57	3	16	69	935	69	15	924	18
Future Volume (veh/h)	24	3	23	57	3	16	69	935	69	15	924	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	3	25	62	3	17	75	1016	75	16	1004	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	19	56	156	5	23	399	1237	91	345	1345	1140
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.72	0.72	0.06	0.72	0.72
Sat Flow, veh/h	648	265	787	1186	70	328	1781	1720	127	1781	1870	1585
Grp Volume(v), veh/h	54	0	0	82	0	0	75	0	1091	16	1004	20
Grp Sat Flow(s),veh/h/ln	1700	0	0	1584	0	0	1781	0	1847	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	0.0	0.9	0.0	35.8	0.2	28.7	0.3
Cycle Q Clear(g_c), s	2.6	0.0	0.0	4.3	0.0	0.0	0.9	0.0	35.8	0.2	28.7	0.3
Prop In Lane	0.48		0.46	0.76		0.21	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	182	0	0	185	0	0	399	0	1329	345	1345	1140
V/C Ratio(X)	0.30	0.00	0.00	0.44	0.00	0.00	0.19	0.00	0.82	0.05	0.75	0.02
Avail Cap(c_a), veh/h	380	0	0	375	0	0	399	0	1329	345	1345	1140
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	0.0	0.0	40.0	0.0	0.0	7.7	0.0	8.5	9.7	7.5	3.5
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.7	0.0	0.0	1.0	0.0	5.8	0.3	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	1.8	0.0	0.0	0.5	0.0	11.0	0.1	8.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.2	0.0	0.0	41.6	0.0	0.0	8.8	0.0	14.3	10.0	11.3	3.6
LnGrp LOS	D	A	A	D	A	A	A	A	B	A	B	A
Approach Vol, veh/h		54			82			1166			1040	
Approach Delay, s/veh		40.2			41.6			13.9			11.2	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	68.0		10.8	9.5	68.0		10.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	63.5		18.0	5.0	63.5		18.0				
Max Q Clear Time (g_c+I1), s	2.2	37.8		4.6	2.9	30.7		6.3				
Green Ext Time (p_c), s	0.0	9.8		0.2	0.0	9.0		0.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				14.3								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary  
 100: Hyland Croy & Moorland

2046 PM Peak  
 12/15/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	0	333	12	0	5	366	937	10	15	665	337
Future Volume (veh/h)	360	0	333	12	0	5	366	937	10	15	665	337
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	391	0	362	13	0	5	398	1018	11	16	723	366
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	412	0	413	122	0	169	422	1197	1015	195	765	814
Arrive On Green	0.10	0.00	0.26	0.11	0.00	0.11	0.18	0.64	0.64	0.41	0.41	0.41
Sat Flow, veh/h	1781	0	1585	1020	0	1585	1781	1870	1585	548	1870	1585
Grp Volume(v), veh/h	391	0	362	13	0	5	398	1018	11	16	723	366
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1020	0	1585	1781	1870	1585	548	1870	1585
Q Serve(g_s), s	9.5	0.0	19.9	1.1	0.0	0.3	14.9	39.0	0.2	2.2	33.8	13.3
Cycle Q Clear(g_c), s	9.5	0.0	19.9	7.0	0.0	0.3	14.9	39.0	0.2	20.1	33.8	13.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	412	0	413	122	0	169	422	1197	1015	195	765	814
V/C Ratio(X)	0.95	0.00	0.88	0.11	0.00	0.03	0.94	0.85	0.01	0.08	0.95	0.45
Avail Cap(c_a), veh/h	412	0	559	216	0	314	422	1216	1031	200	783	830
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.8	0.0	32.1	42.2	0.0	36.4	25.9	12.9	5.9	29.1	25.9	14.0
Incr Delay (d2), s/veh	31.6	0.0	11.5	0.4	0.0	0.1	29.8	5.8	0.0	0.2	19.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	0.0	8.8	0.3	0.0	0.1	11.5	14.2	0.1	0.3	17.6	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.4	0.0	43.6	42.6	0.0	36.4	55.7	18.7	5.9	29.3	45.7	14.4
LnGrp LOS	E	A	D	D	A	D	E	B	A	C	D	B
Approach Vol, veh/h		753			18			1427			1105	
Approach Delay, s/veh		56.0			40.9			28.9			35.1	
Approach LOS		E			D			C			D	
Timer - Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		62.6		28.1	21.0	41.6	14.0	14.1				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s		59.0		32.0	16.5	38.0	9.5	18.0				
Max Q Clear Time (g_c+I1), s		41.0		21.9	16.9	35.8	11.5	9.0				
Green Ext Time (p_c), s		7.3		1.8	0.0	1.3	0.0	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				37.2								
HCM 6th LOS				D								

Intersection												
Int Delay, s/veh	446.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↵	↶		↵	↶	↶	↵	↶	↶
Traffic Vol, veh/h	143	1	115	10	0	1	155	900	7	1	1021	105
Future Vol, veh/h	143	1	115	10	0	1	155	900	7	1	1021	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	155	1	125	11	0	1	168	978	8	1	1110	114

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2431	2434	1110	2546	2540	978	1224	0	0	986	0	0
Stage 1	1112	1112	-	1314	1314	-	-	-	-	-	-	-
Stage 2	1319	1322	-	1232	1226	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 22	32	255	18	27	304	570	-	-	701	-	-
Stage 1	253	284	-	195	228	-	-	-	-	-	-	-
Stage 2	193	226	-	217	251	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 17	23	255	~ 7	19	304	570	-	-	701	-	-
Mov Cap-2 Maneuver	~ 17	23	-	~ 7	19	-	-	-	-	-	-	-
Stage 1	178	284	-	137	161	-	-	-	-	-	-	-
Stage 2	~ 136	159	-	110	251	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, \$	4181.4		1143.3		2		0	
HCM LOS	F		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	570	-	-	29	7	304	701	-	-
HCM Lane V/C Ratio	0.296	-	-	9.708	1.553	0.004	0.002	-	-
HCM Control Delay (s)	13.9	-	-	\$ 4181.4	\$ 1255.9	16.9	10.1	-	-
HCM Lane LOS	B	-	-	F	F	C	B	-	-
HCM 95th %tile Q(veh)	1.2	-	-	34.6	2.3	0	0	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

### Chapter 500 – Planned Development District (PD)

#### 500.001 Planned Development District (PD) Generally

The Planned Development District (PD) is established under the provisions of Ohio Revised Code 519.021(B) to promote the general public welfare, encourage the efficient use of land and resources, promote greater efficiency in providing public and utility services, and encourage innovation in planning and building of all types of development in accordance with the Comprehensive Plan. The regulations set forth herein are based on the premise that the ultimate quality of a built environment or development proposal is determined not only by the general classification of land uses, but also by the specific way in which such land uses are executed. In many cases, the subdivision regulations and standard zoning district classifications do not adequately regulate the design of buildings, the mix of uses, and the general character of development that are desirable in the Township. In accordance with the Comprehensive Plan and the above statements it is the intent of the Planned Development District to promote development that:

1. Provides an opportunity for a mix of open space and other uses not otherwise permitted within the standard zoning district classifications; and
2. Allows the creation of development standards that respect the unique characteristics, natural quality and beauty of the site and the immediate vicinity and protects the community's natural resources by avoiding development on, and destruction of, sensitive environmental areas; and
3. Enables more extensive review of design characteristics to ensure that the development project is properly integrated into its surroundings and is compatible with adjacent development; and
4. Assures compatibility between proposed land uses within and around the PD through appropriate development controls; and
5. Enhances the economy of the Township by making available a variety of employment opportunities and providers of goods and services; and
6. Encourages unified development projects that exhibit creative planning and design in ways that cannot be achieved through a standard zoning district, yet are imaginative in architectural design and are consistent with applicable plans for the area and are compatible with adjacent and nearby land uses. (Amnd. 10-20-2020)

