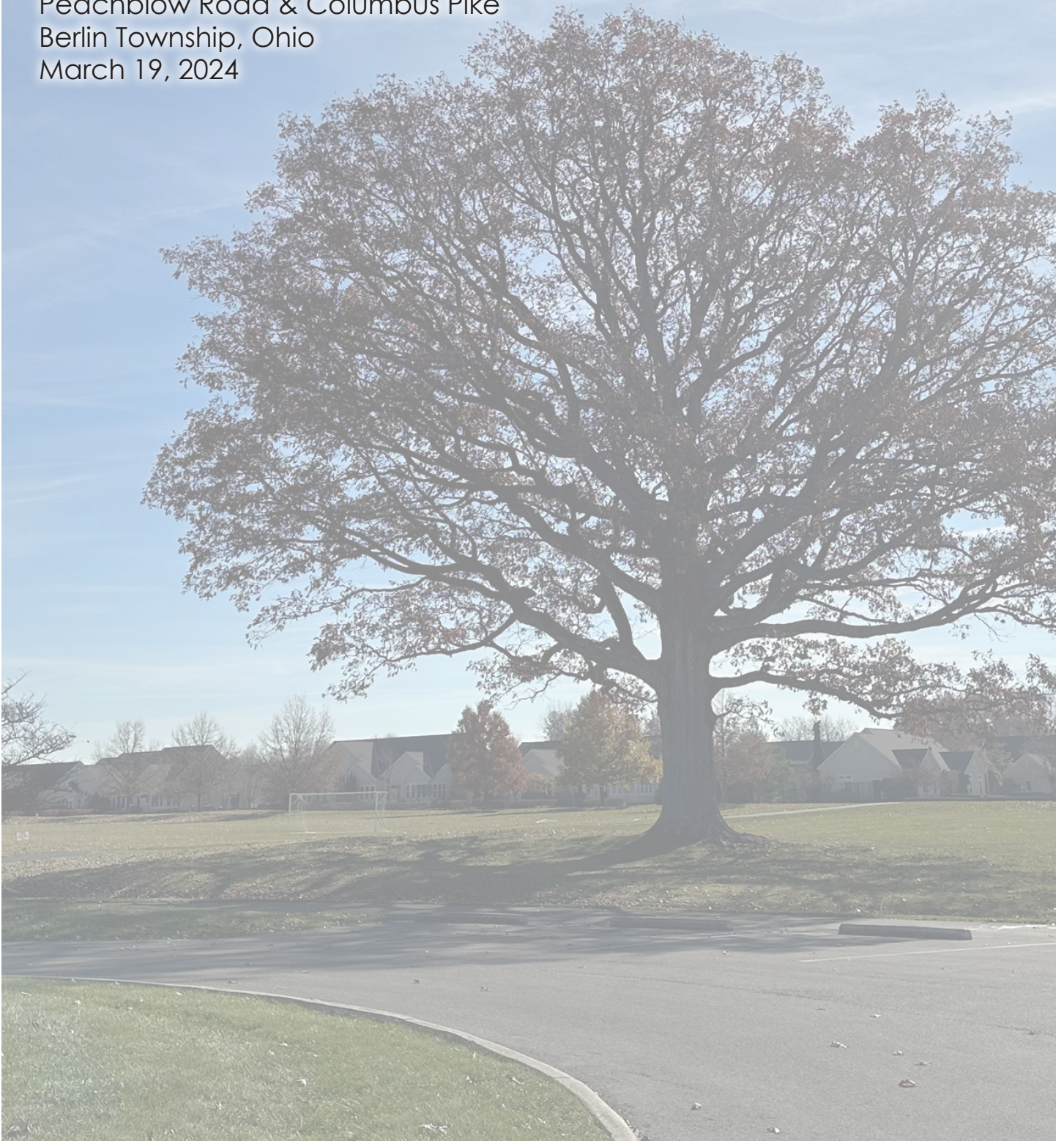


OAK PARK

Transitional Planned Unit Development (TPUD) &
Planned Commercial District (PCD)
Peachblow Road & Columbus Pike
Berlin Township, Ohio
March 19, 2024



PART 2 – PLANNED COMMERCIAL AND OFFICE DISTRICT (PCD)

APPLICATION FOR AMENDMENTS

- Application

DEVELOPMENT PLAN TEXT

- PCD-Planned Commercial and Office District

EXHIBITS:

TAB 1

- EX. A-1 : Surrounding Property Owners

TAB 2

- EX. B-1 : Legal Description
- EX. B-2 : Survey

TAB 3

- EX. C-1 : Preliminary Overall Development Plan
- EX. C-2 : Preliminary Development Plan: Subarea 'A'
- EX. C-2.1 : Preliminary Development Plan: Subarea 'A'
- EX. C-3 : Preliminary Development Plan: Subarea 'B'
- EX. C-3.1 : Preliminary Development Plan: Subarea 'B'
- EX. C-4 : Phasing Plan
- EX. C-5 : Existing Features Plan
- EX. C-6 : Net Developable Plan
- EX. C-7 : Illustrative Plan
- EX. C-8 : Landscape and Amenity Character
- EX. C-9 : Illustrative Enlargement Plan

TAB 4

- EX. D-1 : Overall Landscape Plan
- EX. D-2 : Landscape Plan: Subarea 'A'
- EX. D-3 : Landscape Plan: Subarea 'B'
- EX. D-4 : Landscape Enlargement Plan
- EX. D-5 : Open Space Plan

TAB 5

- EX. E-1 : Conceptual Utility Plans
- EX. E-2 : Delaware County Sewer Letter
- EX. E-3 : DelCo Water Letter
- EX. E-4 : AEP Electric Letter
- EX. E-5 : Columbia Gas Letter
- EX. E-6 : Suburban Natural Gas Letter
- EX. E-7 : Not Used
- EX. E-8 : Berlin Township Fire Letter
- EX. E-9 : Not Used
- EX. E-10 : Traffic Impact Study

TAB 6

- EX. F-1 : Bank Letter

TAB 7

- EX. G-1 : Sample Architectural Elevation – Subarea 'A'
- EX. G-2 : Sample Architectural Elevation – Subarea 'B'

www.berlintwp.us

BERLIN TWP. ZONING OFFICE
3271 CHESHIRE ROAD
DELAWARE, OH 43015
740.548.5217 – PHONE / 740.548.7458 – FAX

Date _____
BZC# _____
Fee: \$ _____ Rec# _____
Hearing Date: _____

APPLICATION FOR PRELIMINARY DEVELOPMENT REZONING PLAN
(Resolution to Amend Berlin Township Zoning Text)

Name of Owner: Peachblowroad LTD

Mailing Address: 6660 N High Street, Suite 1E, Worthington, OH 43085

Email Address: basireddy.kiran@gmail.com

Business Telephone: _____ Home Telephone: 309-825-8585

Address of Property: 526 Peachblow Rd, Lewis Center, OH 43035

Parcel (s): 418-330-01-031-000, 418-330-01-028-000,
418-330-01-030-000, & 418-330-01-029-000 Acreage: ± 27.6 Present Zoning: FR-1

Range: 18 Twp: 4 Section: 3 Farm Lot No: 34 & 35

Subdivision Name: N/A

Present Use: Vacant Single Family/Agricultural Requested Zoning: PCD

Proposed Plan: Planned Commercial and Office District with standalone
commercial buildings

The undersigned certifies that this application and the attachments thereto contain all information required by the Zoning Resolution and that all information contained herein is true and accurate and is submitted to induce the amendment of the Zoning Map. Applicant agrees to be bound by the provisions of the Zoning Resolution of Berlin Township, Delaware County, Ohio. Revised 12/27/19

Date: 11/20/2023 Agent/Applicant Signature: us 1Cn

Agent/Applicant Address: _____

Phone: _____ Fax: _____

Email address: _____

Date: _____ Zoning Inspector Signature: _____

INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED

**REQUIREMENTS FOR THE COMPLETE APPLICATION FOR HEARING BY
THE BERLIN TOWNSHIP ZONING COMMISSION (BZC)**

Original completed application form, dated, and signed by the owner or lessee.

All fees **must** be paid in full when application is presented, and are non-refundable, **\$500.00 plus \$200.00 per acre**, maximum charge of 500 acres. If there should be a **THIRD** hearing due to applicant's request and/or negligence there will be an additional fee of **\$600.00**. Also, 2nd review of a 2-step process will require a payment of an additional **\$600.00** fee before the scheduled meeting.

A **certified** real estate tax mailing address list of current property owners within 200 feet of subject property obtained from **Delaware County Auditors Office, with mailing addresses and two sets of mailing labels, including applicant and/or applicant's representative.**

THESE ITEMS MUST BE PRESENTED WITH THE APPLICATION:

A survey plat signed by a registered Ohio Surveyor showing:

1. Legal Description of the property,
2. Plat Plan of the parcel to scale, including:
 - a.) Area of property including, streets, roadways and parking, and
 - b.) Placement of all existing & proposed buildings,
3. The lot number and/or street address
4. Topographical map

In addition, the survey plat and/or application must include the following as specified in the Berlin Township Zoning Resolution:

5. All setback and frontage dimensions, Article 24.
6. Architectural design criteria for all structures and criteria for proposed signs, with proposed control procedures, Article 25.
7. Landscape Plan, in accordance with the Berlin Township Zoning Resolution, Article 26.

Note: Need text describing design features/standards.

Other requirements to be submitted are as follows:

8. Location of schools, parks and other public facility sites, within one (1) mile,
9. Ability to post bond or an irrevocable letter of credit if the plan is approved assuring completion of public service facilities to be constructed within the project by the developer.
10. The proposed time schedule for development of the site including streets, buildings, utilities and other facilities,
11. If the proposed timetable for development includes developing the land in phases, all phases developed after the first, which in no event shall be less than five (5) acres or the whole tract (whichever is smaller), shall be fully described in

textual form in a manner calculated to give Township official's definitive guidelines for approval of future phases.

Include the following original letters if applicable:

Letter approving agent for owner if applicable
Letter from the Del-Co. Water Company attesting to water availability.
Letter from Gas Company attesting to gas availability (if applicable).
Letter from the Delaware County Sanitary Engineer attesting to sewer capability
or Letter from the Delaware County Health Department attesting to septic feasibility.
Letter from Ohio Department of Transportation (O.D.O.T) or a registered engineer, addressing traffic issues.
Letter from Berlin Township Fire Chief addressing protective service issues they may have.
Letter from the Environmental Protection Agency (E.P.A).
Letter from the Delaware County Engineer. (should include county ditch/drainage plan).
All information concerning Model Homes, Signs, Landscaping, Lighting, and Parking, if applicable.
A drainage plan prepared by a registered engineer.

ALL TOWNSHIP DEVELOPMENT STANDARDS MUST BE ADDRESSED.
Refer to Article 24 of the Berlin Township Zoning Resolution.

PROVIDE AN ELECTRONIC COPY (CD) OF ALL DOCUMENTATION TO BE SUBMITTED.

TWENTY (20) COPIES OF ALL NECESSARY AND RELEVANT INFORMATION MUST BE SUBMITTED WITH THE APPLICATION.

TWENTY (20) COPIES OF ALL AMENDMENTS OR REVISIONS MUST BE SUBMITTED AND AT LEAST 7 DAYS BEFORE ANY TABLING HEARING.

APPLICATIONS WILL ONLY BE PROCESSED WHEN THEY ARE 100% COMPLETE.

A MINIMUM OF THREE SIGNS SHALL BE PROVIDED BY APPLICANT.

Submit any questions to:

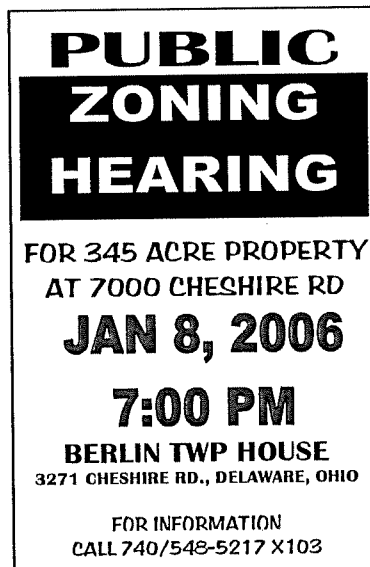
David Loveless
Berlin Township
Zoning Inspector
Phone: 740.548.5217 x103
Fax: 740.548.7458
zoninginspector@berlintwp.us

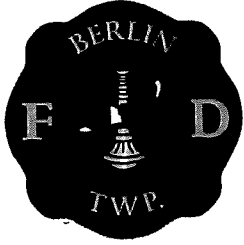
Addendum to BZC Checklist – Signs:

For proposed amendments to the Zoning District Map and/or the Comprehensive Land Use Map the applicant shall provide (3) three signs conforming to the following:

- (a) One sign shall be posted for each 500' of road frontage or at the discretion of the Zoning Inspector on the parcel in the area proposed in the amendment in a location visible from an adjacent street. One sign shall be posted on the corner of the township property located on the northwest corner of Lackey Old State and Cheshire Roads, and one sign shall be posted in front of the township hall.
- (b) The signs shall be two (2) feet by three (3) feet with letters not less than two (2) inches in height notifying the public of the location of the upcoming hearing and the affected parcel as well as a contact number for additional information.
- (c) The signs shall be posted continuously for at least fourteen (14) days prior to the date of the required public hearing and be removed within seven (7) days after board action.
- (d) The signs shall be posted by the applicant with the direction of the zoning inspector or be given to the zoning inspector for posting.

Example:





***Berlin Township
Fire Department***

*2708 Lackey Old State Road
Delaware, Ohio 43015
(740) 548-6031*

***Fire Chief Adam Miller
Lt. Steve Arnold, Fire Prevention***

- 1) Entry into a subdivision/project development shall have 1 lane in and 2 lanes out. When required by Berlin Township FD there shall be at least 2 entry points into the subdivision/project development.
- 2) No Parking signage shall be on the Fire Hydrant side of the street. This signage shall meet the Delaware County Sheriff's office enforcement requirements.
- 3) There shall be a Fire Hydrant installed within the first 50' going into the project development.
- 4) After the first Fire Hydrant going into the project fire hydrants shall be installed every 300'-throughout the project development.
- 5) Any street stubs or ending point shall have a fire hydrant installed at the end point. If determined by Berlin Township FD a flush hydrant is acceptable to be installed in the project development however once the street extension takes place a fire hydrant shall be installed in place of the flush hydrant at the developer's cost.
- 6) The minimum water main size within any project development shall be at least 8" that shall flow a minimum 1000 GPM. Actual water main size for the project development shall be determined at plan review by Berlin Township Fire Department.
- 7) Cul-de-sac shall meet the turning radius per the Orange Twp. FD attachment of 48'
- 8) Berlin Twp. FD shall have access to all green space. The width of the hard surface shall be a minimum 6'. Berlin Township FD will determine hard service requirements.
- 9) Model homes shall have an EXIT sign non-illuminated in the Office area and a 5# ABC Fire Extinguisher.
- 10) To scale drawings shall be provided for all new and revised projects. The scale can be 1"=100' or 1/2"=100' for large projects.

This is not an all-inclusive list

Rev. 03/22

Article 17

Planned Commercial and Office District Oak Park

Proposed Zoning – PCD

March 19, 2024

Section 17.06: Development Plans

A.) Preliminary Development Plan – **See Preliminary Development Plan – Tab 3, Exhibit C-1**

- 1.) The size and location of the proposed PCD district, at a scale of at least 1" = 200', showing topographic contours of at least 5' intervals, wooded areas, wetlands, adjacent (within 200') structures, 100 year floodplains.

The proposed size of the PCD is approximately ± 27.6 acres. The site is located on the south side of Peachblow Road, and to the east of US 23. It is located in Subarea 7a – Proposed Planned Commercial, of the Berlin Township Comprehensive Plan. Refer to Tab 3, Exhibit C-1, for Preliminary Development Plan.

The PCD is divided into 2 subareas, Subarea 'A' is ± 19.4 acres, and Subarea 'B' is ± 8.2 acres.

Subarea 'A' shall be comprised of mixed-use buildings with garages for use by the residents indicated on the development plan. The primary buildings labeled 1 and 4 shall be comprised of up to 3 stories in height and contain apartment units only on all 3 floors. The Primary Buildings labeled 2 and 3 shall be up to 3 stories in height, and contain allowed commercial uses on the first floor, with apartment units allowed on floors 2 and 3. Building 3 shall contain an 8,000 s.f recreation facility that shall serve the occupants within Oak Park and surroundings, located at the southern wing of the building. See Tab 3, Exhibits C-2 & C-2.1

Subarea 'B' shall be comprised of up to 3 out lots to the west, with a specialty retail grocer and/or retail shops to the east. See Tab 3, Exhibits C-3 & C-3.1

- 2.) Conceptual architectural elevations for all structures and signs.

The following architectural design and building construction requirements shall apply to the commercial parcels.

Building Design:

Buildings and structures shall be designed to enhance both areas within and surrounding the development, giving due regard to building footprints, building orientation, massing, roof shape, pitch, and exterior materials. Buildings shall also have architectural features, finishes, and patterns that provide visual interest and contribute to the pedestrian scale.

Building facades shall incorporate a repeating pattern that includes color, texture, and material changes. Expression of architectural or structural bay through a change in plane is recommended. Recommended expressions include offsets, reveals, and recessed flat arches.

Buildings for all uses shall be designed to be seen from three hundred sixty degrees (360°) and have the same caliber of finish on all elevations. Building additions and accessory structures, whether attached or detached, shall be of similar design, materials, and construction to that of the existing principal structure.

Building Materials and Design Elements:

Facades shall be articulated to provide visual interest that will be consistent with the Township, community character, and scale. The intent is to encourage development incorporating high quality materials and a pedestrian friendly scale to contribute to and identify an overall theme.

Blank walls shall not be permitted. Where expanses of solid walls are necessary, they may not exceed twenty (20) feet in length and may not exceed fourteen (14) in height. Ground floor facades that face public streets or parking areas should have display windows, awnings, verandas, entry areas, or other such elements incorporated into their design. There shall be a minimum of three (3) design elements for every one hundred (100) feet of elevation facing a public right-of-way and a minimum of two (2) design elements for every one hundred (100) feet of each side and rear elevation that does not front on a public right-of-way. Design elements shall include:

- a) Wood columns of sufficient width.
- b) A door at least twenty-eight (28) square feet in area with portico/covered entry
- c) A window of at least six (6) square feet in area. Windows closer than ten (10) square feet shall be considered one (1) element.
- d) Cupola
- e) Masonry water table
- f) Trellis containing plants.
- g) Patio, deck, or other similar features
- h) Balconies that project no more than two feet into the minimum setback and have a minimum clearance of ten (10) feet from grade.

- i) Works of art, fountains and pools, street furniture, landscaping and garden areas that are properly integrated into the streetscape, and other similar significant permanent architectural features consistent with the overall theme may be approved by the Township.

Entryway design elements and variations should give orientation and aesthetically pleasing character and pedestrian scale to the building. Each principal building shall have a highly visible customer entrance featuring architectural elements, which may include the following.

- a) Overhangs
- b) Recesses and projections
- c) Verandas
- d) Arches
- e) Landscaped areas with places for pedestrian seating
- f) Architectural details such as tile work and moldings which are integrated into the building structure and design.
- g) Peaked roof form
- h) Tower elements
- i) Canopies or porticos
- j) Night lighting (as allowed by Township zoning code)

Foundations must be clad with the same natural material utilized on the building to blend with the overall architecture of the structure. Exposed cement block or split face block foundations shall be prohibited.

Building Materials:

All exterior elevations shall be comprised of eighty (80) percent wood, fiber cement, brick, or native or cultured stone. Other natural materials may be utilized as an accent material provided it does not exceed twenty (20) percent of the gross exterior building wall square footage. Vinyl and/or aluminum shall be prohibited except when used for trim details such as downspouts, soffits, gutters, and shutters.

The use of black, gold, green, silver, opaque or any other reflective or colored glass on a building is prohibited. Frosted glass may be permitted in some cases, subject to review from the Township.

Building Colors:

Building colors shall consist of neutral tones and earth tones limited to browns, tans, grays, whites, and blues. Greens may be utilized as an accent and shall not be the predominant building color. Brick colors shall consist of neutral tones and reds limited to traditional brick colors.

Roofing:

Roof features should complement the character of adjoining buildings/developments where applicable. All roof top mechanical equipment must not be visible from any public roads.

For any buildings with a sloped roof, the roof shall have a minimum of 6:12 pitch. Secondary accessory roofs, such as porches, may be a lesser slope with a minimum pitch of 4:12. Pitched roofs must be constructed of dimensional shingles, standing seam metal, slate or simulated slate. Both pitched and flat roofs shall be allowed, variation in rooflines shall be used to reduce the mass and add interest. Any roof lines that exceed 100' in length shall include roofline variations.

Drive-Thrus:

For commercial buildings only (not applicable to mixed use buildings), a drive thru (if deemed appropriate for the site) shall be designed as an integral part of the structure it serves. Features incorporated with a drive thru including, but not limited to, canopies, awnings and support posts shall match the material and color scheme within overall theme. Drive thru features shall not have any pickup windows, ordering areas, signage or other related items located on the front elevation of a building or located between the building and the street right-of-way.

Signs:

Subarea 'A' – Temporary and permanent signage are proposed for this development. Two monument signs and two temporary marketing signs are proposed and will be located at the entry to The Flats at Oak Park North along Road 'A', and the entry to The Flats at Oak Park South along Road 'B'. The marketing signs shall be double sided. See Tab 4, Exhibits D-2, D-3, & D-4.

Wall signage is also proposed for this site, so that each proposed commercial business located on the 1st floor of the buildings can advertise their location. All business specific signage shall be submitted at the time of final development plan submission, as it is still unknown at this time.

Subarea 'B' – Signage shall be provided at the time of the final development plan submission. See Tab 3, Exhibits C-3 & C-3.1 for concept signage.

Loading and trash collection:

Locations for loading areas and trash collection shall be detailed and indicated on Final Development Plans when final users and architecture are developed. Loading zones and trash areas shall be appropriately screened and located so as to not interfere with adjacent residential areas.

- 3.) The intended general provisions for water, fire hydrants, sanitary sewer, and adequate storm water drainage outlet. Information regarding existing pipe sizes, capacities, committed flows, and potential needed upgrades must be documented by the utility provider or a registered civil engineer.

Water shall be provided by DelCo Water. Sanitary sewer is available to be extended to this site from the south, per the Delaware County Regional Sewer district.

Refer to Tab 5, Exhibit E-1 for Concept Utility plans by Advanced Civil Design, and refer to Tab 5, Exhibits E-2 through E-10 for utility letters.

- 4.) The relationship of the proposed development to existing and probable uses of surrounding areas, including easements, rights of way, proposed drainage and public utilities.

The proposed development is bordered by Peachblow Road to the north, a commercial parcel in the northeastern corner, single family homes to the east, as well as the future Berlin Meadows single family development. Worthington Arms homes to the south, single family homes to the west, as well as a memorial park, and commercial parcel to the west. See Tab 3, Exhibit C-5 for Existing Features Plan

- 5.) A design of the open space and proposed description of its use, ownership, and maintenance.

Subarea 'A' open space has been designed to buffer existing homes and uses around the periphery of the site, and to provide internal pockets of open space for the resident's use. All open spaces shall be maintained by the Master Association. See Tab 4, Exhibit D-5 for Open Space Plan

Open Space 'A' – contains half of the entry feature for The Flats at Oak Park North, 8' wide multi-use pathway, existing stream overlook seating area, and a landscaped park feature.

Open Space 'B' – contains half of the entry feature for The Flats at Oak Park North, the community green plaza, entries to mixed use commercial shops, street trees, and 5' wide sidewalks.

Open Space 'C' – contains the central community green area which has seating areas, arbors, tree plantings, fencing and columns, and an open lawn for community activities.

Open Space 'D' – contains a large oak tree to be preserved, a proposed basin, columns and fencing, existing wetland, 5' wide sidewalk, 10' wide bike path, a patio area with swings and seating, and a landscape feature.

Open Space 'E' – contains half of the entry feature for The Flats at Oak Park South, entries to mixed use commercial shops, and street trees.

Open Space 'F' – contains half of the entry feature for The Flats at Oak Park South, street trees, three rail fencing, and existing trees to be preserved.

Open Space 'G' – contains existing trees to be preserved, 5' wide sidewalk, three rail fencing, and landscape buffering.

Subarea 'B' open space will be dispersed through the property and will be used for setbacks and buffers. The lot will be maintained by the commercial lot owner.

Ponds with headwalls and end walls that are exposed to view shall be treated with real or synthetic stone to resemble stone walls. All stone shall extend to or below grade so that any low water conditions only reveal stone.

Ponds will have aerator fountains to maintain water quality. Fountains shall have a spray pattern of 10' height minimum.

- 6.) Specific statements of divergence, if any, from the development standards in this Article or the general standards of this resolution such as setbacks, parking, landscaping, lighting, signage, and so forth.

Section 17.02.A – Permitted Uses

It is requested that apartment residential uses be allowed in this commercial development within Subarea A only. This allows for mixed use buildings to be part of the development and would create a walkable commercial area with a variety of commercial opportunities. A maximum of 194 apartment units are permitted within Subarea A

Section 17.02.A – Permitted Uses

It is requested that the setback from Food Services and Drinking Places (NAICS #722) be reduced from 300' to 100' from any adjacent surrounding Residential Zoning Districts, and 0' setback from internal Residential Zoning Districts (TPUD). This allows for the mixed-use buildings and commercial out lots to have food services and drinking places as an available use. Restaurants are a desirable use for this area in the development.

Section 17.05.6 – Minimum Side Yards

It is requested that the minimum side yard be reduced from 100' to 25' against any Residential Zoning District or Planned Residential District. This is to create a distinct walkable district flowing between the PCD and TPUD portions of the full development, which large setbacks would create gaps and thus create less

walkability. Buffers consisting of fences, dense vegetation, mounding, and other elements will be used.

Section 17.05.7 – Minimum Rear Yards

It is requested that the minimum rear yard be reduced from 100' to 25' against any Residential Zoning District or Planned Residential District. This is to create a distinct walkable district flowing between the PCD and TPUD portions of the full development, which large setbacks would create gaps and thus create less walkability. Buffers consisting of fences, dense vegetation, mounding, and other elements will be used.

Section 17.05.15 – Building Height Limits

It is requested that the maximum building height be increased from 35' to 45'. This increased height would allow the proposed mixed-use buildings to be 3 stories and would allow for a variety of rooflines on the mixed-use buildings. The roof lines of any 3 story buildings shall be varied and not have greater than 150' of roof at same height. A minimum of 3' variation shall be required. Architectural elements may be used to fulfill this requirement.

The code currently allows for architectural elements such as chimneys, spires, domes, flag poles, and elevator shafts to be constructed to any safe height, not to exceed 100 feet. This PCD would limit those elements to 65' height maximum.

- 7.) Proposed location of all structures and uses.

Subarea 'A' – See Tab 3, Exhibits C-2 & C-2-1 for Preliminary Development Plan for locations of all structures. All structures to be located on a fee simple lot, excluding the proposed pathways, entry features, and signage.

Subarea 'B' – See Tab 3, Exhibits C-3 & C-3.1, for Preliminary Development Plan for setbacks. Actual development plans will not be known until a specific user for the site submits site plans and building plans. This will be supplied during final development plan approval.

- 8.) Preliminary Traffic Impact Analysis based upon new trip generation as estimated by the Delaware County Engineer's standards.

See Tab 5, Exhibit E-10 for Traffic Impact Study

- 9.) All required design standards in Section 17.05.

A. The development plan shall incorporate the following standards for all permitted uses:

- 1.) Access: Requires frontage on or direct access to one or more dedicated and improved public arterial roads as shown on the Delaware County Thoroughfare Plan, or to an access road that runs parallel to an arterial

road. Provision for future connections to other public roads may be required by the Township, the County Engineer, and/or the Regional Planning Commission.

The site has access to proposed Road 'A' & Road 'B' which will connect to Peachblow Road and US 23.

- 2.) Minimum Tract Size: 10 acres or as approved on the final development plan.
The tract size is ±27.6 acres.

- 3.) Maximum Commercial Ground Coverage by Buildings and Parking (All Impervious Surfaces): No more than 80% of the total tract acreage of a commercial development, exclusive of public street rights of way shall be covered by impervious surfaces, which includes all parking and commercial buildings (not multi-family dwellings). Land underneath overhead high voltage electric transmission lines may be used for open space, landscaping, parking, and roads with the permission of the electric utility company.

The development will have a maximum ground coverage of 80%, this includes all building & parking areas to be located on site.

- 4.) Minimum Required Open Space for Commercial Developments: Not less than 20% of the total tract acreage of a commercial development shall remain open space. Open spaces may be used for the retention, detention and disposal of storm water drainage. Features which are likely to cause erosion or flooding shall not be permitted. A 15-foot wide "green belt" shall be provided between the edge of any parking area and the adjacent public street right of way and shall be landscaped in accordance with Article 26.

The development shall have a minimum open space acreage of approximately 20%.

- 5.) Minimum Lot Width: At the building line shall be as approved per plan.
See Tab 3, Exhibit C-1 for Preliminary Development Plan.

- 6.) Minimum Side Yards: Shall equal one-third (1/3) the sum of the height and depth of the structure, but in no case shall be less than one hundred (100) feet from any Residential Zoning District or Planned Residential District, or as approved per plan.

The side yard building setback shall be 25', a divergence has been requested.

- 7.) Minimum Rear Yard: Shall equal one-third (1/3) the sum of the height and width of the structure, but in no case shall be less than one hundred (100) feet from any Residential Zoning District or Planned Residential District, or as approved per plan.

The rear yard building setback shall be 25', a divergence has been requested.

- 8.) Perimeter Area: No parking shall be constructed within 25 feet of the lot line of an existing or proposed single family home, or a residentially zoned district.

The development shall comply with this requirement, see Tab 3, Exhibit C-1 for Preliminary Development Plan.

- 9.) Water and Sewer: Centralized water and centralized sewer service shall be provided unless otherwise approved per development plan. The appropriate state and/or county agencies with jurisdiction shall indicate feasibility of water supply and wastewater disposal systems at the time of the preliminary development plan review.

See Tab 5, Exhibit E-2 through E-10 for utility letters of serviceability.

- 10.) Walkways and Street Trees: The Township may require walkways to connect parking areas with buildings. Where sidewalks or bike paths are required, they shall be separated from the paved street or parking lot surface by at least five feet (5') of landscaped area with trees placed behind the sidewalk.

The development shall comply with this requirement.

- 11.) Pavement Width Standards for Interior Development Streets, Drives and Parking Lots: All private streets, roads and driveways shall be constructed to a pavement width and cross section that meets the Average Daily Traffic and weights anticipated in the Delaware County Engineer's Location and Design Manual, or shall have a design life of 20 years. Parking lot pavement does not have to meet street cross section standards, but parking lot drive aisles that connect to the public streets shall be constructed to public street cross sectional and design life standards within 50 feet of the edge of the public paved road.

The development shall comply with this requirement.

- 12.) Underground Utilities: All utility lines constructed to service the proposed commercial uses shall be located underground.

The development shall comply with this requirement.

- 13.) Environmentally Sensitive Areas: Jurisdictional wetlands, slopes greater than 20%, and 100- year floodplains shall be preserved to the greatest extent possible. No commercial or office structures shall be constructed within the 100-year floodplain of any stream or river. To the maximum extent possible, all natural drainage courses, vegetation and contours in excess of 6% shall be maintained.

Wetlands shall be preserved to the greatest extent possible. A stream is located on site and shall be preserved. See Tab 3, Exhibit C-5 for Existing Features Plan.

- 14.) Building Design: The project architect shall give due regard to the footprints, building orientation, massing, roof shape, pitch and exterior materials to blend with other traditional or historic architecture in the community or with the site.

Subarea 'A' – Development shall comply. All structures constructed within this development shall contain the following minimum living areas:

- a. Studio unit: 590 square feet
- b. One (1) bedroom unit: 680 square feet
- c. Two (2) bedroom unit: 900 square feet
- d. Each unit with bedrooms over two shall have a minimum of 120 sf per each additional bedroom.

Subarea 'B' – Building size will not be known until the final development plan submission but shall not exceed a maximum size of 30,000 square feet for the east commercial parcel, and 10,000 square feet per acre for the west commercial parcels.

Building design shall adhere to all design standards and materials listed in Section 17.06.A.2 of this document, and as shown on Tab 7, Exhibits G-1 & G-2 for Architectural Character Concepts

- 15.) Building Height Limits: No building or structure in this district shall exceed thirty-five (35) feet in height measured from the front door threshold to the highest point on the roof. Chimneys, spires, domes, flag poles, and elevator shafts may be constructed to any safe height, but shall not exceed one-hundred (100) feet in height. No windmill, aerial, antenna, or tower shall be constructed to a height greater than the distance from the center of the base to the nearest property line of said tract and shall not exceed one-hundred (100) feet in height.

No Subarea 'B' buildings shall exceed 35' as measured from the threshold plate at the front door to the highest point on the roof. Subarea 'A' mixed use buildings may exceed this, and be a maximum 45' in height, but no more

than 3 stories. A divergence has been requested. Architectural elements such as chimneys, spires, domes, flag poles, and elevator shafts to be constructed to any safe height, not to exceed 65' height maximum in each subarea.

- 16.) Landscaping: All yards, front, side and rear, shall be landscaped in accordance with Article 23. All open spaces or non-residential use areas shall be landscaped and shall meet the landscaping requirements of this resolution, unless a variation from these standards is specifically approved as part of the final development plan. A landscape plan prepared by a licensed landscape architect showing the caliper, height, numbers, name and placement of all material, shall be submitted and is subject to approval as a part of the final development plan. Natural foliage shall be retained as buffers where practicable. The Township may require establishment of such tree cover and/or other foliage to buffer adjacent uses.

Subarea 'A' – Landscape plans and site details are attached as Tab 4, Exhibits D-1, D-2, D-3, & D-4 with buffer and open space descriptions in Section 17.06.A.5 of the zoning text.

Subarea 'B' – Final landscape plans will be submitted with the final development plans and will be in accordance with Article 26.

- 17.) Parking: Off-street parking shall be provided at the time of construction of the main structure or building, with adequate provisions for ingress and egress according to the final development plan. In preparing and approving the parking plan, the parking provisions of Article 24, Section 24.01 of this Resolution shall be incorporated, or a divergence requested.

The development shall comply with this requirement.

- 18.) Signs: Signs shall conform to Article 25 of this resolution, or a divergence requested and approved as part of the final development plan.

All signage shall comply with Article 25, see Tab 3, Exhibits C-3 & C-3.1 for Subarea 'B' concept signage. See Tab 4, Exhibit D-3 for Subarea 'A' signage.

- 19.) Exterior Lighting: All exterior lighting shall be as specifically approved as part of the final development plan in accordance with Article 24, Section 24.13 of this resolution.

All exterior lighting shall comply with Article 24. Parking lights shall be down lights and meet all requirements. A final lighting plan will be provided at the time of the final development plan submission.

- 20.) Building Size Limits: Retail or office buildings, including but not limited to NAICS Codes 114, 311811, 442, 443, 444, 445, 446, 447, 448, 451, 452, 453, 51,

52, 5312, 5313, 53211, 5322, 53242, 54, 55, and 561 shall contain no more than 65,000 square feet under one roof for any individual use.

Development shall comply, all retail or office buildings shall be less than 65,000 square feet for any individual user.

- 21.) Exception to Retail and Office Building Size Limits: Retail and office uses permitted in Section 15.02, and NAICS code 441 (Motor Vehicle and Parts Dealers) with an individual commercial or office that exceeds 65,000 square feet under one roof for any individual use may be approved at the discretion of the township provided they have direct access to or access to a commercial frontage road located parallel to and within 500 feet of U.S. 23 or U.S 36.

This use is not allowed in this development, and therefore the code is not applicable.

- 22.) Supplemental Conditions and Safeguards: The Zoning Commission and/or Board of Trustees may require additional conditions be met with regard to the type and extent of the public improvements to be installed; landscaping; improvements and maintenance of open space areas; and other development characteristics.

- 10.) Fire-fighting plan: submission of a letter from Fire department regarding access and water needs for fire-fighting.

See Tab 5, Exhibit E-8, for letter from Berlin Township Fire Department

- 11.) Phasing plans, if any.

Subarea 'A' – There shall be 2 phases, see Tab 3, Exhibit C-4

Subarea 'B' – Outlots in west section shall be developed as users have final development plans approved. The east section shall be developed as one phase.

- 12.) Calculations of net developable acreage and proposed lot coverage for commercial uses.

Net developable acreage is ±23.2 AC, and proposed maximum lot coverage of building and parking areas is 80%.

- 13.) Proposed permitted and accessory uses listed numerically and selected from the NAICS list in Section 17.02.

2002 U.S. NAICS CODE #	PERMITTED USES
1114	Greenhouse, Nursery, and Floriculture Production
311811	Retail Bakeries

441210	Recreational Vehicle Dealers
441221	Motorcycle Dealers
441222	Boat Dealers
441229	All other Motor Vehicle Dealers
4413	Automotive Parts, Accessories, and Tire Stores except 441310 Auto Used Parts Sales
442	Furniture and Home Furnishings Stores
443	Electronics and Appliance Stores
444	Building Material and Garden Centers
445	Food and Beverage Stores
446	Health and Personal Care Stores
447	Gasoline Stations (except 447109 Truck Stops)
448	Clothing and Clothing Accessories Stores
451	Sporting Goods, Hobby, Book (except Adult-Related Entertainment) and Music Stores
452	General Merchandise Stores
453	Miscellaneous Store Retailers, (except Adult-Related Entertainment establishments and 45393 Manufactured Home Dealers)
491	Postal Service
511	Publishers
5133	Telecommunications
514	Information and Data Processing Services
516110	Internet Publishing
517110	Wired Telecommunications Carriers
517212	Cellular and other Wireless Telecommunications
518111	Internet Service Providers
52	Finance and Insurance
531130	Lessors of Mini Warehouses and Self Storage Units
531210	Offices of Real Estate Agents and Brokers
531390	Other activities related to Real Estate
53211	Passenger Car Rental and Leasing
532120	Truck and Utility Trailer Rental and Leasing
5322	Consumer Goods Rental
54	Professional, Scientific and Technical Services (includes Medical, Veterinarians, Computer and Related Hardware and Research and Development etc.)

55	Management of Companies and Enterprises
561110	Office Administrative Support Services
561431	Private Mail Services
561439	Other Business Service Centers (including Copy Shops)
561510	Travel Agencies
61	Educational Services
621111	Offices of Physicians
621112	Offices of Mental Health Specialists
621210	Offices of Dentists
621310	Offices of Chiropractor
621320	Offices of Optometrists
621330	Mental Health Practitioners
621340	Physical, Occupational, and Speech Therapists and Audiologists
621391	Podiatrists
621399	Miscellaneous Health Care Practitioners
621491	HMO Medical Centers
621492	Kidney Dialysis Centers
621493	Ambulatory Surgical and Emergency Centers
621511	Medical Laboratories
621512	Diagnostic Imaging Centers
621610	Home Health Care Services
621910	Ambulance Services
622	Hospitals
623110	Nursing Care Facilities
623311	Continuing Care Retirement Communities
623312	Homes for the Elderly
624410	Child Day Care Services
711110	Theater Companies and Dinner Theaters
711120	Dance Companies
711190	Other Performing Arts Companies (except Adult-Related Entertainment)
712110	Museums
713940	Fitness and Recreational Centers
721110	Hotels (except 72112-casino) and Motels
721191	Bed and Breakfast Inns
722	Food Services and Drinking Places (except those establishments offering or featuring entertainment including totally nude, topless, bottomless, strippers, male or female impersonators, or similar adult entertainment or services), provided that there shall be a minimum of 300 feet of setback from the property line of any Food and Drink service place and the nearest residential property line or residential zoning district.

812	Personal and Laundry Services (except Adult-Related Entertainment)
813	Religious, Grant making, Civil, Professional and Similar Organizations
92	Public Administration (except 922150 Parole and Probation Offices)

B.) Other Submittal Requirements

- 1.) A certified real estate tax mailing address list of current property owners within 200 feet of subject property obtained from Delaware County Auditor's Office, with mailing addresses and two sets of mailing labels, including applicant and/or applicant's representative.

See Tab 1, Exhibit A-1, for Surrounding Property Owner addresses.

- 2.) Legal Description of the property

See Tab 2, Exhibit B-1, for Legal Description

- 3.) Plat plan of the parcel to scale, including:

- a) Area of property including, streets, roadways, and parking
- b) Placement of all existing and proposed buildings

See Tab 2, Exhibit B-2, for Boundary Survey

- 4.) The lot number and/or street address

Parcel Number Identification Numbers: 418-330-01-028-000, 418-330-01-029-000, 418-330-01-030-000, & 418-330-01-031-000

- 5.) Topographical map

See Tab 3, Exhibit C-5, for Existing Conditions Plan

- 6.) All setback and frontage dimensions, Article 24

See Tab 3, Exhibit C-1, for Preliminary Development Plan

- 7.) Architectural design criteria for all structures and criteria for proposed signs, with proposed control procedures, Article 25

See Section 17.06.A.2 of the zoning text for architectural design.

Subarea 'A' – See Tab 7, Exhibit G-1 for Architectural Character Concepts

Subarea 'B' – See Tab 7, Exhibit G-2 for Architectural Character Concepts

- 8.) Landscape Plan, in accordance with the Berin Township Zoning Resolution, Article 26

Subarea 'A' – Landscape plans and site details are attached as Tab 4, Exhibits D-1, D-2, D-3, & D-4 with buffer and open space descriptions in Section 17.06.A.5 of the zoning text.

Subarea 'B' – Final landscape plans will be submitted with the final development plans and will be in accordance with Article 26.

- 9.) Location of schools, parks, and other public facility sites, within one (1) mile
The site is within proximity to Fairview Memorial Park, Columbus State Community College, Delaware Area Career Center, and the Shale Meadows Elementary School. See Tab 3, Exhibit C-5 for Existing Conditions Plan.
- 10.) Ability to post bond or an irrevocable letter of credit if the plan is approved assuring completion of public service facilities to be constructed within the project by the developer
See Tab 6, Exhibit F-1, for Bank Letter
- 11.) The proposed time schedule for development of the site including streets, buildings, utilities, and other facilities
It is anticipated that the subdivision construction would begin shortly after approval of a final development plan, final engineering plans, and plats, which is likely to occur in the summer of 2025. The site utilities, street, and landscape will be installed, and commercial buildings will be constructed.
- 12.) If the proposed timetable for development includes developing the land in phases, all phases developed after the first, which in no event shall be less than five (5) acres or the whole tract (whichever is smaller), shall be fully described in textual form in a manner calculated to give Township official's definitive guidelines for approval of future phases.
Subarea 'A' – There shall be 2 phases, see Tab 3, Exhibit C-4
Subarea 'B' – Outlots in west section shall be developed as users have final development plans approved. The east section shall be developed as one phase.
- 1.) Letter approving agent for owner if applicable
Applicant is the owner of the property.