#### 500.01 Residential Development Purpose and Intent

Along with the general purpose and intent of this District, the following additional purposes relative to residential development are applicable:

1. A clustered neighborhood design is encouraged with a gross density which is in keeping with the Comprehensive Plan and the physical development potential of the area.
2. The utilization of conservation design principles and preservation of a substantial amount of permanent open space is encouraged, integrated into the development and providing for a pedestrian friendly environment.
3. In larger developments, a variety of different lot areas and architectural styles are encouraged to create an integrated and imaginative residential environment.
4. Master planning is encouraged that focuses on a much broader scale than a single development site, taking into account the larger physical context within which the proposed development is to occur.
5. In areas identified on the comprehensive plan as "Higher Density Residential" it may be appropriate to consider single family or multi-family development at densities higher than those appropriate in other areas of the Township and where the Planned Development District will allow more creative site planning to accommodate these densities and provide

appropriate transitions between adjacent higher intensity uses and lower intensity uses.  
(Amnd. 10-20-2020, 12-6-2022)

### **500.02 Commercial and Office Development Purpose and Intent**

Along with the general purpose and intent of this District, the following additional purposes relative to commercial and office development are applicable:

1. Commercial and office development shall be properly managed and the development standards of the PD District clearly specified so that Township officials completely understand the design and impact of a development proposal.
2. A flexible and creative approach to commercial development is encouraged. This flexibility is intended to minimize potential negative impacts and conflicts with rural agriculture and residential development.
3. A pedestrian friendly environment is encouraged, interconnecting with adjacent neighborhoods.
4. Master planning is encouraged that focuses on a much broader scale than a single development site, taking into account the larger physical context within which the proposed development is to occur. (Amnd. 12-6-2022)

### **500.03 Industrial Development Purpose and Intent**

Along with the general purpose and intent of this District, the following additional purposes relative to industrial development are applicable:

1. The clustering of industrial uses is encouraged, along with flexibility and creativity in site design, in order to ensure that development is sensitive to and compatible with the Township's rural environment.
2. Industrial development shall be properly managed and the development standards of the PD District clearly specified so that Township officials completely understand the design and impact of a development proposal.
3. Master planning of an extended area is encouraged, which ensures a stable, unified industrial development having all necessary services and facilities.
4. A unified design is encouraged which allows for greater design flexibility and better integration into the Township's rural environment. This flexibility is intended to minimize potential negative impacts and conflicts with rural agriculture and residential development. (Amnd. 12-6-2022)

### **500.04 General Provisions**

#### **1. Preliminary Development Plan and Detailed Development Plan**

For purposes of this Chapter, plans including all supporting documentation adopted by the Township at the time of amendment of the Official Zoning Map to Planned Development District shall be referred to as the "preliminary development plan," and plans including all supporting documentation approved subsequent to such amendment but prior to the initiation of any development activities are referred to as the "detailed development plan."

#### **2. Effect of PD District Approval**

Each PD District is considered a separate and unique zoning district wherein a preliminary development plan, including associated regulation text describing the allowable uses and specific development standards, is adopted simultaneously with the application requesting amendment of the Official Zoning Map to apply the PD District designation. The preliminary development plan, as approved by the Township and as provided under Ohio Revised Code

Section 519.021(B), shall constitute the zoning regulations for and shall apply only to the property included within that particular PD District. Whenever there is a conflict or difference between the provisions of this Chapter and those of other provisions of this Zoning Resolution, the provisions of this Chapter shall prevail for the development of land within the PD District. Subjects not expressly covered by this Chapter or the applicable preliminary development plan shall be governed by the respective provisions found elsewhere in this Zoning Resolution that are most similar to the proposed use.

### **3. Subareas**

Depending upon the size and complexity of the proposed development, different subareas may be established within a PD District. Each subarea may, if requested, be treated as a separate district with individual standards. However, only one preliminary development plan approval shall be issued for the entire development. For each subarea, the applicant shall indicate gross density, dwelling type, minimum development standards, and all other uses by type, size and location, and such information shall be reflected within the conceptual site plan, regulation text, or other appropriate documents contained in the preliminary development plan.

### **4. Type of Action**

The action of the Board of Township Trustees approving an amendment of the Official Zoning Map to Planned Development District pursuant to this Chapter and Chapter 230 of the Zoning Resolution shall be considered a legislative act, and subject to a referendum. After property has been rezoned to the PD District, any action related to the subsequent use or development of such property, as being in compliance with the regulations authorized to be established by this Chapter including any action taken on a detailed development plan, shall not be considered to be an amendment to the Zoning Resolution for the purpose of Section 519.12 of the Ohio Revised Code, but may be appealed pursuant to Chapter 2506 of the Ohio Revised Code.

### **5. Zoning Amendment**

A change to an adopted preliminary development plan shall be considered to be a zoning amendment and shall be processed and reviewed according to the procedures set forth in Section 519.12 of the Ohio Revised Code and Chapter 230 of this Zoning Resolution. Whenever a preliminary development plan contains multiple subareas, an application for zoning amendment may be filed applicable to one or more subareas provided that the requested change will have no effect on the remaining subareas.

### **6. Detailed Development Plan**

An application for approval of a detailed development plan shall be required to be submitted to the Township for approval prior to the initiation of construction and development in each phase or subarea of a PD District. Such detailed development plan shall be in substantial compliance with and consistent with the approved preliminary development plan for that PD District or any subarea thereof with respect to land uses, densities, architectural and landscape standards, and open space. Minor deviations from the approved preliminary development may be considered for approval during the detailed development plan review process by the Zoning Commission without requiring an applicant file for an amendment to the preliminary development plan as noted on Subsection 5 above. Deviations that may be considered minor, but do not limit the Commission's discretion in such matters, include:

- a) Adjustments to the layout or alignment of new roads or to the site layout that does not affect number of buildable lots, density, setbacks, or open space and does not increase access points to existing public roadways unless required by the County Engineer.

- b) Increases in residential lot areas or reductions in residential density provided such changes do not reduce the required setbacks, decrease the required open space, or change the required architectural or development standards.

### **500.05 Previously Approved Planned Developments**

Chapter 500 of the Zoning Resolution was amended on and the amendment in effect from and after April 20, 2015. Previously approved Planned Developments and all associated preliminary development plans, detailed development plans and supporting documentation adopted and in effect prior to April 20, 2015 shall continue in effect and be considered legally conforming under this Zoning Resolution. These previously approved Planned Development Districts shall continue to be governed pursuant to the regulations contained within any previously approved zoning plans, preliminary development plans, detailed development plans, and supporting documents. The regulations contained within any previously approved zoning plans, preliminary development plans, detailed development plans, and supporting documents may be modified in accordance with this Chapter, as amended. (Amnd. 10-20-2020, 6-15-2021, 12-6-2022)

### **500.06 General Standards for Planned Developments**

In order to achieve the purpose and intent of the Planned Development District and the Comprehensive Plan, the following general standards are hereby established for all Planned Developments within the Township.

#### **1. Uses**

Within the Planned Development District a creative mix of uses is encouraged provided it will establish an efficient and sustainable use of the land and infrastructure, and result in a well-integrated, pedestrian friendly development. Single use PD's may also be established by the applicant to encourage development that is more responsive to the land and environment than may be permitted through a standard zoning district. The following standards are established for uses in the PD District:

- a) Permitted Uses – Permitted uses within each PD District shall be clearly identified in the regulation text contained in the preliminary development plan submitted with the application for amendment the Official Zoning Map to Planned Development District. Any use not specified as a permitted or conditional use in the approved preliminary development plan shall be prohibited.

#### **2. Densities**

Densities within a PD District should be in conformance with the recommendations of the Comprehensive Plan and shall promote the efficient use of land and infrastructure. Proposed densities shall be clearly identified in the preliminary development plan submitted with the application for amendment of the Official Zoning Map to Planned Development District.

#### **3. Setbacks and Yard Areas**

All proposed required setbacks and yard areas within a PD District shall be identified in the preliminary development plan submitted with the application for amendment of the Official Zoning Map to Planned Development District. Setbacks and yard areas within PD developments shall be established to meet the following requirements:

- a) Setbacks within a PD District shall support the goals of the Comprehensive Plan for development that respects the rural character of the Township while promoting efficient use of the land and its resources.
- b) Setbacks shall be configured to appropriately balance open space and provide safe

separation between buildings and uses.

- c) When a commercial or industrial use is proposed to be located adjacent to residential uses, perimeter setbacks and/or appropriate screening from the adjacent tract should be established within the PD District.
- d) To maintain the rural character of the Township, the setbacks from existing public roads should be larger than those established for new public roads established within the PD District.
- e) To the greatest extent possible new residential developments should be designed to minimize the number of homes where the rear lot lines or rear of the proposed dwellings front to existing and proposed roads. Where such conditions are to exist along existing public roads a minimum setback of 50' between the right-of-way of the public road and the rear lot lines, and a minimum of 80' between the right-of-way of the public road and the rear yard setback line of the lot. An increased landscape buffer shall be established for the entire length of road affected.

#### **4. Public Improvements**

A PD District should be developed at a minimum with the following improvements meeting the design standards of the County Engineer:

- a) Public roads shall be designed and constructed to the standards established by the County Engineer's Office.
- b) Means for safe pedestrian and bicycle access and circulation shall be provided. Pedestrian paths should be integrated into open space where applicable or allowed, with ownership and maintenance dedicated to the entity holding title to the open space.
- c) Storm water management facilities shall be provided as required by the County Engineer and State of Ohio.

#### **5. Access**

The preliminary development plan should require direct access, not through easement, to one or more dedicated and improved public roads. Provisions for future connections to other public roads or adjacent land shall be required if recommended by the Township, County Engineer or Regional Planning Commission.

#### **6. Buildings**

To promote the purpose and intent of the Planned Development District and the goals of the Comprehensive Plan, all applications for amendment of the Official Zoning Map to PD District shall detail the proposed design and development standards for all residential and non-residential buildings within the PD District. The following standards apply to all residential and non-residential buildings within a PD District.

- a) The physical relationship of buildings and other site improvements to one another and the surrounding area, as created by building mass, floor area, height, shape, location on the site, and setback, shall result in a harmonious development both within the PD District and in relation to its surroundings.
- b) The bulk and height of buildings within the proposed development shall be compatible with the surrounding area.
- c) Buildings, structures, and parking areas shall be designed and located in such a way to conserve environmentally sensitive or unique natural, historic or cultural features.
- d) The preliminary development plan shall specify for all buildings and residences, at a minimum, the proposed exterior materials, floor area, height, roof shape and pitch.

### 7. Lighting

If applicable, a preliminary development plan shall include the type and description of all proposed street and parking lot lighting. Street lighting shall conform to the standards of the Union County Engineer and all lighting within the proposed PD District shall conform to the following:

- a) The lighting plan contained within the preliminary development plan shall specify the proposed pole and luminary design, maximum height, lighting source, wattage, shielding and any other information necessary to evaluate the lighting as proposed.
- b) The lighting plan be designed to promote an overall cohesiveness in the development of the plan and to minimize the amount of light pollution affecting the neighboring properties and the rural character of the township.
- c) Where no other regulations are provided within a preliminary development plan, the provisions of Chapter 630 of this Resolution shall govern exterior lighting.

### 8. Signage

All preliminary development plans shall include a signage plan and or standards for all uses and subareas within the PD District. Signage design and standards shall ensure a constant and comprehensive character throughout the project and compatible with the character of the Township and shall meet the following:

- a) All signs and graphics within the PD District shall be compatible in size, location, material, height, shape, color, and illumination.
- b) A detailed sign plan and standards shall be including within a preliminary development plan and shall include the design, layout and dimensions of all proposed ground, window and wall signs as well as the setbacks from the rights-of-way and the type and intensity of illumination.
- c) Signs shall contribute to an overall cohesive design, reflect simplicity, reduce visual clutter and compliment the rural character of the Township.
- d) Wall signs shall be controlled and designed in a manner to compliment the architecture of any proposed buildings. Ground signs shall be designed to relate to and share common elements with the proposed architecture.

### 9. Parking and Loading Areas

Parking and access requirements and standards shall be as defined in the preliminary development plan and shall meet the requirements of the Union County Engineer, the applicable fire regulations, and the following standards:

- a) Off-street parking and loading shall be provided for all non-residential buildings with adequate provisions for ingress and egress.
- b) Parking areas shall be designed to discourage large single expanses of parking and shall encourage smaller defined parking areas within the total parking system. Such parking areas shall be delineated and accentuated by landscaped areas.
- c) The layout of parking areas, service areas and related entrances, exits, signs, lighting, noise sources or other potentially adverse influences shall be designed and located to protect the character of the area as well as those areas adjacent to the PD District.
- d) To minimize the environmental impacts of large parking areas shared parking between uses shall be encouraged and supported within the PD District. Where shared parking is desired the applicant shall submit a statement identifying how the parking is to be shared between the uses, and the percentage of parking and hours of parking allocated for each use.

- e) All service and delivery and loading areas for all uses shall be arranged and located to minimize the impacts and view of such uses throughout the development.

### **10. Landscaping**

All preliminary development plans shall include a detailed landscape plan and standards for all areas, sub-areas, open spaces and uses with the proposed development. The following standards shall apply:

- a) All yards and open space not covered by structure, paving and the like shall be landscaped with lawn as a minimum.
- b) All vacant and undeveloped areas shall be kept seeded and maintained in such a manner as to prevent erosion of the property and excess drainage on adjacent land.
- c) Landscaping shall be designed to enhance architectural features, screen incompatible uses, emphasize pedestrian environments, provide shade for streets and parking lots and strengthen views and vistas.
- d) The landscape plan shall be designed to preserve and capitalize on the existing natural characteristics of the site and to promote overall unity in design.
- e) Landscape design and the specification and use of trees and plant materials shall discourage monoculture. For the purpose of this Section monoculture is defined as the dominance or overabundance of any one species that may expose the development to a substantial loss of plant material should said plant material be affected by pest or disease (ex. Emerald Ash Borer)
- f) Plant material specified in the landscape plan shall be indigenous and hearty to the area and shall be harmonious to the design and consistent with adjacent land uses.
- g) Street tree species native to the area shall be provided by the developer for all existing and proposed public streets and placed outside the public right-of-way in a maintenance easement. Size, shape, type and location of street trees shall be specified in the preliminary development plan.
- h) Landscape buffers between lots and the public road serving the PD District and buffers between lots and adjacent land should be placed in landscape easements or in dedicated open space areas.

### **11. Flood Plains and Environmentally Sensitive Areas**

Floodplains within a PD District shall be protected from building or pavement encroachment through the following standards:

- a) A riparian buffer, having a width of not less than 50' as measured from the centerline of the stream, shall be provided along the entire length and on both sides of a river or perennial stream channel.
- b) Buffer areas shall be restricted from development and managed to promote the growth of vegetation indigenous to the stream area capable of maintaining the structural integrity of the stream bank.
- c) A wetlands buffer should be provided for all wetlands required to be retained by the Army Corps of Engineers or the Ohio EPA. The buffer area should have a width of not less than 25' measured from the edge of the designated wetland. The buffer areas should not be disturbed other than necessary to establish and natural landscape and existing trees should be preserved and protected to the extent practicable.