TAB 1 – EXHIBIT 'A-1' – Surrounding Property Owners

PROPERTY OWNER**PARCEL NUJMBER**

BELMONT PLACE HOMEOWNERS'
ASSOCIATION
MCNAMARA LOOP
LEWIS CENTER, OH 43015

41833002001000

41833010001000

NAVALKAR NIPUN
EVATI NIPUN
91 GRACELYN WAY
LEWIS CENTER OH 43035

41833010002000

VENKATA MALLADI
120 MCNAMARA LOOP
LEWIS CENTER OH 43035

41833002002000

GOWSIKA RAJAN PALANIVEL
HEMA PRIYA MAHARAJAN
126 MCNAMARA LOOP
LEWIS CENTER OH 43035

41833002003000

SHANNON N ISRAEL
URIEL BE ISRAEL
132 MCNAMARA LOOP
LEWIS CENTER OH 43035

41833002004000

KEVIN R COUTHEN
CAITLIN N COUTHEN
138 MCNAMARA LOOP
LEWIS CENTER OH 43035

41833002005000

HAROLD L REAY
LINDA M REAY
144 MCNAMARA LOOP
LEWIS CENTER OH 43035

41833002006000

VIKRAM HOODA
EKTA BHARTI
150 MCNAMARA LOOP
LEWIS CENTER OH 43035

41833002007000

JAMES ANDREW THOMPSON
AARON M REA
156 MCNAMARA LOOP
LEWIS CENTER OH 43035

41833002008000

PING WANG
CHU MIN
162 MCNAMARA LOOP
LEWIS CENTER, OH 43035

41833002009000

MEAGAN E LAW
MITCHELL D LAW
168 MCNAMARA LOOP
LEWIS CENTER, OH 43035

41833002010000

MAHESH S MANE
VAISHALI M MANE
174 MCNAMARA LOOP
LEWIS CENTER, OH 43035

41833002011000

JAMES A CASTRODALE
KIMBERLY L CASRODALE
180 MCNAMARA LOOP
LEWIS CENTER, OH 43035

41833002012000

JITENDRA PRATAP SINGH RAJORIA
VANDANA RAJORIA
186 MCNAMARA LOOP
LEWIS CENTER, OH 43035

41833002013000

KIRAN SHASHI THANDRA
192 MCNAMARA LOOP
LEWIS CENTER, OH 43035
41833001026000

41833002014000

WILMA J LAW
838 PEACHBLOW RD
LEWIS CENTER, OH 43035

41833001026000

GERMANN HOLDINGS LLC
774 PEACHBLOW RD
LEWIS CENTER, OH 43035

41833001027000

JENNIFER DYAN STRAWSER 886 PEACHBLOW RD LEWIS CENTER, OH 43035	41833001022001
MARK E VANDERVORT JENNIFER D STRAWSER 1010 PEACHBLOW RD LEWIS CENTER OH 43035	41833001022000
PEACHBLOW LAND LLC 470 OLD WORTHINGTON RD WESTERVILLE OH 43082	41833001014000
UMH OH WORTHINGTON ARMS LLC 5277 COLUMBUS PIKE LEWIS CENTER OH 43035	41833001066000
NCDCBT LLC 102 HIDDEN PASTURES DR CRAMERTON NC 28032	41833001064000 41833001062000
2715 WISE AVENUE LTD 5087 COLUMBUS PIKE LEWIS CENTER OH 43035	41833001061000
ISLAMIC SOCIETY OF CENTRAL OHIO PO BOX 29392 COLUMBUS OH 43229	41833001052000
CHARLES SHIPMAN ANN SHIPMAN 375 CONNER LN LEWIS CENTER OH 43035	41833001051000 41833001050000
DALE FILBY RICHARDS 345 CONNER LN LEWIS CENTER OH 43035	41833001049000
LEONARD L BUSSARD SHARON K BUSSARD 305 CONNER LN LEWIS CENTER OH 43035	41833001048000

JANE M MCKEE, TRUSTEE
350 PEACHBLOW RD
LEWIS CENTER OH 43035

41833001034000

JUDY D CONNER
380 PEACHBLOW RD
LEWIS CENTER OH 43035

41833001033000

TAB 2 – EXHIBITS 'B-1 & B-2' – Legal Description and Boundary Survey

**Zoning Description ~ 64.9 Acre +/-
South at the Intersection of Crownover Way
And Peachblow Road**

-1-

Situated in the State of Ohio, County of Delaware, Township of Berlin, being part of Farm Lot 34 and 35, Section 3, Township 4, Range 18, United States Military District and containing 64.9+/- acres of land, more or less, said 64.9+/- acres being part of the Original 75.454 acre tract of land conveyed to PeachblowRoad Ltd., of Record in Official Record 1978, Page 1436 and part of a 19.029 acre tract of land conveyed to PeachblowRoad Ltd. of record in Official Record 2015, Page 2804, said 64.9+/- acres more particularly described as follows:

Beginning, at the northwesterly corner of said Original 75.454 and being in the centerline of Peachblow Road (C.R. 98);

Thence **S 86° 24' 54" E**, along a northerly line of said Original 75.454 acre tract and said 19.029 acre tract and along said centerline, **1366.5 feet+/-** to an angle point at a northeasterly corner of said 19.029 acre tract and being a northwesterly corner of a 5.040 acre tract of land conveyed to Gemann Holdings LLC of record in Official Record 1468, Page 1022;

Thence along the common lines of said 19.029 tract and said 5.040 acre tract, the following two (2) courses:

S 03° 16' 24" W, 699.9 feet+/- to an angle point thereof;

S 86° 23' 39" E, 372.7 feet+/- to an angle point thereof and being in the westerly line of a 12.941 acre tract of land conveyed to Mark E. Vandervart and Jennifer D. Strawser;

Thence **S 03° 22' 25" W**, along the easterly line of said 19.929 acre tract, along the westerly line of said Vandervart/Strawser tract and along the westerly line of a 145.432 acre tract of land conveyed to Peachblow Land LLC of record in Official Record 1728, Page 328, **1820.3 feet+/-** to a southeasterly corner of said 19.029 acre tract and being the northeasterly corner of a tract of land conveyed to UMH OH Worthington Arms, LLC of record in Official Record 1371, Page 730;

Thence **N 86° 36' 06" W**, along a southerly line of said 19.029 acre tract and along the northerly line of said UMH OH tract, **272.5 feet+/-** to an angle point;

Thence across said 19.029 acre tract and said Original 75.454 acre tract, the following twelve (12) courses;

N 03° 22' 25" E, 711.7 feet+/- to an angle point thereof;

N 86° 37' 35" W, 578.1 feet+/- to an angle point thereof;

N 03° 23' 54" E, 544.9 feet+/- to a point of curvature;

with a curve to the right, having a central angle of **18° 08' 41"** and a radius of **244.99 feet**, an arc length of **77.58 feet**, a chord bearing and chord distance of **N 61° 02' 08" W, 77.3 feet+/-** to a point of reverse curvature;

with a curve to the left, having a central angle of **39° 22' 52"** and a radius of **184.64 feet**, an arc length of **126.91 feet**, a chord bearing and chord distance of **N 72° 57' 50" W, 124.4 feet+/-** to a point of reverse curvature;

with a curve to the left, having a central angle of **11° 48' 16"** and a radius of **987.07 feet**, an arc length of **203.37 feet**, a chord bearing and chord distance of **N 88° 46' 58" W, 203.0 feet+/-** to a point of curvature;

EXHIBIT B-1

**Zoning Description ~ 64.9 Acre +/-
South at the Intersection of Crownover Way
And Peachblow Road**

-2-

with a curve to the left, having a central angle of **01° 56' 08"** and a radius of **1972.46 feet**, an arc length of **66.83 feet**, a chord bearing and chord distance of **S 79° 48' 36" W, 66.8 feet+/-** to an angle point;

S 14° 07' 48" E, 97.6 feet+/- to a point of curvature;

with a curve to the right, having a central angle of **12° 37' 08"** and a radius of **970.00 feet**, an arc length of **213.63 feet**, a chord bearing and chord distance of **S 07° 49' 14" E, 213.2 feet+/-** to an angle point;

N 86° 36' 06" W, 246.4 feet+/- to a point of point;

S 03° 23' 54" W, 610.0 feet+/- to a point of point;

N 86° 59' 41" W, 129.8 feet+/- to a westerly line of said Original 75.454 acre tract and being in the easterly line of a 2.631 acre tract of land described as Tract 2 and conveyed to NCDCBT LLC of record in Official Record 1035, page 227;

Thence **N 10° 50' 52" W**, along the westerly line of said Original 75.454 acre tract, along the easterly line of said Tract 2 and along an easterly line of a 3.67 acre tract of land conveyed to 2715 Wise Avenue Ltd. of record in 1546, Page 2133, **498.3 feet** to an angle point of said Original 75.454 acre tract, being the northeasterly corner of said 3.67 acre tract and being the southeasterly corner of a 8.325 acre tract of land conveyed to the Islamic Society of Central Ohio of record in Official Record 1788, Page 2311;

Thence **N 03° 15' 13" E**, along the westerly line of said Original 75.454 acre tract, along the easterly line of said 8.325 acre tract and along the easterly line of a subdivision of lots named "Midway Gardens" of record in Plat Book 4, Page 125, **1660.5 feet** to the **True Point of Beginning**. Containing **64.9+/- acres**.

The above description was prepared by Advanced Civil Design Inc. on March 14, 2024 and is based on existing County Auditor records, County Recorder records and an actual field survey by Advanced Civil Design, Inc in January of 2023.

All references used in this description can be found at the Recorder's Office, Delaware County, Ohio.

This is not to be used for the transfer of land and is for zoning purposes only.

ADVANCED CIVIL DESIGN, INC.

**Zoning Description ~ 27.6 Acre +/-
South at the Intersection of Crownover Way
And Peachblow Road**

-1-

Situated in the State of Ohio, County of Delaware, Township of Berlin, being part of Farm Lot 34 and 35, Section 3, Township 4, Range 18, United States Military District and containing 27.6+/- acres of land, more or less, said 27.6+/- acres being part of the Original 75.454 acre tract of land conveyed to PeachblowRoad Ltd., of Record in Official Record 1978, Page 1436 and being part of a 19.029 acre tract of land conveyed to PeachblowRoad Ltd of record in Official Record 2015, Page 2084, said 27.6+/- acres more particularly described as follows:

Beginning for Reference at the northwesterly corner of said Original 75.454 and being in the centerline of Peachblow Road (C.R. 98);

Thence **S 03° 15' 13" W**, along the westerly line of said Original 75.454 acre tract, across said right-of-way, along the easterly line of a subdivision "Midway Gardens" of record in Plat Book 4, Page 125 and along the easterly line of a 8.325 acre tract of land conveyed to the Islamic Society of Central Ohio of record in Official Record 1788, Page 2311, **1660.5 feet+/-** to an angle point at a southeasterly corner of said 8.325 acre tract and being a northeasterly corner of a 3.67 acre tract of land conveyed to 2715 Wise Avenue Ltd. of record in Official Record 1546, Page 2133;

Thence **S 10° 50' 52" E**, along the westerly line of said Original 75.454 acre tract, along the easterly line of said 3.67 acre tract and along easterly line of a 2.631 acre tract of land described as Tract 2 and conveyed to NCDCBT LLC of record in Instrument Number 1035, Page 227, **498.3 feet+/-** to a point, the **True Point of Beginning**;

Thence across said Original 75.454 acre tract, the following twelve (12) courses:

S 86° 59' 41" E, 129.8 feet+/- to a point;

N 03° 23' 54" E, 610.0 feet+/- to a point;

S 86° 36' 06" E, 246.4 feet+/- to a point of curvature;

with a curve to the left, having a central angle of **12° 37' 08"** and a radius of **970.00 feet**, an arc length of **213.63 feet**, a chord bearing and chord distance of **N 07° 49' 14" W, 213.2 feet+/-** to a point of tangent;

N 14° 07' 48" W, 97.6 feet+/- to a point of curvature;

with a curve to the right, having a central angle of **01° 56' 28"** and a radius of **1972.46 feet**, an arc length of **66.83 feet**, a chord bearing and chord distance of **N 79° 48' 36" E, 66.8 feet+/-** to a point of curvature;

with a curve to the right, having a central angle of **11° 48' 16"** and a radius of **987.07 feet**, an arc length of **203.37 feet**, a chord bearing and chord distance of **S 88° 46' 58" E, 203.0 feet+/-** to a point of curvature;

with a curve to the right, having a central angle of **39° 22' 52"** and a radius of **184.64 feet**, an arc length of **126.91 feet**, a chord bearing and chord distance of **S 72° 57' 50" E, 124.4 feet+/-** to a point of curvature;

with a curve to the left, having a central angle of **18° 08' 41"** and a radius of **244.99 feet**, an arc length of **77.58 feet**, a chord bearing and chord distance of **S 61° 02' 08" E, 77.3 feet+/-** to a point;

S 03° 23' 54" W, 544.9 feet+/- to an angle point;

S 686° 37' 35" E, 578.1 feet+/- to an angle point;

S 03° 22' 25" W, 711.7 feet+/- to an angle point in the southerly line of said Original 75.454 acre tract and being in the northerly line of a tract of land conveyed to UMH OH Worthington Arms, LLC of record in Official Record 1371, Page 730;

**Zoning Description ~ 27.6 Acre +/-
South at the Intersection of Crownover Way
And Peachblow Road**

-2-

Thence **N 86° 36' 06" W**, along said common line, **1245.1 feet**+/- to the southwesterly corner of said Original 75.454 acre tract and being the southeasterly corner of said 4.713 acre tract;

Thence **N 10° 50' 52" W**, along the westerly line of said Original 75.454 acre tract and the easterly line of said 4.713 acre tract, **394.6 feet**+/- to the **True Point of Beginning**.
Containing **27.6**+/- acres.

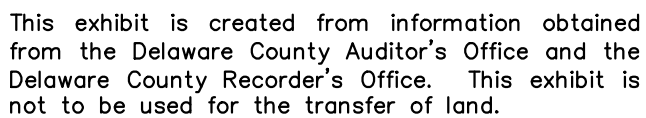
The above description was prepared by Advanced Civil Design Inc. on March 14, 2024 and is based on existing County Auditor records, County Recorder records and an actual field survey by Advanced Civil Design, Inc in January of 2023.

All references used in this description can be found at the Recorder's Office, Delaware County, Ohio.

This is not to be used for the transfer of land and is for zoning purposes only.

ADVANCED CIVIL DESIGN, INC.

SITUATED IN THE STATE OF OHIO, COUNTY OF DELAWARE, TOWNSHIP OF BERLIN, RANGE 18,
TOWNSHIP 4, SECTION 3, FARM LOTS 34 AND 35, UNITED STATES MILITARY DISTRICT



1 inch = 300 feet

ph 614.428.7750
fax 614.428.7755

ZONING EXHIBIT ~ 64.9± ACRES AND 26.9± ACRES

SITUATED IN THE STATE OF OHIO, COUNTY OF DELAWARE, TOWNSHIP OF BERLIN, RANGE 18,
TOWNSHIP 4, SECTION 3, FARM LOTS 34 AND 35, UNITED STATES MILITARY DISTRICT

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S86°24'54"E	1366.5'±
L2	S03°16'24"W	699.9'±
L3	S86°23'39"E	372.7'±
L4	S03°22'25"W	1820.3'±
L5	N86°36'06"W	272.5'±
L6	N03°22'25"E	711.7'±
L7	N86°37'35"W	578.1'±
L8	N03°23'54"E	544.9'±
L9	S14°07'48"E	97.6'±
L10	N86°36'06"W	246.4'±
L11	S03°23'54"W	610.0'±
L12	N86°59'41"W	129.8'±
L13	N10°50'52"W	498.3'±
L14	N03°15'13"E	1660.5'±
L15	S03°15'13"W	1660.5'±
L16	S10°50'52"E	498.3'±
L17	S86°59'41"E	129.8'±
L18	N03°23'54"E	610.0'±
L19	S86°36'06"E	246.4'±

LINE TABLE		
LINE	BEARING	DISTANCE
L20	N14°07'48"W	97.6'±
L21	S03°23'54"W	544.9'±
L22	S86°37'35"E	578.1'±
L23	S03°22'25"W	711.7'±
L24	N86°36'06"W	1245.1'±
L25	N10°50'52"W	394.6'±

- A

Belmont Place Section 7
P.C. 5, Sl. 575
Lot 12719
6.479 Ac.

Belmont Place Homeowners Assoc.
O.R. 2032, Pg. 1310
PID: 41833002001000
- B

Belmont Place Section 1
P.C. 4, Sl. 40
Lot 10967
5.267 Ac.

Belmont Place Homeowners Assoc.
O.R. 1765, Pg. 1775
PID: 41833002001000
- C

Germann Holdings LLC
O.R. 1468, Pg. 1022
5.040 Ac.
PID: 41833001027000
- D

Mark E. Vandervort &
Jennifer D. Strawser
12.941 Ac.
PID: 41833001022000
- E

Peachblow Land LLC
O.R. 1728, Pg. 328
Orig. 145.432 Ac.
PID: 41833001014000
- F

NCDCBT LLC
O.R. 1035, 227
4.713 Ac.
PIE: 41833001064000
- G

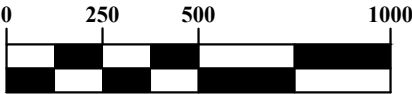
NCDCBT LLC
O.R. 1035, 227
Tract 2
2.631 Ac.
PID: 41833001062000
- H

2715 Wise Avenue Ltd.
O.R. 1546, Pg. 2133
3.67 Ac.
PID: 41833001061000
- I

Midway Gardens
P.B. 4, Pg. 125

This exhibit is created from information obtained from the Delaware County Auditor's Office and the Delaware County Recorder's Office. This exhibit is not to be used for the transfer of land.

GRAPHIC SCALE




1 inch = 500 feet

DRAWN BY: DRB

DATE: 03/14/24

JOB NO.: 22-0001-1326

CHECKED BY:



ADVANCED
CIVIL DESIGN
ENGINEERS SURVEYORS

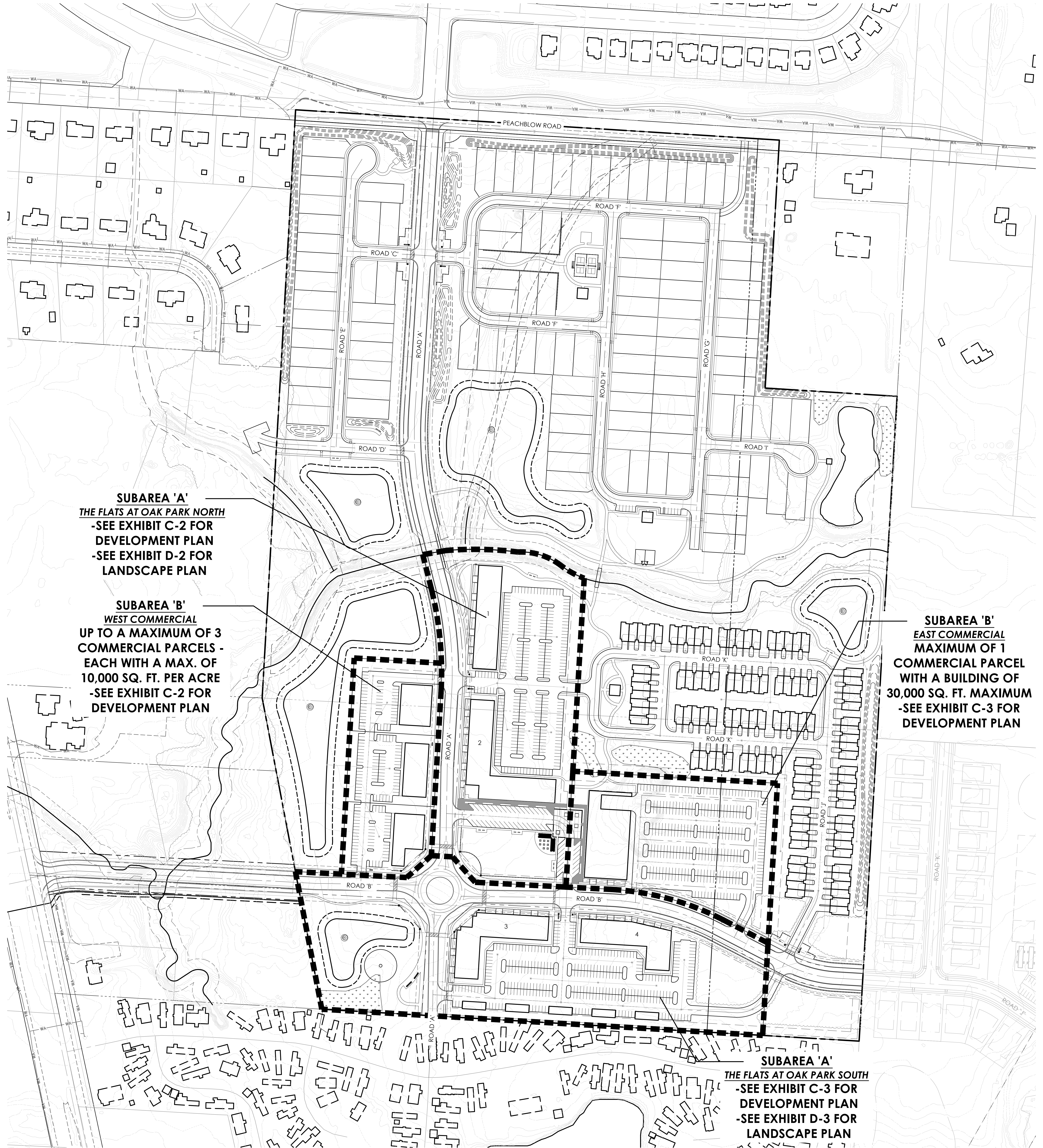
781 Science Boulevard, Suite 100
Gahanna, Ohio 43230
ph 614.428.7750
fax 614.428.7755

2

2

Z:\22-0001-1326\DWG\PRODUCTION DRAWINGS\SURVEY\22-0001-1326 zoning exhibit rev2.dwg page 2 Mar 14, 2024 -- 2:03:09pm dbickham

TAB 3 – EXHIBITS 'C-1 through C-9' – Preliminary Development Plans, Phasing Plan, Existing Features Plan, Net Developable Plan, and Illustrative Plans

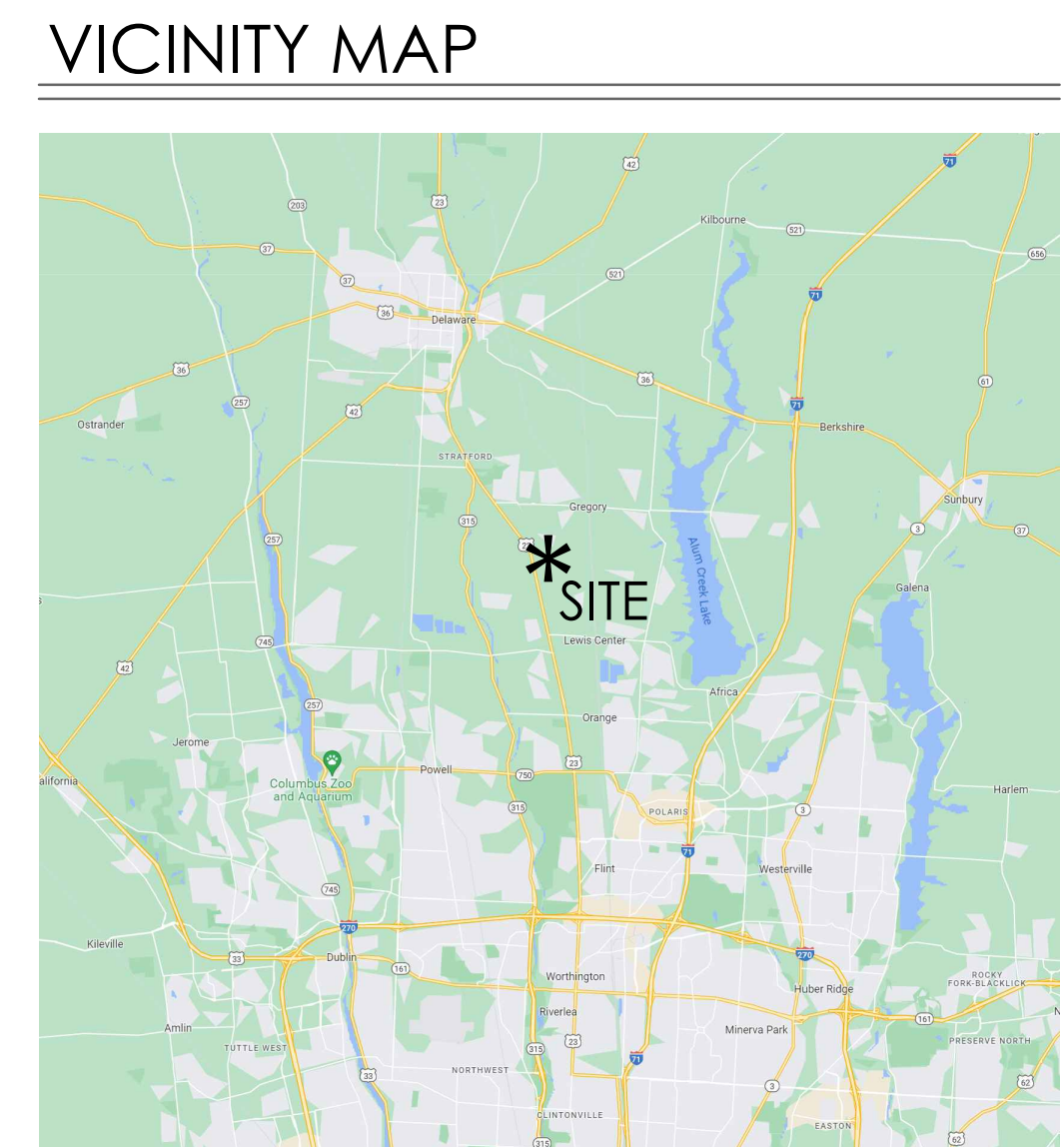


SUBAREA 'A'
THE FLATS AT OAK PARK NORTH
-SEE EXHIBIT C-2 FOR
DEVELOPMENT PLAN
-SEE EXHIBIT D-2 FOR
LANDSCAPE PLAN

SUBAREA 'B'
WEST COMMERCIAL
UP TO A MAXIMUM OF 3
COMMERCIAL PARCELS -
EACH WITH A MAX. OF
10,000 SQ. FT. PER ACRE
-SEE EXHIBIT C-2 FOR
DEVELOPMENT PLAN

SUBAREA 'B'
EAST COMMERCIAL
MAXIMUM OF 1
COMMERCIAL PARCEL
WITH A BUILDING OF
30,000 SQ. FT. MAXIMUM
-SEE EXHIBIT C-3 FOR
DEVELOPMENT PLAN

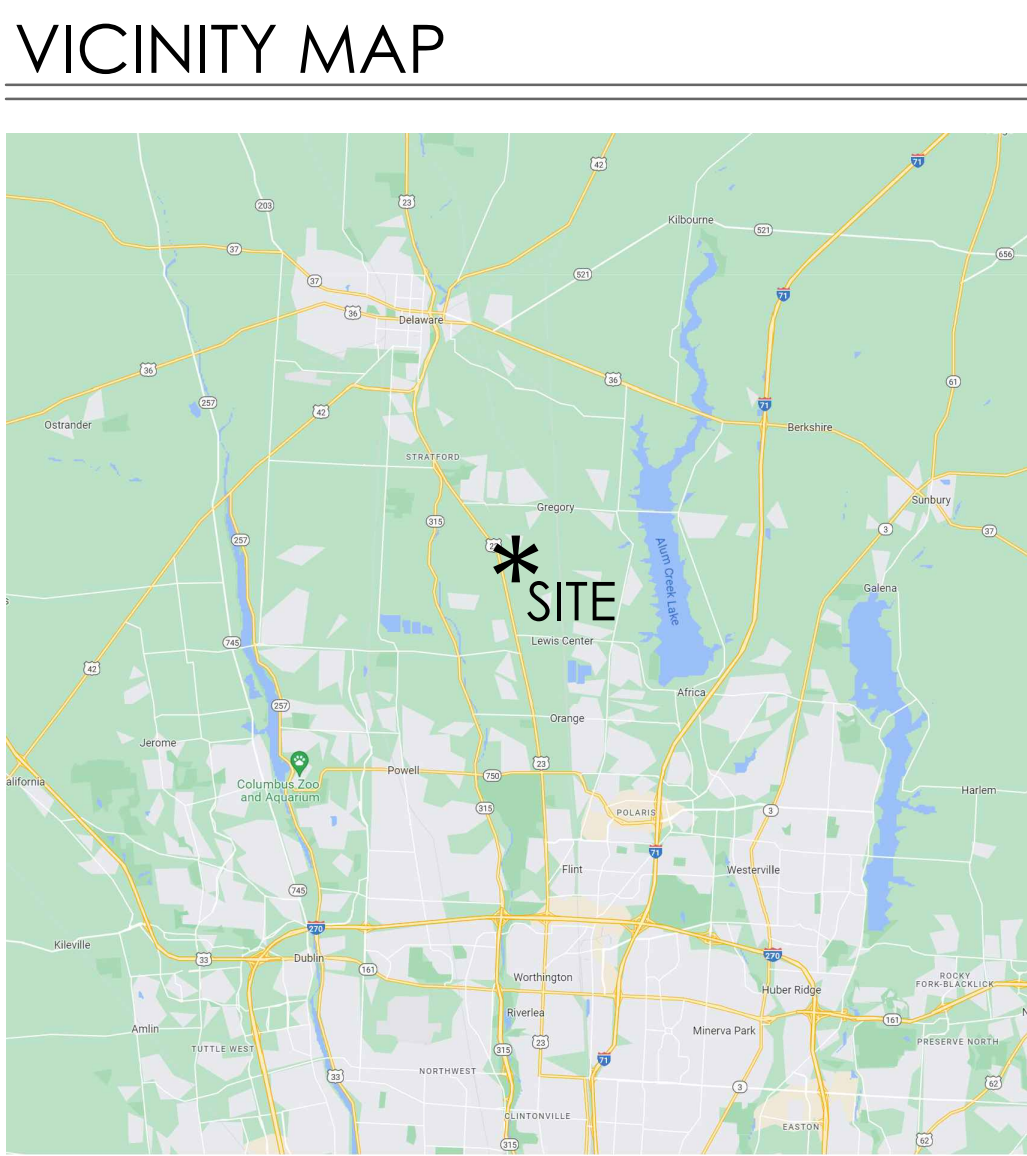
SUBAREA 'A'
THE FLATS AT OAK PARK SOUTH
-SEE EXHIBIT C-3 FOR
DEVELOPMENT PLAN
-SEE EXHIBIT D-3 FOR
LANDSCAPE PLAN



SITE DATA	
TOTAL ACRES	±27.6 AC
NET DEVELOPABLE ACRES	±23.2 AC
TOTAL UNITS	194 UNITS
TOTAL COMMERCIAL SQ. FT.	MIXED USE = 52,850 SQ. FT. EAST = 30,000 SQ. FT. WEST = 10,000 SQ. FT. EACH
GROSS DENSITY	±7.0 D.U./AC.
NET DENSITY	±8.4 D.U./AC.

PRELIMINARY OVERALL DEVELOPMENT PLAN

EXHIBIT C-1

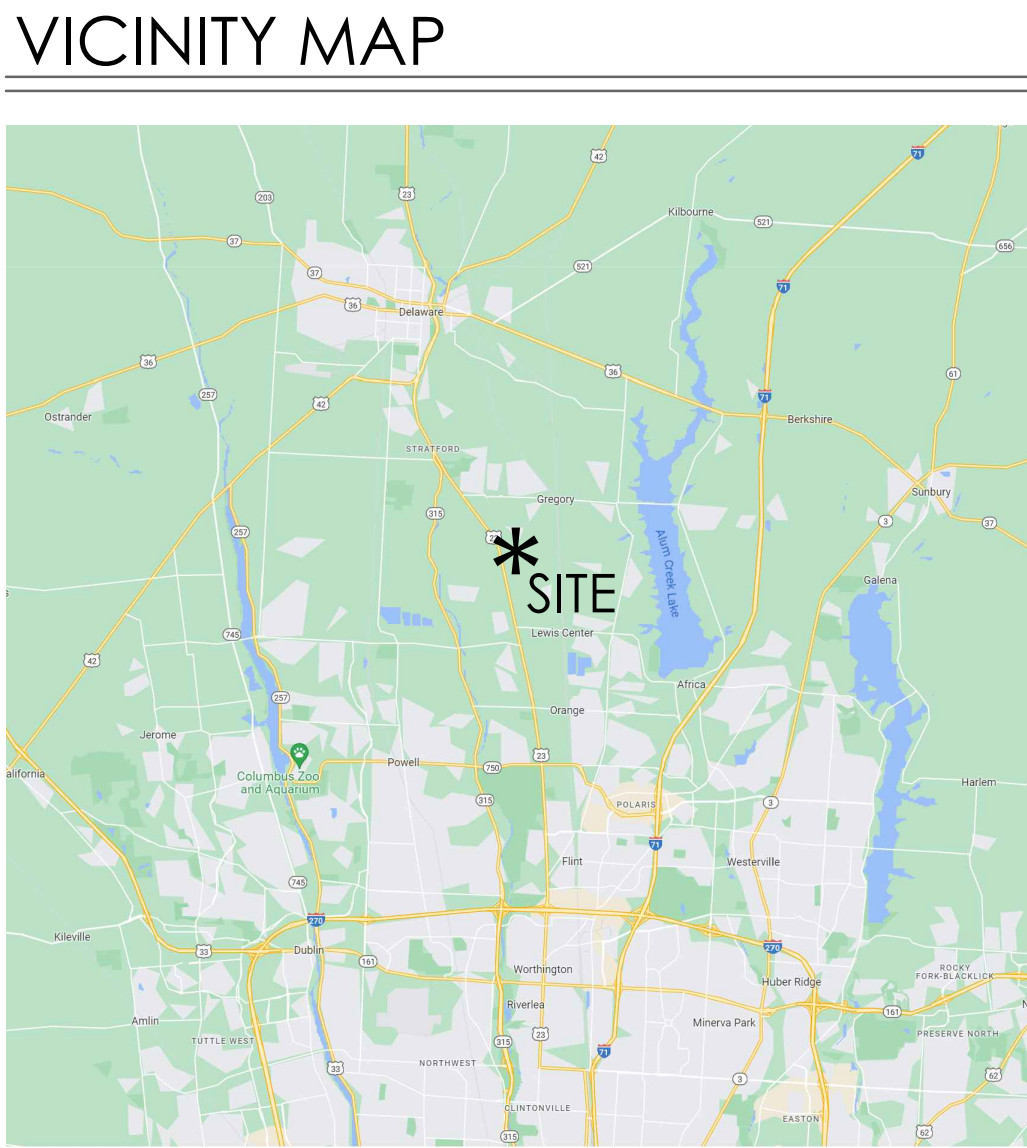
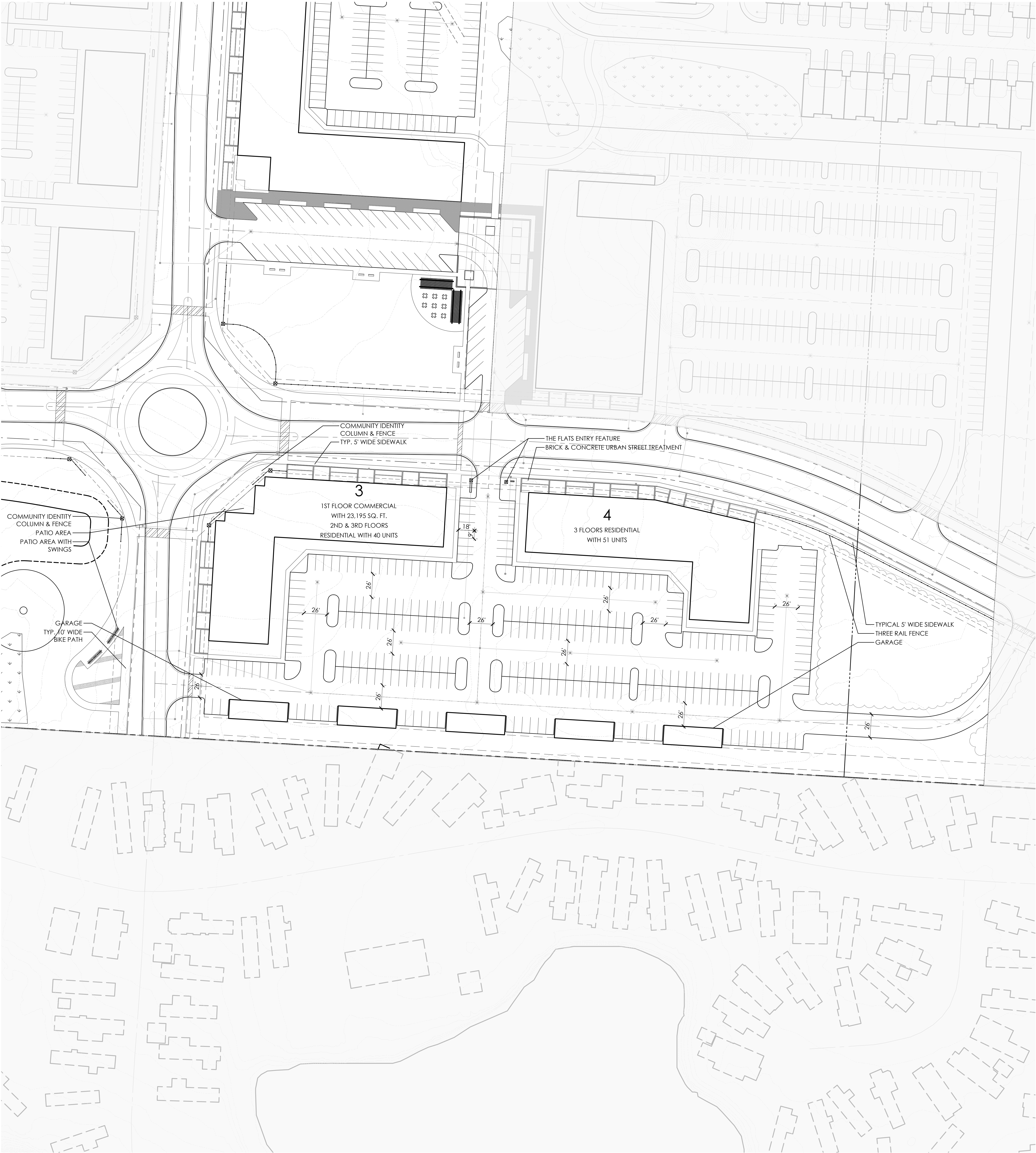


SITE DATA	
TOTAL ACRES	±27.6 AC
NET DEVELOPABLE ACRES	±23.2 AC
TOTAL UNITS	194 UNITS
TOTAL COMMERCIAL SQ. FT.	MIXED USE = 52,850 SQ. FT. EAST = 30,000 SQ. FT. WEST = 10,000 SQ. FT. EACH
GROSS DENSITY	±7.0 D.U./AC.
NET DENSITY	±8.4 D.U./AC.

SITE DATA: SUBAREA 'A'	
TOTAL UNITS	194 UNITS
TOTAL COMMERCIAL SQ. FT.	52,850 SQ. FT.
GROSS DENSITY	±7.0 D.U./AC.
NET DENSITY	±8.4 D.U./AC.
TOTAL OPEN SPACE	±8.00 AC (28.9%)

PRELIMINARY DEVELOPMENT PLAN - SUBAREA 'A'

EXHIBIT C-2

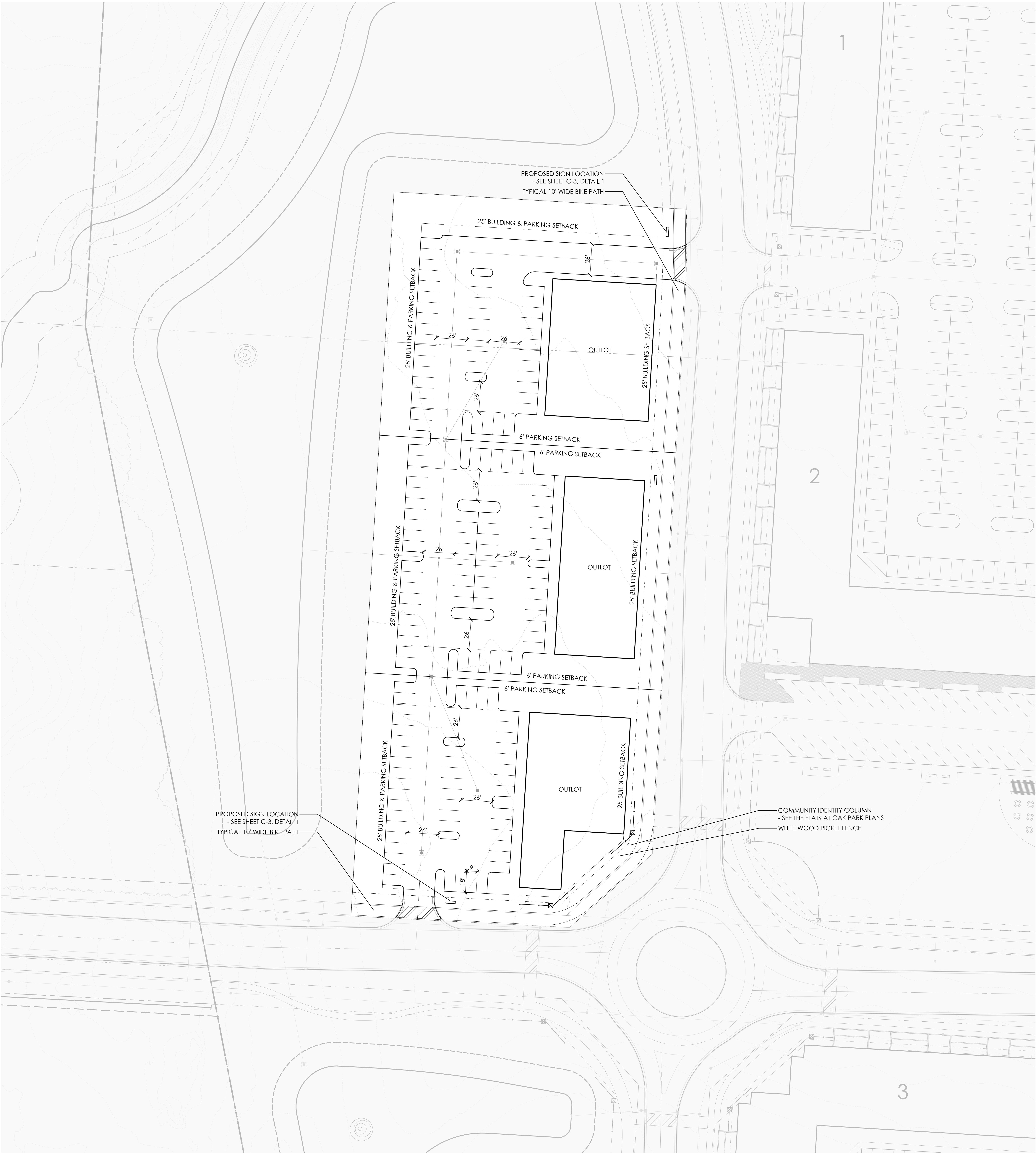


SITE DATA	
TOTAL ACRES	±27.6 AC
NET DEVELOPABLE ACRES	±23.2 AC
TOTAL UNITS	194 UNITS
TOTAL COMMERCIAL SQ. FT.	MIXED USE = 52,850 SQ. FT. EAST = 30,000 SQ. FT. WEST = 10,000 SQ. FT. EACH
GROSS DENSITY	±7.0 D.U./AC.
NET DENSITY	±8.4 D.U./AC.

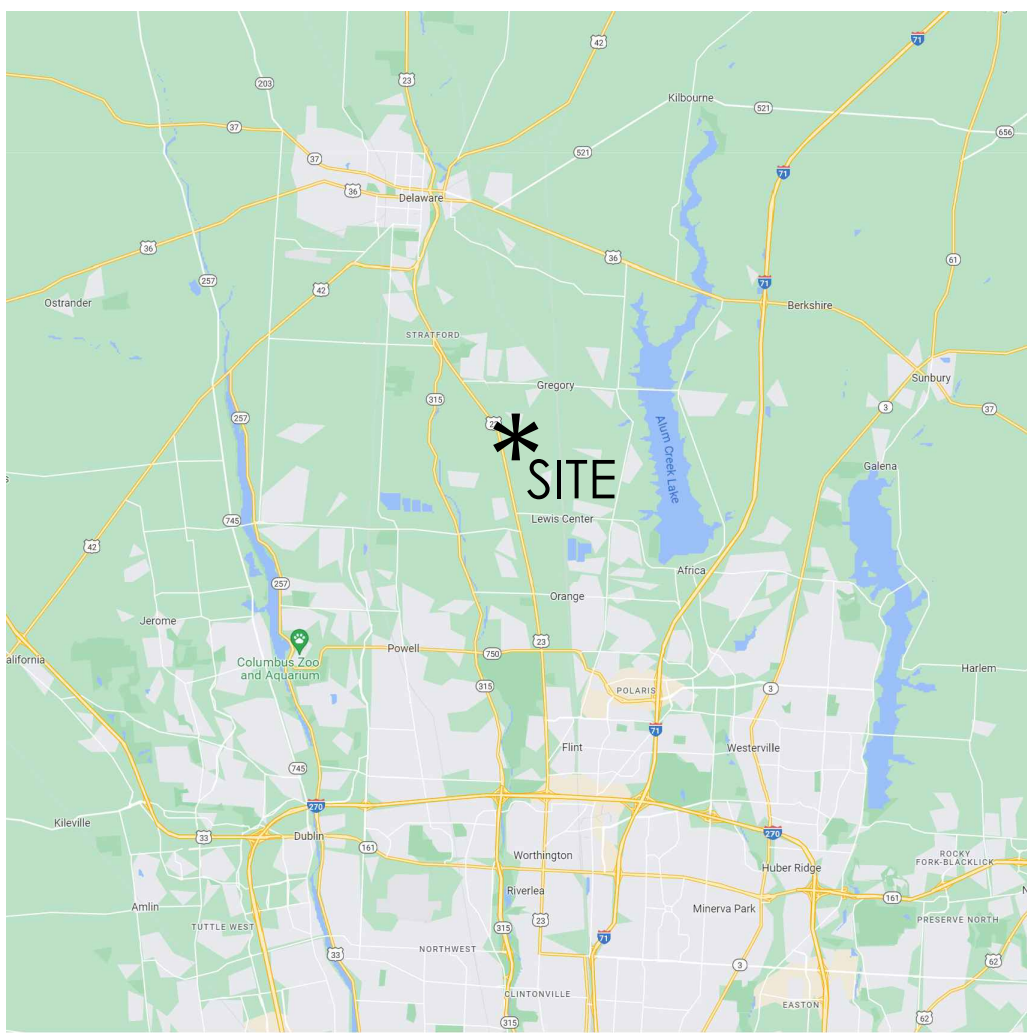
SITE DATA: SUBAREA 'A'	
TOTAL UNITS	194 UNITS
TOTAL COMMERCIAL SQ. FT.	52,850 SQ. FT.
GROSS DENSITY	±7.0 D.U./AC.
NET DENSITY	±8.4 D.U./AC.
TOTAL OPEN SPACE	±8.00 AC (28.9%)

PRELIMINARY DEVELOPMENT PLAN - SUBAREA 'A'

EXHIBIT C-2.1



VICINITY MAP



SITE DATA	
TOTAL ACRES	±27.6 AC
NET DEVELOPABLE ACRES	±23.2 AC
TOTAL UNITS	194 UNITS
TOTAL COMMERCIAL SQ. FT.	MIXED USE = 52,850 SQ. FT. EAST = 30,000 SQ. FT. WEST = 10,000 SQ. FT. EACH
GROSS DENSITY	±7.0 D.U./AC.
NET DENSITY	±8.4 D.U./AC.

SITE DATA: SUBAREA 'B'	
TOTAL COMMERCIAL SQ. FT. EAST	30,000 SQ. FT.
TOTAL COMMERCIAL SQ. FT. WEST	10,000 SQ. FT. EACH
LOT COVERAGE	80.0%
TOTAL OPEN SPACE	20.0%

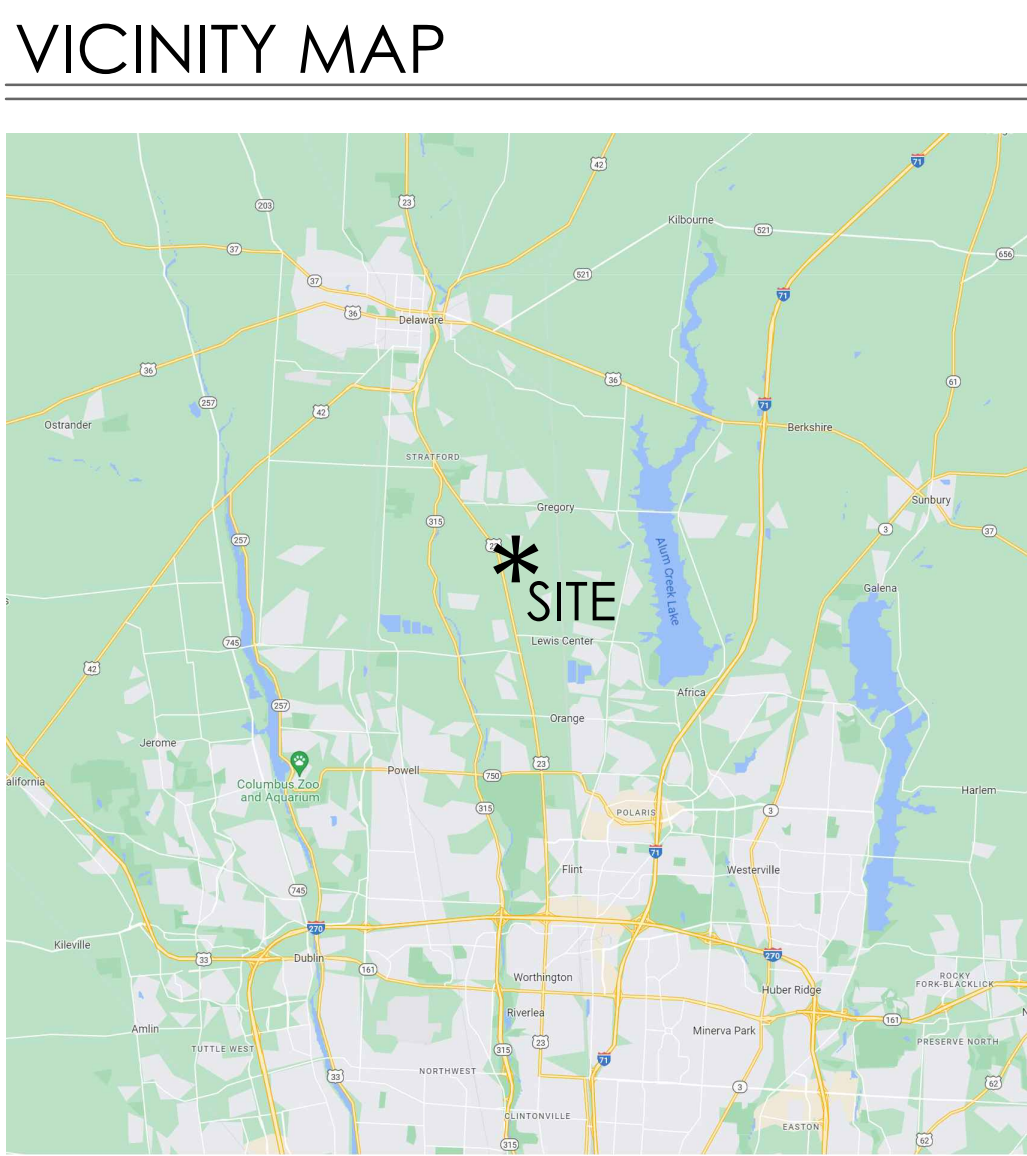


NOTE: Sign to be placed a minimum of 8' HGT. above the sidewalk (maximum of 15')

- 1
- WALL SIGN - LARGE COMMERCIAL
N.T.S.

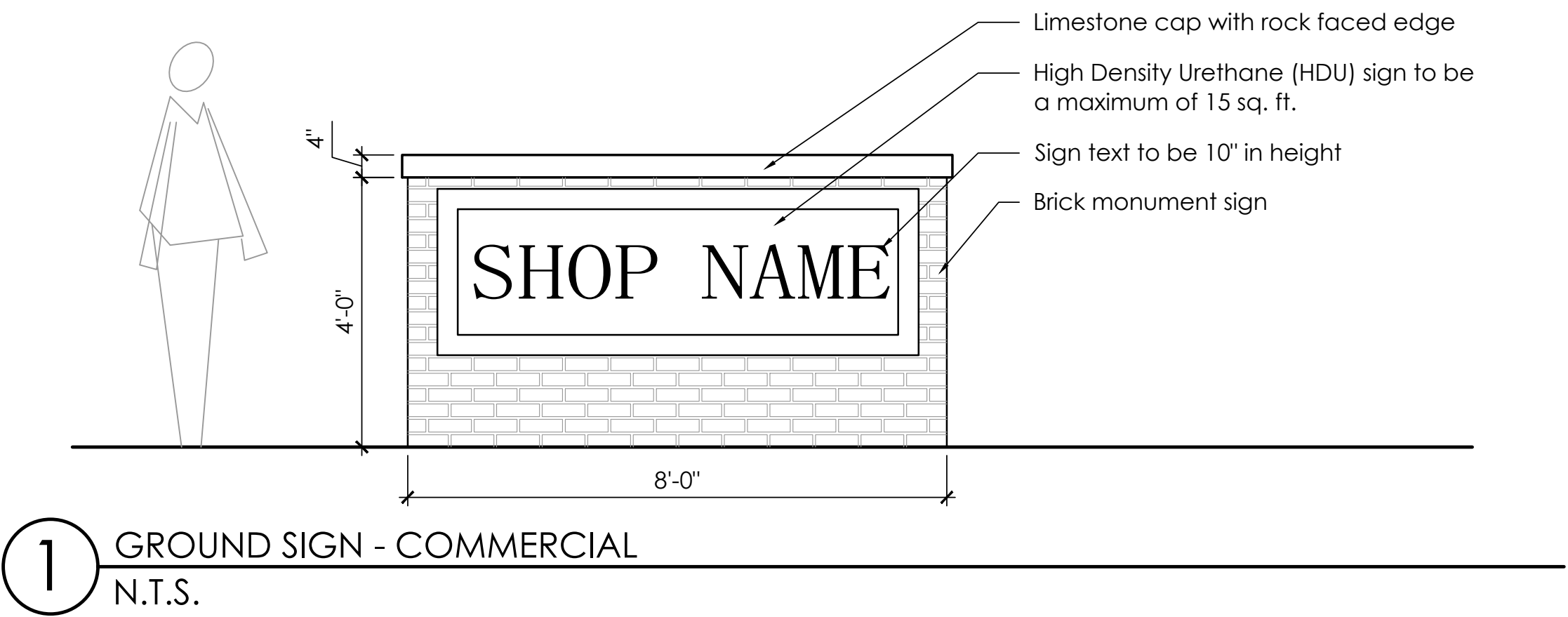
PRELIMINARY DEVELOPMENT PLAN - SUBAREA 'B'

EXHIBIT C-3

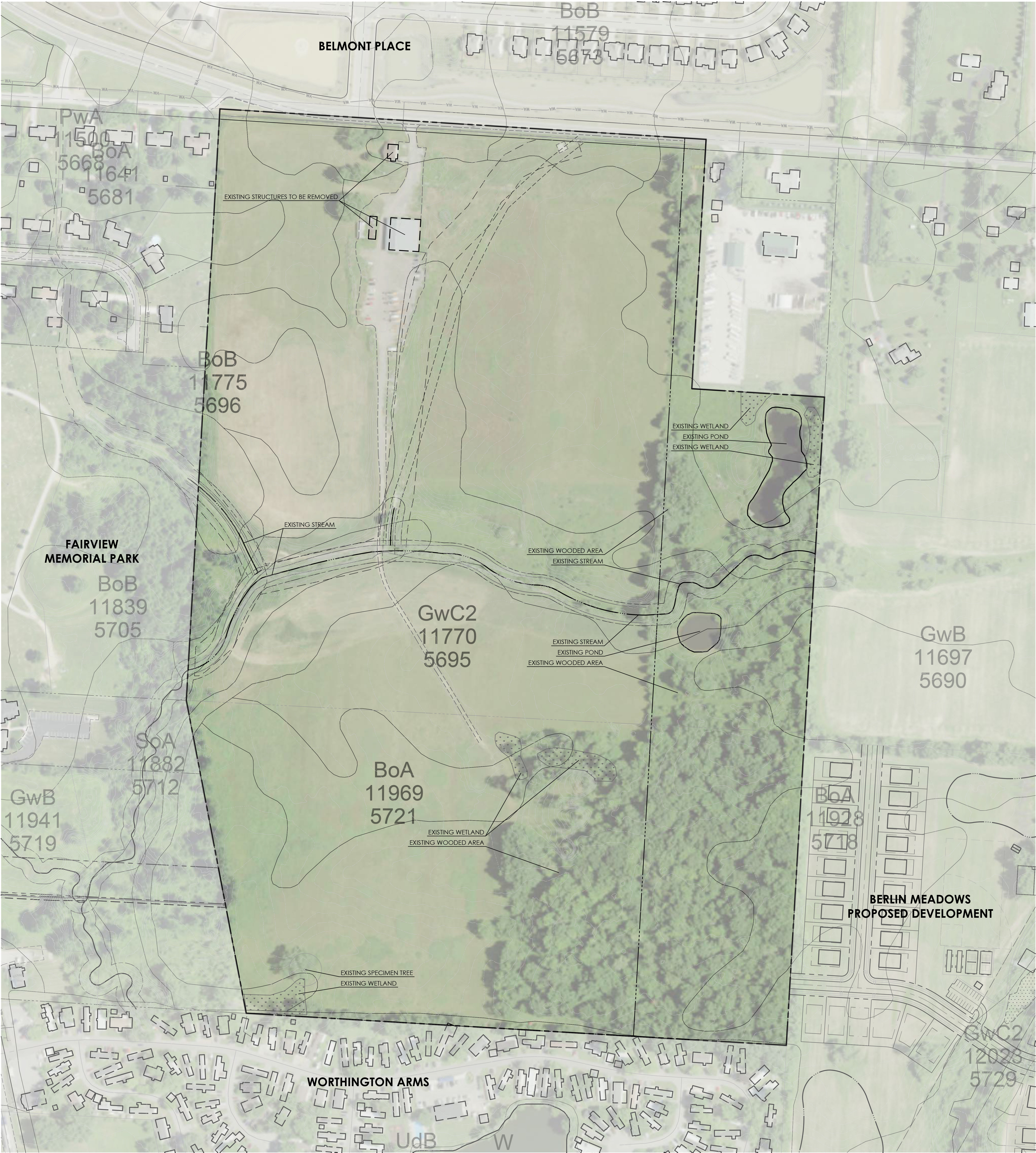


SITE DATA	
TOTAL ACRES	±27.6 AC
NET DEVELOPABLE ACRES	±23.2 AC
TOTAL UNITS	194 UNITS
TOTAL COMMERCIAL SQ. FT.	MIXED USE = 52,850 SQ. FT. EAST = 30,000 SQ. FT. WEST = 10,000 SQ. FT. EACH
GROSS DENSITY	±7.0 D.U./AC.
NET DENSITY	±8.4 D.U./AC.

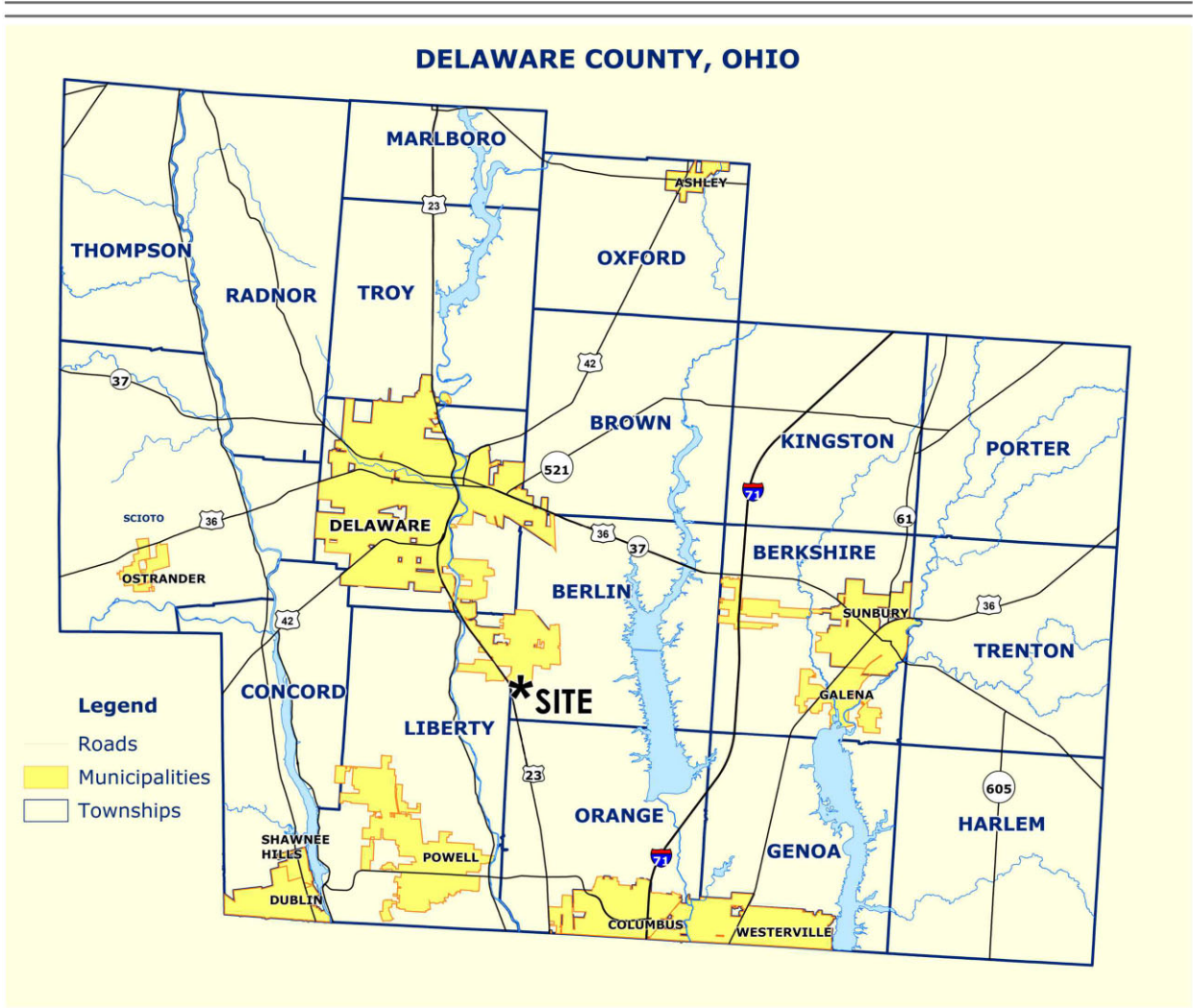
SITE DATA: SUBAREA 'B'	
TOTAL COMMERCIAL SQ. FT. EAST	30,000 SQ. FT.
TOTAL COMMERCIAL SQ. FT. WEST	10,000 SQ. FT. EACH
LOT COVERAGE	80.0%
TOTAL OPEN SPACE	20.0%



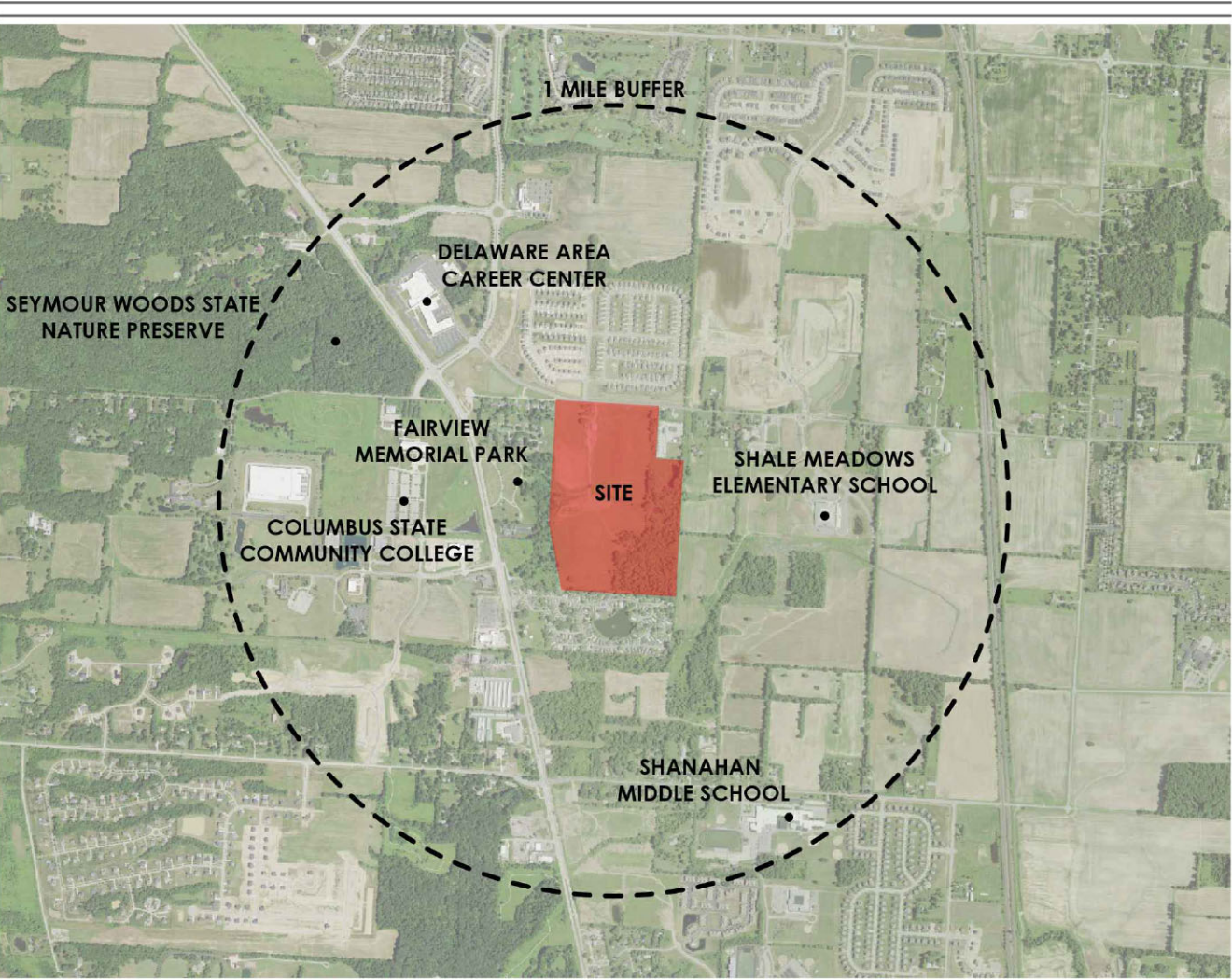




VICINITY MAP

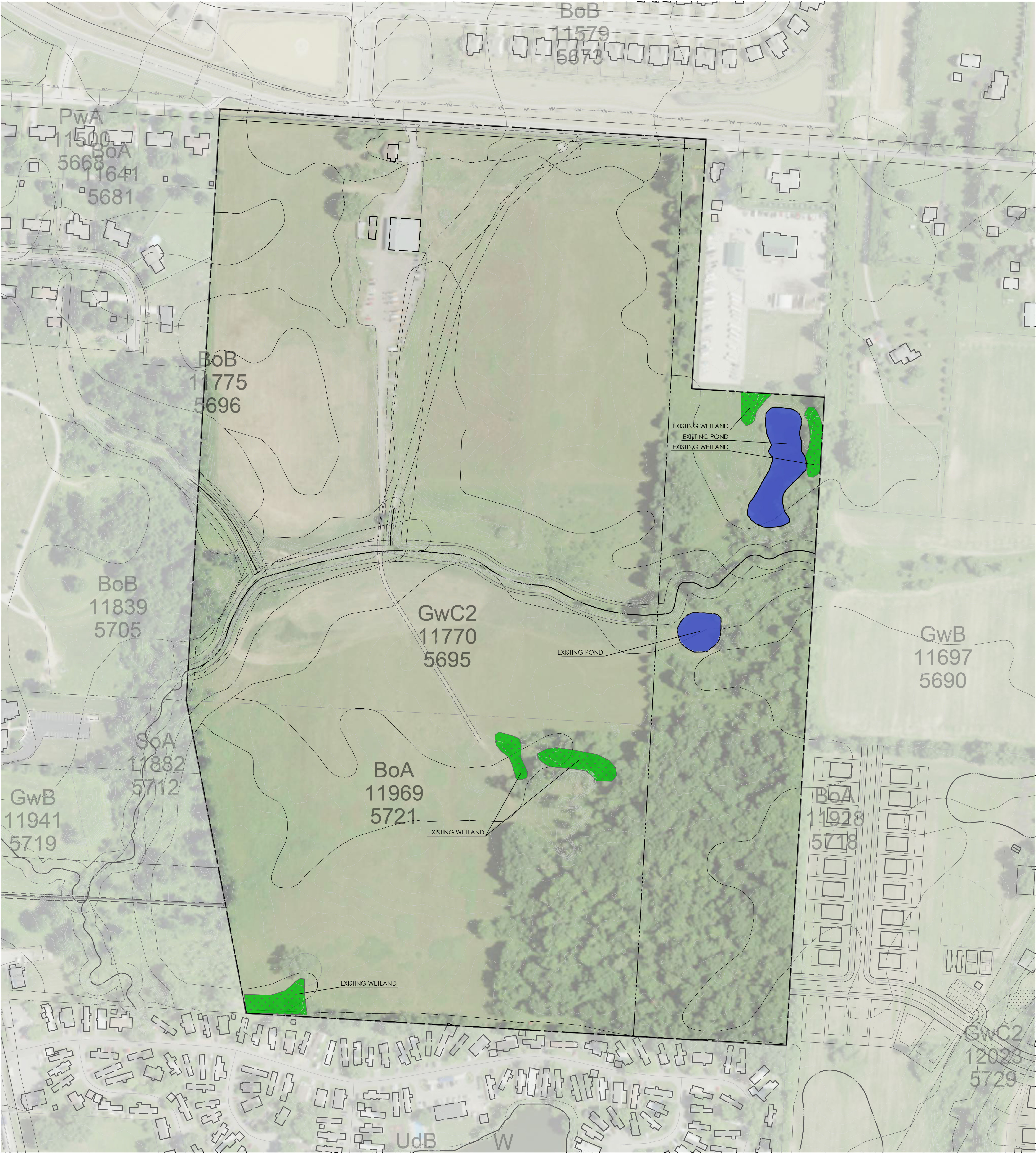


BUFFER MAP



EXISTING FEATURES PLAN

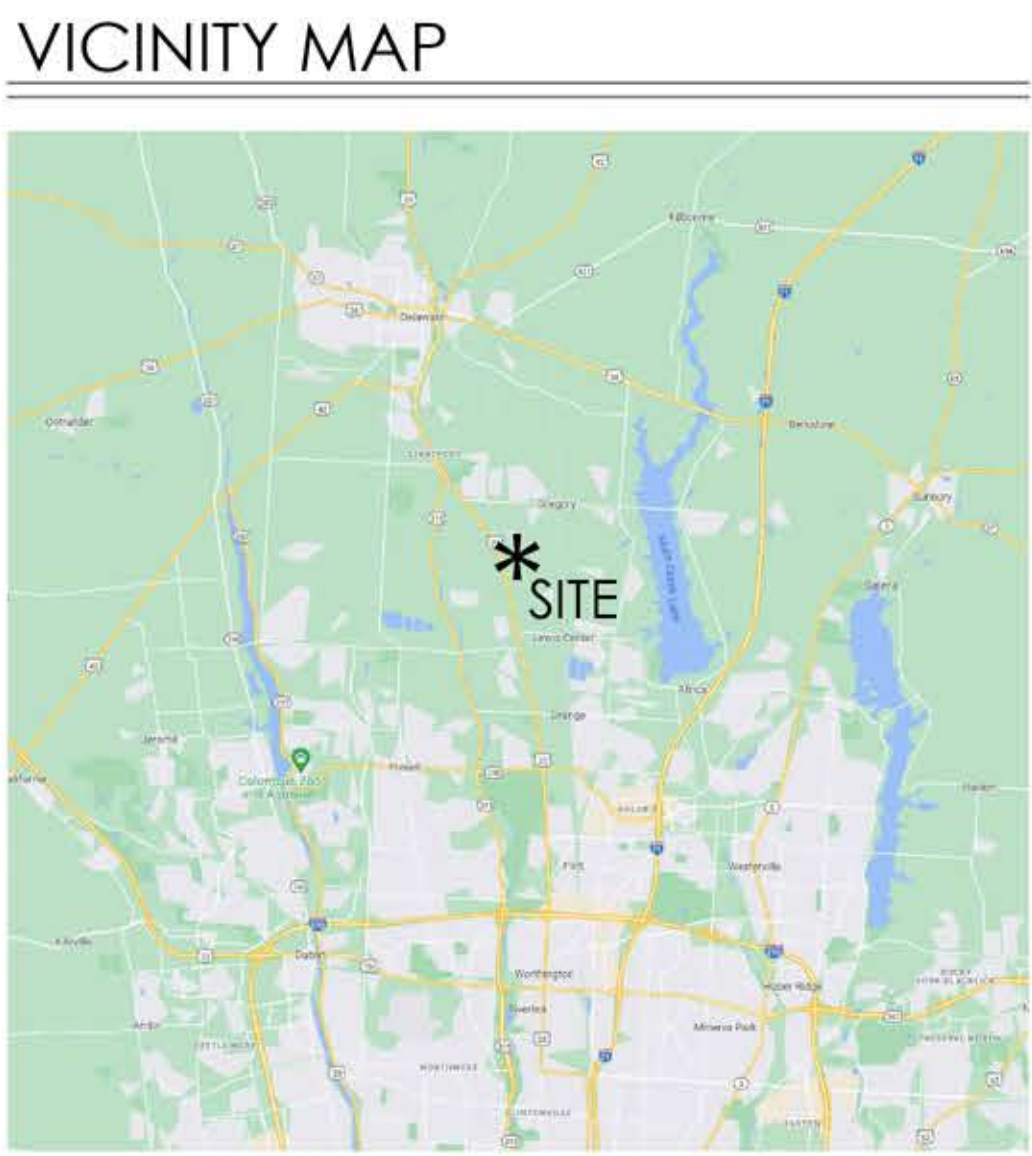
EXHIBIT C-5



SITE DATA			
TRANSITIONAL PLANNED UNIT DEVELOPMENT (TPUD)		PLANNED COMMERCIAL AND OFFICE DISTRICT (PCD)	
TOTAL ACRES	±64.9 AC	TOTAL ACRES	±27.6 AC
NET DEVELOPABLE ACRES	±53.8 AC	NET DEVELOPABLE ACRES	±23.2 AC
TOTAL UNITS	217 UNITS - 109 CONDOMINIUMS - 108 TOWNHOMES	TOTAL UNITS	194 MULTI-FAMILY UNITS
GROSS DENSITY	±3.3 D.U./AC	TOTAL COMMERCIAL SQ. FT.	MIXED USE = 52,850 SQ. FT. GROCERY = 26,000 SQ. FT. OUTLOTS = 10,000 SQ. FT. PER OUTLOT
NET DENSITY	±4.0 D.U./AC	GROSS DENSITY	±7.0 D.U./AC
NET DENSITY CALCULATION: 64.9 AC x 0.85 = 55.2 AC 55.2 AC - 1.4 AC = 53.8 AC NET		NET DENSITY CALCULATION: 27.6 AC x 0.85 = 23.5 AC 23.5 AC - 0.3 AC = 23.2 AC NET	

NET DEVELOPABLE PLAN

EXHIBIT C-6



SITE DATA	
TOTAL ACRES	±27.6 AC
NET DEVELOPABLE ACRES	±23.2 AC
TOTAL UNITS	194 UNITS
TOTAL COMMERCIAL SQ. FT.	MIXED USE = 52,850 SQ. FT. EAST = 30,000 SQ. FT. WEST = 10,000 SQ. FT. EACH
GROSS DENSITY	±7.0 D.U./AC.
NET DENSITY	±8.4 D.U./AC.

SITE DATA: SUBAREA 'A'	
TOTAL UNITS	194 UNITS
TOTAL COMMERCIAL SQ. FT.	52,850 SQ. FT.
GROSS DENSITY	±7.0 D.U./AC.
NET DENSITY	±8.4 D.U./AC.
TOTAL OPEN SPACE	±8.00 AC (28.9%)

SITE DATA: SUBAREA 'B'	
TOTAL COMMERCIAL SQ. FT. EAST	30,000 SQ. FT.
TOTAL COMMERCIAL SQ. FT. WEST	10,000 SQ. FT. EACH
LOT COVERAGE	80.0%
TOTAL OPEN SPACE	20.0%

ILLUSTRATIVE PLAN

EXHIBIT C-7



① ARBOR SWING



④ DOG PARK



⑦ BLACK HORSE FENCE ALONG WOODED AREA



② COVERED SHELTER



⑤ PICKLEBALL COURT



③ COVERED SHELTER



⑥ PEDESTRIAN BRIDGE

* IMAGES SHOWN ARE REPRESENTATIVE ONLY.
ACTUAL PRODUCTS AND LAYOUTS TO BE
DETERMINED AT FINAL DEVELOPMENT.

LANDSCAPE AND AMENITY CHARACTER

OAK PARK

PREPARED FOR KIRAN BASIREDDY

DATE: 3.19.24

EXHIBIT C-8

Faris Planning & Design

LAND PLANNING

LANDSCAPE ARCHITECTURE

4876 Cemetery
p (614) 487-1964

Hilliard, OH 43026
www.farisplanninganddesign.com



① GRASS MEADOW STREAM BANK



② WOODED MEADOW STREAM BANK



③ NATURALIZED POND



④ PATHWAY ALONG POND



⑤ PATHWAY THROUGH MEADOW



⑥ NATURALIZED POND EDGE



⑦ POND OVERLOOK SEATING



⑧ POND OVERLOOK SEATING

* IMAGES SHOWN ARE REPRESENTATIVE ONLY.
ACTUAL PRODUCTS AND LAYOUTS TO BE
DETERMINED AT FINAL DEVELOPMENT.

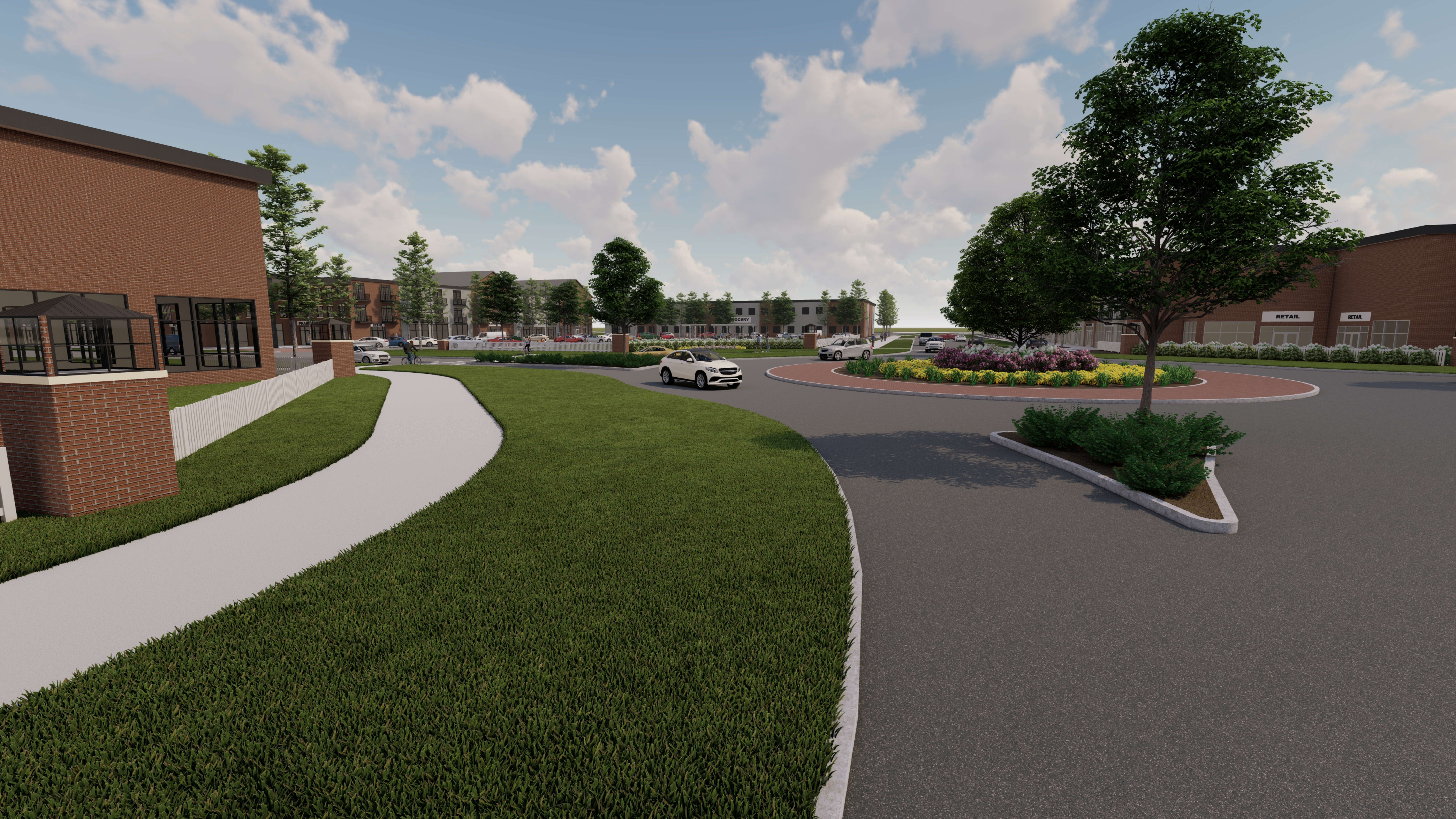
LANDSCAPE AND AMENITY CHARACTER

OAK PARK
PREPARED FOR KIRAN BASIREDDY
DATE: 3.19.24













TAB 4 – EXHIBITS 'D-1 through D-5' – Overall Landscape Plans, Landscape
Enlargement Plans, and Open Space Plan



SUBAREA 'A'
THE FLATS AT OAK PARK NORTH
-SEE EXHIBIT C-2 FOR
DEVELOPMENT PLAN
-SEE EXHIBIT D-2 FOR
LANDSCAPE PLAN

SUBAREA 'B'
WEST COMMERCIAL
UP TO A MAXIMUM OF 3
COMMERCIAL PARCELS -
EACH WITH A MAX. OF
10,000 SQ. FT. PER ACRE
-SEE EXHIBIT C-2 FOR
DEVELOPMENT PLAN

SUBAREA 'B'
EAST COMMERCIAL
MAXIMUM OF 1
COMMERCIAL PARCEL
WITH A BUILDING OF
30,000 SQ. FT. MAXIMUM
-SEE EXHIBIT C-3 FOR
DEVELOPMENT PLAN

SUBAREA 'A'
THE FLATS AT OAK PARK SOUTH
-SEE EXHIBIT C-3 FOR
DEVELOPMENT PLAN
-SEE EXHIBIT D-3 FOR
LANDSCAPE PLAN

CONSTRUCTION NOTES

- ① LAWN AREA, PROVIDE POSITIVE DRAINAGE ACROSS ALL SURFACES.
- ② LANDSCAPE AREA, PROVIDE 3" DEPTH HARDWOOD MULCH, POSITIVE DRAINAGE ACROSS ALL SURFACES.