### 12. Open Space

A PD District should have an open space component which is compatible with the size, nature and design of the development. A recommended minimum of 20 percent of the gross land area of a PD District containing a residential component, except as outlined in Section 500.07(4), should be set aside as open space for common use, preferably interconnected with other similar spaces within this or adjacent developments. For a PD District without a residential component, a minimum of 10 percent open space set aside is recommended. Open space shall be prohibited from further subdivision or development by deed restriction, conservation easement or other agreement, in a form satisfactory to the Township. This restriction from further subdivision or development shall also be noted in the preliminary development plan and the recorded plat.

a) Design Standards – The following design standards for open space should be followed:

- (i) Open space shall be fully integrated into the overall design and should, absent unique and special circumstances, meet all standards and guidelines contained herein. The types of uses, buildings and structures proposed to be permitted in the open space shall be specified in the preliminary development plan.
- (ii) Within a PD District, public uses may be proposed for natural areas and preserves, parks and other active recreational areas, and public facilities such as public schools, libraries and community centers may likewise be proposed. Access to all public uses shall be specified.
- (iii) In identifying the location of open space, the developer shall consider as priorities existing natural features such as natural woodlands, wetlands, identified species habitat, tree lines, stream and creek corridors, and FEMA designated 100-year floodplains.
- (iv) Retention ponds (wet basins) may be permitted in an open space reserve provided such ponds are designed and maintained as natural features that blend into the landscape. A landscape design for each retention pond shall be submitted with the preliminary development plan. Detention ponds (dry basins) should ordinarily not be permitted in the designated open space unless a part of a bioswale corridor.
- (v) Except for bike paths and pedestrians trails, open space should be unified and massed so that no open space is narrower in any direction than the development's average lot width. Open space should be platted as an open space reserve, including appropriate conservation easements.
- (vi) Open space should, when practicable, be interconnected with open space areas on adjacent parcels.
- (vii) In order to encourage the creation of large areas of contiguous open space, areas that should not be considered as open space include:
  1. Private road and public road rights-of-way;
  2. Parking areas, access ways, and driveways;
  3. Required setbacks between buildings, parking areas, and project boundaries;
  4. Required setbacks between buildings and streets;
  5. Easements for overhead power transmission lines unless containing bike paths as part of an overall coordinated trail network;
  6. Minimum spacing between buildings, and between buildings and parking areas;
  7. Private yards;

8. Areas of fee simple lots to be conveyed for residential dwelling uses;
  9. Other small fragmented or isolated open space areas that have a dimension less than 75 feet in any direction. (Excessive gaps and non-usable spaces between buildings are discouraged, or pedestrian walkways should be established.)
- (viii) Any open space intended to be devoted to active recreational activities should be of usable size and shape for the intended purposes.
- (ix) Any area within the open space that is proposed to be disturbed during construction or otherwise not preserved in its natural state, other than required setback areas, should be noted on the preliminary development plan and the method and timing of any restoration shall be set forth.
- (x) The open space, including any recreational structures and public facilities proposed to be constructed in such space, shall be clearly shown on the preliminary development plan.
- b) Open Space Ownership – Open space may be proposed to be owned by an association, the Township or other governmental entity, a land trust or other conservation organization recognized by the Township, or by a similar entity, or may remain in private ownership if appropriately restricted. The ownership of the open space shall be specified in the preliminary development plan and shall be subject to the approval of the Township. The methods of ownership, if approved as part of the preliminary development plan, may be as follows:
- (i) Offer of Dedication – The Board of Township Trustees or other governmental agency may, but shall not be required to, accept conveyance in the form of fee simple ownership of the open space.
  - (ii) Associations – Open space may be held by the individual members of a condominium association as tenants-in-common or may be held in common ownership by a homeowners’ association, community association, or other similar legal entity. Documents shall be submitted with the preliminary development plan which will ensure compliance with the following requirements:
    - 1) Membership in the association shall be mandatory for all purchasers of lots in the development or units in the condominium.
    - 2) The association shall be capable of and responsible for maintenance, control, and insurance of common areas, including the open space.
    - 3) The association shall have the right and obligation to impose assessments upon its members, enforceable by liens, in order to ensure that it will have sufficient financial resources to provide for proper care and maintenance of the open space.
  - (iii) Transfer of Easements to a Public Agency or Private Conservation Organization – With the approval of the Board of Township Trustees, an owner may transfer interest in conservation easements to a public agency or private non-profit organization, among whose purposes it is to conserve open space or natural resources, provided that:
    - 1) The organization is acceptable to the Board of Township Trustees, and is public agency or a bona fide conservation organization that exists in perpetuity;
    - 2) The conveyance contains appropriate provisions for the interests to be conveyed to another acceptable public agency or organization, or to revert to an association as provided herein in the event that organization becomes unwilling or unable to continue carrying out its function; and

3) A maintenance agreement approved by the Board of Township Trustees is entered into by the developer and the organization.

- c) Open Space Management and Maintenance – The owner of the open space shall be responsible for raising all monies required for operations, maintenance, or physical improvements to the open space through annual dues, special assessments, and valid and enforceable collection methods. The owner shall be authorized, under appropriate restrictions and covenants, to place liens on the property of residents within the PD District or any subarea thereof, who fall delinquent in payment of such dues and assessments. In the event that the organization established to own, operate and maintain the open space shall at any time after the establishment of the PD District fail to maintain the open space in reasonable order and condition in accordance with the approved detailed development plans, such failure shall constitute a violation of this Zoning Resolution.
- d) Transfer of Title of Open Space – Title to any open space required within a PD District which is included within any recorded subdivision plat of any section of the land zoned PD District shall be transferred to the entity approved for ownership of the open space prior to the sale of more than 75% of the lots or units within that subdivision section. (Amnd. 10-20-2020, 12-6-2022)

### **500.07 Use-Specific Development Standards**

In addition to the general development standards for Planned Development District provided for in this Chapter, the following use specific development standards are hereby established to further fulfill the purpose and intent of the PD District through the application of flexible land development techniques in the arrangement, design and construction of structures and their intended uses and the integration of open space within the development. These standards, as well as applicable plans for the area, are intended as general standards as circumstances dictate. The development standards filed and approved as part of the preliminary development plan shall establish the final requirements. The development policies include the following:

#### **1. Low and Medium Density Residential Land Use**

Future development of clustered subdivisions is anticipated to occur in those areas with central water and sewer systems shall be managed to protect the area's unique quality of life and semi-rural character. The density of these developments will be based upon several factors, including, without limitation, the availability of central water and sewer systems, the recommendations of the Comprehensive Plan, and whether the proposed development will be compatible in use and appearance with surrounding or planned land uses. The following shall apply when calculating residential density within a PD District:

- a) Calculating Residential Density – While the densities of individual residential areas may vary within a large PD District, the calculation of density for the entire PD District shall be based upon the gross density proposed of total area devoted exclusively to residential use, including open space. Where open space is included within the calculation for residential density, such open space shall permanently remain as open space within the PD District unless specifically included in another duly approved zoning amendment in accordance with the provisions of this Resolution.
- b) Additional Density Considerations – Additional density for residential developments to be serviced by centralized water and sewer systems may be permitted in certain unique and special instances such as those where: the open space set-aside far exceeds the minimum recommended ; additional and substantial site amenities are

provided; the development incorporates rural design elements that help preserve and retain the rural character of the area into the overall design of the site and maintains compatibility with the surrounding or planned land uses; the design of the development preserves, protects and enhances the natural and historic resources located on the site; and storm water and other environmental impacts are minimized and mitigated and natural features are enhanced.