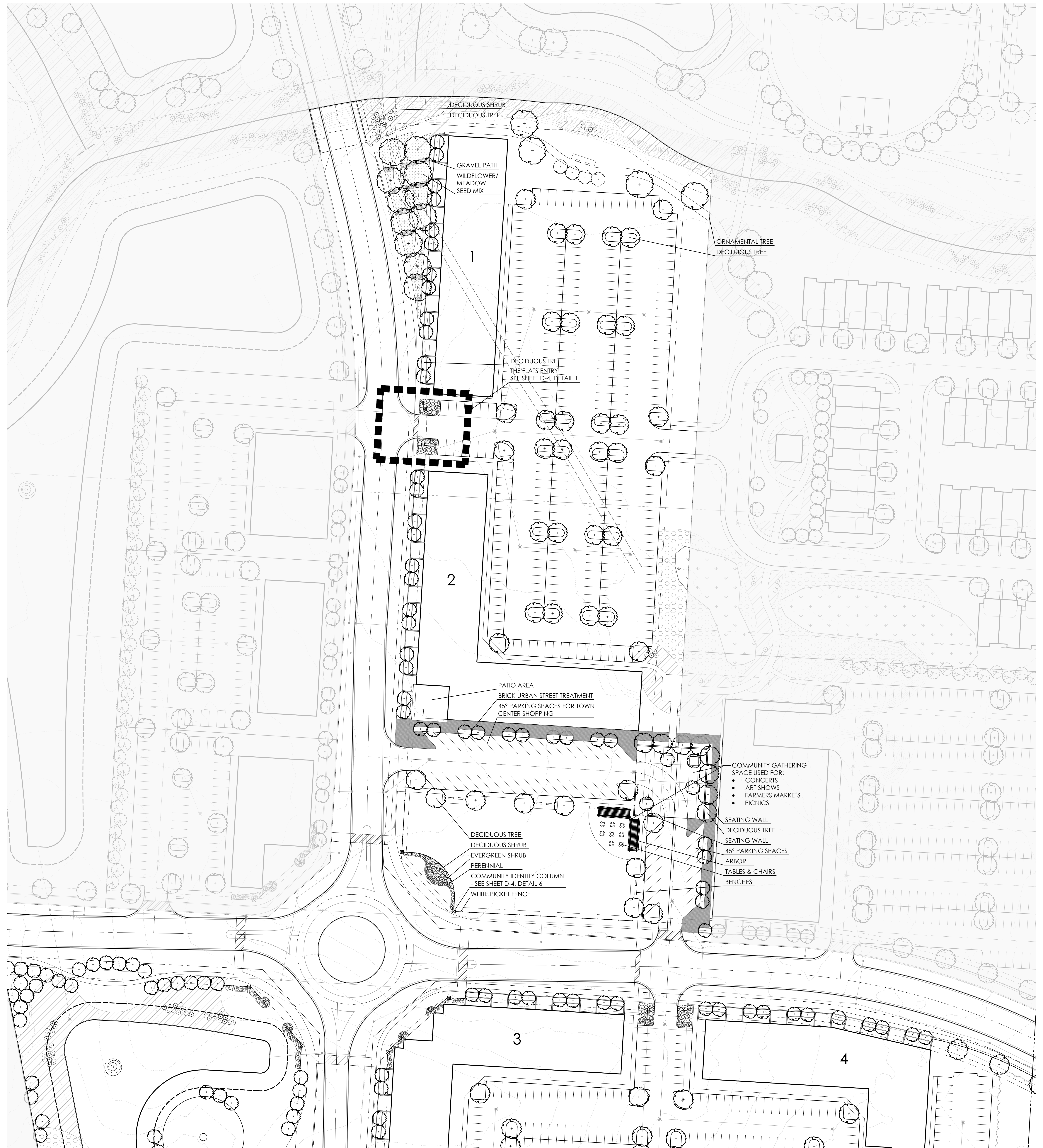
PLANT KEY TYPICALS

SEE PLANT LIST FOR SPECIFIC PLANT SPECIES

- ORNAMENTAL TREE
- LARGE DECIDUOUS SHRUB
- EXISTING TREE
- EVERGREEN SHRUB
- DECIDUOUS SHRUB
- EVERGREEN TREE
- PERENNIALS
- GROUND COVER
- SHADE TREE

OVERALL LANDSCAPE PLAN

EXHIBIT D-1

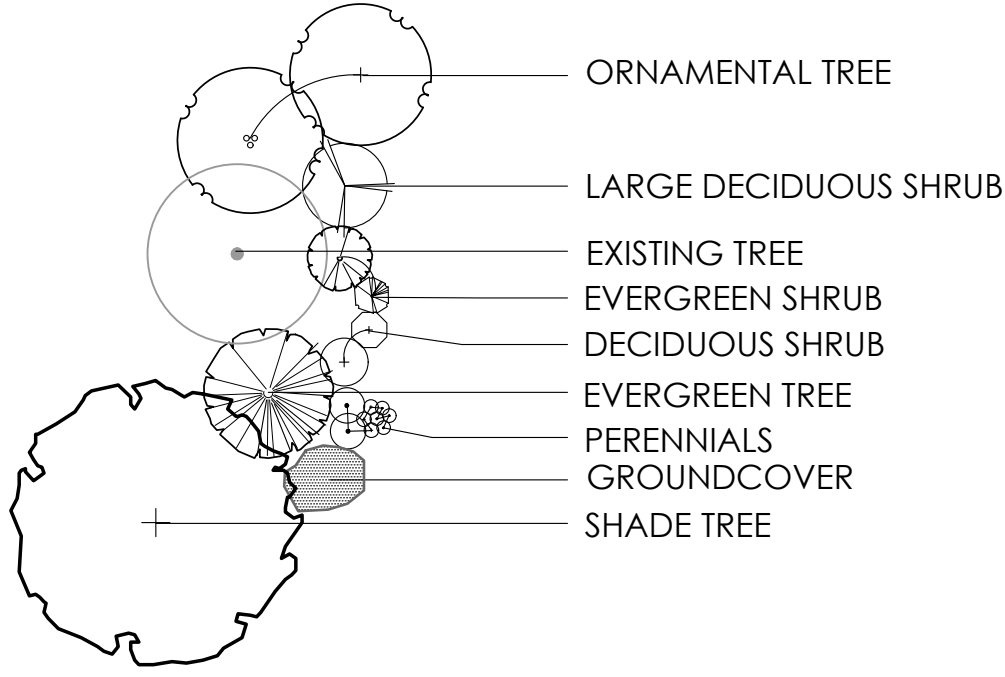


CONSTRUCTION NOTES

- ① LAWN AREA, PROVIDE POSITIVE DRAINAGE ACROSS ALL SURFACES.
- ② LANDSCAPE AREA, PROVIDE 3" DEPTH HARDWOOD MULCH, POSITIVE DRAINAGE ACROSS ALL SURFACES.

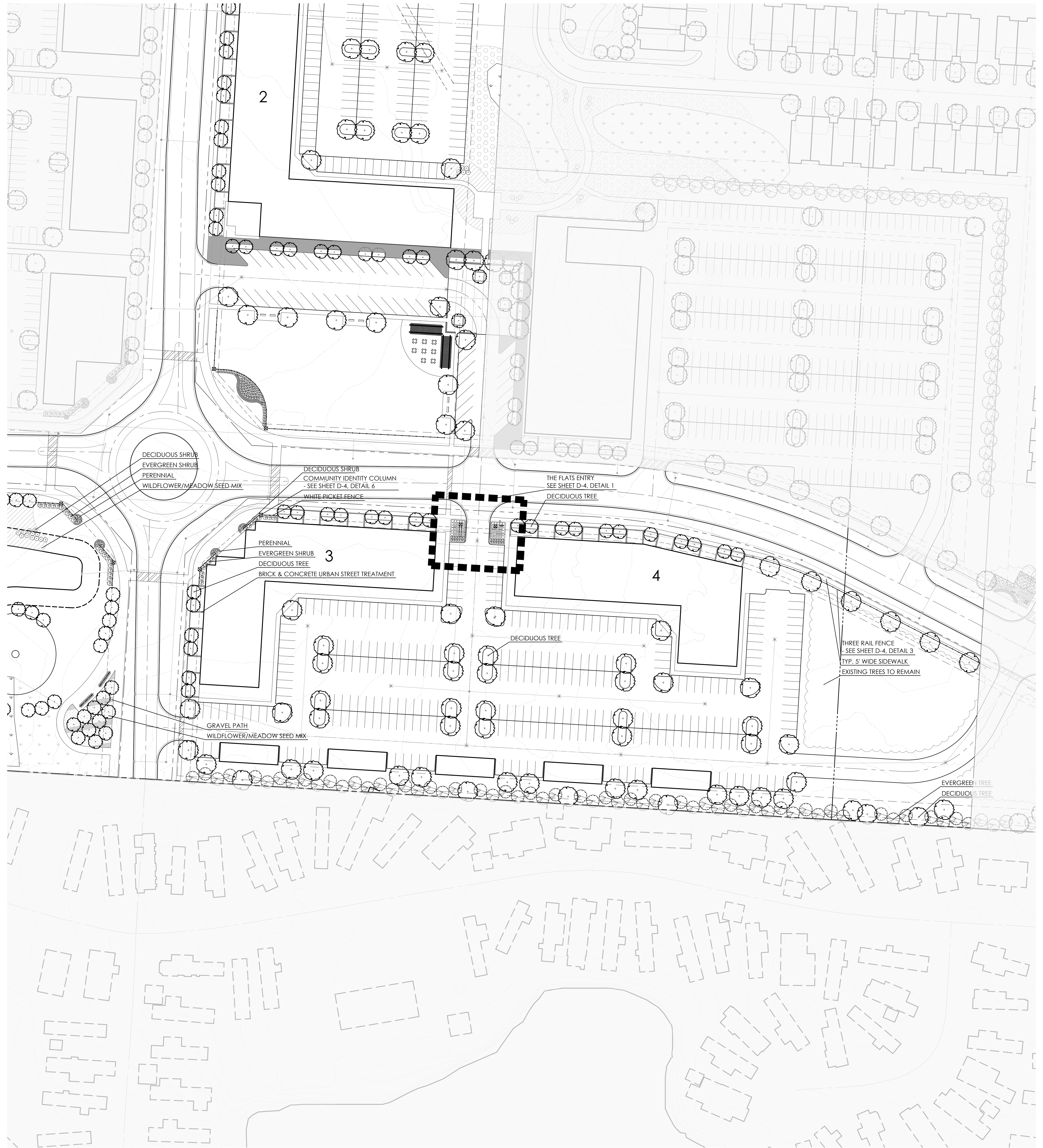
PLANT KEY TYPICALS

SEE PLANT LIST FOR SPECIFIC PLANT SPECIES



LANDSCAPE PLAN - SUBAREA 'A' - THE FLATS NORTH

EXHIBIT D-2

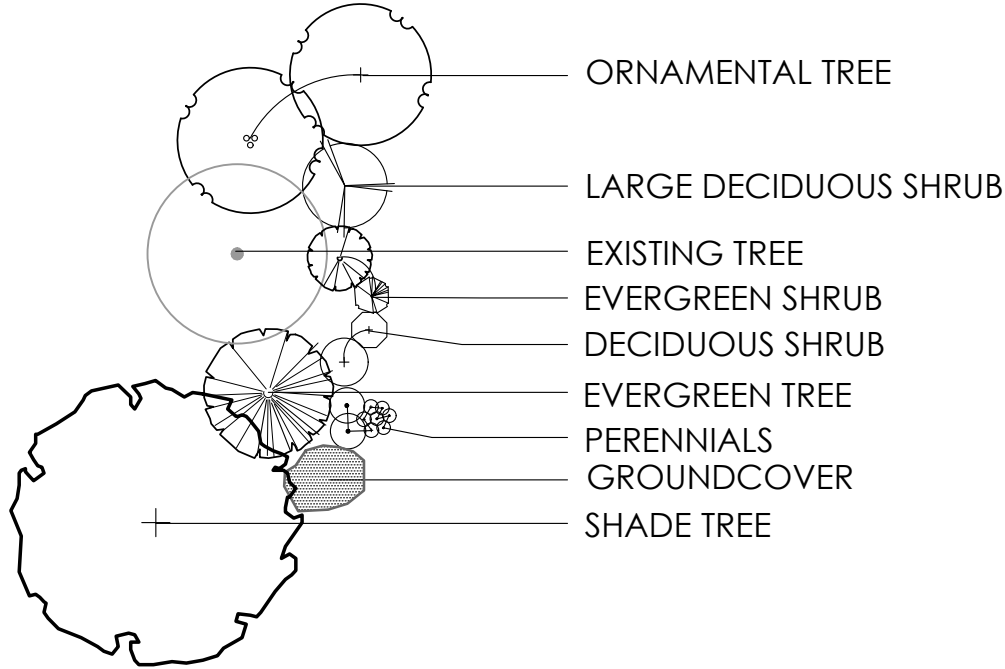


CONSTRUCTION NOTES

- ① LAWN AREA, PROVIDE POSITIVE DRAINAGE ACROSS ALL SURFACES.
- ② LANDSCAPE AREA, PROVIDE 3" DEPTH HARDWOOD MULCH, POSITIVE DRAINAGE ACROSS ALL SURFACES.

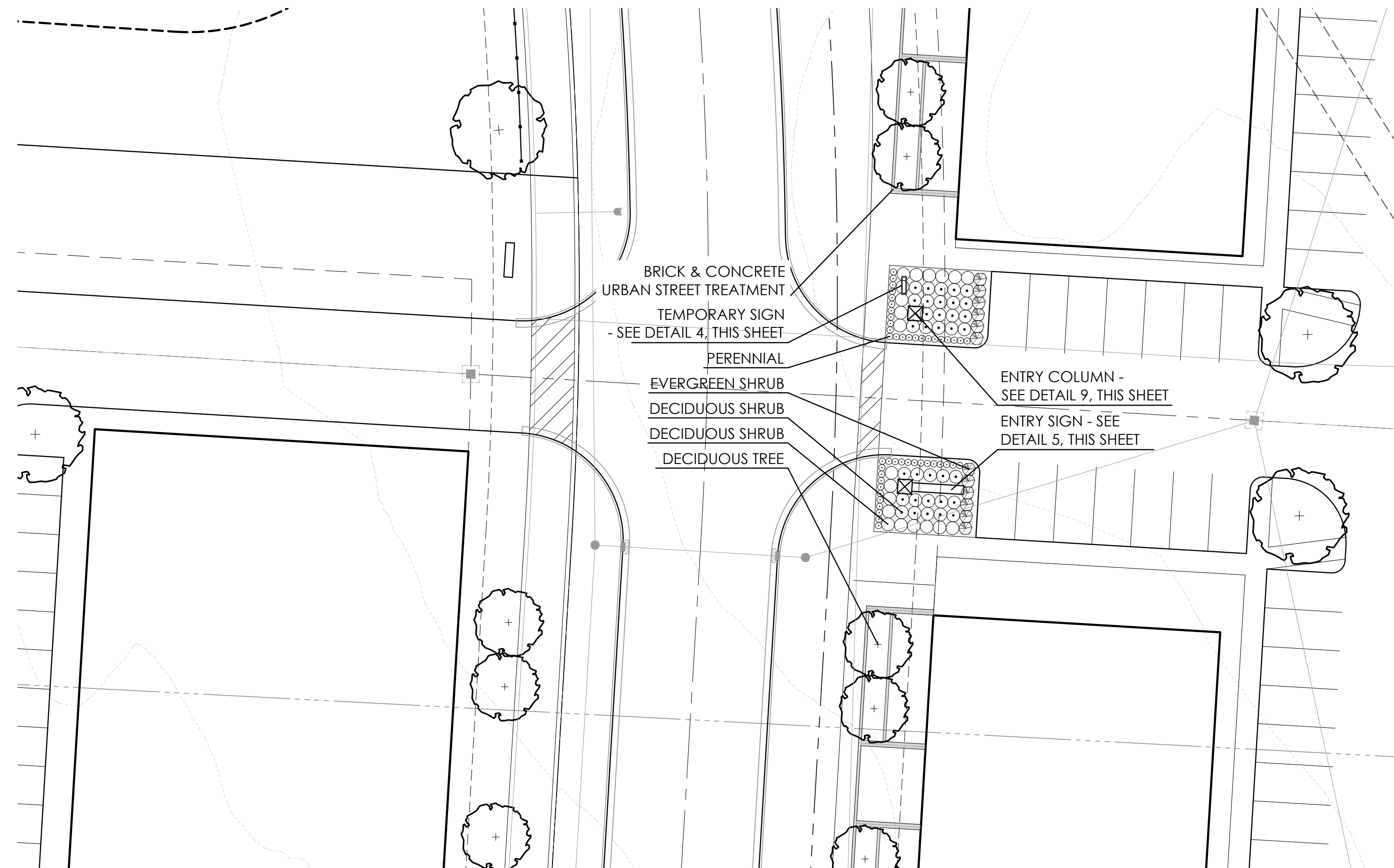
PLANT KEY TYPICALS

SEE PLANT LIST FOR SPECIFIC PLANT SPECIES

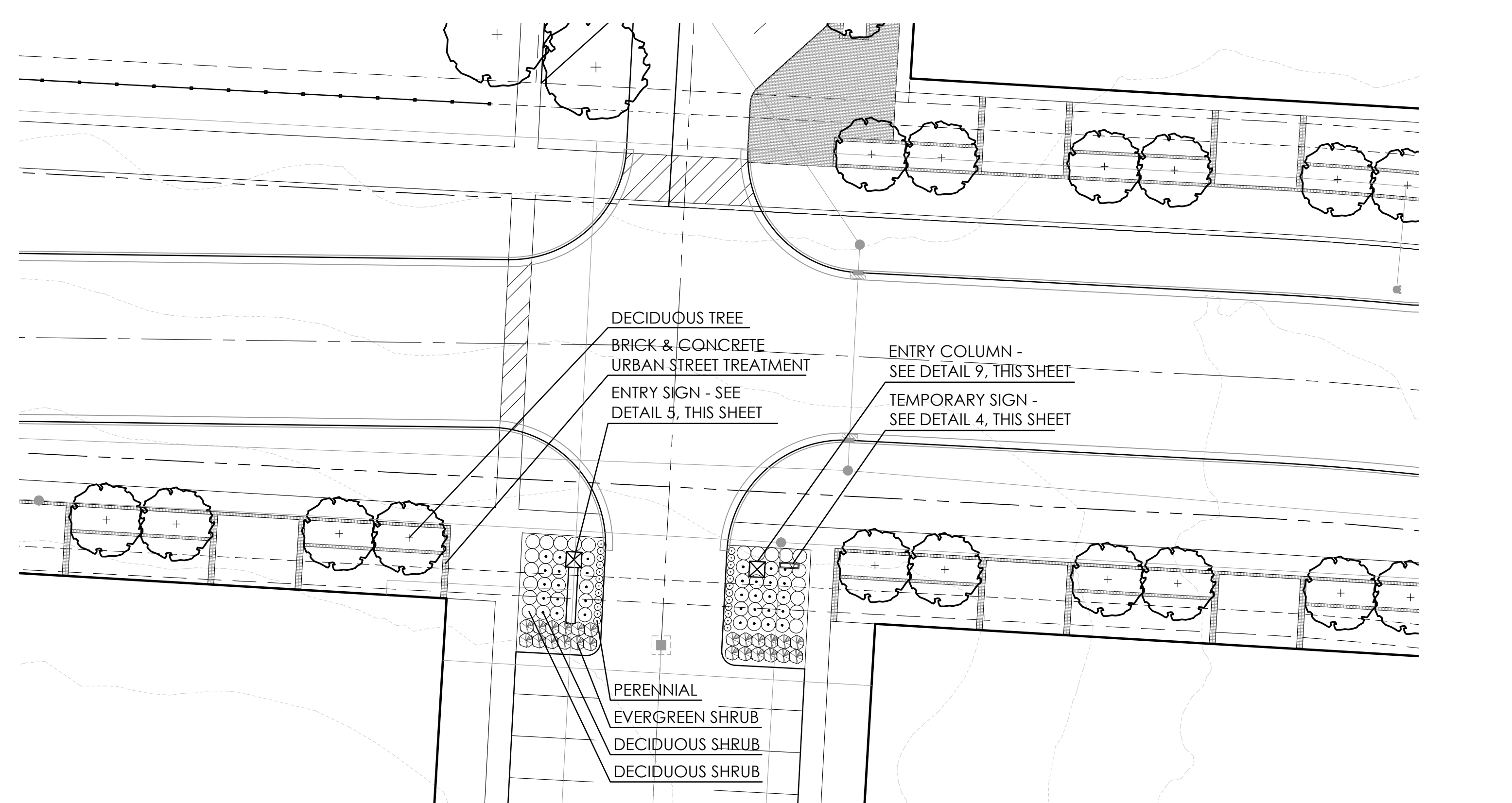


LANDSCAPE PLAN - SUBAREA 'A' - THE FLATS SOUTH

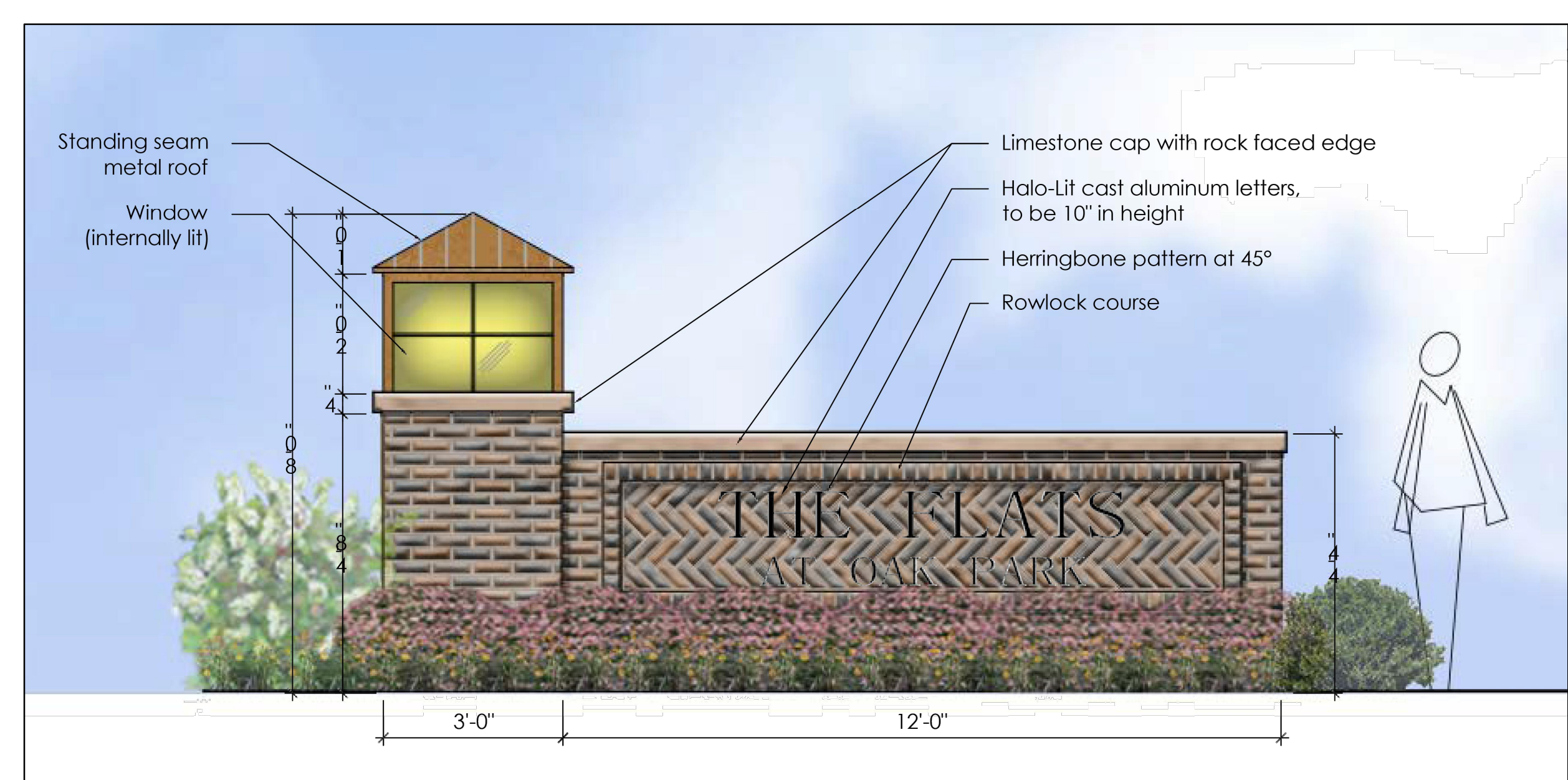
EXHIBIT D-3



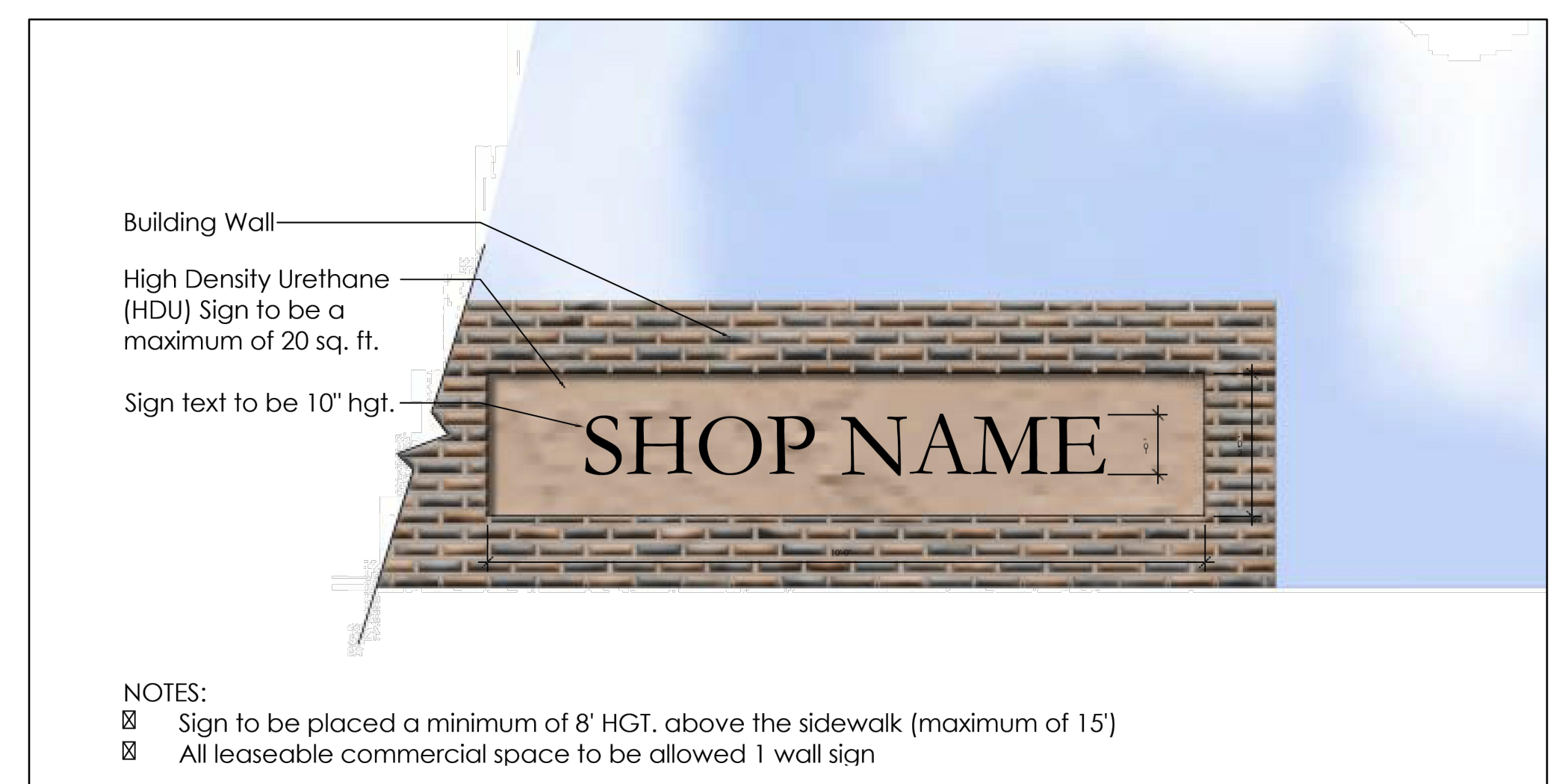
1 CONDOMINIUM ENTRY
SCALE: 1" = 20'



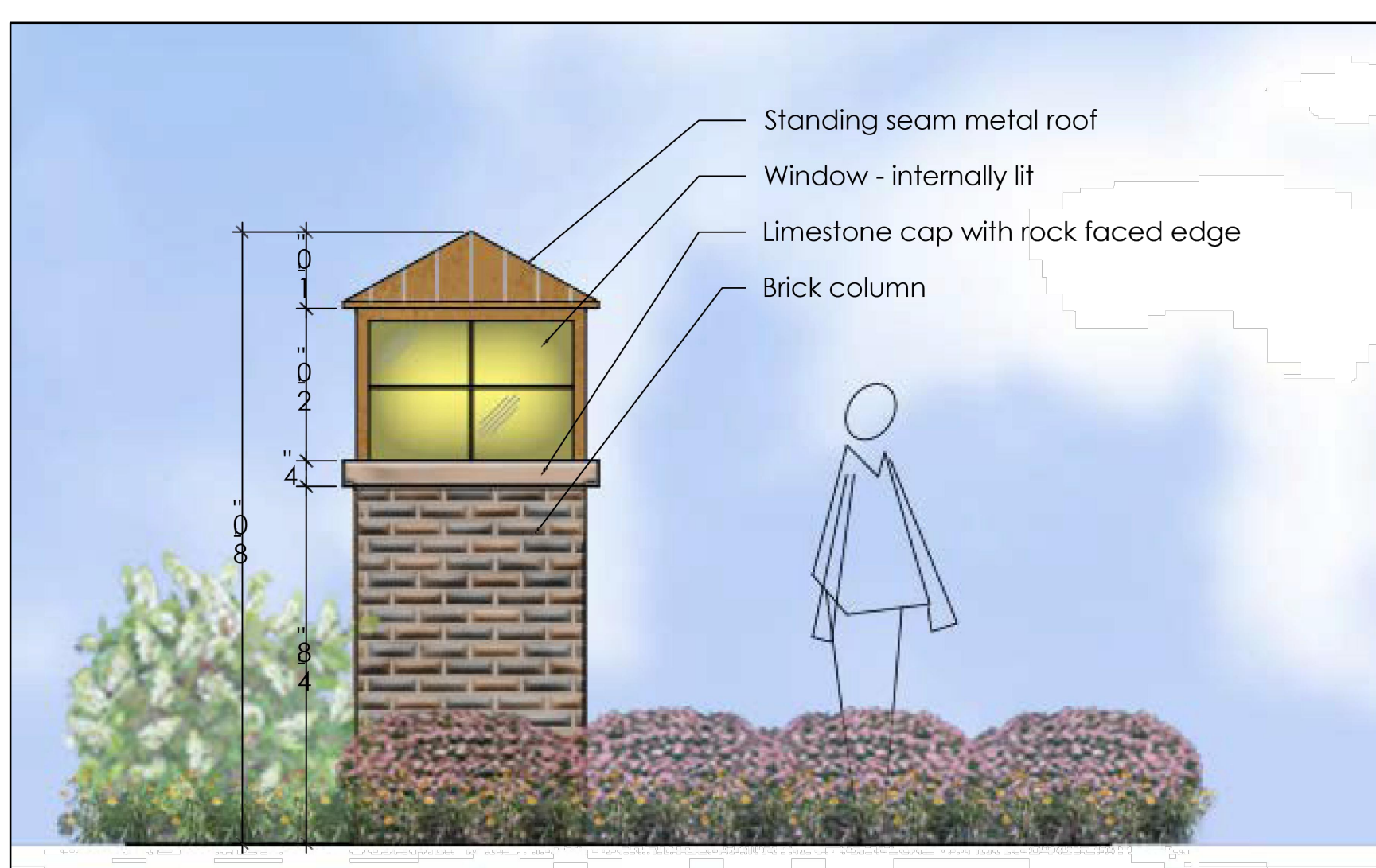
2 TOWNHOME ENTRY
SCALE: 1" = 20'



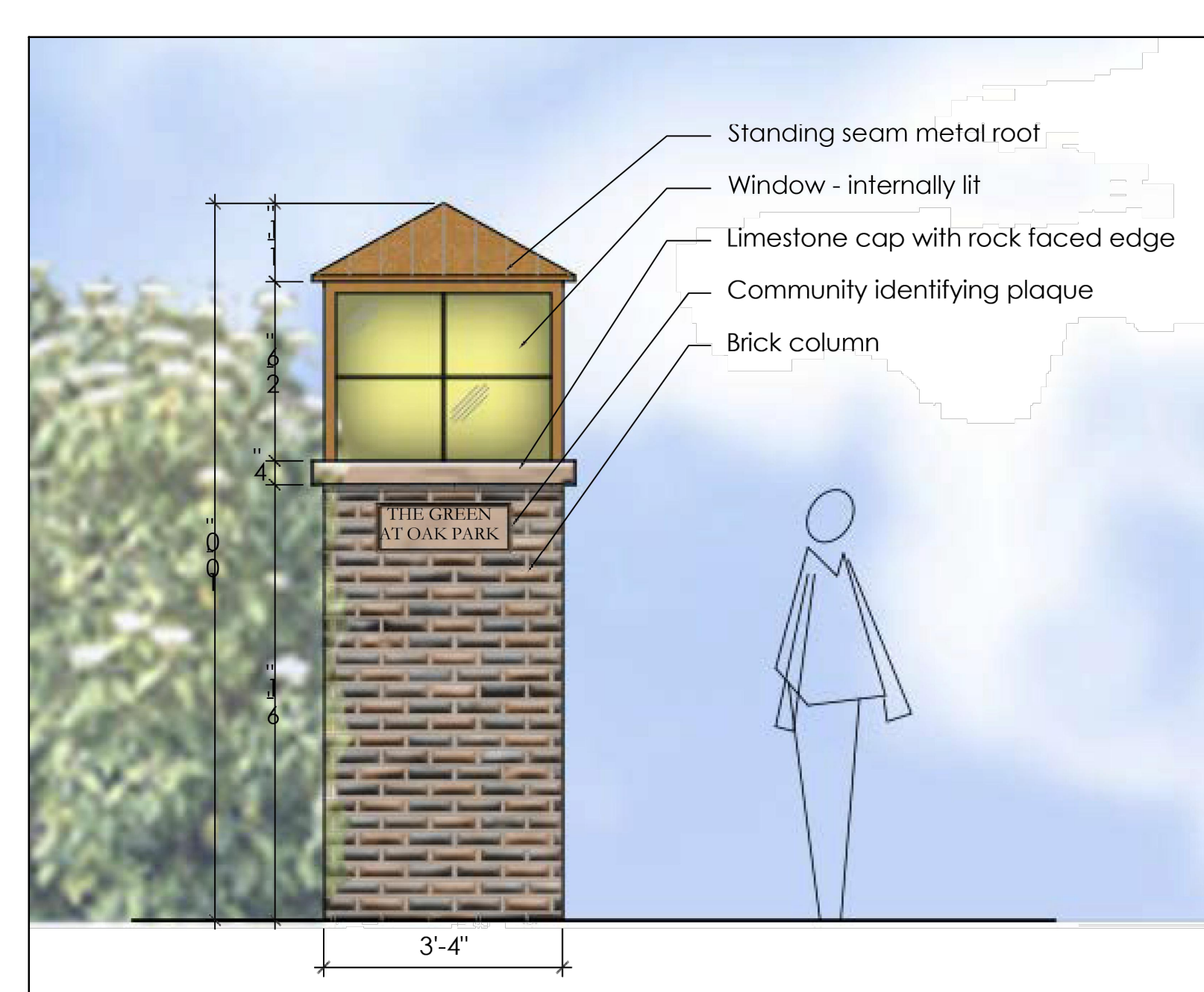
5 ENTRY SIGN
SCALE: N.T.S.



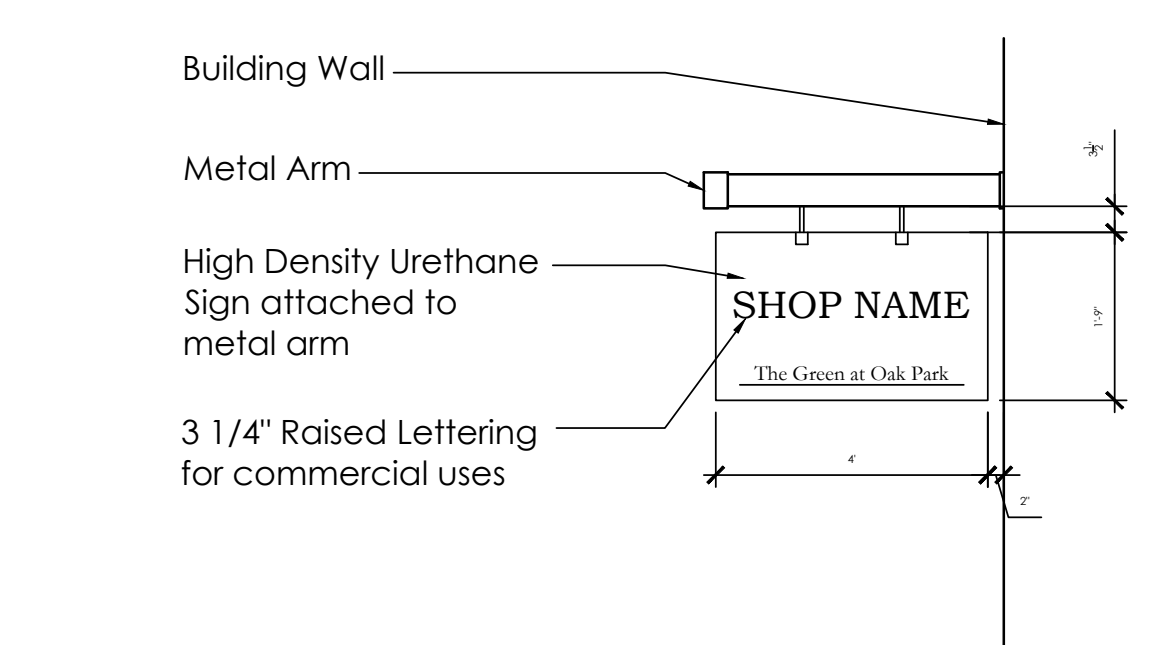
8 WALL SIGN-SMALL COMMERCIAL
SCALE: N.T.S.



9 ENTRY SIGN COLUMN
SCALE: N.T.S.



6 COMMUNITY IDENTIFYING COLUMN
SCALE: N.T.S.

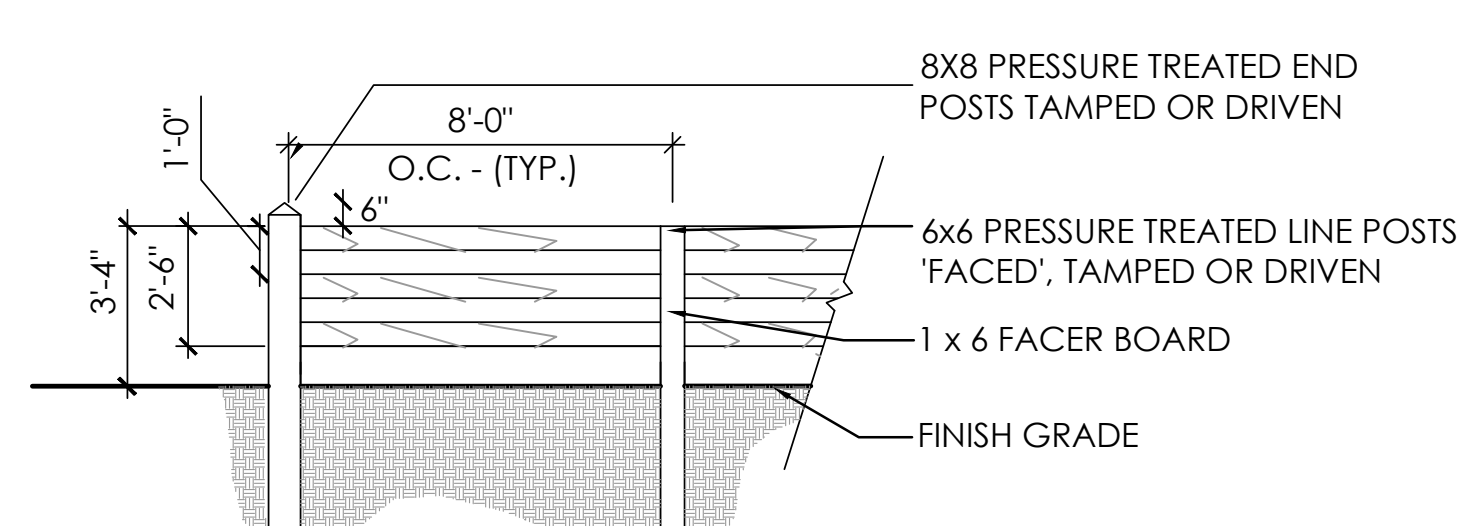
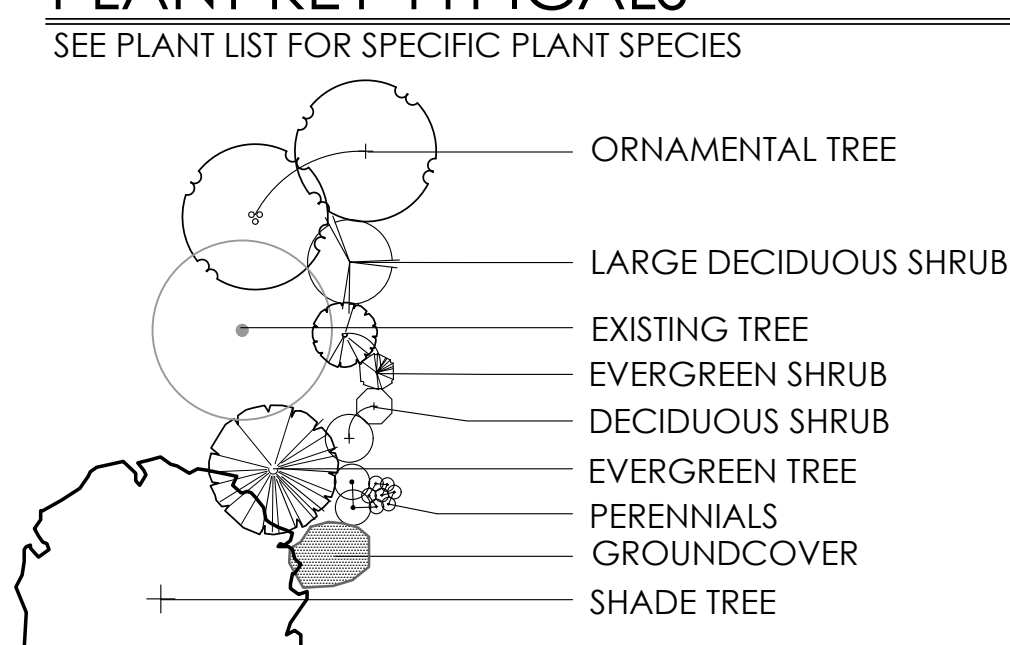


7 HANGING ARM SIGNAGE
N.T.S.

CONSTRUCTION NOTES

- 1 LAWN AREA. PROVIDE POSITIVE DRAINAGE ACROSS ALL SURFACES.
- 2 LANDSCAPE AREA. PROVIDE 3" DEPTH HARDWOOD MULCH. POSITIVE DRAINAGE ACROSS ALL SURFACES.
- 3 ENTRY SIGN. SEE DETAIL X, SHEET X-X FOR MORE INFORMATION.