- c) Lower Density Considerations – In addition to the consideration for additional density as mentioned above, lower densities may be required for a residential development in certain unique and special instances such as those where: a large portion of the site is undevelopable due to its physical features such as existing bodies of water, steep slopes and similar characteristics, and where proposed residential development is not compatible with adjacent residential development patterns. (Amnd. 9-5-2023)

### **2. Higher Density Residential Land Use**

Future development of higher density land uses is expected to occur in areas so designated in the Comprehensive Plan as being suitable for such uses. These areas provide an opportunity to serve differing housing needs within the community and establish an effective transition between more intense commercial and office land uses, and lower density residential uses. The density of these developments will be based upon several factors, including, without limitation, the availability of centralized sewers and water system, the recommendations of the Comprehensive Plan, and whether the proposed development will be compatible in use and appearance with surrounding or planned land uses. In addition, increases in the density of dwellings units may be supportable when mitigated by increased architectural standards, increased landscaping standards, and/or site design that contributes to the desirability of the community. (Amnd. 2-18-2025)

### **3. Agriculture and Rural Residential Land Use**

It is anticipated that portions of the Township will remain principally agricultural in nature, especially in those areas where centralized sewers and water systems are not anticipated to be provided. Development standards within these areas should encourage a development pattern that minimizes impacts and intrusions to agriculture, such as clustering dwellings on new streets and not along the frontages of existing roads, and designating agricultural-exclusive areas. (Amnd. 2-18-2025)

### **4. Residential Conservation Development**

Within the Comprehensive Plan there exists recommendations for residential development in certain areas that adheres to conservation development principles. These principles promote more compact development patterns in exchange for the preservation of important existing environmental and natural features and/or the conservation of significant amounts of open space. These types of developments reduce infrastructure costs for the developer, help to maintain a more open, rural character for the Township, promote a more efficient use of land, and provide a mechanism to preserve important natural features and incorporate them into site development. Land developed with conversation development principles shall adhere to the following standards:

- a) Uses – PD Districts designed using conservation development principles may be permitted to contain a mix of uses provided that all proposed uses are identified in the preliminary development plan and application as specified in Section 500.08.
- b) Density – The overall residential density of a PD District designed using conversation development principles should conform to the recommendations and intent of the Comprehensive Plan and shall be identified in the preliminary development plan and application per Section 500.08.

- c) Lot Size – Lot sizes shall be as established by the approved preliminary development plan and shall be based on the recommendations contained in the Comprehensive Plan. All lots less than two acres in area shall be served by central sewers and water systems. Lots with an area of 2 acres or more may be served by on-site sewer and water systems subject to the approval of the Union County Health Department.
- d) Dedicated Open Space – All PD Districts designed using conservation development principles shall comply with the following minimum requirements regarding open space:
  - (i) The minimum amount of open space to be provided is recommended to be 40% of the gross area of the property being included in the PD District, or such other amount as may be determined necessary based on the characteristics of the site and consistent with the purposes of this Chapter
  - (ii) All PD Districts designed using conservation development principles shall strive to utilize open space to preserve natural features including but not limited to floodplains, waterways, stream buffers, steep slopes, woodlands, wetlands and natural habitats or shall be designed to preserve significant amounts of agricultural lands.
  - (iii) Open space shall meet all other requirements of Section 500.06(12). (Amnd. 2-18-2025)

### **5. Commercial and Office Land Use**

Commercial and office development should be clustered in areas serviced by centralized utilities and adequate roadway systems. The density of general commercial development should not exceed 10,000 square feet per acre, absent special circumstances. This density calculation will ordinarily be based upon the total square footage proposed for the entire area devoted exclusively to commercial and office development. However, a lower density may be mandated due to the nature of the project, the physical features of the site or the compatibility of the project with surrounding or planned land uses. In addition a higher density may be approved to accommodate mixed use projects and other innovative and sustainable planning features. Design standards should be incorporated into the preliminary development plan which will improve the aesthetic quality of this type of development.

### **6. Industrial Land Use**

Light industry, research and development, and related office uses should be clustered in areas serviced by centralized utilities and adequate highway accessibility. Absent special circumstances, density should not exceed 10,000 square feet per acre. This density calculation will ordinarily be based upon the total floor area proposed for the entire area devoted exclusively to industrial development. However, a lower density may be mandated due to the nature of the project, the physical features of the site or the compatibility of the project with surrounding or planned land uses. The industrial areas should only develop in conjunction with centralized utilities. These areas should be master planned and well-coordinated, and not developed in a piecemeal (lot by lot) way. Access should be shared. Design standards should be incorporated into the preliminary development plan which will improve the aesthetic quality of this development type. In addition, all industrial uses developed under the PD District shall conform to the following standards:

- a) Fire and Explosion Hazards – All activities, including storage, involving flammable or explosive materials shall include the provision of adequate safety devices against hazard of fire and explosion. All standards enforced by the Occupational Safety and Health Administration shall be adhered to. Burning of waste materials in open fire is prohibited, as enforced by the Ohio Environmental Protection Agency.

- b) Air Pollution – No emission of air pollutants shall be permitted which violate the Clean Air Act of 1977 or later amendments as enforced by the Ohio Environmental Protection Agency.
- c) Glare, Heat, and Exterior Light – Any operation producing intense light or heat, such as high temperature processing, combustion, welding, or other shall be performed within an enclosed building and not visible beyond any lot line bounding the property whereon the use is conducted.
- d) Dust and Erosion – Dust or silt shall be minimized through landscaping or paving in such a manner as to prevent their transfer by wind or water to points off the lot in objectionable quantities.
- e) Liquid or Solid Wastes – No discharge at any point into any public sewer, private sewage disposal system, or stream, or into the ground, of any materials of such nature or temperature as can contaminate any water supply or interfere with bacterial processes in sewage treatment, shall be permitted. The standards of the Ohio Environmental Protection Agency shall apply.
- f) Vibrations and Noise – No uses shall be located and no equipment shall be installed in such a way as to produce intense, earth-shaking vibrations which are discernable without instruments at or beyond the property line of the subject premises. Noise standards of the Ohio Environmental Protection Agency shall be adhered to.
- a) Odors – No use shall be operated so as to produce the continuous, frequent or repetitive emission of odors or odor causing substances in such concentrations as to be readily perceptible at any point at or beyond the lot line of the property on which the use is located. The applicable standards of the Ohio Environmental Protection Agency shall be adhered to. (Amnd. 10-20-2020, 12-6-2022)

### **500.08 Procedure for Amending to the PD District**

In addition to the procedure set forth in Chapter 230 of this Resolution, all applications for amendments of the Official Zoning Map to PD District shall follow the procedures hereinafter set forth in Section 500.08, hereof.

#### **1. Pre-application Meeting**

The applicant is encouraged to engage in informal consultations with staff from the Township and the Union County subdivision authorities (e.g., Regional Planning Commission, County Engineer, Board of Health, etc.) prior to formal submission of an application for amendment of the Official Zoning Map to PD District. No statement or action by Township or County officials in the course of these informal consultations shall be construed to be a waiver of any legal obligation of the applicant or of any procedure or formal approval required by Township or County regulations. Ohio's Open Meetings Law (Section 121.22 of the Revised Code) is required to be observed at pre-application meetings involving a quorum of members of the Zoning Commission.

#### **2. Application**

The owner(s) of any property may request that the property be rezoned by amending the Official Zoning Map to Planned Development District for that property by filing fifteen (15) copies of an application for such amendment with the Zoning Commission, which application shall contain:

- a) Name, address and telephone number of the owner and applicant;
- b) Name, address and telephone number of the urban planner, architect, landscape architect, surveyor and/or engineer assisting in the preparation of the application or preliminary development plan;
- c) Legal description of the property and the address of the property;

- d) Description of existing uses;
- e) Present zoning district;
- f) A vicinity map at a scale approved by the Zoning Commission showing the relationship of the proposed PD District to the adjacent properties, existing roads and public service facilities in the area;
- g) A list of the names and addresses of the owner or owners of the property, the applicant, and all owners of property which are within, contiguous to and directly across the street from the subject property as such addresses appear on the County Auditor's current tax list; and
- h) Any other matter or information deemed necessary or relevant by the Zoning Commission for the proposed amendment.

### 3. Proposed Preliminary Development Plan

In addition to the application required herein, fifteen (15) copies of the proposed preliminary development plan shall be submitted with the application. The proposed preliminary development plan shall be prepared and endorsed by a certified or licensed planner, architect, landscape architect, engineer and/or surveyor, with all mapping to be at a scale of at least 1" = 100', and shall include, in text and map form, the following:

- a) A conceptual site plan of the proposed PD District, including any proposed subareas, any proposed buildings other than single-family dwellings or two-family dwellings, any functional use areas, circulation patterns, and their relationship.
- b) Proposed densities, number of lots and dimension parameters, and building intensities.
- c) Proposed parks, playgrounds, schools and other public facilities or open spaces including woodland preservation and natural topography preservation areas with their suggested ownership.
- d) Locations of stream channels, watercourses, wooded areas and buffer areas shall be designated. Existing topography and drainage patterns shall also be shown.
- e) Relation to existing and future land use in surrounding area.
- f) Proposed provision of water, sanitary sewers, surface drainage, and street lighting.
- g) Proposed traffic and pedestrian circulation pattern, indicating both public and private streets and highways, access points to public rights-of-ways, bike paths and trails, sidewalks and any off-site street improvements.
- h) An anticipated 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 phase for various uses, the number of housing units proposed by type; building heights; open space; building intensity; parking areas; density and public improvements proposed.
- i) Engineering feasibility studies and schematic plans showing, as necessary, water, sewer and other utility installations, waste disposal facilities, surface drainage, and street improvements.
- j) A preliminary traffic study completed to the requirements of the Union County Engineer or correspondence from the County Engineer's Office or other relevant public agency that a traffic study is not required for the proposed development.
- k) General architectural design criteria for proposed buildings, structures, signs and exterior lighting with proposed control features.
- l) 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.
- m) Projected schedule of site development.
- n) Evidence that the applicant has sufficient control over the land to carry out the proposed development.

- o) Regulation text for development in the proposed Planned Development District. That text shall set forth and define the uses to be permitted in the proposed Planned Development District and the development standards applicable to the proposed District. The regulation text is intended to guide all development of the property proposed to be designated as a Planned Development District by the application.
- p) The regulation text provided for in subsection (o), above, shall cover all appropriate zoning regulations for the proposed PD District including, without limitation, the following:
  - (i) All required setbacks including, but not limited to, buildings, service areas, off-street parking lots and signage, including rear, front and side yard areas.
  - (ii) All maximum height and size requirements of buildings, mechanical areas and other structures.
  - (iii) All parking and loading space standards per building square footage or dwelling unit type, including dimensions of all parking stalls, aisles and loading spaces.
  - (iv) All street and road right-of-way and pavement width dimensions, curb cut spacing and other related circulation standards.
  - (v) All pedestrian and bicycle walkway, trail and sidewalk dimensional standards, including rights-of-way and pavement width, and pavement standards.
  - (vi) All screening and landscaping standards, including buffer dimensions, height, landscape material, maintenance standards, and screening standards for off-street parking areas, loading docks, trash receptacles and dumpsters, ground- and roof-mounted mechanical units and adjacent areas.
  - (vii) All proposed signage and graphic standards, including height, setback, square footage, colors, corporate logos and type.
  - (viii) All exterior lighting standards, including light intensity, placement, height and materials for parking lots, walkways, sidewalks and accent lighting.
  - (ix) All exterior architectural design standards, including material, color and styles.
  - (x) A list and description of the precise uses proposed for the development. Listed uses shall be defined by their customary name or identification, except where they are specifically defined or limited elsewhere in the preliminary development plan or this Zoning Resolution. Any listed use may be limited to specific areas delineated in the proposed preliminary development plan;
  - (xi) Frontage requirements, minimum lot area requirements, yard areas, lot coverage restrictions and perimeter setback requirements.
  - (xii) Accessory structure standards and limitations.
  - (xiii) Open space area, uses and structures, including proposed ownership and sample controlling instruments.
  - (xiv) Any other regulatory area or matter deemed necessary or relevant by the Zoning Commission.
  - (xv) The regulation text should contain the following provision: All development standards not specifically addressed by the regulation text shall be regulated by those general development standards set forth in the Zoning Resolution.

#### **4. Basis of Approval**

In determining whether or not to approve an application for amendment of the Official Zoning Map to Planned Development District, the reviewing authorities shall consider all relevant factors and circumstances including, without limitation, the following:

- a) Whether the proposed development is consistent in all aspects with the purpose, policies, criteria, intent, and standards of this Zoning Resolution;

- b) Whether the proposed development is in conformity with the applicable plans for the area or such portion thereof as may apply, or whether the benefits, improved arrangement and design of the development justify any deviation there from;
- c) Whether the proposed development promotes the public health, safety and general welfare of the Township and the immediate vicinity;
- d) Whether the proposed plan meets the design features contained in this Resolution;
- e) Whether the proposed development is in keeping with the existing or planned land use character and physical development potential of the area;
- f) Whether the proposed development will be compatible in use and appearance with surrounding or planned land uses;
- g) Whether the development will have a beneficial or an adverse effect upon the Township and other governmental services;
- h) Whether the area surrounding the development can be planned, zoned and developed in coordination and substantial compatibility with the proposed development;
- i) Whether the existing and proposed utility and governmental services are adequate for the population densities and nonresidential uses proposed;
- j) Whether the development promotes greater efficiency in providing public and utility services and encouraging innovation in the planning and building of all types of development;
- k) Whether the development can be made accessible through existing or future roadways without creating unreasonable traffic congestion in the immediate vicinity of the proposed development or elsewhere in the Township;
- l) Whether the development is located and designed in such a way as to minimize any unreasonable adverse impact on existing residential or agricultural areas of the Township; and
- m) Whether the benefits, improved arrangement and design of the property to be developed justify rezoning the tract to the PD District.

### **5. Effect of Approval**

- a) The action of the Board of Township Trustees in approving an application for amendment to a PD District and a preliminary development plan shall constitute an amendment of the Official Zoning Map for the subject tract to the PD District permitting development and use of said land and any structures thereon in accordance with the development standards contained in the preliminary development plan. However, in a PD District, no use shall be established and no structure shall be constructed or altered on any part of said tract, until there is submitted a detailed development plan for said part of said tract, and until the detailed development plan is approved by the Zoning Commission.
- b) The approval of the preliminary development plan shall be for a period of five (5) years, to allow for the preparation of a required detailed development plan(s). Unless the Board of Township Trustees approves such an extension of this time limit, upon the expiration of such period, no use shall be established and no building, structure or improvement shall be constructed until an application accompanied by a new preliminary development plan has been filed with and approved by the Board of Township Trustees, and such application for approval shall be subject to the same procedures and conditions as an original application for the preliminary development plan approval. This new application shall comply with the terms of the Zoning Resolution then in effect at the time of filing, including, without limitation, any zoning amendments enacted from and after the date of the initial request to designate the property Planned Development District. In addition, the Board of Township Trustees or Zoning Commission may initiate a zoning amendment to amend the Official Zoning

Map for the tract to a previous zoning district or to another similar standard zoning district upon expiration of the preliminary development plan approval period.

### **6. Extension of Time for Preliminary Development Plan**

Upon application by the owner(s), the Board of Township Trustees may extend the time limit provided by Section 500.08 5(b), above. Such extension may be given after application by the applicant showing the purpose and necessity for same and upon evidence that the owner(s) has made reasonable efforts toward the accomplishment of the original approved preliminary development plan, and that such extension is not in conflict with the general health, safety and welfare of the public. (Amnd. 10-20-2020, 12-6-2022)

## **500.09 Detailed Development Plan**

### **1. Application**

In a PD District, no use shall be established and no structure shall be constructed or altered until a detailed development plan for each such use and/or structure has been approved by the Zoning Commission. An application, in a form approved by the Zoning Commission, shall be completed by the property owner and submitted with the Development Plan. A total of 15 copies of the application and supporting material shall be submitted. The application form shall be provided by the Zoning Inspector. All mapping shall be prepared using the County's graphic standards.