PLANT KEY TYPICALS



NOTES:
POSTS SHALL BE SOUND, STRAIGHT, AND FREE FROM KNOTS, SPLITS, AND SHAKES, AND PEELED THEIR ENTIRE LENGTH. BOTH ENDS SHALL BE DOUBLE TRIMMED AND SAWED SQUARE

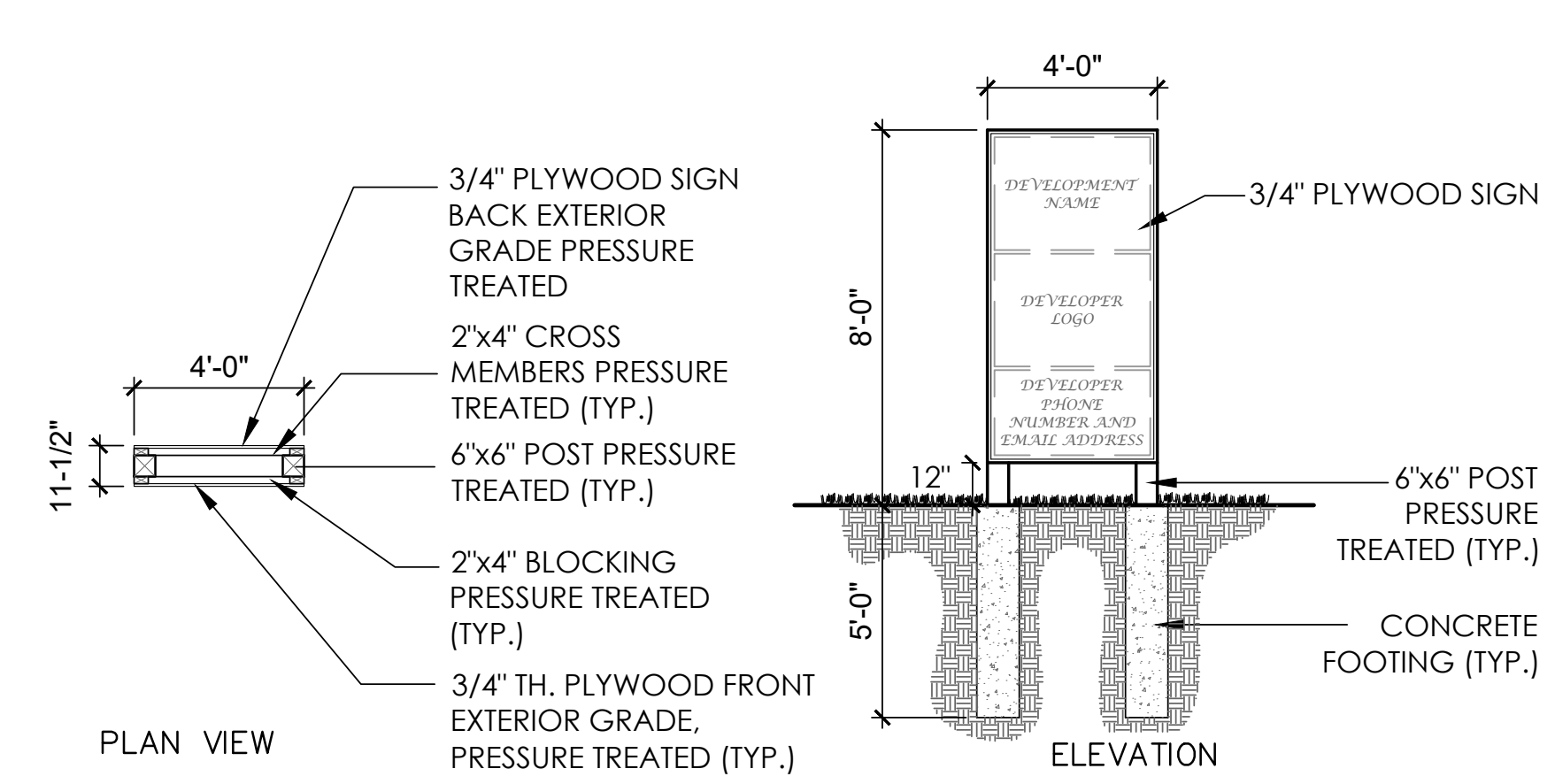
FENCE BOARDS
BOARDS SHALL BE 1" X 6" X 16' POPLAR, PRESSURE TREATED, THE BOARDS SHALL BE SOUND, STRAIGHT AND FREE OF KNOTS AND SHAKES

PAINT
PAINT SHALL BE A SEMI GLOSS BLACK

FASTENERS
NAILS- 10D PLAIN SHANK BOX GALVANIZED

3 3 RAIL FENCE
N.T.S.

NOTE: 19' MIN. SETBACK FROM R.O.W. SIGNAGE TO BE DOUBLE SIDED



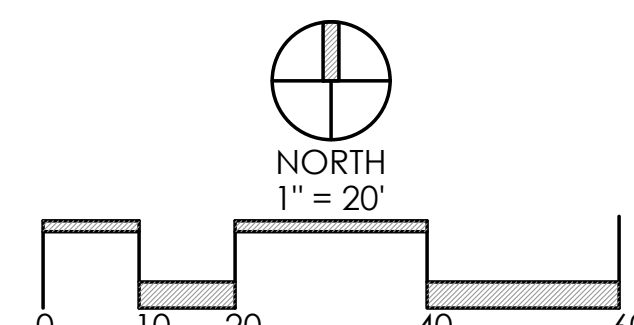
4 TEMPORARY SIGN DETAIL
N.T.S.

LANDSCAPE ENLARGEMENT PLANS

OAK PARK
PREPARED FOR KIRAN BASIREDDY
DATE: 03/19/24

EXHIBIT D-4

Faris Planning & Design
LAND PLANNING
LANDSCAPE ARCHITECTURE
4876 Cemetery Road
p (614) 487-1964
Hilliard, OH 43026
www.farisplanninganddesign.com





OPEN SPACE DATA: SUBAREA 'A'	
OPEN SPACE PROVIDED	±8.00 AC
PERCENTAGE OPEN SPACE PROVIDED	±28.9%

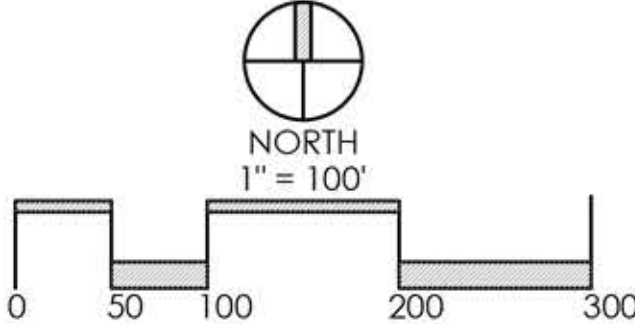
OPEN SPACE DATA: SUBAREA 'B'	
OPEN SPACE PROVIDED	20.0%

* SUBAREA B OPEN SPACE IS NOT GRAPHICALLY REPRESENTED ON THIS PLAN. OPEN SPACE LOCATIONS AND EXACT ACREAGE TO BE DETERMINED AT FINAL DEVELOPMENT AND WILL BE A MINIMUM OF 20%.

OPEN SPACE PLAN

EXHIBIT D-5

OAK PARK
PREPARED FOR KIRAN BASIREDDY
DATE: 03/19/24

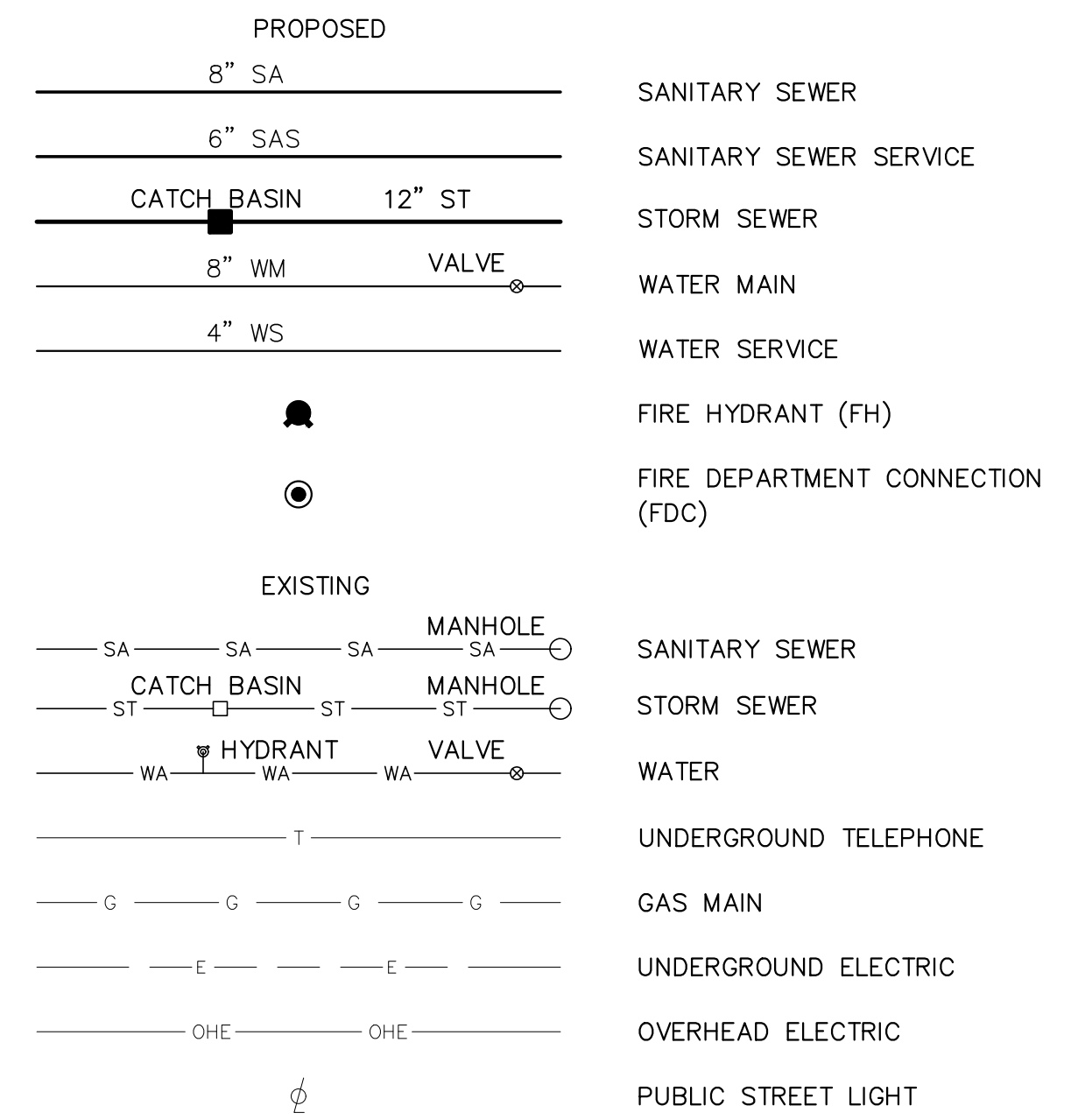


Faris Planning & Design
LAND PLANNING LANDSCAPE ARCHITECTURE
4876 Cemetery Road Hilliard, OH 43026
p (614) 467-1964 www.farisplanninganddesign.com

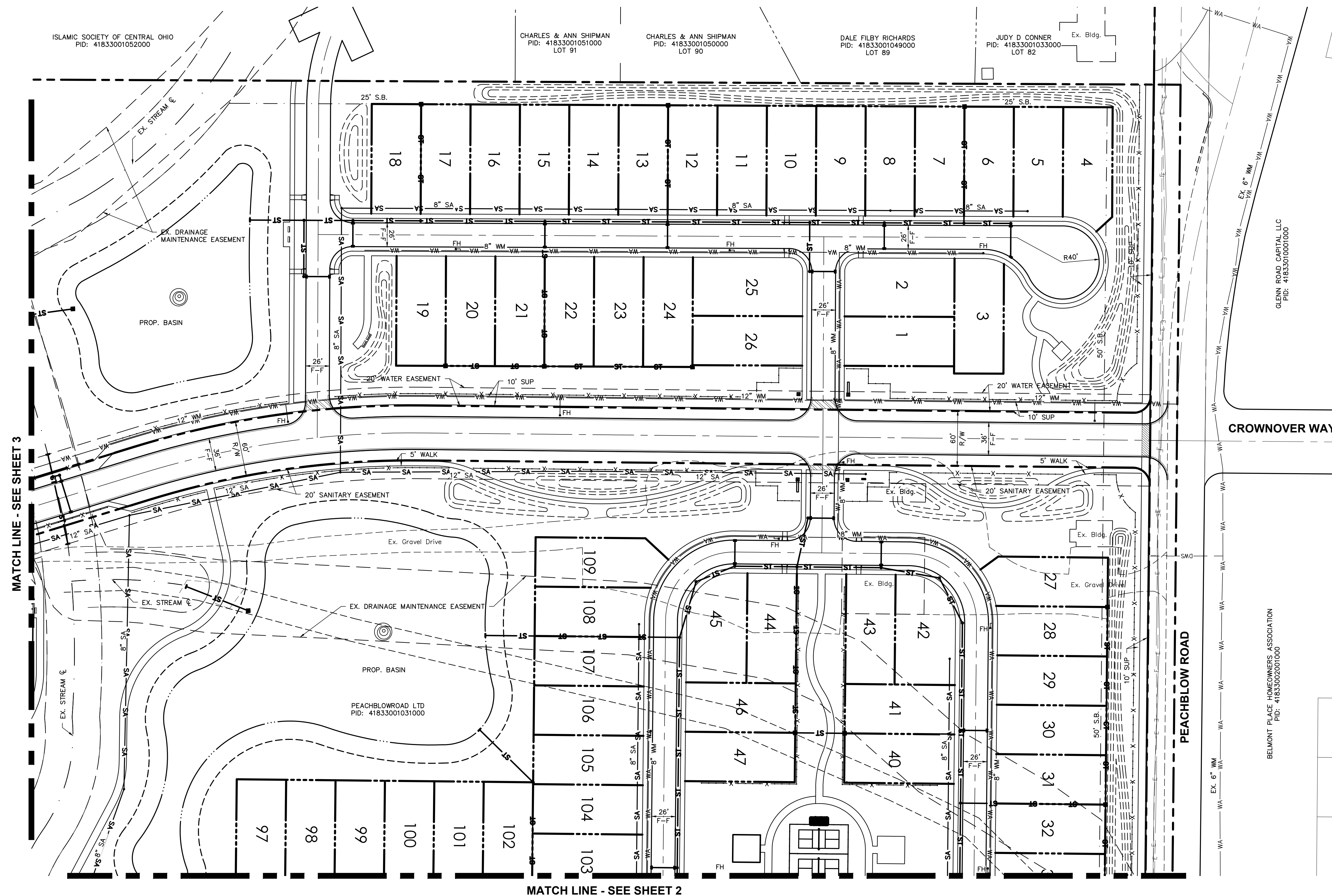
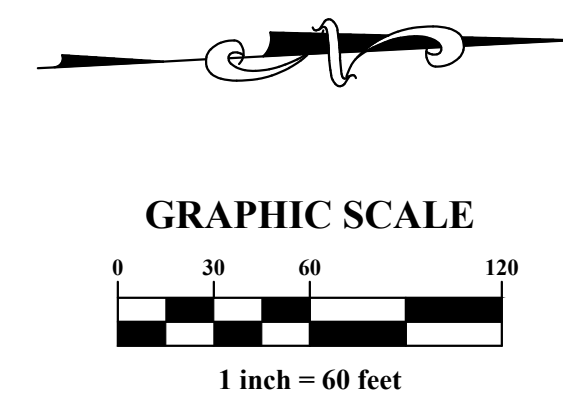
TAB 5 – EXHIBITS 'E-1 through E-10' – Conceptual Utility Plans and Utility Service Letters



LEGEND



NOTE: The utility sizes and locations shown hereon are approximate only and general in nature. Minor relocations and/or changes in sizing during final engineering design are to be expected. Such changes will not affect the serviceability or viability of the project.



PEACHBLOWROAD LTD
6660 N. HIGH STREET, SUITE 1E
WORTHINGTON, OHIO 43085

BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO

**PRELIMINARY UTILITY PLAN
FOR
PEACHBLOW DEVELOPMENT**

Issue Dates:

Date: 03/19/2024
Scale: 1" = 60'

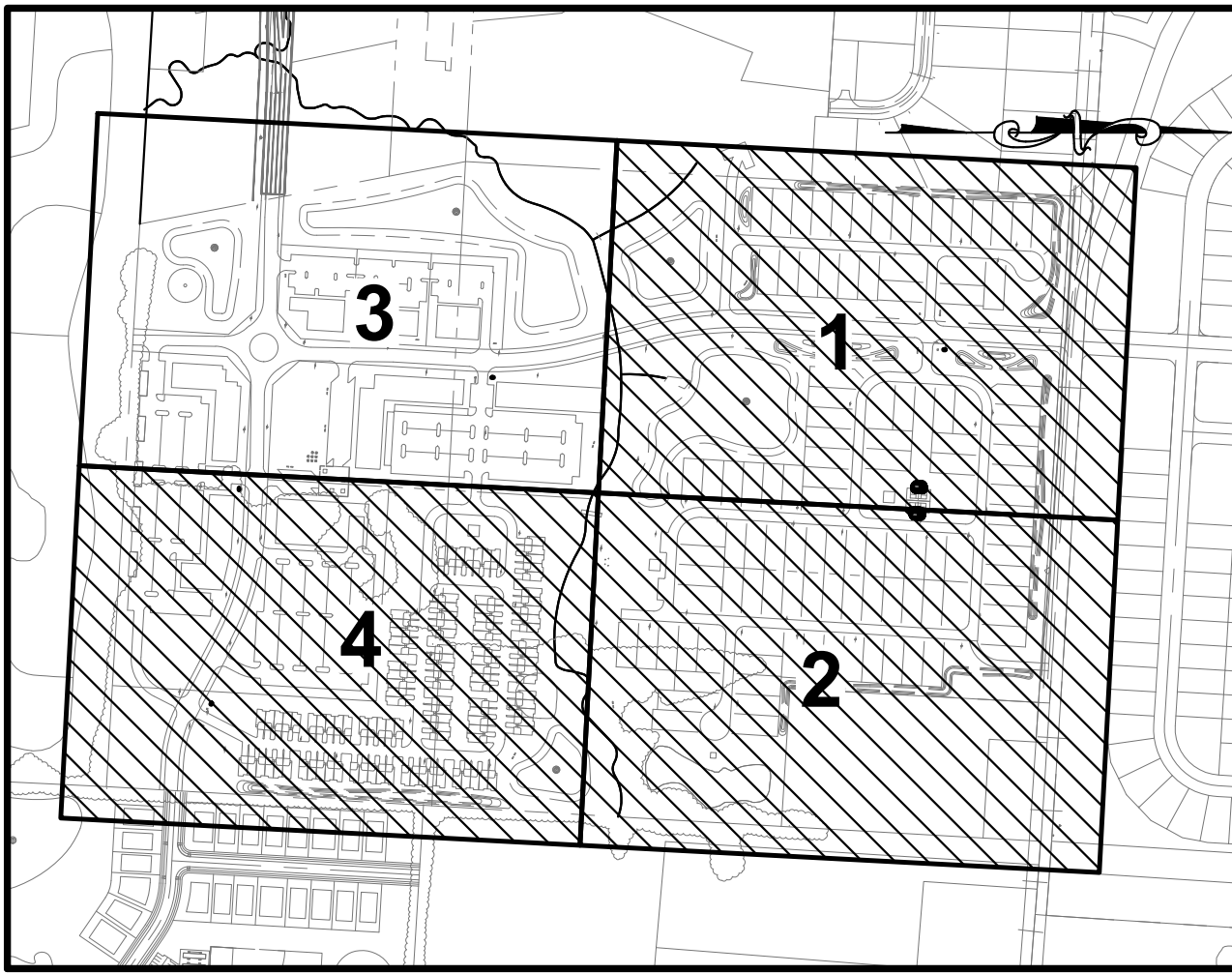
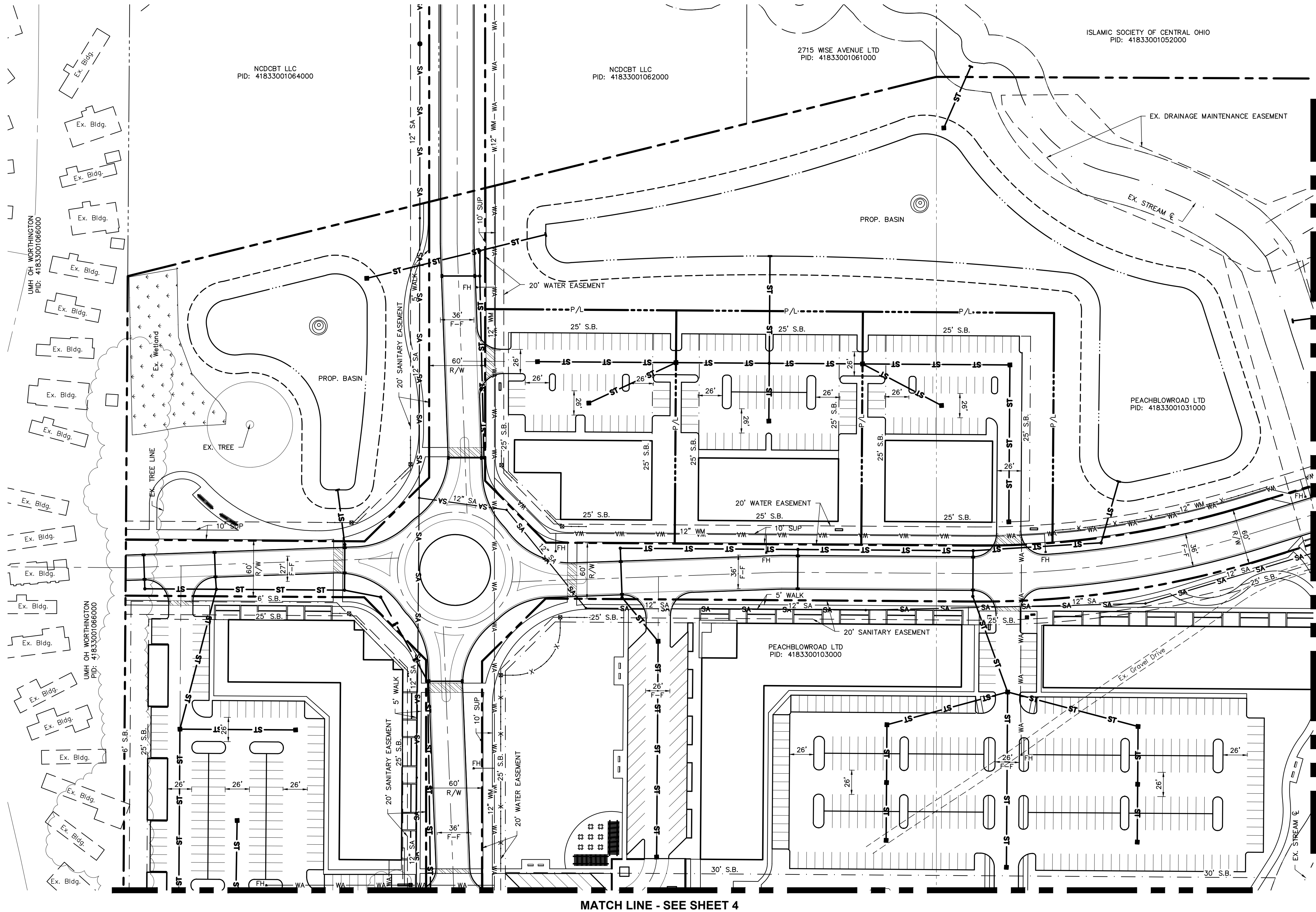
Drawn By: TLM	Checked By: MIM
------------------	--------------------

Project Number:
22-0001-1326

Drawing Number:

1 / 4

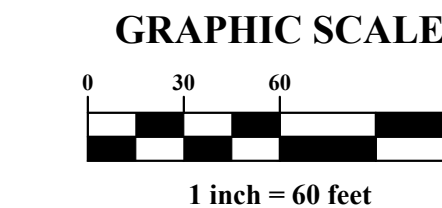
EXHIBIT E-1



SHEET KEY
SCALE: 1"=500'

LEGEND	
PROPOSED	
8" SA	SANITARY SEWER
6" SAS	SANITARY SEWER SERVICE
CATCH BASIN	STORM SEWER
8" WM	WATER MAIN
4" WS	WATER SERVICE
	FIRE HYDRANT (FH)
	FIRE DEPARTMENT CONNECTION (FDC)
EXISTING	
SA	MANHOLE
ST	MANHOLE
WA	VALVE
	HYDRANT
T	UNDERGROUND TELEPHONE
G	GAS MAIN
E	UNDERGROUND ELECTRIC
OHE	OVERHEAD ELECTRIC
	PUBLIC STREET LIGHT

NOTE: The utility sizes and locations shown hereon are approximate only and general in nature. Minor relocations and/or changes in sizing during final engineering design are to be expected. Such changes will not affect the serviceability or viability of the project.



PLAN PREPARED BY:

PEACHBLOWROAD LTD
6660 N. HIGH STREET, SUITE 1E
WORTHINGTON, OHIO 43085

PLAN PREPARED FOR:

BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO

PRELIMINARY UTILITY PLAN
FOR
PEACHBLOW DEVELOPMENT

Issue Dates:

Date:	03/19/2024
Scale:	1" = 60'
Drawn By:	TLM
Checked By:	MIM
Project Number:	22-0001-1326
Drawing Number:	3 / 4

781 Solana Boulevard, Suite 100
Cohasset, Ohio 43020
PH 614.428.7750
FAX 614.428.7755

ADVANCED
CIVIL DESIGN
ENGINEERS SURVEYORS



Delaware County

Regional Sewer District

Director/Sanitary Engineer
Tiffany M. Maag, P.E.

July 31, 2023

Tom M. Warner
Advanced Civil Design, Inc.
781 Science Boulevard, Suite 100
Gahanna, OH 43230

sent via email: oh-intern@advancedcivildesign.com

Re: **Request for Sewer Capacity**
Peachblow Road, Berlin Township
Parcels: 41833001031000, 41833001030000, 41833001029000, 41833001028000

Dear Mr. Warner:

Pursuant to your request dated June 19, 2023, for a sanitary sewer service letter for the aforementioned parcels, we offer the following conditional sanitary sewer availability:

Availability

The Delaware County Sanitary Engineer's Office can confirm that public sanitary sewer is available to serve the above referenced parcels provided that the development obtain sanitary service via the 12" sanitary sewer south of the subject parcel that will be constructed as part of the Greenery project. Extensions from the existing sanitary sewer will be necessary to provide service to the proposed development.

Capacity

Capacity is conditionally available to serve the proposed development. Capacity for the proposed development **is not reserved** until such time that all the requirements for the sewer extension or commercial tap permit have been fulfilled. Sewer capacity is dynamic and subject to decrease pending ongoing development.

If you should have any questions or concerns about this correspondence, please feel free to contact me.

Sincerely,

Kelly Thiel
Staff Engineer III

cc: Correspondence File

EXHIBIT E-2

Officers

PAMALA L. HAWK
President
PERRY K. TUDOR
Vice President
ROBERT W. JENKINS
Secretary
G. MICHAEL DICKEY
Treasurer
GLENN MARZLUF
General Manager/CEO
SHANE CLARK
Deputy General Manager



6658 OLENTANGY RIVER ROAD

DELAWARE, OHIO 43015

www.delcowater.org

Phone (740) 548-7746 • (800) 521-6779

Directors

MARC A. ARMSTRONG

DAVID A. BENDER

DOUGLAS D. DAWSON

TIMOTHY D. MCNAMARA

MICHAEL (NICK) D. SHEETS

June 20, 2023

Mr. Thomas M. Warner
Advanced Civil Design, Inc.
781 Science Boulevard, Suite 100
Gahanna, Ohio 43230

Via Email: oh-intern@advancedcivildesign.com

RE: Peachblow Road Mixed Residential Commercial Development

Dear Mr. Warner:

Please know that Del-Co Water can provide water service to the site described below upon plan approval and payment of the required fees:

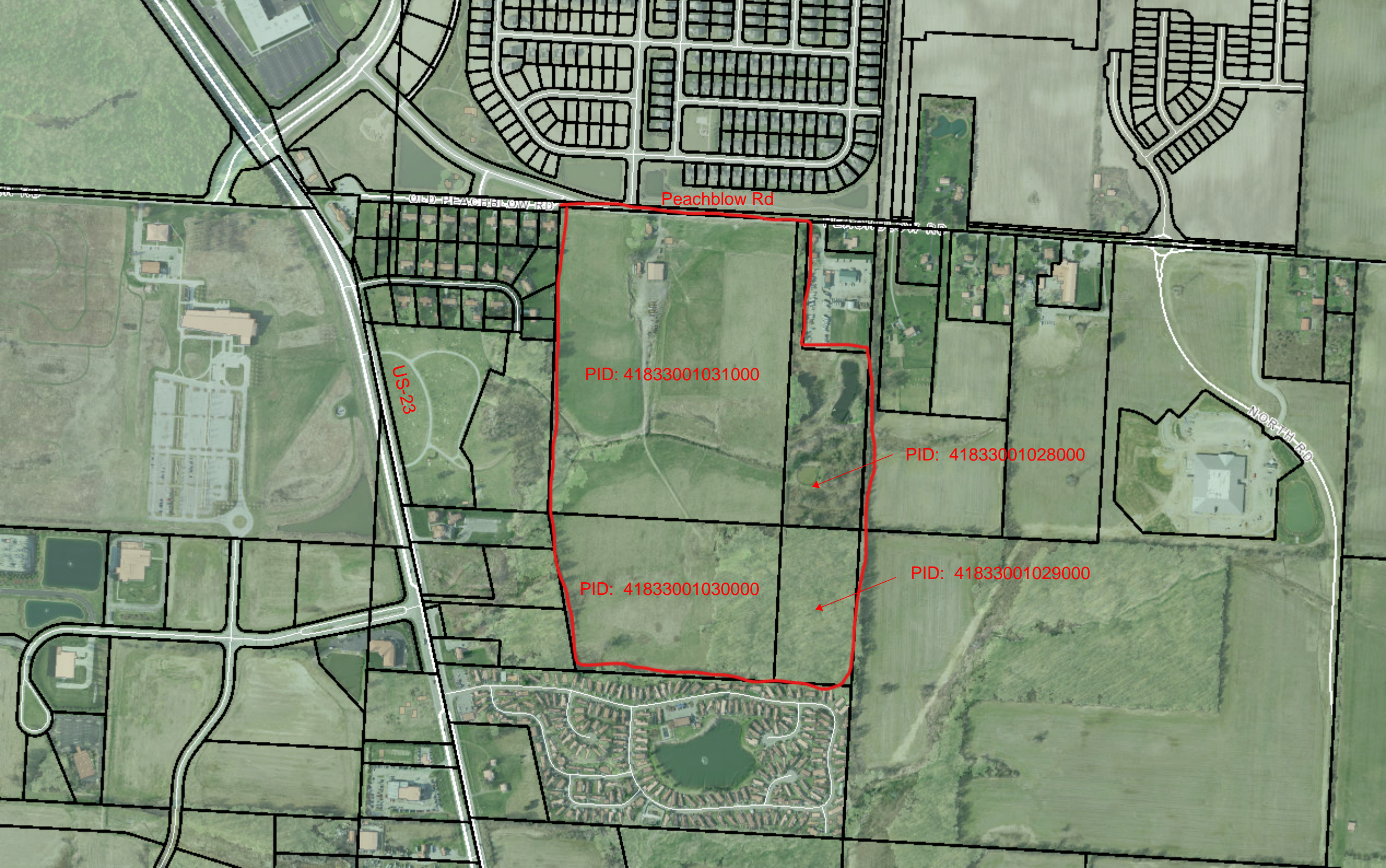
Proposed Land Use: Mixed residential and commercial development
Location: South side of Peachblow Road, $\pm 2,100$ feet east of Columbus Pike (US 23)
Land Size: ± 92.5 acres

This site can be served from an existing 12-inch waterline located on Columbus Pike. The developer will be required to construct an offsite waterline to the proposed development site.

This letter of water availability is valid for a period of one year from the date of this letter. Del-Co makes no guarantee of water availability beyond this period. Contact our Engineering Department if you have any questions on the plan review process, or our Customer Service Department for information on tap fees.

Sincerely,
DEL-CO WATER COMPANY, INC.

Shane F. Clark, P.E.
Deputy General Manager



Peachblow Rd

US-23

PID: 41833001031000

PID: 41833001028000

PID: 41833001030000

PID: 41833001029000

NORTH RD



An **AEP** Company

BOUNDLESS ENERGYSM

AEP Ohio
700 Morrison Rd
Gahanna, OH 43230
AEPOhio.com

6/30/2023

Thomas M. Warner
Advanced Civil Design, Inc.
781 Science Boulevard
Gahanna, Ohio 43230

RE: AVAILABILITY OF ELECTRICAL SERVICE

P.I.D. 41833001031000, 41833001030000, 41833001028000, 41833001029000

To Whom It May Concern:

This letter will confirm that American Electric Power has electric service facilities adjacent to your new project. These facilities will be made available to serve your project with some Contribution-In-Aid-To-Construction charged to the project developer.

Our records indicate your project; a residential and commercial development on 92± acres, is located east of Columbus Pike and south of Peachblow Rd, in Berlin Township, Delaware County, Ohio.

American Electric Power anticipates providing your new project the best possible service. I look forward to working with you and remain available to coordinate your project needs. Please contact me to discuss any questions you may have or other assistance you may require.

Sincerely,

Erik Schaas
Customer Design Supervisor

From: Schwarz \ Todd \ Patrick <TSchwarz@nisource.com>
Sent: Monday, June 19, 2023 3:44 PM
To: OH-Intern
Subject: FW: Utility Serviceability Letter requested- Peachblow Rd Site
Attachments: [Site Location.pdf](#); [Sample Utility Serviceability Letter.docx](#); [GIS Peachblow Rd.PNG](#)

We no longer send out serviceability letters. I have attached our gas map showing our mainlines in green.

When final plans have been submitted, I can work with my engineering team on design and to see if any up front cost needs paid by customer. The mainline would need extended into the development. Although COH facilities may be in the vicinity of your proposed property, further investigation will need to take place for capacity. Once Attachment A of the Information Request Packet has been answered and returned and all other requested information is released to the COH New Business Team, gas availability and any capacity issues will be determined; as well as any deposit and/or Aid-To-Construction costs that may be required.

Please note that availability is contingent upon a cost benefit analysis. If the project is not deemed economically feasible for Columbia Gas, a deposit may be necessary

Todd Schwarz
Development Manager
Columbia Gas of Ohio
614-506-7023

From: OH-Intern <OH-Intern@advancedcivildesign.com>
Sent: Monday, June 19, 2023 1:01 PM
To: Williams \ Brandi \ Nicole <brandiwilliams@nisource.com>
Subject: Utility Serviceability Letter requested- Peachblow Rd Site

USE CAUTION: This email was sent from an external source. Think before you click links or open attachments. If suspicious, please forward to security@nisource.com for review.

Good morning,

Our design team is working on rezoning efforts for a mixture of residential and commercial development on ±92 acres in the Berlin Township, Delaware County. On behalf of our client, we would like to request a signed "Utility Serviceability" letter from your agency detailing the availability and the proximity of gas service to the prospective site.

Please find attached a vicinity map showing the project location south of Peachblow Road and east of US-23.

We request the following information:

- Service availability
- Infrastructure location(s), in map form if possible
- Charges or fees related to service connections

- Submittal/application requirements to obtain services
- Timelines to design proposed service to our site (if applicable)

A sample Utility Serviceability Letter is attached for your reference. The letter should be addressed to:

Thomas M. Warner
Advanced Civil Design, Inc.
781 Science Boulevard, Suite 100
Gahanna, Ohio 43230

Please send the letter and supplemental information by email to oh-intern@advancedcivildesign.com by June 26th, 2023, if possible. If you should have any questions, please feel free to contact me at 614-944-5097.

Thank you for your time and consideration.

Best,

Ashley Hockstok

Advanced Civil Design, Inc.

781 Science Boulevard, Suite 100
Gahanna, OH 43230

ph 614.428.7750

fax 614.428.7755

dir 614.944.5097

<https://link.edgepilot.com/s/6560f0cb/496o8AH4z0iOhKmXI1863g?u=http://www.advancedcivildesign.com/>

SUBURBAN NATURAL GAS COMPANY

ESTABLISHED 1882

211 FRONT STREET, P.O. BOX 130
CYGNET, OHIO 43413-0130

(419) 655-2345
FAX: (419) 655-2274

2626 LEWIS CENTER ROAD
LEWIS CENTER, OHIO 43035-9206

(740) 548-2450
FAX: (740) 549-4939

June 20, 2023

Thomas M. Warner
Advanced Civil Design, Inc.
781 Science Boulevard, Suite 100
Gahanna, Ohio 43230
VIA EMAIL: oh-intern@advancedcivildesign.com

RE: Peachblow Road Site

Dear Mr. Warner:

In response to your request for natural gas service availability to the approximately 92 acres located south of Peachblow Road, east of US-23, Berlin Township, Delaware County, Ohio, Suburban Natural Gas Company does have natural gas service available to the above described location.

As always, natural gas service to the area as well as any other served or to be served by Suburban Natural Gas Company is subject to the terms and conditions of our PUCO tariff.

We look forward to working with you on the proposed project. If you have any questions, feel free to contact me directly.

Cordially,



Aaron Roll
Vice President
System Development

AR/hc

cc: D. Joseph Pemberton



Berlin Township Fire Department
Fire Prevention Bureau
2708 Lackey Old State Road
Delaware, Ohio 43015
(740) 548-6031

Fire Chief AJ Miller
Lt. Craig A. Hall, Fire Prevention

June 20, 2023

Thomas M. Warner
Advanced Civil Design, Inc.
781 Science Boulevard
Gahanna, Oh. 43230

Dear Mr. Warner,

I am writing in response to your request regarding the proposed land use development known as PID 41833001031000, 41833001030000, 41833001028000 & 4183300102900

Berlin Township Fire Department does provide fire protection to the above referenced parcels located within Berlin Township.

It has been determined that service is available for a mixture of residential and commercial development on 92.5 acres on the above referenced parcels

We appreciate the opportunity to work with you in the future and thank you for your interest in Berlin Township. If you further questions or concerns please do not hesitate to call or visit our 2708 Lackey Old State location.

Respectfully,

Lt. Craig A. Hall, CFSI
chall@berlintwp.us

Traffic Impact Study

Oak Park (Peachblow) Mixed Use Development

Prepared for
Delaware County Engineer's Office
City of Delaware, and ODOT District 6

By



Advanced Civil Design, Inc.
781 Science Blvd., Suite 100, Gahanna Ohio 43230
(614) 428-7750

A handwritten signature in black ink, appearing to read 'Mark I. Mann', with a long, sweeping horizontal line extending to the right.

Mark I. Mann, P.E.
Director – Transportation Services

March 19, 2024

Table of Contents

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Introduction

The proposed Oak Park development site is in the Berlin Twp, Delaware County, Ohio. The 92.5 acre site is east of US 23 and south of Peachblow Road (see site plan). The site will have 3 primary access points, one from Peachblow opposite Crownover, one of US 23 opposite Greif Parkway, and an extension of Berlin Meadows site drive to the east of this project.

At the time of this study, ODOT is conducting a study of US 23. This study will modify all the access points to US 23 through the study corridor. The modification will include the 3 intersections on US 23 that are part of the Oak Park study. As such, this study provides analysis for the intersection listed below and makes recommendations for any improvements required to mitigate our impact for the 2025 Opening Year but does not make recommendations for the 2045 Design Year since the Design Year intersection geometrics are unknown at this time.

The development is also expected to advance in at least 2 phases. Phase 1 is currently expected to be the residential portion of the development north of the stream that crosses the site from east to west. The second and or more phases will be the remaining portions of the development. Given this the Opening Year (2025) traffic has trips from what is called zone 1 and 2 (see traffic volume exhibits) while the Design Year (2045) includes trips from all 7 zones.

The scope of this study was developed from correspondence with the DCEO, City of Delaware ODOT District 6. The following will be studied and evaluated as part of this study:

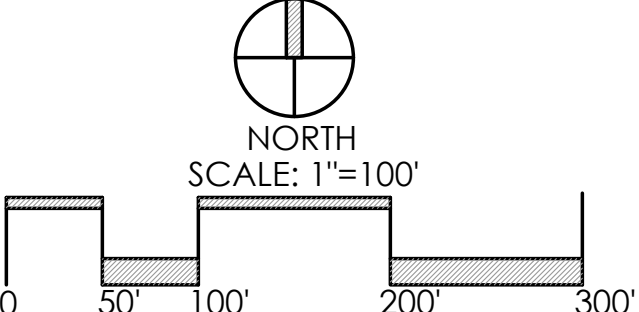
- Left turn lane warrant at the Proposed Access Point on Peachblow Rd.
- Right turn lane warrant at the Proposed Access Point on Peachblow Rd.
- Level of Service (LOS) at the following intersections
 - Peachblow & Crownover Way (Two-Way Stop Sign, Delaware County)
 - Peachblow & Glenn Pkwy (Two-Way Stop Sign, City of Delaware)
 - Glenn Pkwy & US 23 (Signalized, ODOT)
 - US 23 & Greif Pkwy (Signalized, ODOT)
 - US 23 & Shanahan Rd. (Signalized, ODOT)

The primary goal of this study is to determine any transportation impacts related to the proposed development, and identify any required mitigation at site area intersections.