### **2. Proposed Detailed Development Plan Contents**

In addition to the application required herein, 15 copies of the detailed development plan shall be submitted with the application. The detailed development plan, which may be submitted for the entire development or an individual phase, shall contain, in text and map form, the following information at a minimum:

- a) Proposed name of the development and its location;
- b) Names and addresses of owners and developers;
- c) Date, north arrow and plan scale. Scale shall be one-inch equals 100 feet or larger scale;
- d) Boundary lines of the proposed development and the total acreage encompassed therein;
- e) Locations, widths and names of all existing public streets or other public ways, railroad and utility rights of way or easements, parks and other public open spaces, permanent structures, and section and corporation lines within or adjacent to the tract;
- f) Existing sewers, water mains, culverts and other underground facilities within the tract, adjacent to the tract or that will be used in developing the tract, indicating pipe sizes, grades and locations;
- g) The lot lines of adjacent tracts, parcels or lots;
- h) Residential density, dwelling types, nonresidential building intensity and specific uses to be included within the proposed development, specified according to area or specific building location;
- i) Existing ground configuration, drainage channels, wooded areas, watercourses and other significant physical features;
- j) Layout of proposed streets, including their names and rights of way, easements, sewers, water lines, culverts, street lighting and other major improvements;
- k) Layout, numbering and dimensions of lots if more than one;
- l) Anticipated building envelope and general architectural style and character of proposed structures;

- m) Parcels of land intended to be dedicated or temporarily reserved for public use or reserved by deed covenant with the condition proposed for such covenant and for the dedications;
- n) Building setback lines with dimensions;
- o) Tentative street grades and sewer size slope;
- p) Traffic circulation, parking areas, curb cuts and pedestrian walks;
- q) Landscaping plans, including site grading and landscape design;
- r) Engineering feasibility studies of any anticipated problems which may arise due to the proposed development as required by the Zoning Commission;
- s) For other than detached single-family structures, provide:
  - (i) Drawings for buildings to be constructed in the current phase, including floor plans, exterior elevations and sections;
  - (ii) Color rendering of buildings(s), complete with a listing of all colors, including Pantone 1999-2000 Reference Numbers or if Pantone is not available, the manufacturer's reference/serial number with sample, and materials, with samples to be used;
  - (iii) Building locations depicting the bulk, height and spatial relationships of building masses with adjacent development;
  - (iv) Intended measures to screen rooftop mechanical equipment from view;
- t) A detailed signage and exterior lighting plan;
- u) Accommodations and access for emergency and firefighting apparatus;
- v) The management plan or mechanism to provide for the perpetual maintenance of all open space, landscaping, buffers and shared parking areas by the ultimate owner and/or user and the controlling instruments;
- w) Location of open space area and designation of intended uses; and
- x) Any additional information as may be required by the Zoning Commission.

### **3. Zoning Commission Action on Detailed Development Plan**

After receipt of the completed application materials and payment of required fees, the Zoning Commission shall schedule a public hearing to be held within a reasonable amount of time and shall provide the applicant written notice at least ten (10) days prior to the date of the hearing. The Zoning Commission shall render a decision on the application within thirty (30) days after the conclusion of the public hearing. In determining whether or not to approve an application for detailed development plan approval, the Zoning Commission shall consider and approve a detailed development plan upon a finding of substantial compliance with the approved preliminary development plan.

### **4. Commencement of Development**

The approval of a detailed development plan shall be effective for a period of five (5) years in order to allow for the preparation and recording of a subdivision plat (if required under applicable law) and the commencement of construction following the issuance of a zoning certificate(s). If no plat has been recorded within this approval period or, if platting is not required, if construction or other affirmative actions, efforts, planning or other expenditures has not commenced, or unless the Zoning Commission approves an extension of this time limit, a detailed development approval shall expire. Upon the expiration of a detailed development, the subject parcel(s) shall remain zoned PD District, but no use shall be established or changed, and no building, structure or improvement shall be constructed until an application for a detailed development plan, accompanied by a new detailed development plan and all information required therewith, has been filed with and approved by the Township using the procedures and process established herein for the approval of a detailed development plan.

### **5. Extension of Time for Detailed Development Plan**

Upon application by the owner(s), the Zoning Commission may extend the time limit provided by Section 500.09(4), above. Such extension may be given upon a showing of the purpose and necessity for same and upon evidence that the owner(s) has made reasonable efforts toward the accomplishment of the original approved preliminary development plan, and that such extension is not in conflict with the general health, safety and welfare of the public or the development standards of the PD District.

### **6. Modification of Detailed Development Plan**

An applicant seeking to modify an approved detailed development plan shall file an application for modification of the detailed development plan utilizing the same procedures and criteria as established for the approval of the initial detailed development plan. (Amnd. 10-20-2020, 12-6-2022)

#### **500.10 Fees**

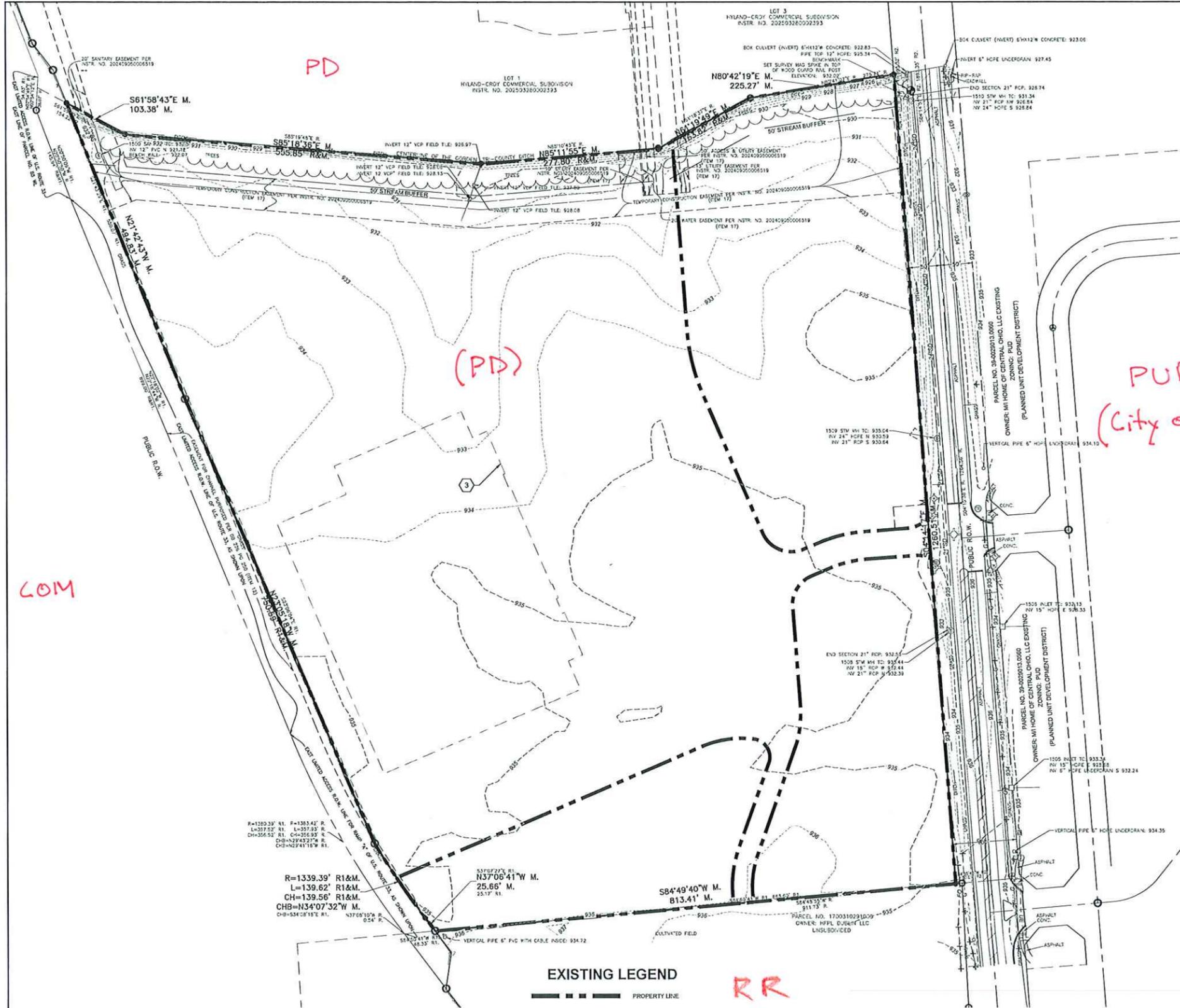
A fee as established by Schedule of Zoning Fees shall accompany an application requesting approval of an amendment the Official Zoning Map to Planned Development District or approval of a detailed development plan. In addition, the applicant shall also be responsible for all reasonable and necessary expenses incurred by the Township in using professional consulting services to review the preliminary development plan or detailed development plan. These expenses may include, without limitation, costs for professional consultants such as architects, landscape architects, planners and engineers utilized by the Township in connection with reviewing the preliminary development plan or detailed development plan and related application materials. As soon as reasonably practicable following the submission of an application for approval of a preliminary development plan or detailed development plan, the Zoning Commission shall decide if it needs a professional consultant(s) to assist it in reviewing the application. If the Zoning Commission decides it needs professional consulting services, it shall designate the person(s) to be consulted and make an initial estimate of the expenses anticipated to be incurred in reviewing the application materials. The Zoning Commission shall provide the applicant with notice of its initial estimate of such expenses. This initial estimate will be reviewed, and may be revised, from time to time during the review process, and, if such review results in an increase in the estimated professional consulting fees and charges which will be incurred in the Township's review of the application materials, the Zoning Commission shall send the applicant written notice of the revised estimate of fees and charges. Within fourteen (14) days of the date of the notice of the initial estimate of fees and charges (and, if applicable, within fourteen (14) days of the date of the notice of any revised estimate), the applicant shall deposit in the office of the Fiscal Officer, an amount equal to the estimated cost of the Township's expenses. In making the estimate of the professional consulting fees and charges anticipated to be incurred, the Zoning Commission shall consider the reasonable commercial rates of qualified professionals and reasonable estimates of time to complete the review. Any unused portion of the estimated amount received to cover the professional consulting fees and charges shall be returned to the applicant as soon as practicable following the final disposition of the application, along with a summary of the fees and charges expended for such services. (Amnd. 10-20-2020, 12-6-2022)