SITE PLAN

OAK PARK
PREPARED FOR KIRAN BASIREDDY
DATE: 03/07/24



Faris Planning & Design
LAND PLANNING LANDSCAPE ARCHITECTURE
4876 Cemetery p (614) 487-1964
Hilliard, OH 43026
www.farisplanninganddesign.com

Existing/ No Build Conditions

US 23 is a 4-lane divided highway with a posted speed limit of 55 MPH. Left and right turn lanes are added at intersection where necessary. Glenn Parkway is a 4-lane divided roadway with a 35 MPH posted speed limit. Left and right turn lanes are added at intersections where necessary. Peachblow is a 2-lane roadway with a 55 MPH posted speed limit. Left and right turn lanes are added as necessary.

Traffic Volumes and Trip Generation

Traffic volume data for this study was collected in October 2023 (see appendix). Traffic signal timings were also provided for the traffic signals in the study area by ODOT D6.

Background growth rates were obtained from MORPC (see appendix) for the study and those growth rates were applied at an annual linear rate to the roadway sections for this study. For the through movement on US 23 an additional ODOT factor was applied based on the day of week, month of year and roadway category to develop the Design Hour Volume for the Design Year.

Trip Generation for the site was developed using the latest edition of the ITE Trip Generation Manual (see Appendices). Land Use Codes (LUC) 210, 215 and 220 were used for the residential portions of the development (see appendix). LUC 822 and 850 were used for the retail/commercial portions of the development (see appendix).

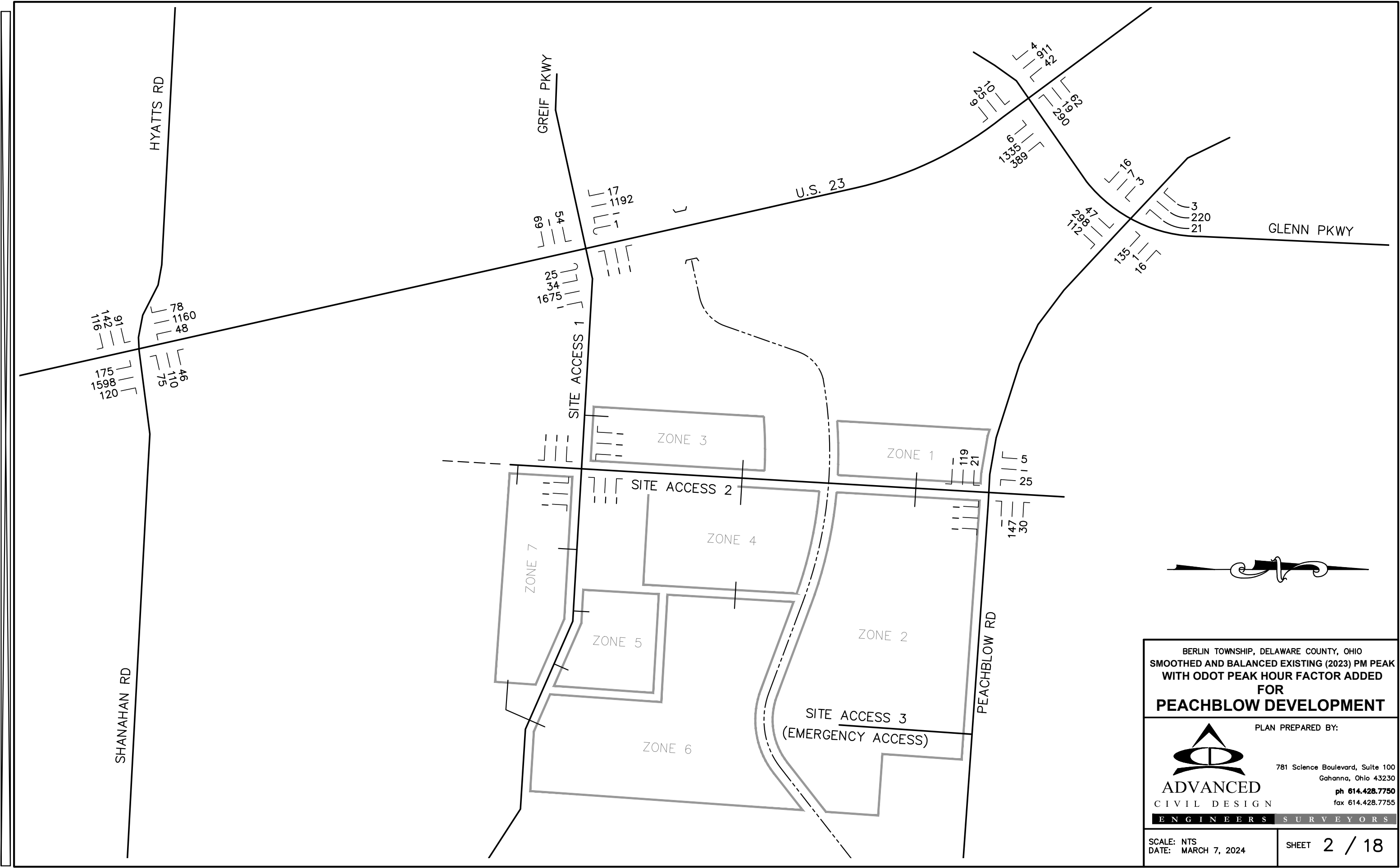
Trip generation numbers can be found in the below table.


Table 1. Trip Generations

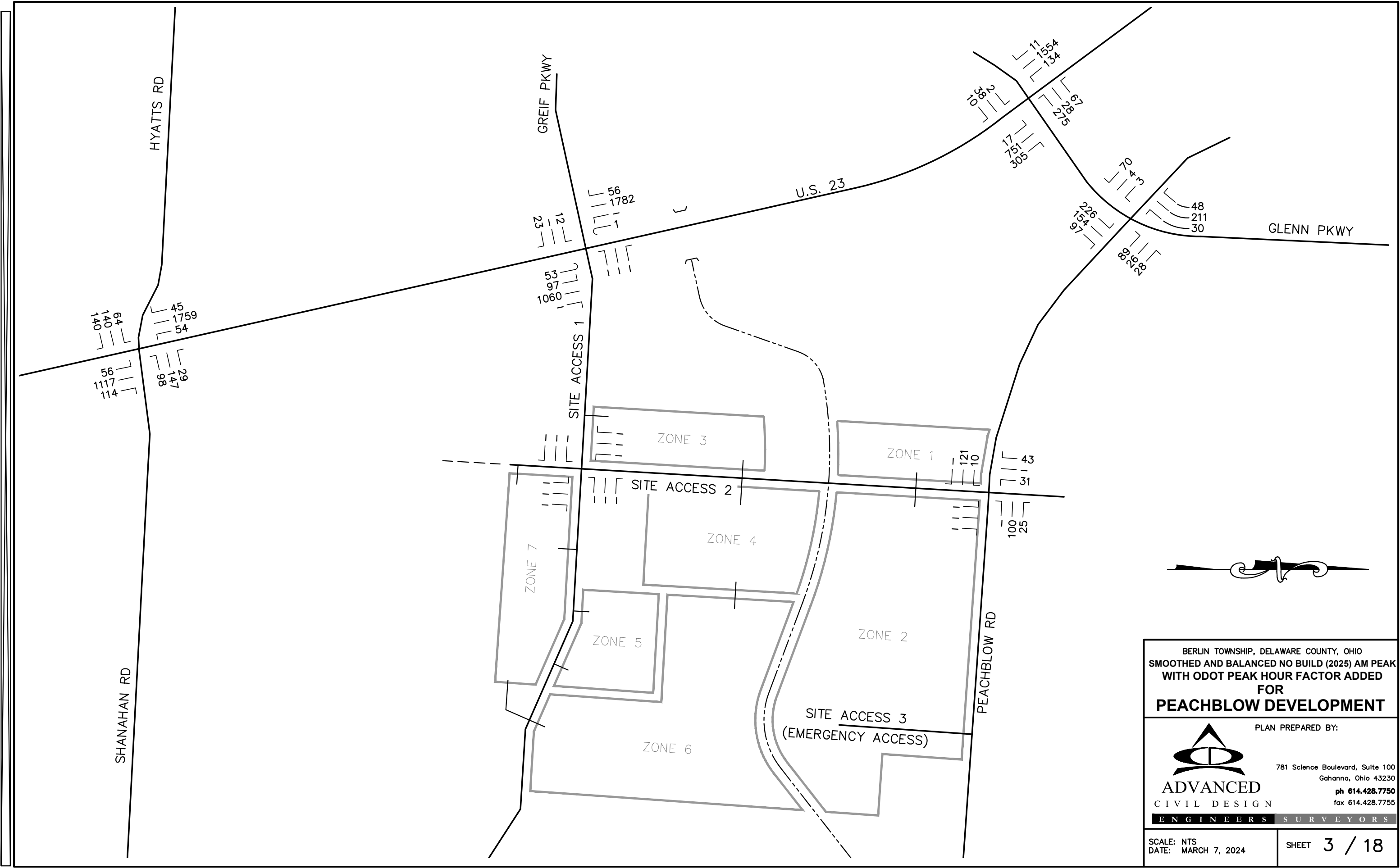
Trip Generation								
ZONE	Description	Land Use Code (LUC)	Total Trips	Enter	Exit		Total IN	Total OUT
1	Town Homes (26 units)	210	22	25%	75%	AM	6	17
			26	63%	37%	PM	16	10
2	Town Homes (86 units)	210	60	25%	75%	AM	15	45
			81	63%	37%	PM	51	30
3	General Retail/ Commercial (3@10k ea.)	822	72	60%	40%	AM	43	29
			198	50%	50%	PM	99	99
4	Multi-Family Residential (103 units)	220	41	24%	76%	AM	10	31
			53	63%	37%	PM	33	20
	General Retail/ Commercial (30k Sq. Ft.)	822	72	60%	40%	AM	43	29
			198	50%	50%	PM	99	99
5	General Retail (Grocery 30k Sq. Ft.)	850	86	59%	41%	AM	51	35
			269	50%	50%	PM	135	135
6	Town Homes (105 units)	215	50	25%	75%	AM	13	38
			60	59%	41%	PM	35	25
7	Multi-Family Residential (252 units)	220	101	24%	76%	AM	24	77
			129	63%	37%	PM	81	48
	General Retail/ Commercial (23k Sq. Ft.)	822	54	60%	40%	AM	32	22
			152	50%	50%	PM	76	76

The distribution of trips in the network was derived from the data collected at the study intersections and from information gathered from recent traffic studies in the area.

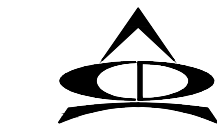
The in-bound and out-bound trip volumes, and distribution of trips on the network are all shown in the following exhibits.



BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO SMOOTHED AND BALANCED EXISTING (2023) PM PEAK WITH ODOT PEAK HOUR FACTOR ADDED FOR PEACHBLOW DEVELOPMENT	
 ADVANCED CIVIL DESIGN ENGINEERS SURVEYORS	PLAN PREPARED BY: 781 Science Boulevard, Suite 100 Gahanna, Ohio 43230 ph 614.428.7750 fax 614.428.7755
SCALE: NTS DATE: MARCH 7, 2024	SHEET 2 / 18



BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO
SMOOTHED AND BALANCED NO BUILD (2025) AM PEAK
WITH ODOT PEAK HOUR FACTOR ADDED
FOR
PEACHBLOW DEVELOPMENT



ADVANCED
CIVIL DESIGN

ENGINEERS SURVEYORS

PLAN PREPARED BY:

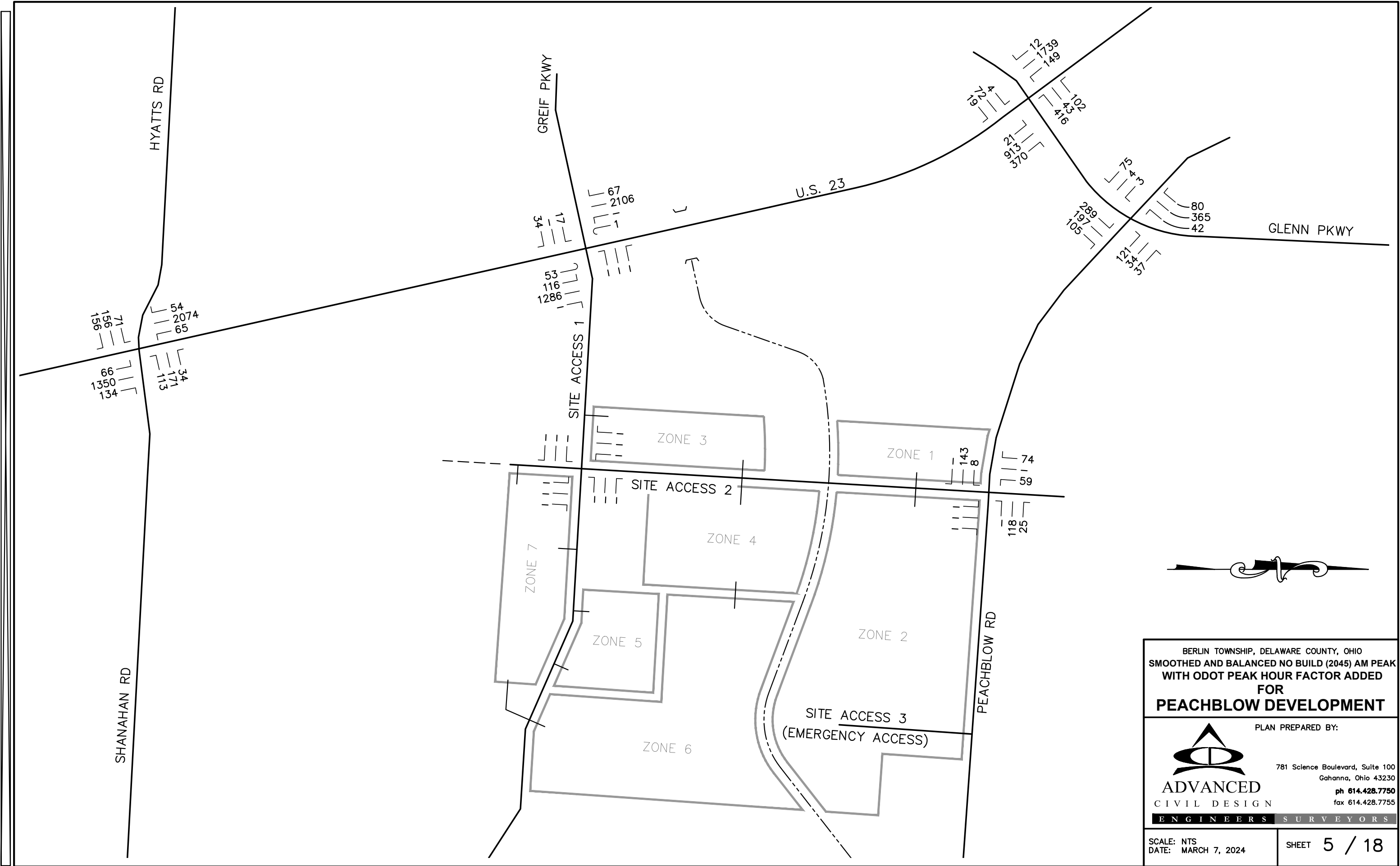
781 Science Boulevard, Suite 100
Gahanna, Ohio 43230
ph 614.428.7750
fax 614.428.7755

SCALE: NTS
DATE: MARCH 7, 2024

SHEET **3 / 18**




SHEET 4 / 18



BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO
 SMOOTHED AND BALANCED NO BUILD (2045) AM PEAK
 WITH ODOT PEAK HOUR FACTOR ADDED
FOR
PEACHBLOW DEVELOPMENT


PLAN PREPARED BY:



ADVANCED
CIVIL DESIGN
ENGINEERS SURVEYORS

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

SCALE: NTS DATE: MARCH 7, 2024	SHEET 5 / 18
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781 Science Boulevard, Suite 100
Gahanna, Ohio 43230
ph 614.428.7750
fax 614.428.7755

SHEET 6 / 18

Capacity Analyses No-Build

Capacity analyses were performed utilizing HCS. The Opening Year (2025) No-Build, Design Year (2045) No-Build were all analyzed. The results are summarized in Tables 3 and 4, below. Detailed print outs are contained in the Appendices.

Table 2. Traffic Study Signalized Intersections LOS, No Build

Intersection		Signalized Intersection Level of Service (LOS/ sec. delay)															
		No Build															
		2025								2045							
		AM				PM				AM				PM			
		NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB
US 23 & Glenn Parkway	LT	C/30.6	B/12.0	D/38.3	D/47.6	B/16.5	B/18.8	D/36.5	D/47.7	E/57.8	E/56.6	D/51.4	F/548.8	E/60.5	E/56.8	D/49.1	F/156.7
	TH	B/18.2	B/16.5	C/34.5	D/36.0	C/26.5	B/12.3	C/32.8	C/34.3	B/19.8	C/26.3	E/56.3	D/45.2	C/26.9	B/13.8	D/54.7	D/47.8
	RT	A/0.0	A/7.8	C/34.0	D/36.0	A/0.0	A/8.5	C/32.5	C/34.3	A/0.0	B/10.0	D/53.3	D/45.2	A/0.0	A/9.0	D/53.3	D/47.8
	Approach	B/13.2	B/16.1	C/34.6	D/44.6	C/24.4	B/12.6	C/33.6	D/44.8	B/14.8	C/28.6	E/55.5	F/418.8	C/21.0	B/15.6	D/53.1	F/132.9
	Overall	B/18.7				C/21.3				F/81.3				D/37.1			
US 23 & Grief Parkway	LT	C/24.1	A/5.4	D/54.7	E/73.9	A/6.3	B/10.9	D/53.5	E/73.9	D/43.5	A/6.2	D/53.8	E/73.9	B/10.9	C/22.3	D/51.1	E/73.9
	TH	A/3.5	B/13.9	E/56.1	E/73.9	A/6.4	A/10.0	E/58.7	E/73.9	A/4.3	C/23.5	E/55.8	E/73.9	B/11.0	B/13.9	E/57.3	E/73.9
	RT	A/3.5	A/5.7	E/56.1	E/73.9	A/6.4	A/5.9	E/58.7	E/73.9	A/4.3	A/6.4	E/55.8	E/73.9	B/11.0	A/6.9	E/57.3	E/73.9
	Approach	A/6.1	B/13.6	E/55.6	E/73.9	A/6.4	A/9.9	E/56.4	E/73.9	A/8.9	C/22.9	E/55.1	E/73.9	B/11.0	B/13.8	D/54.6	E/73.9
	Overall	B/11.2				A/9.8				B/17.8				B/14.3			
US 23 & Shanahan/ Hyatts Road	LT	C/25.1	B/11.8	D/43.8	D/44.1	B/15.8	B/19.9	D/44.9	D/45.1	C/28.4	B/16.7	D/42.9	D/42.7	C/31.4	C/28.4	D/44.1	D/44.9
	TH	B/17.0	C/32.4	D/53.3	D/52.6	C/23.0	B/19.1	E/55.2	D/52.9	C/21.8	F/80.7	D/52.6	D/51.3	F/50.7	C/27.8	D/54.5	D/53.0
	RT	A/8.3	C/33.4	D/46.5	D/41.7	A/7.9	B/19.2	D/45.3	D/44.1	A/9.1	F/84.4	D/45.6	D/39.9	A/8.8	C/28.5	D/43.1	D/43.3
	Approach	B/16.5	C/32.3	D/48.8	D/48.4	C/21.4	B/19.2	D/49.2	D/48.6	C/21.0	F/80.6	D/47.9	D/47.1	D/46.4	C/28.1	D/48.0	D/48.4
	Overall	C/29.6				C/24.9				D/54.6				D/40.2			

Table 3. Traffic Study Un-Signalized Intersections LOS, No Build

Intersection		Un-Signalized Intersection Level of Service (LOS/ sec. delay)															
		No Build															
		2025								2045							
		AM				PM				AM				PM			
		NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB
Glenn Pkwy & Peachblow Rd		E/44.0	B/11.5	A/4.0	A/0.8	D/26.3	B/12.5	A/0.8	A/0.7	F/807.5	C/15.8	A/4.8	A/0.7	F/117.2	C/16.3	A/0.9	A/0.8
Peachblow Road & Crownover Way		-	A/9.6	A/0.6	-	-	B/10.7	A/1.1	-	-	B/10.1	A/0.4	-	-	B/11.8	A/0.9	-

For the Existing Conditions No-Build scenarios for the Opening Year (2025) the signalized study intersections overall operations meets normal criteria. However, the sideroad operations at Greif Parkway for the AM and PM peaks operate below normal criteria with approach LOS's of "E". The un-signalized intersection similarly operate within normal criteria for the Opening Year, accept the northbound (Peachblow) approach at Glenn Parkway operates at LOS E during the AM Peak hour.


For the Existing Conditions No-Build scenarios for the Design Year (2045) the signalized study intersections overall operations meets normal criteria, except for the US 23 & Glenn Pkwy intersection which operates at LOS F for the AM Peak in the design year. However, several

approaches to each intersection operate below the normal criteria. The sideroads at Greif continue to operate at LOS E and the southbound approach at Shanahan operates at LOS F during the AM Peak hour. The through movement for the northbound approach at Shanahan operates at LOS F for the PM Peak hour although the approach operates at an acceptable LOS D for the same period.



LEGEND
A+B=C
A = ZONE 1 GENERATED TRIPS
B = ZONE 2 GENERATED TRIPS
C = TOTAL PHASE 1 GENERATED TRIPS



BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO AM TRIP GENERATION (DETAILED PHASE 1) FOR PEACHBLOW DEVELOPMENT	
 ADVANCED CIVIL DESIGN ENGINEERS SURVEYORS	PLAN PREPARED BY: 781 Science Boulevard, Suite 100 Gahanna, Ohio 43230 ph 614.428.7750 fax 614.428.7755
SCALE: NTS DATE: MARCH 7, 2024	SHEET 7 / 18

LEGEND


A+B=C

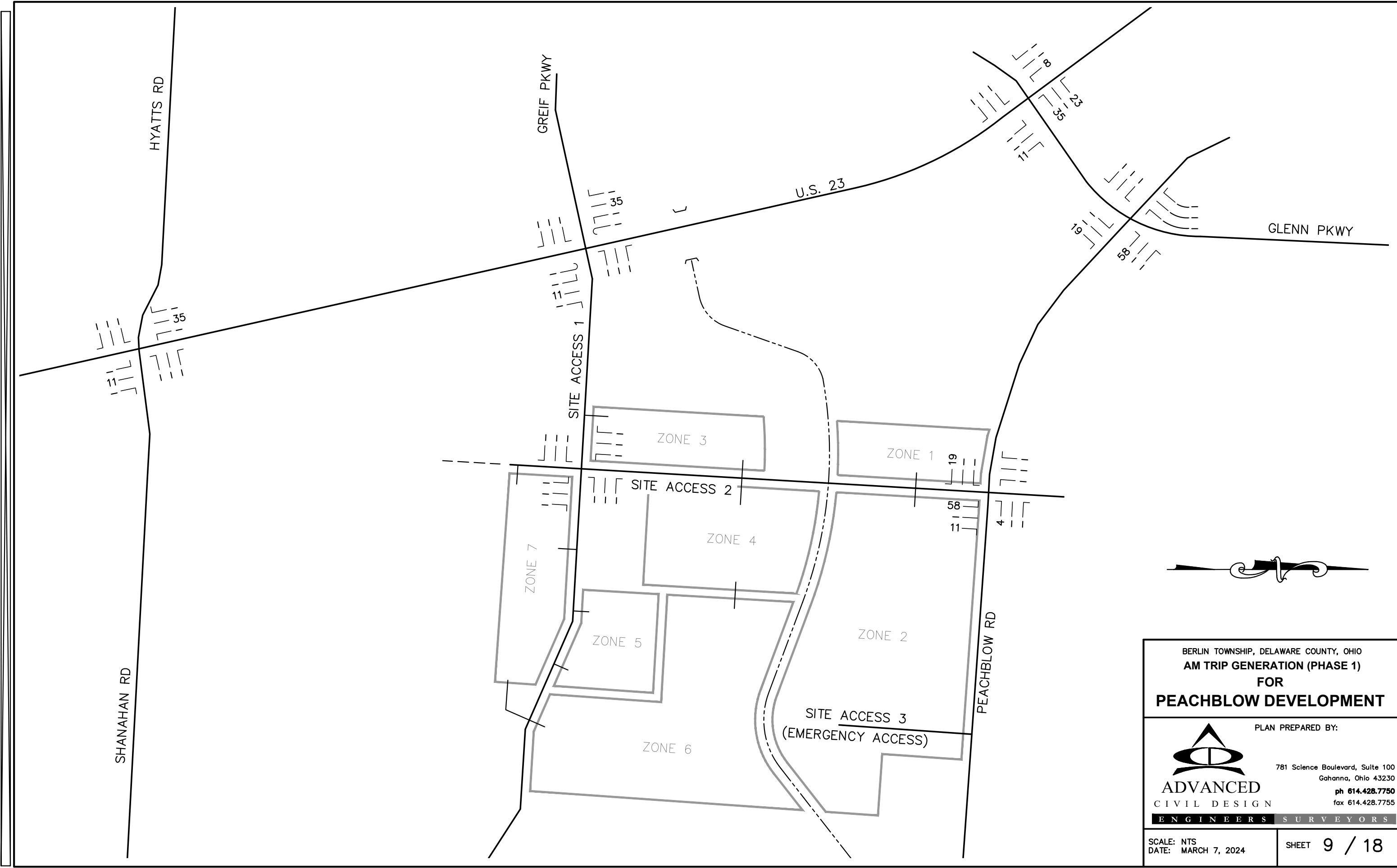
A = ZONE 1 GENERATED TRIPS


B = ZONE 2 GENERATED TRIPS

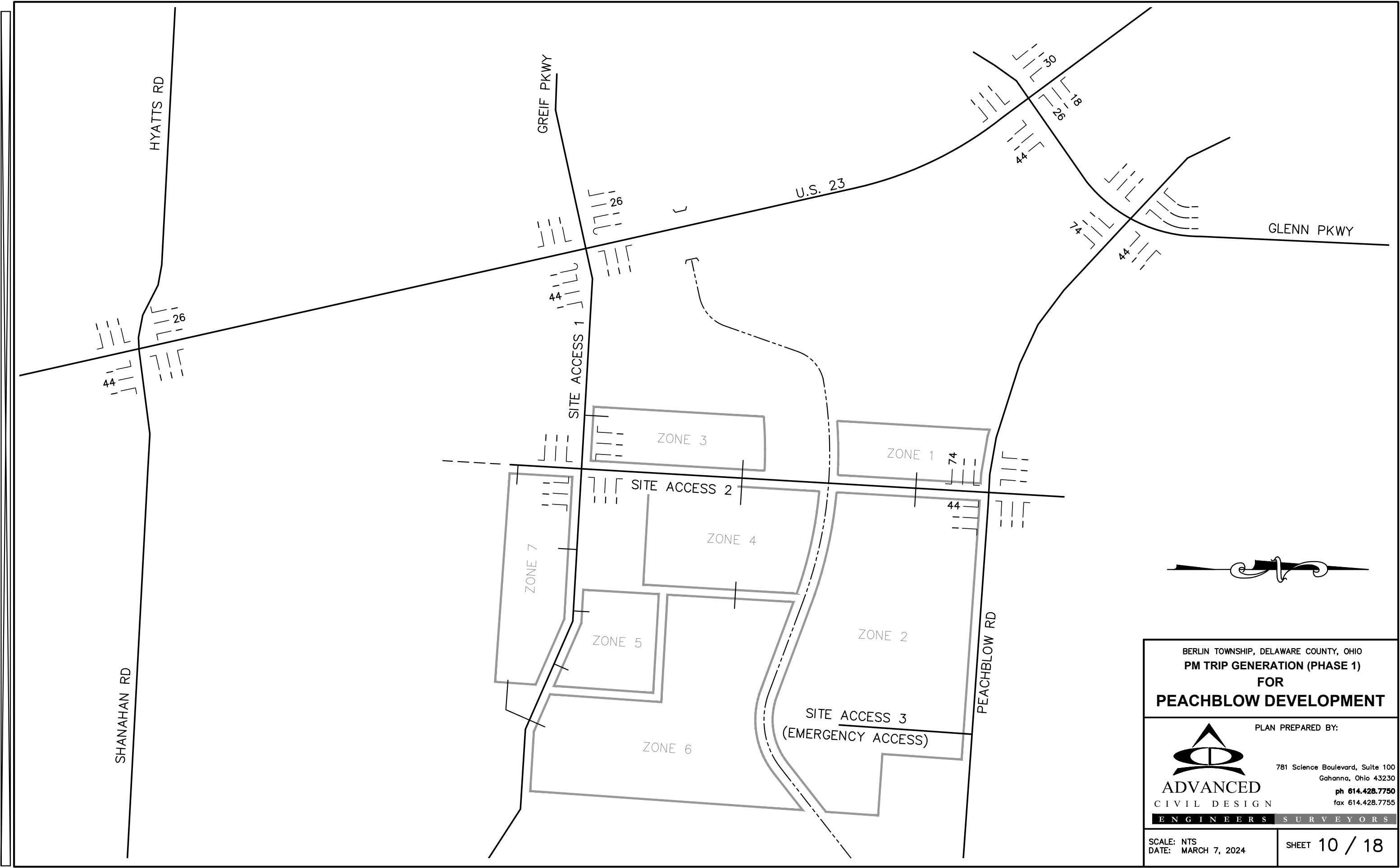
C = TOTAL PHASE 1 GENERATED TRIPS



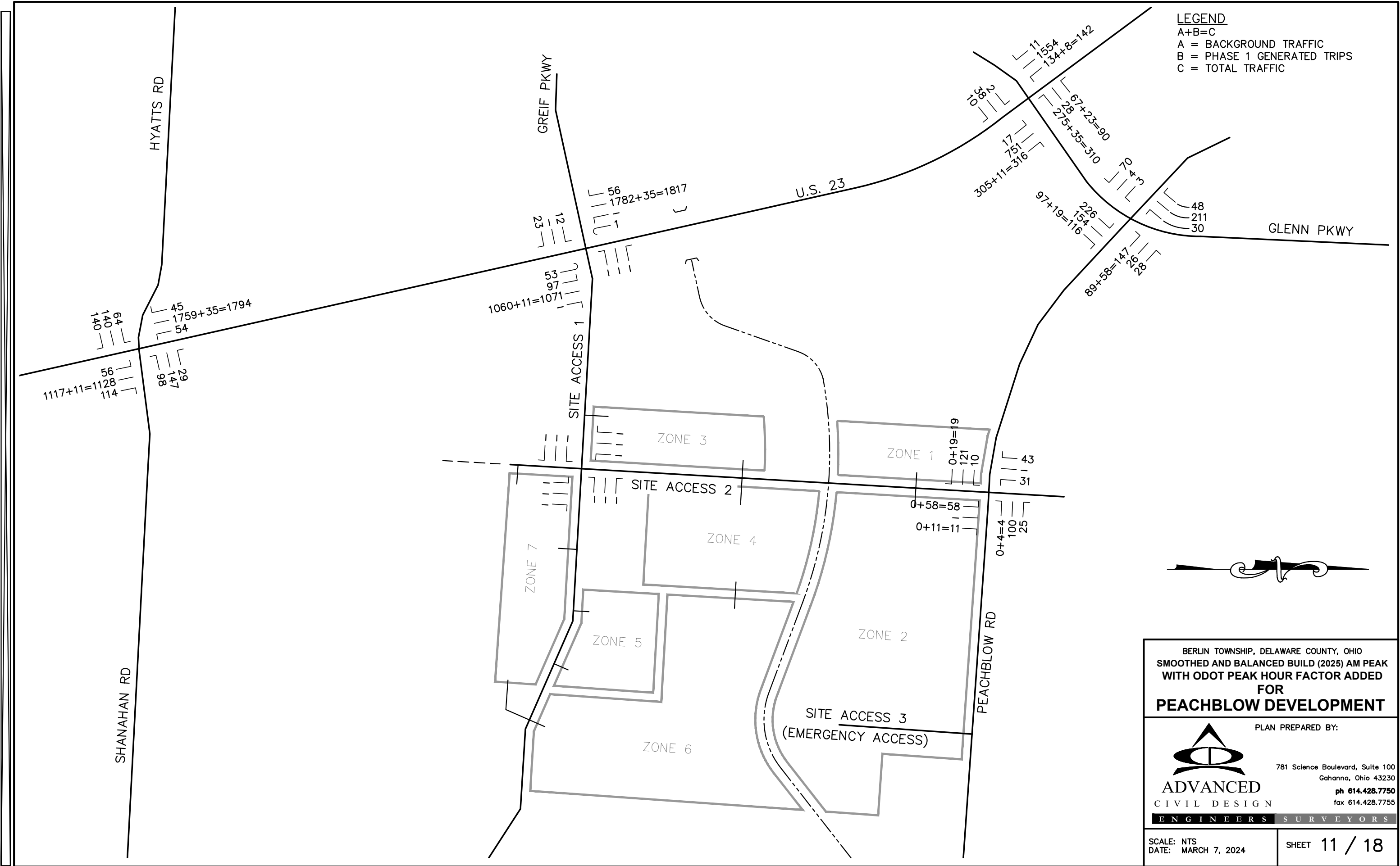
BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO	
PM TRIP GENERATION (DETAILED PHASE 1)	
FOR	
PEACHBLOW DEVELOPMENT	
PLAN PREPARED BY:	
 ADVANCED CIVIL DESIGN	781 Science Boulevard, Suite 100 Gahanna, Ohio 43230 ph 614.428.7750 fax 614.428.7755
ENGINEERS SURVEYORS	
SCALE: NTS DATE: MARCH 7, 2024	SHEET 8 / 18



BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO AM TRIP GENERATION (PHASE 1) FOR PEACHBLOW DEVELOPMENT	
 ADVANCED CIVIL DESIGN ENGINEERS SURVEYORS	PLAN PREPARED BY: 781 Science Boulevard, Suite 100 Gahanna, Ohio 43230 ph 614.428.7750 fax 614.428.7755
SCALE: NTS DATE: MARCH 7, 2024	SHEET 9 / 18



BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO PM TRIP GENERATION (PHASE 1) FOR PEACHBLOW DEVELOPMENT	
 ADVANCED CIVIL DESIGN ENGINEERS SURVEYORS	PLAN PREPARED BY: 781 Science Boulevard, Suite 100 Gahanna, Ohio 43230 ph 614.428.7750 fax 614.428.7755
SCALE: NTS DATE: MARCH 7, 2024	SHEET 10 / 18



LEGEND
A+B=C
A = BACKGROUND TRAFFIC
B = PHASE 1 GENERATED TRIPS
C = TOTAL TRAFFIC



BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO
SMOOTHED AND BALANCED BUILD (2025) AM PEAK
WITH ODOT PEAK HOUR FACTOR ADDED
FOR
PEACHBLOW DEVELOPMENT

PLAN PREPARED BY:

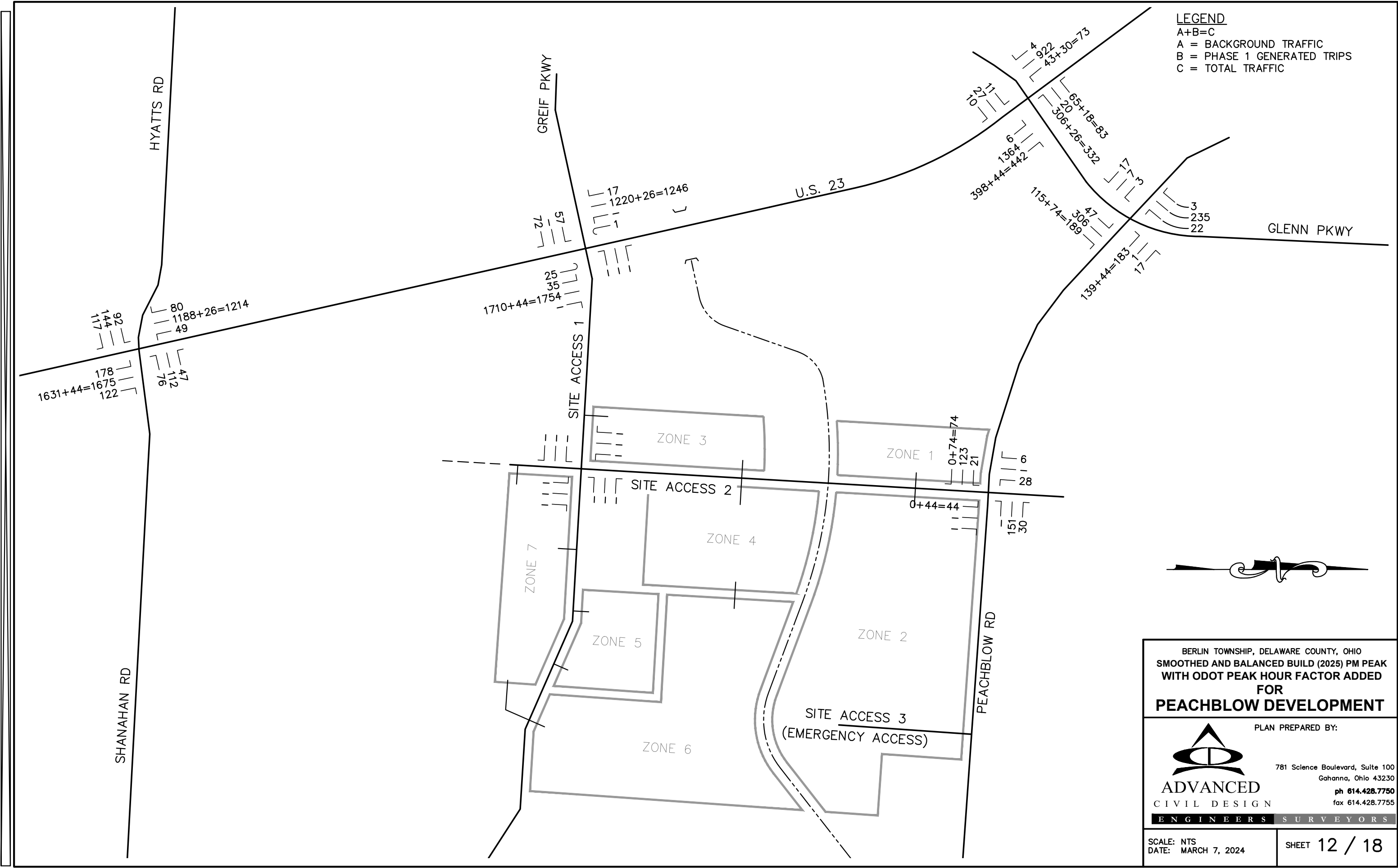


ADVANCED
CIVIL DESIGN
ENGINEERS SURVEYORS

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

SCALE: NTS
DATE: MARCH 7, 2024

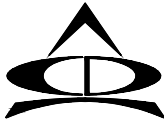
SHEET 11 / 18



LEGEND
A+B=C
A = BACKGROUND TRAFFIC
B = PHASE 1 GENERATED TRIPS
C = TOTAL TRAFFIC



BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO
SMOOTHED AND BALANCED BUILD (2025) PM PEAK
WITH ODOT PEAK HOUR FACTOR ADDED
FOR
PEACHBLOW DEVELOPMENT



PLAN PREPARED BY:

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ENGINEERS SURVEYORS

SCALE: NTS
DATE: MARCH 7, 2024

SHEET 12 / 18

Build Conditions

Turn Lane and Signal Warrants, Storage Length Calculations, and Queuing

The procedure to determine whether left turn lanes are warranted is according to City of Dublin Turn Lane Requirements. The procedure to determine whether right turn lanes are warranted is according to the ODOT Access Management Manual Section 4.5.4. The posted speed limit of 55 MPH was used for the analysis on Peachblow Road. The results are shown in the table below and included in the appendix:

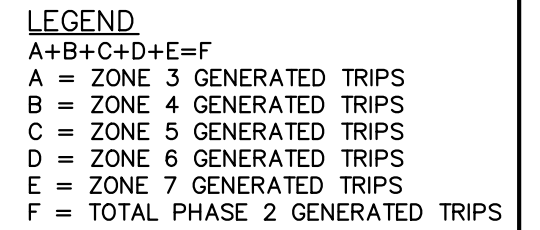
Movement	2025
	'Opening Year'
Peachblow EBRT at Prop. Site Access	Not Warranted
Peachblow WBLT at Prop. Site Access	Required by DCEO

Traffic Signal Warrants	2025
	'Opening Year'
Warrant 2 – Glenn & Peachblow	Not Met
Warrant 3 – Glenn & Peachblow	Not Met

ODOT L&D Manual Vol. 1 Section 401-9 provides design criteria for the calculation of storage lengths of warranted right and left turn lanes. Based on these criteria, and the Design Hour Volumes, the turn lane was calculated. The results show a 285 feet long westbound left turn lane including a 50 feet taper is required. (See appendices for turn lane length calcs).

Capacity Analyses Build

Capacity analyses were performed utilizing HCS. The Opening Year (2025) Build, and, Design Year (2045) Build were all analyzed. The results are summarized in Tables 5 and 6, below. Detailed HCS print outs are contained in the Appendices.



BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO
AM TRIP GENERATION (DETAILED PHASE 2)
FOR
PEACHBLOW DEVELOPMENT

PLAN PREPARED BY:



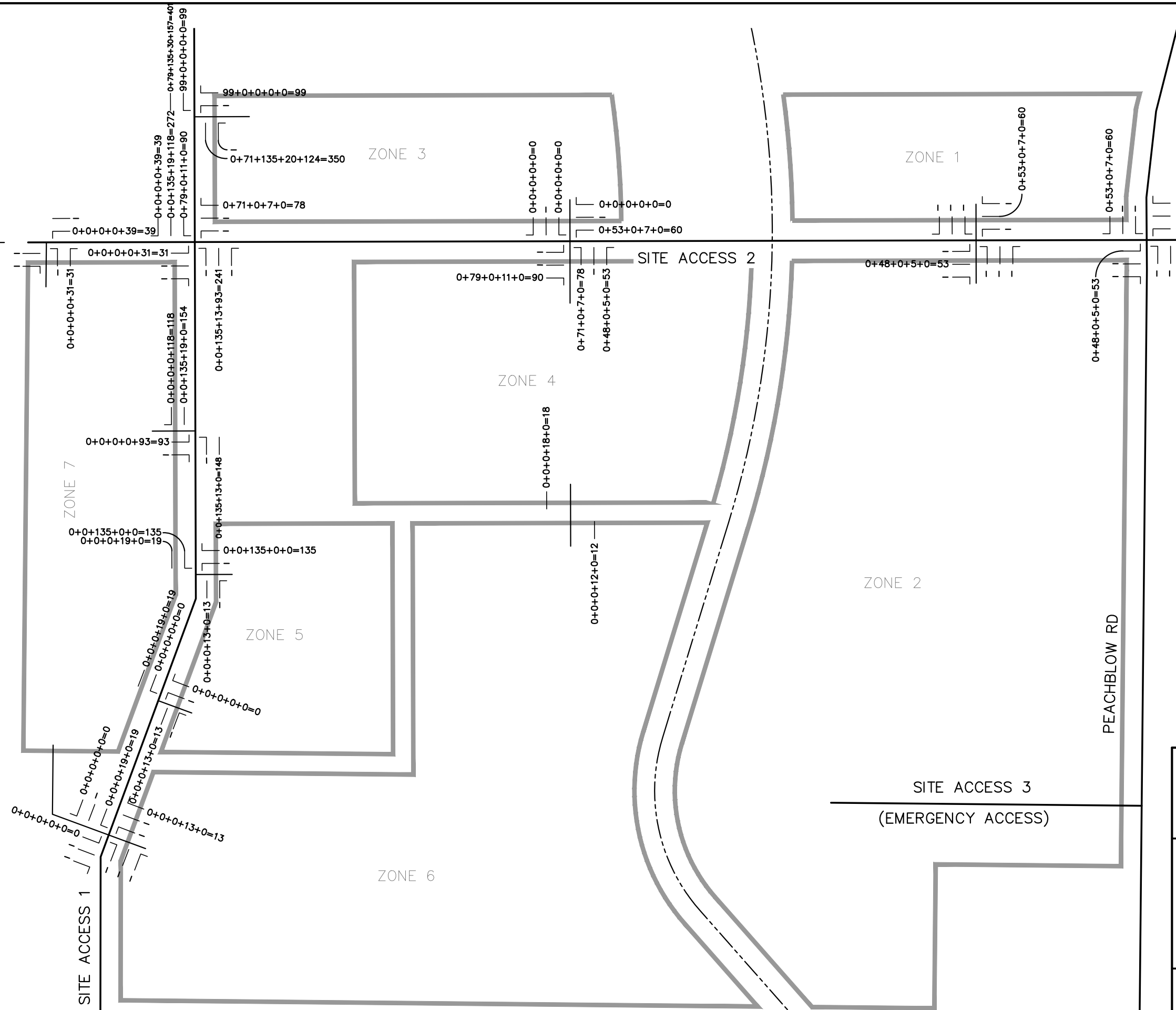
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ENGINEERS SURVEYORS


SCALE: NTS
DATE: MARCH 7, 2024

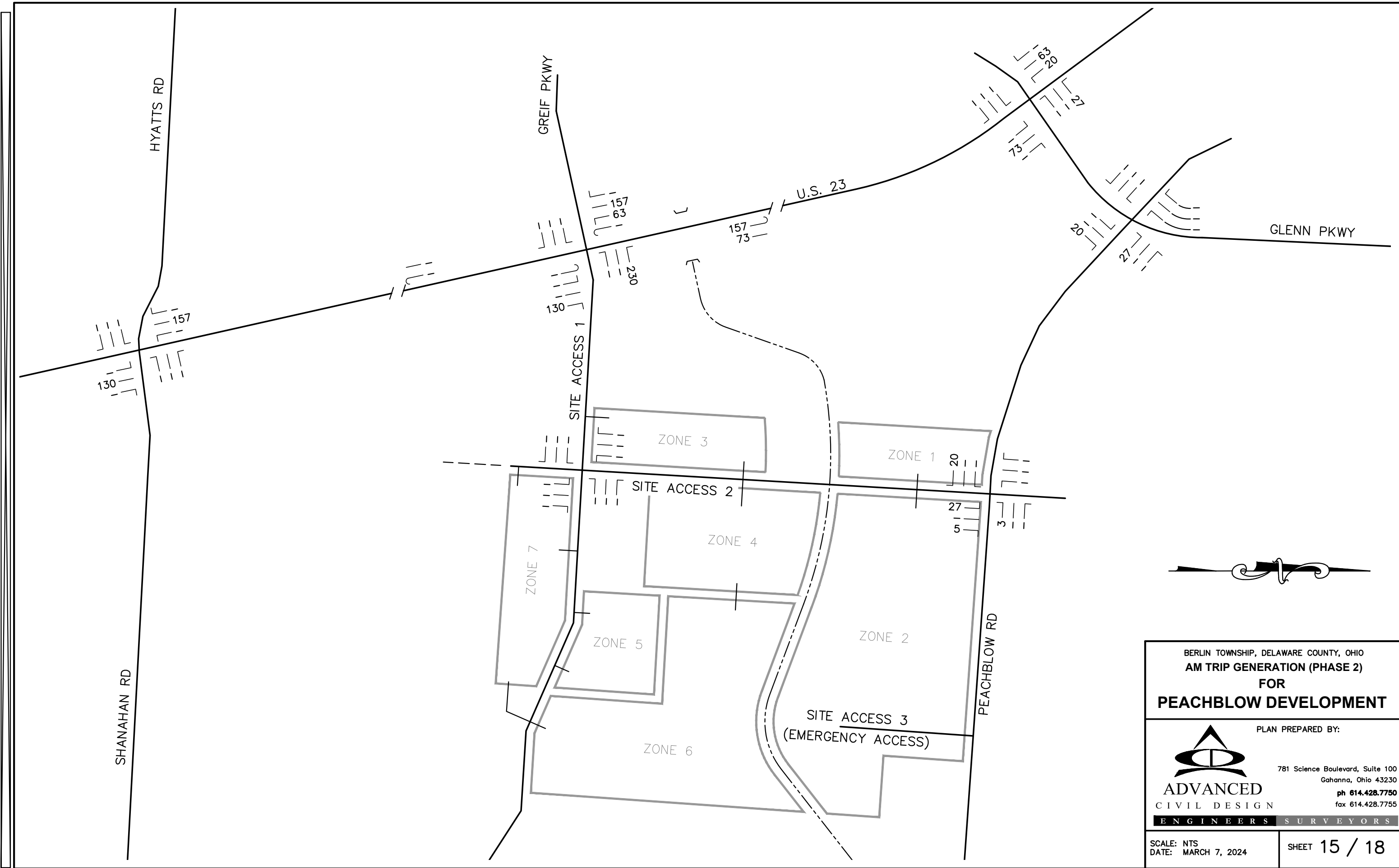
SHEET 13 / 18




- LEGEND**
A+B+C+D+E=F
A = ZONE 3 GENERATED TRIPS
B = ZONE 4 GENERATED TRIPS
C = ZONE 5 GENERATED TRIPS
D = ZONE 6 GENERATED TRIPS
E = ZONE 7 GENERATED TRIPS
F = TOTAL PHASE 2 GENERATED TRIPS



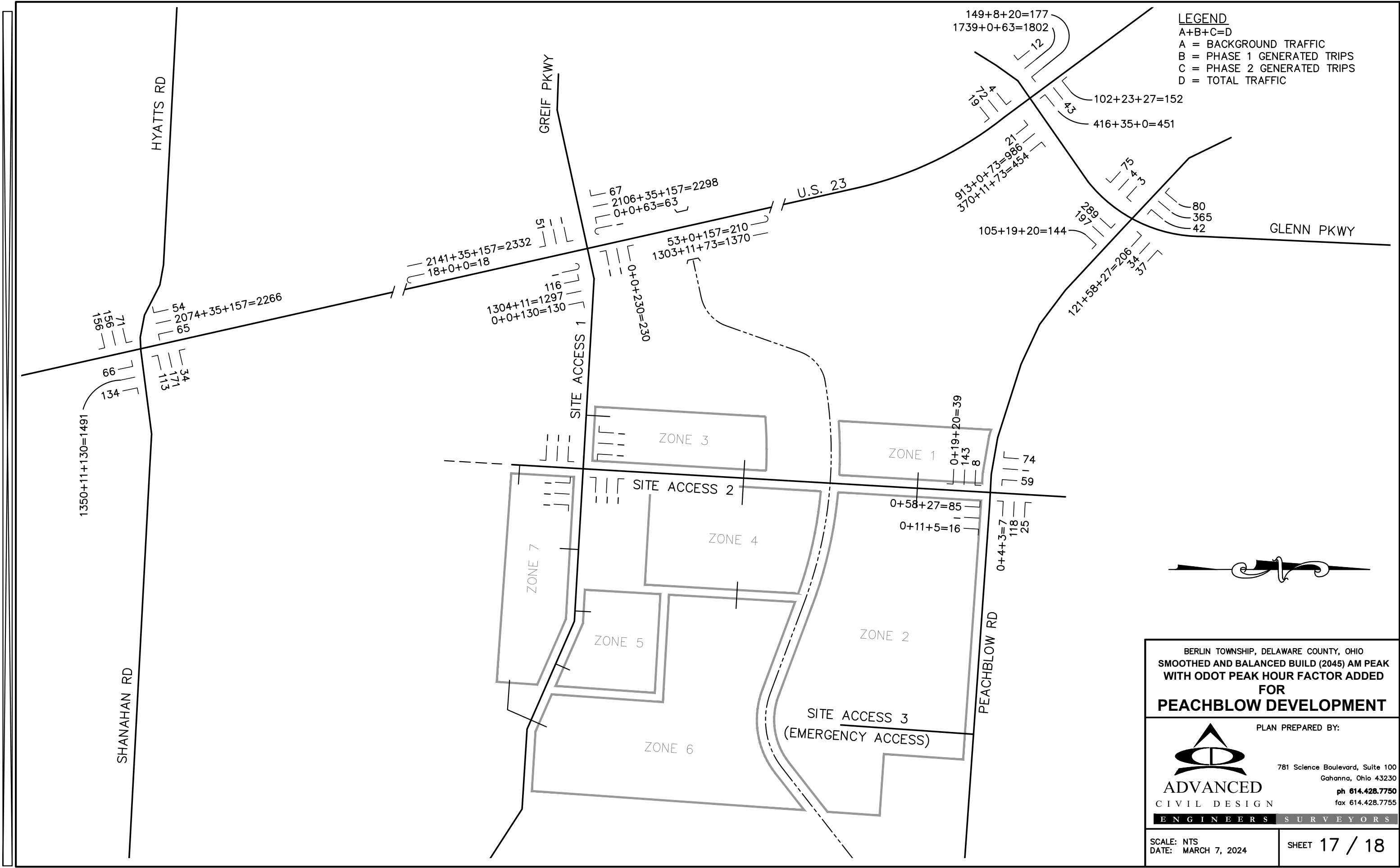
BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO PM TRIP GENERATION (DETAILED PHASE 2) FOR PEACHBLOW DEVELOPMENT	
PLAN PREPARED BY:	
 ADVANCED CIVIL DESIGN ENGINEERS SURVEYORS	781 Science Boulevard, Suite 100 Gahanna, Ohio 43230 ph 614.428.7750 fax 614.428.7755
SCALE: NTS DATE: MARCH 7, 2024	SHEET 14 / 18



BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO AM TRIP GENERATION (PHASE 2) FOR PEACHBLOW DEVELOPMENT	
 ADVANCED CIVIL DESIGN ENGINEERS SURVEYORS	PLAN PREPARED BY: 781 Science Boulevard, Suite 100 Gahanna, Ohio 43230 ph 614.428.7750 fax 614.428.7755
SCALE: NTS DATE: MARCH 7, 2024	SHEET 15 / 18



SHEET 16 / 18



BERLIN TOWNSHIP, DELAWARE COUNTY, OHIO
SMOOTHED AND BALANCED BUILD (2045) AM PEAK
WITH ODOT PEAK HOUR FACTOR ADDED
FOR
PEACHBLOW DEVELOPMENT

PLAN PREPARED BY:



ADVANCED
CIVIL DESIGN
ENGINEERS SURVEYORS

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

SCALE: NTS
DATE: MARCH 7, 2024

SHEET 17 / 18

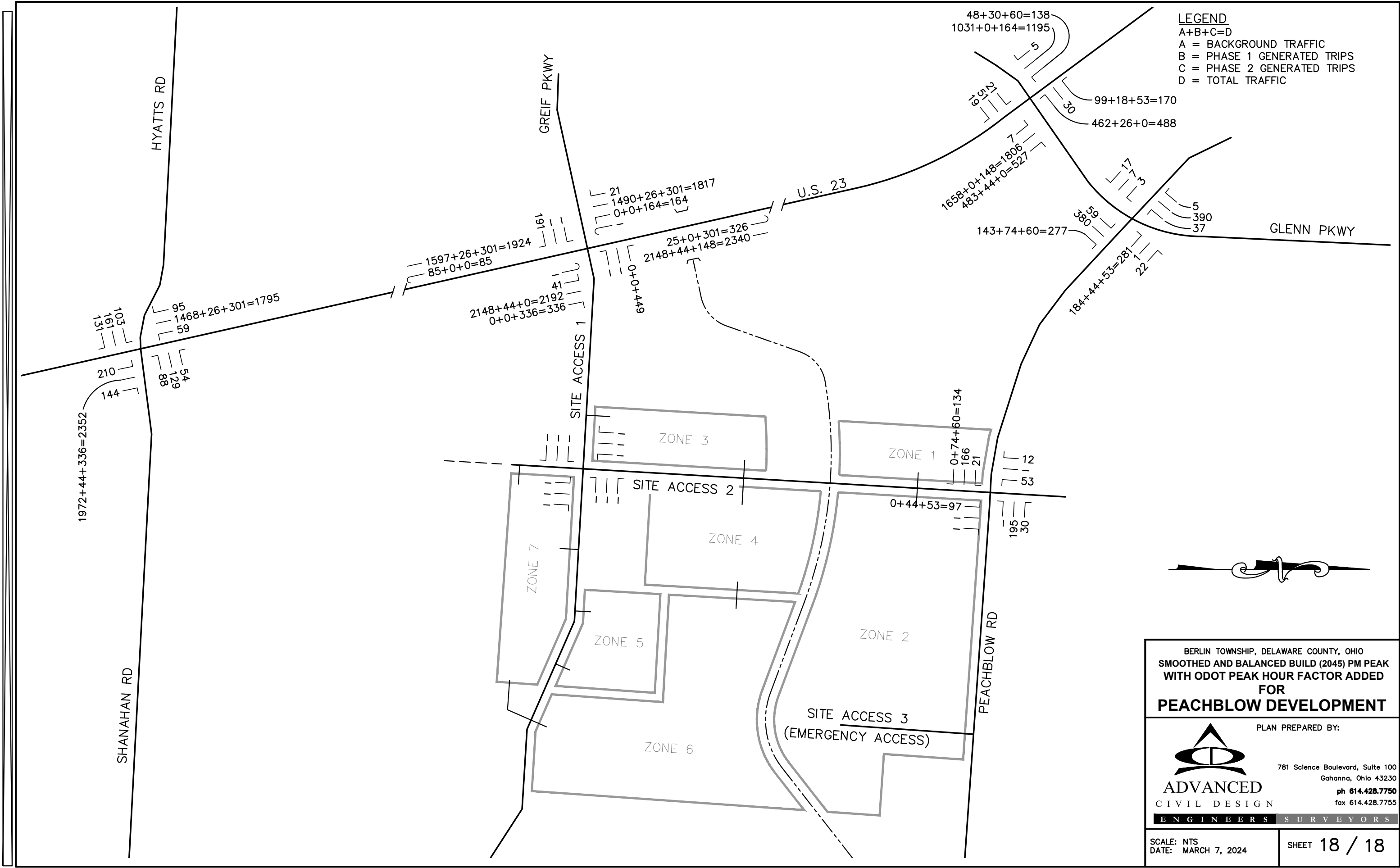


Table 4. Traffic Study Signalized Intersections LOS, Build

Intersection		Signalized Intersection Level of Service (LOS/ sec. delay)															
		Build															
		2025								2045							
		AM				PM				AM				PM			
		NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB
US 23 & Glenn Parkway	LT	D/35.4	B/13.8	D/36.8	D/48.0	B/18.2	C/22.3	D/35.5	D/48.1	E/57.8	E/55.5	D/51.5	F/626.1	E/60.5	E/57.0	D/49.4	F/708.4
	TH	C/20.3	B/19.2	C/32.1	C/34.1	C/30.7	B/13.6	C/31.1	C/32.9	C/22.2	C/28.9	E/56.3	D/47.6	F/55.0	B/15.1	D/54.7	D/53.3
	RT	A/0.0	A/9.0	C/31.6	C/34.1	A/0.0	A/9.4	C/30.8	C/32.9	A/0.0	B/10.0	D/53.3	D/47.6	A/0.0	A/9.0	D/53.3	D/53.3
	Approach	B/14.6	B/18.7	C/32.2	D/44.2	C/23.2	B/14.2	C/32.0	D/44.5	B/16.6	C/31.2	E/55.5	F/451.9	D/42.6	B/19.4	D/53.2	F/517.8
	Overall	C/20.9				C/23.4				F/92.7				F/109.2			
US 23 & Grief Parkway	LT	C/25.4	A/5.4	D/54.7	E/73.9	A/6.5	B/11.5	D/53.5	E/73.9	-	-	-	-	-	-	-	-
	TH	A/3.5	B/14.4	E/56.1	E/73.9	A/6.6	B/10.1	E/58.7	E/73.9	-	-	-	-	-	-	-	-
	RT	A/3.5	A/5.7	E/56.1	E/73.9	A/6.6	A/5.9	E/58.7	E/73.9	-	-	-	-	-	-	-	-
	Approach	A/6.2	B/14.1	E/55.6	E/73.9	A/6.6	B/10.1	E/56.4	E/73.9	-	-	-	-	-	-	-	-
	Overall	B/11.5				A/10.0				-				-			
US 23 & Shanahan/ Hyatts Road	LT	C/26.2	B/11.9	D/43.8	D/44.1	B/16.5	C/21.4	D/44.9	D/45.1	C/28.4	C/20.0	D/42.9	D/42.7	D/43.9	C/27.9	D/44.1	D/44.9
	TH	B/17.1	C/34.3	D/53.3	D/52.6	C/24.2	B/19.4	E/55.2	D/52.9	C/24.4	F/119.9	D/52.6	D/51.3	F/128.5	F/62.6	D/54.5	D/53.0
	RT	A/8.3	D/35.4	D/46.5	D/41.7	A/7.9	B/19.6	D/45.3	D/44.1	A/9.1	F/123.5	D/45.6	D/39.9	A/8.8	F/68.3	D/39.9	D/43.3
	Approach	B/16.7	C/34.2	D/48.8	D/48.4	C/22.5	B/19.6	D/49.2	D/48.6	C/23.4	F/118.6	D/47.9	D/47.1	F/115.5	E/64.3	D/46.9	D/48.4
	Overall	C/30.6				C/25.5				E/74.5				F/88.3			
Glenn Pkwy & Peachblow Rd.	LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	TH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Approach	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Overall	-				-				-				-			

Table 5. Traffic Study Un-Signalized Intersections LOS, Build

Intersection		Un-Signalized Intersection Level of Service (LOS/ sec. delay)															
		Build															
		2025								2045							
		AM				PM				AM				PM			
		NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB
Glenn Pkwy & Peachblow Rd		F/107.3	B/11.6	A/3.9	A/0.8	E/41.0	B/13.1	A/0.7	A/0.7	F/783.1	C/16.2	A/4.5	A/0.7	F/415.4	C/18.1	A/0.7	A/0.8
Peachblow Road & Site Access 2		B/11.3	A/9.9	A/0.5	A/0.2	B/12.3	B/11.5	A/0.7	A/0.0	B/12.9	B/10.6	A/0.3	A/0.4	C/15.7	B/13.3	A/0.5	A/0.0

The above analysis results show that all the signalized study intersections operate at acceptable LOS for the Opening Year Build with the exception of Greif Parkway which continues to operate at LOS B but with side street movements at LOS E, the same as in the No Build.

The un-signalized, intersections including the proposed Site Access Point & Peachblow Road operate at acceptable LOS for Opening and Design Year, with the exception of Peachblow & Glenn. The northbound movement operates at LOS F in the AM of the Opening Year and LOS F for the AM and PM in the Design Year. (See appendices calculations).

Conclusions and Recommendations

The results of the study show that in the Opening Year all the study intersections operate at an acceptable Level of Service(LOS) with the exception of the northbound left at Glenn Parkway & Peachblow Road. The movement operates at LOS E in the Opening Year No Build and LOS F in the Opening Year Build condition.

Traffic signal warrants 2 and 3 are not met in the 2025 No Build or 2025 Build conditions (see appendix).

As shown in the analysis section of this study, the intersection of Peachblow & Crownover Way/ Site Access operates at an acceptable LOS for both the No Build and Build conditions for both 2025 and 2045.

A westbound left turn is required by the DCEO and this study recommends the construction of a 285 feet westbound left turn lane at this intersection.

A right turn lane is not warranted for the 2025 Build conditions at the Peachblow & Crownover Way, but is warranted for the 2045 Build conditions.

Given that the future improvements at the intersections along US 23 are unknown at this time and their impact on traffic movements is also unknown this study does not recommend any improvements that may be related to 2045 impacts only.

Appendices

MOU

August 24, 2023

To: Michael Love, PE PTOE (Delaware County)

Subject: Peachblow Mixed Use Development – Traffic Impact Study
Memorandum of Understanding

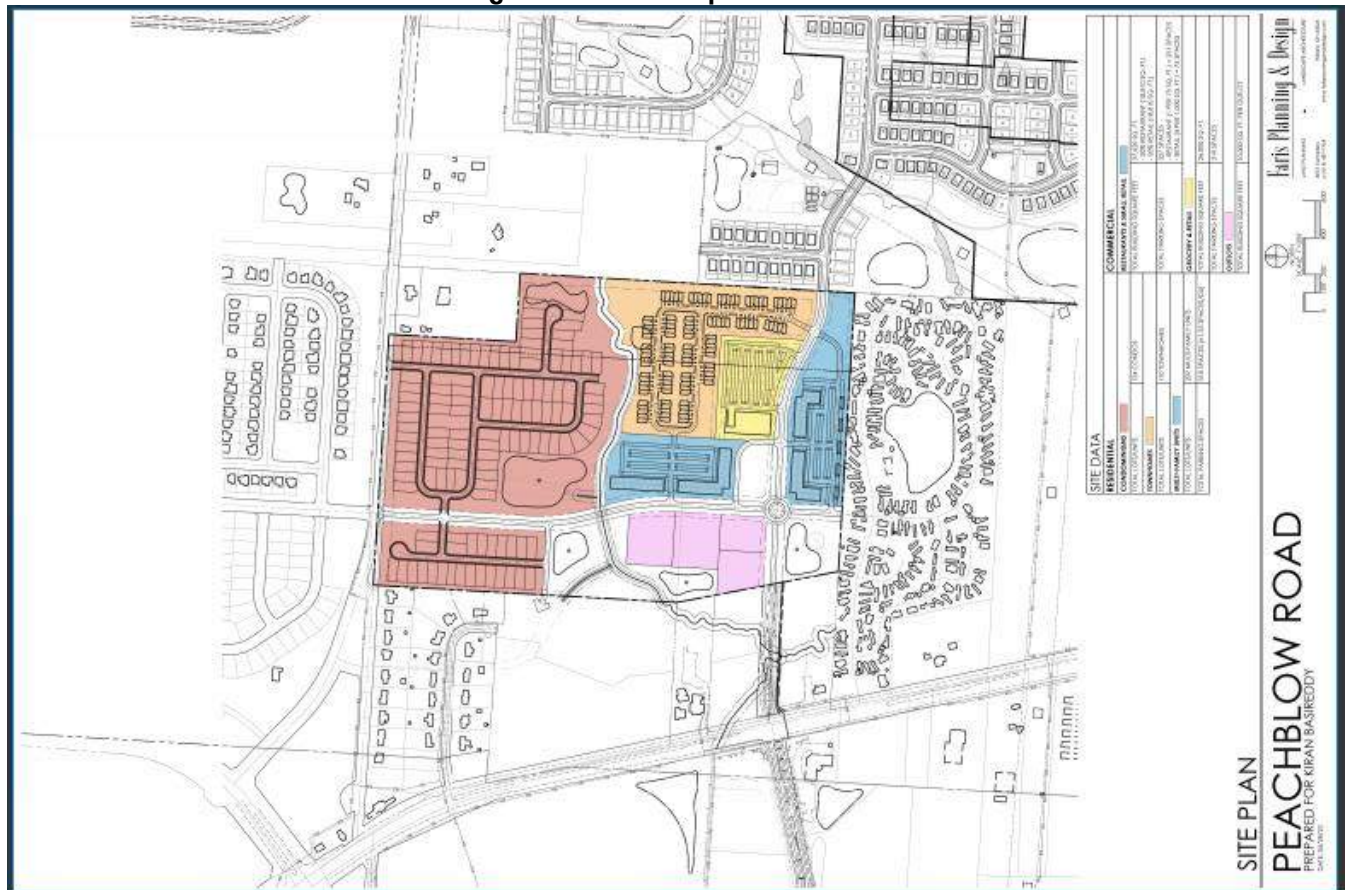
All,

We submit this Memorandum of Understanding (MOU) to document the scope of the above captioned traffic study as discussed in a meeting with the staff of Delaware County and ODOT District 6 on August 3, 2023..

Proposed Development & Access Plan

Figure 1 shows the development concept for site layout and access points. Proposed access includes one full movement access point on Peachblow Road and one Left-in/Right-in/Right-out access on US 23 from the site.

Figure 1: Site Concept Plan



Site Design for 2025 Opening Year and 2035 and 2045 Design Year

- 207 multi-family units
- 234 Condo/ Townhome units
- 26,000 square feet – Grocery/ Retail

Delaware County, Ohio
Peachblow Mixed Use Development MOU

- 38,000 square feet – Restaurant/ Small Retail
- 40,000 square feet – Outlots (4)

Study Area

The Study Area of this TIS is limited to the following intersections:

1. US 23 & Site Access 1/ Greif Parkway (LiRiRo, ODOT)
2. US 23 & Glenn Parkway (ODOT)
3. Glenn Parkway & Peachblow Road (City of Delaware)
4. Peachblow Road & Site Access 2 (City of Delaware and Delaware County)
5. Site N/S roadway & Site E/W roadway - Roundabout (Delaware County)
6. Peachblow Road & Site Access 3 (DCEO) **Emergency access?**

this access will line up with
Crownover Way and will
require a WB left turn lane



Data Collection

Traffic data will be collected at the study intersections. Additional data may be provided by ODOT, City of Delaware or the DCEO if intersection counts are available from any of those entities.

Future traffic growth rates will be derived from ODOT studies and/ or from the Mid-Ohio Regional Planning Commission (MORPC) if required.

Trip Generation and Distribution

This study will estimate new trips generated by development according to the data and procedures contained in the Trip Generation Manual, 11th ed. (Institute of Transportation Engineers, 2021). We will use land use code 220 for the Multi-Family portions of the development, LUC 215 for the condo's and townhomes sections and land use codes 850, 932, 822, 848, 843 and 816 for the commercial/ retail portions of the site. The trips generated for the proposed land uses are shown in **Table 1**.

Table 1: Trip Generation

Trip Generation												
Description	Land Use Code (LUC)	Total Trips	Enter	Exit	Pass-By		Primary	Pass-By	Total IN	Primary	Pass-By	Total OUT
Multi-Family Residential - 207 units	220	87	24%	76%	-	AM	21	-	21	66	-	66
		110	63%	37%	-	PM	69	-	69	41	-	41
Condo/ Townhome Residential - 234 units	215	115	25%	75%	-	AM	29	-	29	86	-	86
		135	59%	41%	-	PM	80	-	80	55	-	55
Grocery - 26k S.F	850	74	59%	41%	-	AM	44	-	44	30	-	30
		233	50%	50%	-	PM	117	-	117	117	-	117
Restuarant - 19k S.F	932	77	55%	45%	-	AM	42	-	42	35	-	35
		72	61%	39%	-	PM	44	-	44	28	-	28
Retail - 19k S.F	822	45	60%	40%	-	AM	27	-	27	18	-	18
		125	50%	50%	-	PM	63	-	63	63	-	63
Commercial - 40k S.F (4 @ 10k ea.)	822/848/843 /816	104	64%	36%	-	AM	67	-	67	37	-	37
		192	50%	50%	-	PM	96	-	96	96	-	96

Traffic Assignment and Volume Balancing

This study developed AM and PM peak hour volumes for the following scenarios and the attached volume exhibits are submitted for review with this submission:

- 2025 No-Build Site
- 2025 Build Site
- ~~• 2035 No-Build Site~~
- ~~• 2035 Build Site~~
- 2045 No-Build Site
- 2045 Build Site

The attached volume exhibits will increase counts to design year No-Build conditions based on calculated growth rates.

Traffic Analyses

Intersection Capacity Analyses

Advanced Civil Design will use Synchro (v.11) and HCS software to evaluate intersection capacity at Study Area intersections that are under the control of the City of Delaware and DCEO. We will use HCS for intersections under the control of the ODOT. SIDRA will be used to provide the analysis for any roundabouts in the study area.

ODOT, City of Delaware and DCEO performance criteria for the overall intersection Level of Service (LOS) is LOS D with individual movements also at LOS D or better. If improvements required to meet traditional agency performance criteria are not practical, this study will consider alternate goals such as restoring pre-development performance and/or mitigating queues where background conditions are severely deficient. Agency concurrence is required in the event that alternate criteria are used as the basis for study recommendations.

Turn Lane Warrant Analysis

We will analyze right turn lane warrants at proposed site access points for the locations controlled by DCEO. Left turn lane warrants are generally not applicable because DCEO requires left turn lane additions to the street being accessed when 10 or more left turn movements are made in the peak hour.

We will analyze left and right turn lane warrants at proposed site access points and intersections for the locations controlled by ODOT D6 and City of Delaware.

We will evaluate the length of existing and proposed Study Area turn lanes impacted by site generated traffic. We will prepare our turn lane analysis in accordance with the Location and Design Manual § 401 (Ohio Department of Transportation).

We will determine lane length based on the maximum volume for the design year Build condition for either AM or PM peak conditions considering both L&D methodology.

Signal Warrant Analysis

If signalization is considered to meet performance criteria at a location that is not currently signalized, we will evaluate traffic signal warrants. Traffic signal warrant evaluation will use thresholds established by the Ohio Manual of Uniform Traffic Control Devices §4C (Ohio Department of Transportation).

This study is limited to analysis of Warrants 1, 2 and 3. We will remove a portion of minor street right turns in accordance with the Traffic Engineering Manual §402-5 (Ohio Department of Transportation). We will consider roundabouts as an alternative to signalization where applicable.

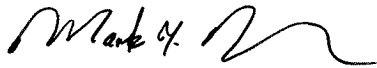
Provide ADTs on any public internal streets
Will need analysis documenting single lane roundabout will work

Traffic Impact Study Report

A report including applicable figures and tables will be prepared to summarize study methodologies, analysis, findings and recommendations. We will provide the report to ODOT, City of Delaware and DCEO for review.

Please signify your concurrence with the scope of services outlined herein by signing below and returning this Memorandum of Understanding to me. Please feel free to contact me by email at mmann@advancecivildesign.com or by calling me at (614) 944-5035.

Sincerely,



Mark I. Mann, PE
Director - Transportation Services

ACCEPTANCE AND APPROVAL OF MEMORANDUM OF UNDERSTANDING

By: _____
For City of Delaware

By: _____
For Delaware County Engineer's Office

By: _____
For ODOT District 6

Traffic Count Data

Peachblow Rd & Crownover Way - TMC

Wed Sep 27, 2023

Full Length (5 AM-7 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112798, Location: 40.227581, -83.031081



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

Leg Direction	Peachblow Road Eastbound					Peachblow Road Westbound					Crownover Way Southbound					
Time	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	Int
2023-09-27 5:00AM	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	3
5:15AM	0	1	0	1	0	1	0	0	1	0	0	1	0	1	0	3
5:30AM	1	2	0	3	0	1	0	0	1	0	1	2	0	3	0	7
5:45AM	0	2	0	2	0	3	1	0	4	0	0	3	0	3	0	9
Hourly Total	1	5	0	6	0	7	1	0	8	0	1	7	0	8	0	22
6:00AM	0	6	0	6	0	2	0	0	2	0	0	2	0	2	0	10
6:15AM	1	7	0	8	0	9	0	0	9	0	0	4	0	4	0	21
6:30AM	1	11	0	12	0	11	0	0	11	0	4	5	0	9	0	32
6:45AM	0	15	0	15	0	12	0	0	12	0	8	3	0	11	0	38
Hourly Total	2	39	0	41	0	34	0	0	34	0	12	14	0	26	0	101
7:00AM	1	19	0	20	0	17	1	0	18	0	7	3	0	10	0	48
7:15AM	2	21	0	23	0	29	4	0	33	0	3	9	0	12	0	68
7:30AM	3	32	0	35	0	34	0	0	34	0	4	5	0	9	0	78
7:45AM	0	46	0	46	0	30	4	0	34	0	8	2	0	10	0	90
Hourly Total	6	118	0	124	0	110	9	0	119	0	22	19	0	41	0	284
8:00AM	2	38	0	40	0	27	2	0	29	0	6	7	0	13	0	82
8:15AM	1	24	0	25	0	24	1	0	25	0	8	5	0	13	0	63
8:30AM	1	24	0	25	0	19	5	0	24	0	9	10	0	19	0	68
8:45AM	5	51	0	56	0	32	4	0	36	0	22	8	0	30	0	122
Hourly Total	9	137	0	146	0	102	12	0	114	0	45	30	0	75	0	335
9:00AM	3	18	0	21	0	39	15	0	54	0	8	5	0	13	0	88
9:15AM	1	11	0	12	0	25	2	0	27	0	3	6	0	9	0	48
9:30AM	0	18	0	18	0	12	0	0	12	0	4	5	0	9	0	39
9:45AM	2	10	0	12	0	15	0	0	15	0	3	5	0	8	0	35
Hourly Total	6	57	0	63	0	91	17	0	108	0	18	21	0	39	0	210
10:00AM	2	9	0	11	0	20	1	0	21	0	3	4	0	7	0	39
10:15AM	2	13	0	15	0	4	0	0	4	0	1	1	0	2	0	21
10:30AM	2	14	0	16	0	21	3	0	24	0	5	6	0	11	0	51
10:45AM	2	29	0	31	0	16	0	0	16	0	1	3	0	4	0	51
Hourly Total	8	65	0	73	0	61	4	0	65	0	10	14	0	24	0	162
11:00AM	1	17	0	18	0	20	0	0	20	0	1	2	0	3	0	41
11:15AM	0	12	0	12	0	20	1	0	21	0	6	5	0	11	0	44
11:30AM	5	17	0	22	0	11	6	0	17	0	1	4	0	5	0	44
11:45AM	4	25	0	29	0	24	2	0	26	0	1	4	0	5	0	60
Hourly Total	10	71	0	81	0	75	9	0	84	0	9	15	0	24	0	189
12:00PM	4	18	0	22	0	27	4	0	31	0	3	2	0	5	0	58
12:15PM	6	25	0	31	0	13	1	0	14	0	2	4	0	6	3	51
12:30PM	2	19	0	21	0	15	2	0	17	0	1	4	0	5	0	43
12:45PM	2	18	0	20	0	17	2	0	19	0	2	3	0	5	0	44
Hourly Total	14	80	0	94	0	72	9	0	81	0	8	13	0	21	3	196
1:00PM	0	31	0	31	0	23	3	0	26	0	7	5	0	12	0	69
1:15PM	4	16	0	20	0	25	0	0	25	0	2	2	0	4	0	49
1:30PM	6	17	0	23	0	10	5	0	15	0	3	2	0	5	0	43
1:45PM	2	13	0	15	0	16	4	0	20	0	2	2	0	4	0	39
Hourly Total	12	77	0	89	0	74	12	0	86	0	14	11	0	25	0	200
2:00PM	1	19	0	20	0	20	2	0	22	0	4	3	0	7	0	49
2:15PM	3	43	0	46	0	8	1	0	9	0	4	2	0	6	0	61
2:30PM	1	29	0	30	0	23	5	0	28	0	2	3	0	5	0	63
2:45PM	4	17	0	21	0	18	4	0	22	0	3	2	0	5	0	48
Hourly Total	9	108	0	117	0	69	12	0	81	0	13	10	0	23	0	221
3:00PM	7	24	0	31	0	15	1	0	16	0	2	4	0	6	0	53
3:15PM	4	35	0	39	0	28	3	0	31	0	4	1	0	5	0	75
3:30PM	7	45	0	52	0	21	4	0	25	0	9	2	0	11	0	88
3:45PM	8	30	0	38	0	42	14	0	56	0	5	1	0	6	0	100

Leg Direction	Peachblow Road Eastbound					Peachblow Road Westbound					Crownover Way Southbound					
Time	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	Int
Hourly Total	26	134	0	160	0	106	22	0	128	0	20	8	0	28	0	316
4:00PM	5	22	0	27	0	62	9	0	71	0	7	2	0	9	0	107
4:15PM	2	29	0	31	0	23	3	0	26	0	4	1	0	5	0	62
4:30PM	5	19	0	24	0	31	7	0	38	0	3	2	0	5	0	67
4:45PM	10	23	0	33	0	26	4	0	30	0	5	4	0	9	0	72
Hourly Total	22	93	0	115	0	142	23	0	165	0	19	9	0	28	0	308
5:00PM	9	28	0	37	0	38	5	0	43	0	0	7	0	7	0	87
5:15PM	6	23	0	29	0	30	9	0	39	0	5	9	0	14	0	82
5:30PM	6	27	0	33	0	26	10	0	36	0	3	10	0	13	0	82
5:45PM	7	22	0	29	0	28	11	0	39	0	2	9	0	11	0	79
Hourly Total	28	100	0	128	0	122	35	0	157	0	10	35	0	45	0	330
6:00PM	11	14	0	25	0	11	4	0	15	0	2	6	0	8	0	48
6:15PM	9	12	0	21	0	12	4	0	16	0	4	5	0	9	0	46
6:30PM	7	17	0	24	0	10	6	0	16	0	5	8	0	13	0	53
6:45PM	11	8	0	19	0	8	3	0	11	0	2	5	0	7	0	37
Hourly Total	38	51	0	89	0	41	17	0	58	0	13	24	0	37	0	184
Total	191	1135	0	1326	0	1106	182	0	1288	0	214	230	0	444	3	3058
% Approach	14.4%	85.6%	0%	-	-	85.9%	14.1%	0%	-	-	48.2%	51.8%	0%	-	-	-
% Total	6.2%	37.1%	0%	43.4%	-	36.2%	6.0%	0%	42.1%	-	7.0%	7.5%	0%	14.5%	-	-
Lights and Motorcycles	184	1047	0	1231	-	1044	172	0	1216	-	200	230	0	430	-	2877
% Lights and Motorcycles	96.3%	92.2%	0%	92.8%	-	94.4%	94.5%	0%	94.4%	-	93.5%	100%	0%	96.8%	-	94.1%
Heavy	7	88	0	95	-	62	10	0	72	-	14	0	0	14	-	181
% Heavy	3.7%	7.8%	0%	7.2%	-	5.6%	5.5%	0%	5.6%	-	6.5%	0%	0%	3.2%	-	5.9%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	3
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-

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

Peachblow Rd & Crownover Way - TMC

Wed Sep 27, 2023

Full Length (5 AM-7 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112798, Location: 40.227581, -83.031081



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

[N] Crownover Way

Total: 817

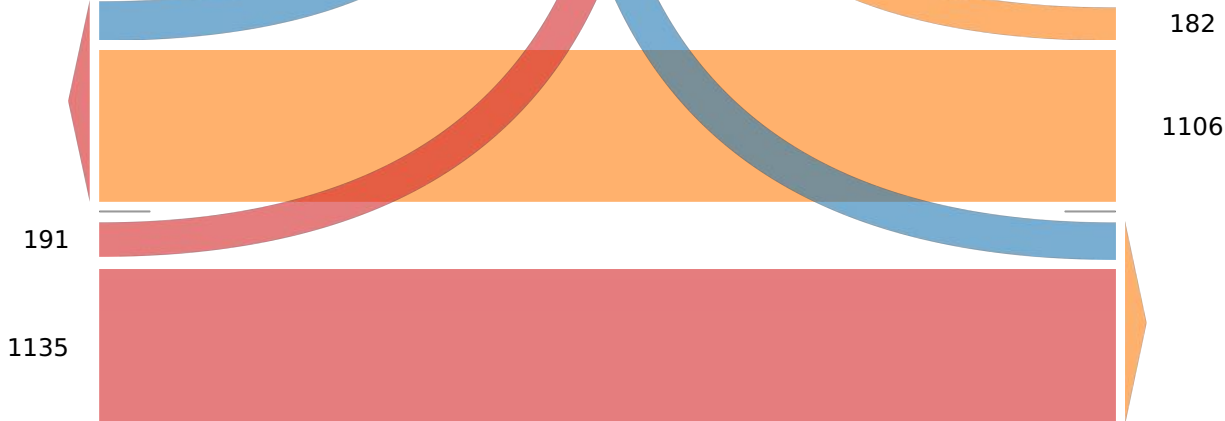
In: 444 Out: 373

230
214
1 2

[W] Peachblow Road

Total: 2662

In: 1326 Out: 1336



Peachblow Rd & Crownover Way - TMC

Wed Sep 27, 2023

AM Peak (8:15 AM - 9:15 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112798, Location: 40.227581, -83.031081