#### **500.11 Phases**

Developments within a Planned Development District may be approved for development in phases. Each phase shall require approval of a detailed development plan for that phase pursuant to the procedures set forth herein. Absent an extension of a preliminary

development plan approved by the Board of Township Trustees, all phases shall be submitted for and receive approval of a detailed development plan within the time frame set forth in Section 500.09(4). (Amnd. 10-20-2020, 12-6-2022)

Images: .xrefs: 10020719--x.dwg; 10020719--p.dwg; main store and gc footprint.dwg; 10020719TBLK.dwg; Base - Coughlin Kia.dwg  
 Layout: Job Name: C-100  
 Last Saved By: Bischof, 12/11/2025 5:35:44 PM  
 G:\DE\Clients\Meijer\10020719 Meijer\10020719--DEM.dwg Plotted By: Stachschulte, Matthew Plotted: December 16, 2025, 2:25:43 PM



**GENERAL NOTES**

1. PLANIMETRIC FEATURES SHOWN HEREON ARE BASED UPON A FIELD SURVEY COMPLETED BY WOOLPERT INC. ON AUGUST 5, 2025 AND WILL NOT REFLECT ANY CHANGES TO THE PHYSICAL SITE THROUGH MAN-MADE OR NATURAL OCCURRENCES BEYOND SAID DATE.
2. ANY USE OF THIS DRAWING BY PARTIES NOT CONTRACTED DIRECTLY WITH WOOLPERT OR CERTIFIED TO ON THIS DRAWING IS PROHIBITED WITHOUT PRIOR WRITTEN PERMISSION.
3. ONLY THE IMPROVEMENTS THAT WERE VISIBLE FROM ABOVE GROUND AT TIME OF SURVEY, THROUGH A NORMAL SEARCH AND WALK THROUGH OF THE SITE, ARE SHOWN ON THE FACE OF THIS PLAN. THIS SURVEY MAY NOT REFLECT ALL UTILITIES OR IMPROVEMENTS, IF SUCH ITEMS ARE HIDDEN BY LANDSCAPING, OR ARE COVERED BY SUCH THINGS AS DUMPSTERS, TRAILERS, SHOW, ETC.
4. BASED ON REVIEW OF THE CURRENT NATIONAL WETLAND INVENTORY MAPPING NO WETLAND AREAS ARE CURRENTLY DEPICTED ON THE PROPERTY. GIVEN THE PREVIOUSLY FARMED NATURE OF THE SITE IT IS UNLIKELY THAT WETLANDS ARE PRESENT.
5. ACCORDING TO THE FLOOD INSURANCE RATE MAP - MAP NUMBER 30150C05000, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITH A REVISION DATE OF DECEMBER 16, 2008, WHICH IS THE MOST CURRENT FLOOD INSURANCE RATE MAP AVAILABLE ON FEMA'S WEBSITE, THIS SITE IS LOCATED IN ZONE "X" (MODERATE RISK - AREAS OF MINIMAL FLOOD HAZARD). THE ABOVE REFERENCED FLOODPLAN MAP WAS UTILIZED FOR THIS DETERMINATION.
6. RECYCLED CONCRETE MATERIAL IS DEFINED AS CRUSHED CONCRETE SLAB, FOUNDATIONS, CURBS AND SIDEWALK, ALONG WITH THE GRANULAR BASE MATERIAL ASSOCIATED WITH THESE ITEMS (EXCLUDES CRUSHED CONCRETE BLOCK). THIS MATERIAL SHALL BE CRUSHED AND OR PROCESSED TO BE IN ACCORDANCE WITH MEIJER SPECIFICATIONS AND CAN BE USED AS FOLLOWS:
  - MASS CURBING AND GENERAL FILL AREAS.
  - UTILITY TRENCH BACKFILL (EXCEPT FOR PIPE BEDDING).
  - SUBGRADE FILL MATERIAL DIRECTLY UNDER THE ASPHALT AND CONCRETE PAVEMENT SECTIONS. (MATERIAL SHALL NOT BE USED AS PART OF THE PAVEMENT SECTIONS.)

**WOOLPERT**  
 ARCHITECTURE | ENGINEERING | SURVEYING  
 4454 Idea Center Boulevard  
 Dayton, OH 45430  
 937.461.5660

**meijer**  
 2929 WALKER AVENUE  
 GRAND RAPIDS, MICHIGAN 49544  
 (616) 459-5711

REV.	DATE	DESCRIPTION

MEIJER STORE JRM  
 HYLAND-CROY ROAD  
 PLAIN CITY, OHIO 43064

**EXISTING CONDITIONS PLAN**

ISSUED FOR:	
PERMIT	MMDDYY
E.D.	MMDDYY
CONSTRUCTION	MMDDYY

PROJECT MANAGER	DESIGNER
BLS	MRS

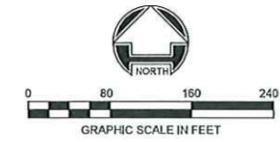
DATE  
 10020719

C-100

**BENCHMARK:**

THE BASIS OF ELEVATIONS HEREON IS NAVD 83 PER OBSERVATIONS OF SELECTED STATIONS IN THE NATIONAL GEODETIC SURVEY CONTINUOUSLY OPERATING REFERENCE STATION (NCGS CORS) NETWORK. SURVEY MARS SPIKE SET IN THE TOP OF WOOD GUARD RAIL POST - SEE DRAWING FOR LOCATION. ELEVATION = 932.02'

Ohio Utilities Protection Service  
**Call 811**  
 before you dig



**A1** EXISTING CONDITIONS / DEMOLITION PLAN  
 1" = 60'

Current Zoning Dist.