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

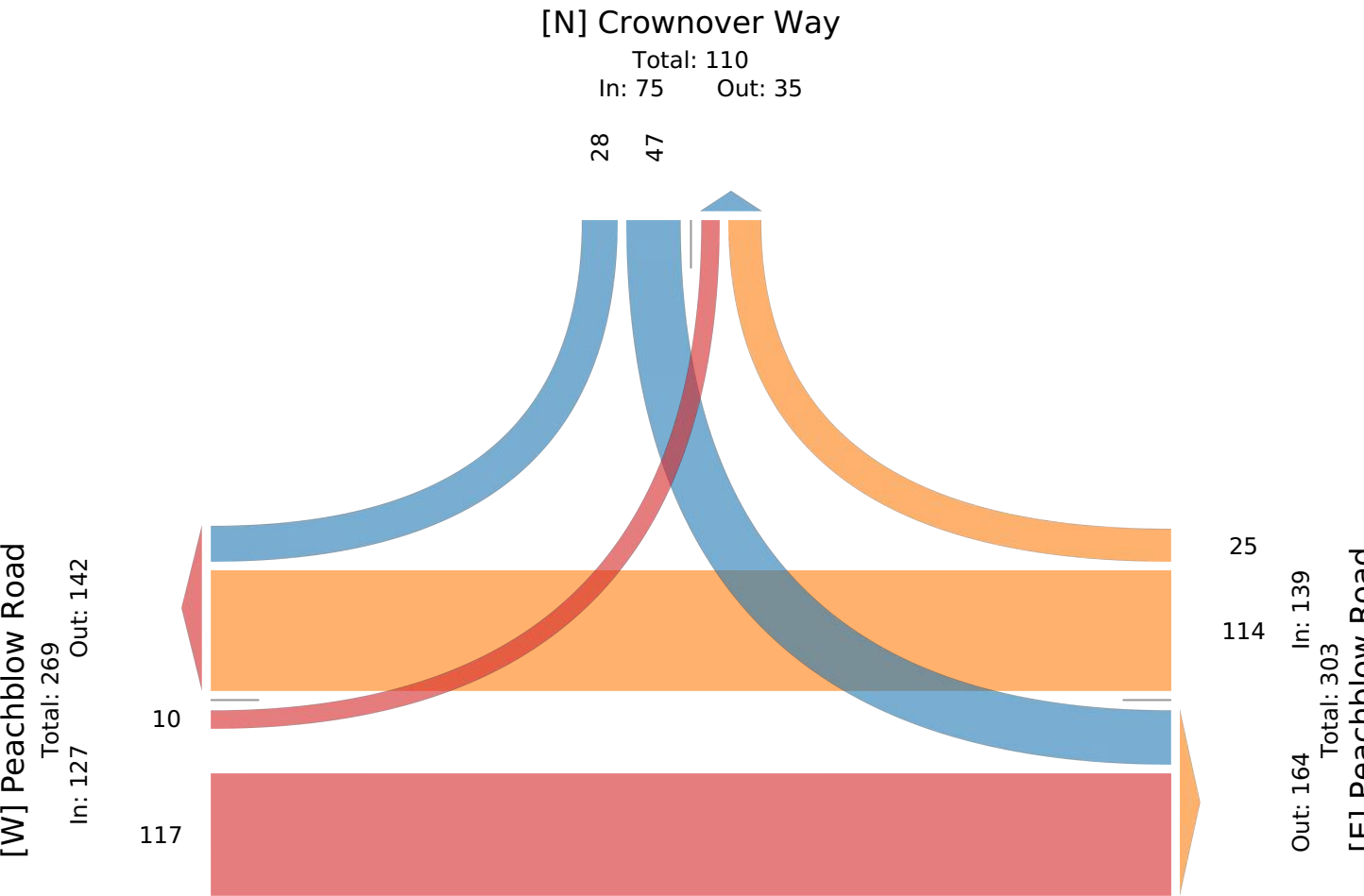
Leg Direction	Peachblow Road Eastbound					Peachblow Road Westbound					Crownover Way Southbound					
Time	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	Int
2023-09-27 8:15AM	1	24	0	25	0	24	1	0	25	0	8	5	0	13	0	63
8:30AM	1	24	0	25	0	19	5	0	24	0	9	10	0	19	0	68
8:45AM	5	51	0	56	0	32	4	0	36	0	22	8	0	30	0	122
9:00AM	3	18	0	21	0	39	15	0	54	0	8	5	0	13	0	88
Total	10	117	0	127	0	114	25	0	139	0	47	28	0	75	0	341
% Approach	7.9%	92.1%	0%	-	-	82.0%	18.0%	0%	-	-	62.7%	37.3%	0%	-	-	-
% Total	2.9%	34.3%	0%	37.2%	-	33.4%	7.3%	0%	40.8%	-	13.8%	8.2%	0%	22.0%	-	-
PHF	0.500	0.574	-	0.567	-	0.731	0.417	-	0.644	-	0.534	0.700	-	0.625	-	0.699
Lights and Motorcycles	9	101	0	110	-	107	23	0	130	-	44	28	0	72	-	312
% Lights and Motorcycles	90.0%	86.3%	0%	86.6%	-	93.9%	92.0%	0%	93.5%	-	93.6%	100%	0%	96.0%	-	91.5%
Heavy	1	16	0	17	-	7	2	0	9	-	3	0	0	3	-	29
% Heavy	10.0%	13.7%	0%	13.4%	-	6.1%	8.0%	0%	6.5%	-	6.4%	0%	0%	4.0%	-	8.5%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Peachblow Rd & Crownover Way - TMC
Wed Sep 27, 2023
AM Peak (8:15 AM - 9:15 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians)
All Movements
ID: 1112798, Location: 40.227581, -83.031081



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



Peachblow Rd & Crownover Way - TMC

Wed Sep 27, 2023

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

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112798, Location: 40.227581, -83.031081



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

Leg Direction	Peachblow Road Eastbound						Peachblow Road Westbound						Crownover Way Southbound						
Time	L	T	U	App	Ped*		T	R	U	App	Ped*		L	R	U	App	Ped*	Int	
2023-09-27 11:30AM	5	17	0	22	0		11	6	0	17	0		1	4	0	5	0	44	
11:45AM	4	25	0	29	0		24	2	0	26	0		1	4	0	5	0	60	
12:00PM	4	18	0	22	0		27	4	0	31	0		3	2	0	5	0	58	
12:15PM	6	25	0	31	0		13	1	0	14	0		2	4	0	6	3	51	
Total	19	85	0	104	0		75	13	0	88	0		7	14	0	21	3	213	
% Approach	18.3%	81.7%	0%	-	-		85.2%	14.8%	0%	-	-		33.3%	66.7%	0%	-	-	-	
% Total	8.9%	39.9%	0%	48.8%	-		35.2%	6.1%	0%	41.3%	-		3.3%	6.6%	0%	9.9%	-	-	
PHF	0.792	0.850	-	0.839	-		0.694	0.542	-	0.710	-		0.583	0.875	-	0.875	-	0.888	
Lights and Motorcycles	18	76	0	94	-		69	12	0	81	-		6	14	0	20	-	195	
% Lights and Motorcycles	94.7%	89.4%	0%	90.4%	-		92.0%	92.3%	0%	92.0%	-		85.7%	100%	0%	95.2%	-	91.5%	
Heavy	1	9	0	10	-		6	1	0	7	-		1	0	0	1	-	18	
% Heavy	5.3%	10.6%	0%	9.6%	-		8.0%	7.7%	0%	8.0%	-		14.3%	0%	0%	4.8%	-	8.5%	
Pedestrians	-	-	-	-	0		-	-	-	-	0		-	-	-	-	3	-	
% Pedestrians	-	-	-	-	-		-	-	-	-	-		-	-	-	-	100%	-	

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

Peachblow Rd & Crownover Way - TMC

Wed Sep 27, 2023

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

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112798, Location: 40.227581, -83.031081



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

[N] Crownover Way

Total: 53

In: 21 Out: 32

14 7
1 2

[W] Peachblow Road

Total: 193

In: 104 Out: 89

19

85

13

75

Out: 92 In: 88

Total: 180

[E] Peachblow Road

Peachblow Rd & Crownover Way - TMC

Wed Sep 27, 2023

PM Peak (3:15 PM - 4:15 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112798, Location: 40.227581, -83.031081



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

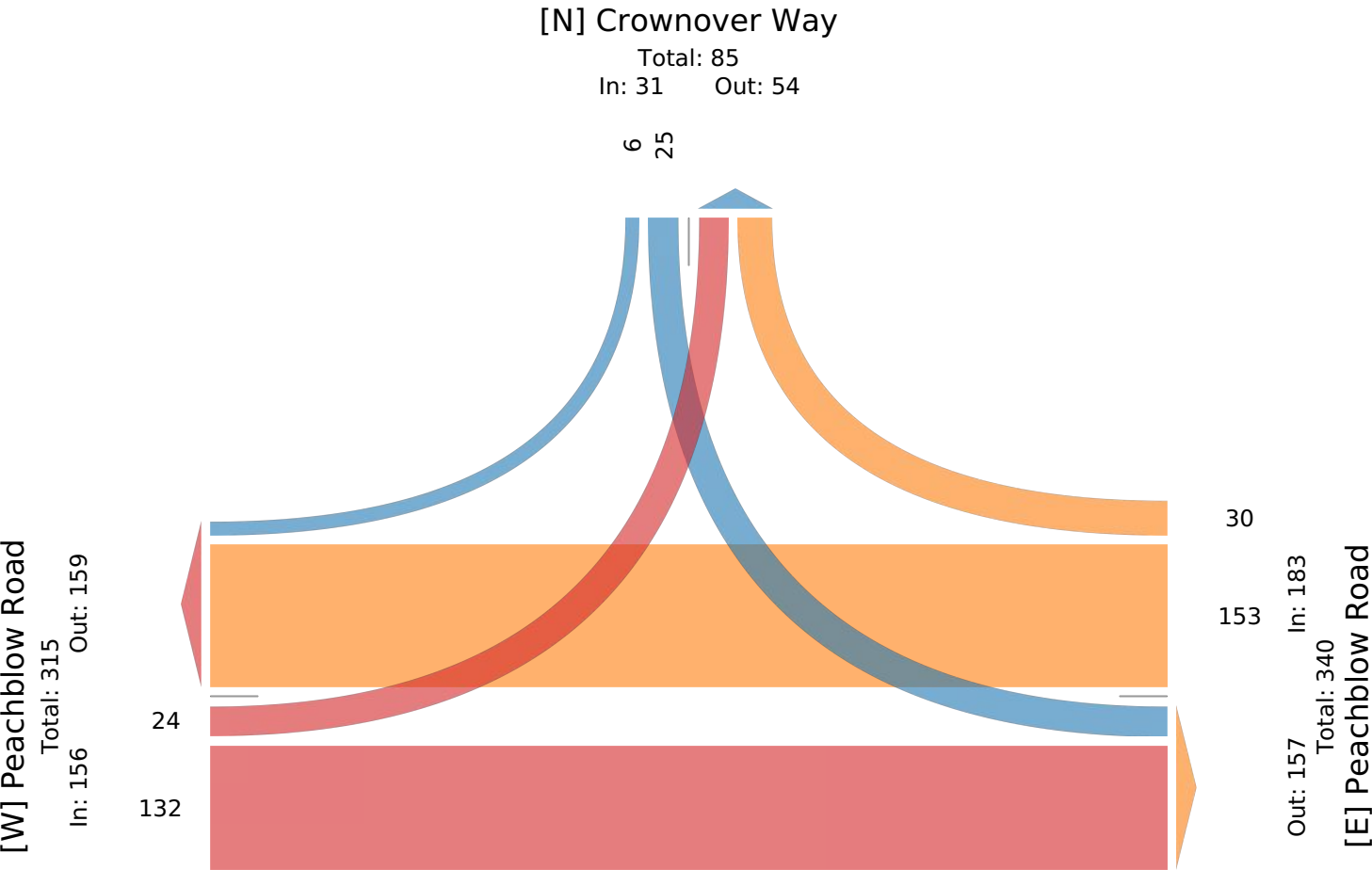
Leg Direction	Peachblow Road Eastbound						Peachblow Road Westbound						Crownover Way Southbound						
Time	L	T	U	App	Ped*		T	R	U	App	Ped*		L	R	U	App	Ped*		Int
2023-09-27 3:15PM	4	35	0	39	0		28	3	0	31	0		4	1	0	5	0		75
3:30PM	7	45	0	52	0		21	4	0	25	0		9	2	0	11	0		88
3:45PM	8	30	0	38	0		42	14	0	56	0		5	1	0	6	0		100
4:00PM	5	22	0	27	0		62	9	0	71	0		7	2	0	9	0		107
Total	24	132	0	156	0		153	30	0	183	0		25	6	0	31	0		370
% Approach	15.4%	84.6%	0%	-	-		83.6%	16.4%	0%	-	-		80.6%	19.4%	0%	-	-		-
% Total	6.5%	35.7%	0%	42.2%	-		41.4%	8.1%	0%	49.5%	-		6.8%	1.6%	0%	8.4%	-		-
PHF	0.750	0.733	-	0.750	-		0.617	0.536	-	0.644	-		0.694	0.750	-	0.705	-		0.864
Lights and Motorcycles	23	115	0	138	-		143	26	0	169	-		22	6	0	28	-		335
% Lights and Motorcycles	95.8%	87.1%	0%	88.5%	-		93.5%	86.7%	0%	92.3%	-		88.0%	100%	0%	90.3%	-		90.5%
Heavy	1	17	0	18	-		10	4	0	14	-		3	0	0	3	-		35
% Heavy	4.2%	12.9%	0%	11.5%	-		6.5%	13.3%	0%	7.7%	-		12.0%	0%	0%	9.7%	-		9.5%
Pedestrians	-	-	-	-	0		-	-	-	-	0		-	-	-	-	0		-
% Pedestrians	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-

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

Peachblow Rd & Crownover Way - TMC
Wed Sep 27, 2023
PM Peak (3:15 PM - 4:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians)
All Movements
ID: 1112798, Location: 40.227581, -83.031081



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



Glenn Pkwy & Peachblow Rd - TMC

Wed Sep 27, 2023

Full Length (5 AM-7 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112796, Location: 40.229729, -83.03637



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

Leg Direction	DACC Access Eastbound						Peachblow Road Westbound						Glenn Parkway Northbound						Glenn Parkway 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
2023-09-27																									
5:00AM	0	0	0	0	0	0	3	0	0	0	3	0	1	1	0	0	2	0	0	8	0	0	8	0	13
5:15AM	0	0	0	0	0	0	2	0	0	0	2	0	0	1	2	0	3	0	0	6	0	0	6	0	11
5:30AM	0	0	0	0	0	0	3	0	0	0	3	0	0	3	1	0	4	0	1	18	0	0	19	0	26
5:45AM	0	0	0	0	0	0	5	1	0	0	6	0	0	4	2	0	6	0	0	14	0	0	14	0	26
Hourly Total	0	0	0	0	0	0	13	1	0	0	14	0	1	9	5	0	15	0	1	46	0	0	47	0	76
6:00AM	0	0	0	0	0	0	4	0	0	0	4	0	1	5	6	0	12	0	0	26	0	0	26	0	42
6:15AM	0	0	0	0	0	0	13	0	1	0	14	0	3	9	8	0	20	0	1	35	0	0	36	0	70
6:30AM	0	0	1	0	1	0	14	1	0	0	15	0	4	16	13	0	33	0	2	43	0	0	45	0	94
6:45AM	0	0	0	0	0	0	13	4	0	0	17	0	9	23	11	0	43	0	4	42	1	0	47	0	107
Hourly Total	0	0	1	0	1	0	44	5	1	0	50	0	17	53	38	0	108	0	7	146	1	0	154	0	313
7:00AM	0	0	1	0	1	0	13	5	2	0	20	0	21	22	19	0	62	0	2	60	7	0	69	0	152
7:15AM	0	1	7	0	8	0	24	6	7	0	37	0	69	38	21	0	128	0	2	47	7	0	56	0	229
7:30AM	0	1	34	0	35	0	18	12	11	0	41	0	104	34	26	0	164	0	6	39	23	0	68	0	308
7:45AM	1	3	29	0	33	0	19	6	6	0	31	0	35	40	34	0	109	0	10	51	13	0	74	0	247
Hourly Total	1	5	71	0	77	0	74	29	26	0	129	0	229	134	100	0	463	0	20	197	50	0	267	0	936
8:00AM	2	0	4	0	6	0	27	1	3	0	31	0	4	33	25	0	62	0	14	66	2	0	82	0	181
8:15AM	1	0	1	0	2	0	28	0	4	0	32	0	1	51	21	0	73	0	4	82	1	0	87	0	194
8:30AM	0	0	1	0	1	0	23	0	3	0	26	0	4	44	20	0	68	0	5	66	0	0	71	0	166
8:45AM	0	0	0	0	0	0	30	1	6	0	37	0	6	38	29	0	73	0	28	65	1	0	94	0	204
Hourly Total	3	0	6	0	9	0	108	2	16	0	126	0	15	166	95	0	276	0	51	279	4	0	334	0	745
9:00AM	0	0	3	0	3	0	33	0	15	0	48	0	8	44	16	0	68	0	8	55	0	0	63	0	182
9:15AM	0	0	4	0	4	0	30	1	6	0	37	0	5	36	14	0	55	0	1	34	1	0	36	1	132
9:30AM	1	0	1	0	2	0	16	0	2	0	18	0	3	24	14	2	43	0	4	34	0	0	38	0	101
9:45AM	0	0	4	0	4	0	16	0	2	0	18	0	3	32	11	0	46	0	0	37	0	0	37	0	105
Hourly Total	1	0	12	0	13	0	95	1	25	0	121	0	19	136	55	2	212	0	13	160	1	0	174	1	520
10:00AM	0	0	1	0	1	0	20	1	2	0	23	0	3	27	10	0	40	0	2	45	1	0	48	0	112
10:15AM	0	0	4	0	4	0	8	0	0	0	8	0	4	23	11	0	38	0	2	28	1	0	31	0	81
10:30AM	2	4	5	0	11	0	26	1	1	0	28	0	9	45	12	0	66	0	2	39	6	0	47	0	152
10:45AM	13	9	57	0	79	0	14	5	3	0	22	0	16	30	13	0	59	0	11	50	5	0	66	0	226
Hourly Total	15	13	67	0	95	0	68	7	6	0	81	0	32	125	46	0	203	0	17	162	13	0	192	0	571
11:00AM	0	1	10	0	11	0	14	6	4	0	24	0	43	35	15	0	93	0	2	26	6	0	34	0	162
11:15AM	3	0	8	0	11	0	17	5	3	0	25	0	23	36	12	0	71	0	2	43	10	0	55	0	162
11:30AM	1	0	3	0	4	0	13	2	0	0	15	0	5	37	20	0	62	0	2	35	6	0	43	0	124
11:45AM	5	3	5	0	13	0	29	0	1	0	30	0	3	47	21	0	71	0	7	49	0	0	56	0	170
Hourly Total	9	4	26	0	39	0	73	13	8	0	94	0	74	155	68	0	297	0	13	153	22	0	188	0	618
12:00PM	1	2	5	0	8	0	25	0	7	0	32	0	5	48	18	0	71	0	3	33	0	0	36	0	147
12:15PM	1	0	0	0	1	0	17	0	1	0	18	0	1	44	25	0	70	0	6	47	0	0	53	0	142
12:30PM	0	0	7	0	7	0	14	0	4	0	18	0	2	49	17	0	68	1	6	37	0	0	43	0	136
12:45PM	1	0	1	0	2	0	15	0	6	0	21	0	3	39	18	0	60	0	3	23	2	0	28	0	111
Hourly Total	3	2	13	0	18	0	71	0	18	0	89	0	11	180	78	0	269	1	18	140	2	0	160	0	536
1:00PM	2	0	4	0	6	0	19	0	2	0	21	0	5	48	25	0	78	0	9	28	0	0	37	0	142
1:15PM	1	1	8	0	10	0	19	1	11	0	31	0	4	49	23	0	76	0	2	33	0	0	35	0	152
1:30PM	0	0	2	0	2	0	14	1	2	0	17	0	4	44	19	0	67	0	2	27	0	0	29	0	115
1:45PM	0	0	4	0	4	0	14	0	3	0	17	0	8	44	12	0	64	0	4	44	1	0	49	0	134
Hourly Total	3	1	18	0	22	0	66	2	18	0	86	0	21	185	79	0	285	0	17	132	1	0	150	0	543
2:00PM	0	1	13	0	14	0	16	1	5	0	22	0	19	46	16	0	81	0	2	44	5	0	51	0	168
2:15PM	22	11	47	0	80	0	6	2	2	0	10	0	9	40	13	1	63	0	24	113	5	0	142	0	295
2:30PM	12	6	45	0	63	0	18	1	7	0	26	0	11	49	13	0	73	0	10	67	1	0	78	0	240
2:45PM	0	0	7	0	7	0	19	0	3	0	22	0	2	49	15	1	67	0	4	34	0	0	38	0	134
Hourly Total	34	18	112	0	164	0	59	4	17	0	80	0	41	184	57	2	284	0	40	258	11	0	309	0	837
3:00PM	2	3	10	0	15	0	18	0	2	0	20	0	1	49	23	1	74	0	8	40	0	0	48	0	157
3:15PM	1	2	14	0	17	0	24	1	2	0	27	0	0	57	27	0	84	0	11	34	0	0	45	0	173
3:30PM	2	3	11	0	16	0	24	0	2	0	26	0	2	65	31	0	98	0	16	39	0	0	55	0	195
3:45PM	0	1	8	0	9	0	21	0	19	0	40	0	0	56	32	1	89	0	10	32	0	0	42	0	180
Hourly Total	5	9	43	0	57	0	87	1	25	0	113	0	3	227	113	2	345	0	45	145	0	0	190	0	705

Leg Direction	DACC Access Eastbound						Peachblow Road Westbound						Glenn Parkway Northbound						Glenn Parkway 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
4:00PM	0	1	11	0	12	0	52	0	16	0	68	0	1	69	25	0	95	0	3	41	0	0	44	0	219
4:15PM	0	0	4	0	4	1	21	0	4	0	25	0	3	81	26	0	110	0	8	47	0	0	55	0	194
4:30PM	0	0	0	0	0	0	34	1	1	0	36	0	0	54	24	0	78	0	5	42	0	0	47	0	161
4:45PM	0	0	1	0	1	0	25	0	5	0	30	0	6	69	30	0	105	0	6	52	1	0	59	0	195
Hourly Total	0	1	16	0	17	1	132	1	26	0	159	0	10	273	105	0	388	0	22	182	1	0	205	0	769
5:00PM	2	5	13	0	20	0	42	0	4	0	46	0	12	64	30	0	106	0	5	61	0	0	66	0	238
5:15PM	1	1	2	0	4	1	37	0	4	0	41	0	17	85	24	0	126	0	6	59	1	0	66	1	237
5:30PM	0	1	1	0	2	0	32	1	3	0	36	0	12	83	29	0	124	0	4	49	1	0	54	0	216
5:45PM	0	0	1	0	1	1	26	1	8	0	35	0	11	72	21	0	104	0	4	45	1	0	50	0	190
Hourly Total	3	7	17	0	27	2	137	2	19	0	158	0	52	304	104	0	460	0	19	214	3	0	236	1	881
6:00PM	0	0	0	0	0	2	17	0	4	0	21	0	0	66	22	0	88	0	3	53	0	0	56	0	165
6:15PM	0	0	1	0	1	0	16	0	2	0	18	0	2	50	20	0	72	0	2	42	0	0	44	0	135
6:30PM	1	0	1	0	2	1	12	0	4	0	16	0	0	52	25	0	77	0	2	40	0	0	42	0	137
6:45PM	0	1	0	0	1	0	13	0	1	0	14	0	0	47	12	0	59	0	3	35	0	0	38	0	112
Hourly Total	1	1	2	0	4	3	58	0	11	0	69	0	2	215	79	0	296	0	10	170	0	0	180	0	549
Total	78	61	404	0	543	6	1085	68	216	0	1369	0	527	2346	1022	6	3901	1	293	2384	109	0	2786	2	8599
% Approach	14.4%	11.2%	74.4%	0%	-	-	79.3%	5.0%	15.8%	0%	-	-	13.5%	60.1%	26.2%	0.2%	-	-	10.5%	85.6%	3.9%	0%	-	-	-
% Total	0.9%	0.7%	4.7%	0%	6.3%	-	12.6%	0.8%	2.5%	0%	15.9%	-	6.1%	27.3%	11.9%	0.1%	45.4%	-	3.4%	27.7%	1.3%	0%	32.4%	-	-
Lights and Motorcycles	74	57	386	0	517	-	1034	65	201	0	1300	-	512	2251	953	6	3722	-	270	2294	100	0	2664	-	8203
% Lights and Motorcycles	94.9%	93.4%	95.5%	0%	95.2%	-	95.3%	95.6%	93.1%	0%	95.0%	-	97.2%	96.0%	93.2%	100%	95.4%	-	92.2%	96.2%	91.7%	0%	95.6%	-	95.4%
Heavy	4	4	18	0	26	-	51	3	15	0	69	-	15	95	69	0	179	-	23	90	9	0	122	-	396
% Heavy	5.1%	6.6%	4.5%	0%	4.8%	-	4.7%	4.4%	6.9%	0%	5.0%	-	2.8%	4.0%	6.8%	0%	4.6%	-	7.8%	3.8%	8.3%	0%	4.4%	-	4.6%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%

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

Glenn Pkwy & Peachblow Rd - TMC

Wed Sep 27, 2023

Full Length (5 AM-7 PM)

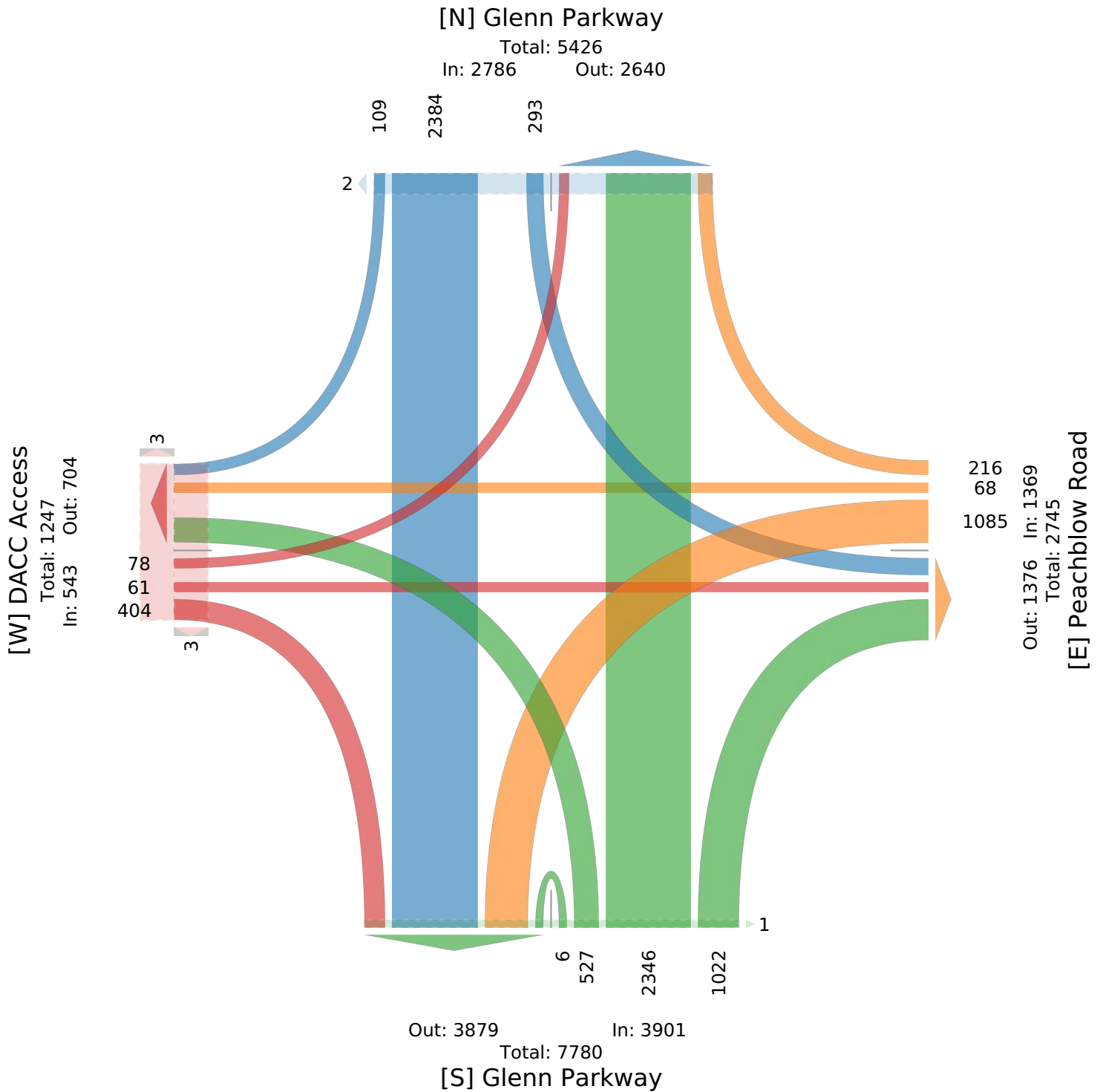
All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112796, Location: 40.229729, -83.03637



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



Glenn Pkwy & Peachblow Rd - TMC

Wed Sep 27, 2023

AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112796, Location: 40.229729, -83.03637



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

Leg Direction	DACC Access Eastbound						Peachblow Road Westbound						Glenn Parkway Northbound						Glenn Parkway 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
2023-09-27 7:15AM	0	1	7	0	8	0	24	6	7	0	37	0	69	38	21	0	128	0	2	47	7	0	56	0	229
7:30AM	0	1	34	0	35	0	18	12	11	0	41	0	104	34	26	0	164	0	6	39	23	0	68	0	308
7:45AM	1	3	29	0	33	0	19	6	6	0	31	0	35	40	34	0	109	0	10	51	13	0	74	0	247
8:00AM	2	0	4	0	6	0	27	1	3	0	31	0	4	33	25	0	62	0	14	66	2	0	82	0	181
Total	3	5	74	0	82	0	88	25	27	0	140	0	212	145	106	0	463	0	32	203	45	0	280	0	965
% Approach	3.7%	6.1%	90.2%	0%	-	-	62.9%	17.9%	19.3%	0%	-	-	45.8%	31.3%	22.9%	0%	-	-	11.4%	72.5%	16.1%	0%	-	-	-
% Total	0.3%	0.5%	7.7%	0%	8.5%	-	9.1%	2.6%	2.8%	0%	14.5%	-	22.0%	15.0%	11.0%	0%	48.0%	-	3.3%	21.0%	4.7%	0%	29.0%	-	-
PHF	0.375	0.417	0.544	-	0.586	-	0.815	0.521	0.614	-	0.854	-	0.510	0.906	0.779	-	0.706	-	0.571	0.769	0.489	-	0.854	-	0.783
Lights and Motorcycles	3	4	72	0	79	-	84	25	24	0	133	-	211	130	103	0	444	-	31	186	43	0	260	-	916
% Lights and Motorcycles	100%	80.0%	97.3%	0%	96.3%	-	95.5%	100%	88.9%	0%	95.0%	-	99.5%	89.7%	97.2%	0%	95.9%	-	96.9%	91.6%	95.6%	0%	92.9%	-	94.9%
Heavy	0	1	2	0	3	-	4	0	3	0	7	-	1	15	3	0	19	-	1	17	2	0	20	-	49
% Heavy	0%	20.0%	2.7%	0%	3.7%	-	4.5%	0%	11.1%	0%	5.0%	-	0.5%	10.3%	2.8%	0%	4.1%	-	3.1%	8.4%	4.4%	0%	7.1%	-	5.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Glenn Pkwy & Peachblow Rd - TMC

Wed Sep 27, 2023

AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112796, Location: 40.229729, -83.03637



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

[N] Glenn Parkway

Total: 455

In: 280

Out: 175

45

203

32

[W] DACC Access

Total: 364

In: 82

Out: 282

3
5
74

27
25
88

Out: 143

In: 140

Total: 283

[E] Peachblow Road

212

145

106

Out: 365

In: 463

Total: 828

[S] Glenn Parkway

Glenn Pkwy & Peachblow Rd - TMC

Wed Sep 27, 2023

Midday Peak (11 AM - 12 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112796, Location: 40.229729, -83.03637



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

Leg Direction	DACC Access Eastbound						Peachblow Road Westbound						Glenn Parkway Northbound						Glenn Parkway 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
2023-09-27 11:00AM	0	1	10	0	11	0	14	6	4	0	24	0	43	35	15	0	93	0	2	26	6	0	34	0	162
11:15AM	3	0	8	0	11	0	17	5	3	0	25	0	23	36	12	0	71	0	2	43	10	0	55	0	162
11:30AM	1	0	3	0	4	0	13	2	0	0	15	0	5	37	20	0	62	0	2	35	6	0	43	0	124
11:45AM	5	3	5	0	13	0	29	0	1	0	30	0	3	47	21	0	71	0	7	49	0	0	56	0	170
Total	9	4	26	0	39	0	73	13	8	0	94	0	74	155	68	0	297	0	13	153	22	0	188	0	618
% Approach	23.1%	10.3%	66.7%	0%	-	-	77.7%	13.8%	8.5%	0%	-	-	24.9%	52.2%	22.9%	0%	-	-	6.9%	81.4%	11.7%	0%	-	-	-
% Total	1.5%	0.6%	4.2%	0%	6.3%	-	11.8%	2.1%	1.3%	0%	15.2%	-	12.0%	25.1%	11.0%	0%	48.1%	-	2.1%	24.8%	3.6%	0%	30.4%	-	-
PHF	0.450	0.333	0.650	-	0.750	-	0.629	0.542	0.500	-	0.783	-	0.430	0.824	0.810	-	0.798	-	0.464	0.781	0.550	-	0.839	-	0.909
Lights and Motorcycles	8	3	21	0	32	-	70	11	7	0	88	-	73	139	61	0	273	-	13	138	20	0	171	-	564
% Lights and Motorcycles	88.9%	75.0%	80.8%	0%	82.1%	-	95.9%	84.6%	87.5%	0%	93.6%	-	98.6%	89.7%	89.7%	0%	91.9%	-	100%	90.2%	90.9%	0%	91.0%	-	91.3%
Heavy	1	1	5	0	7	-	3	2	1	0	6	-	1	16	7	0	24	-	0	15	2	0	17	-	54
% Heavy	11.1%	25.0%	19.2%	0%	17.9%	-	4.1%	15.4%	12.5%	0%	6.4%	-	1.4%	10.3%	10.3%	0%	8.1%	-	0%	9.8%	9.1%	0%	9.0%	-	8.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Glenn Pkwy & Peachblow Rd - TMC

Wed Sep 27, 2023

Midday Peak (11 AM - 12 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112796, Location: 40.229729, -83.03637



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

[N] Glenn Parkway

Total: 360

In: 188

Out: 172



[W] DACC Access

Total: 148

In: 39 Out: 109

9
4
26

8
13
73

Out: 85 In: 94

Total: 179

[E] Peachblow Road

Out: 252

In: 297

Total: 549

[S] Glenn Parkway

Glenn Pkwy & Peachblow Rd - TMC

Wed Sep 27, 2023

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

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112796, Location: 40.229729, -83.03637



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

Leg Direction	DACC Access Eastbound							Peachblow Road Westbound							Glenn Parkway Northbound							Glenn Parkway 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
2023-09-27 4:45PM	0	0	1	0	1	0		25	0	5	0	30	0		6	69	30	0	105	0		6	52	1	0	59	0		195
5:00PM	2	5	13	0	20	0		42	0	4	0	46	0		12	64	30	0	106	0		5	61	0	0	66	0		238
5:15PM	1	1	2	0	4	1		37	0	4	0	41	0		17	85	24	0	126	0		6	59	1	0	66	1		237
5:30PM	0	1	1	0	2	0		32	1	3	0	36	0		12	83	29	0	124	0		4	49	1	0	54	0		216
Total	3	7	17	0	27	1		136	1	16	0	153	0		47	301	113	0	461	0		21	221	3	0	245	1		886
% Approach	11.1%	25.9%	63.0%	0%	-	-		88.9%	0.7%	10.5%	0%	-	-		10.2%	65.3%	24.5%	0%	-	-		8.6%	90.2%	1.2%	0%	-	-		-
% Total	0.3%	0.8%	1.9%	0%	3.0%	-		15.3%	0.1%	1.8%	0%	17.3%	-		5.3%	34.0%	12.8%	0%	52.0%	-		2.4%	24.9%	0.3%	0%	27.7%	-		-
PHF	0.375	0.350	0.327	-	0.338	-		0.810	0.250	0.800	-	0.832	-		0.691	0.885	0.942	-	0.915	-		0.875	0.906	0.750	-	0.928	-		0.931
Lights and Motorcycles	3	7	17	0	27	-		135	1	14	0	150	-		47	299	109	0	455	-		19	216	3	0	238	-		870
% Lights and Motorcycles	100%	100%	100%	0%	100%	-		99.3%	100%	87.5%	0%	98.0%	-		100%	99.3%	96.5%	0%	98.7%	-		90.5%	97.7%	100%	0%	97.1%	-		98.2%
Heavy	0	0	0	0	0	-		1	0	2	0	3	-		0	2	4	0	6	-		2	5	0	0	7	-		16
% Heavy	0%	0%	0%	0%	0%	-		0.7%	0%	12.5%	0%	2.0%	-		0%	0.7%	3.5%	0%	1.3%	-		9.5%	2.3%	0%	0%	2.9%	-		1.8%
Pedestrians	-	-	-	-	-	1		-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	1		
% Pedestrians	-	-	-	-	-	100%		-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	100%		-

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

Glenn Pkwy & Peachblow Rd - TMC

Wed Sep 27, 2023

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

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112796, Location: 40.229729, -83.03637



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

[N] Glenn Parkway

Total: 565

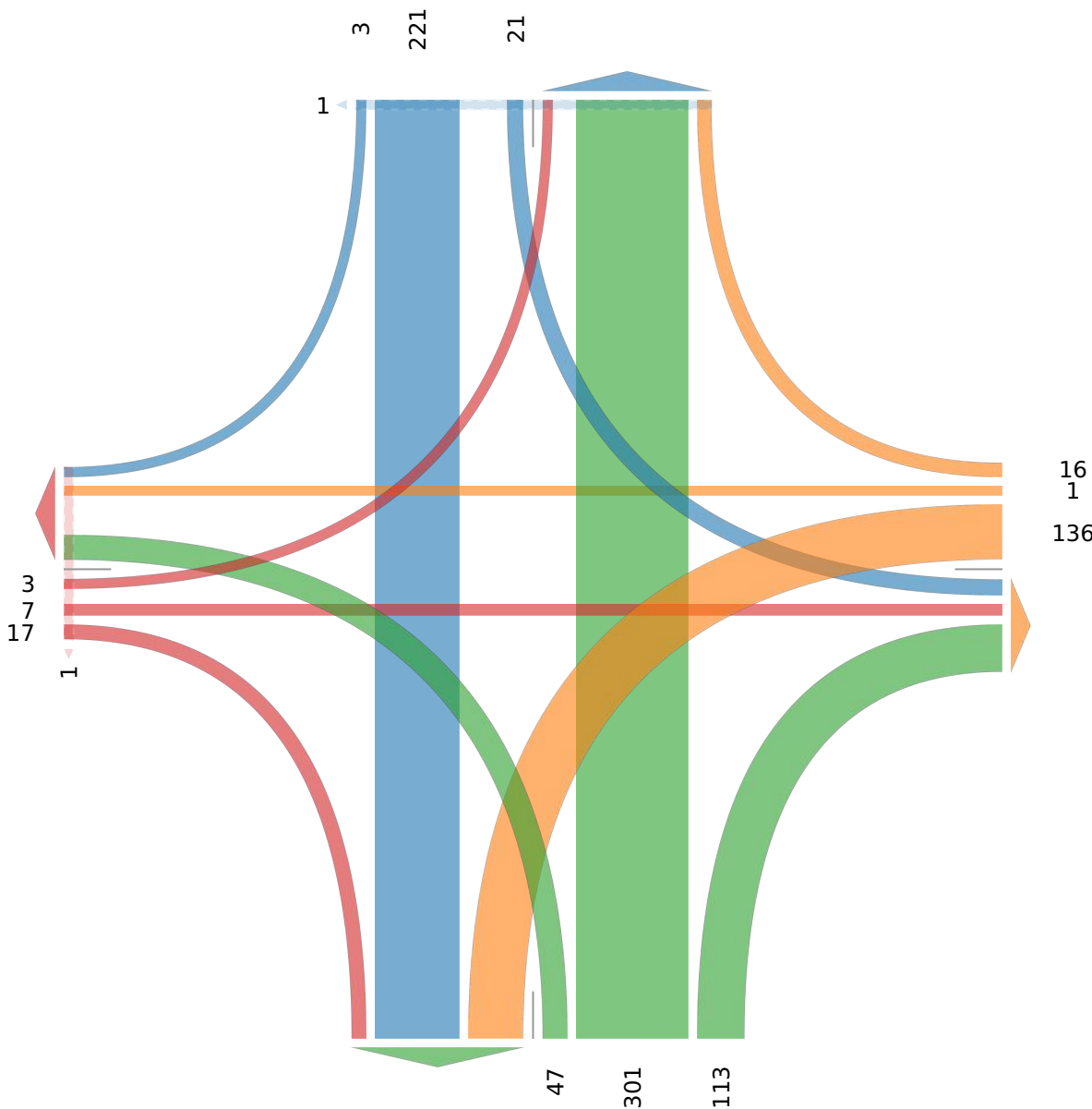
In: 245

Out: 320

[W] DACC Access

Total: 78

In: 27 Out: 51



Out: 374

In: 461

Total: 835

[S] Glenn Parkway

[E] Peachblow Road

Out: 141 In: 153

Total: 294

US 23 & Glenn Pkwy - TMC

Wed Sep 27, 2023

Full Length (6 AM-10 AM, 2 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112802, Location: 40.228644, -83.038313



Provided by: Smart Services, Inc.

88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Winter Road Eastbound						Glenn Parkway Westbound						US 23 Northbound						US 23 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
2023-09-27																									
6:00AM	0	0	0	0	0	0	27	2	1	0	30	0	0	97	6	0	103	0	5	193	0	0	198	0	331
6:15AM	0	0	0	0	0	0	42	1	3	0	46	0	0	98	16	0	114	0	5	242	0	0	247	0	407
6:30AM	0	0	0	0	0	0	52	3	5	0	60	0	1	131	24	0	156	0	10	250	0	0	260	0	476
6:45AM	0	2	1	0	3	0	44	1	7	0	52	0	3	136	35	0	174	0	9	273	1	0	283	0	512
Hourly Total	0	2	1	0	3	0	165	7	16	0	188	0	4	462	81	0	547	0	29	958	1	0	988	0	1726
7:00AM	0	0	0	0	0	0	65	4	4	0	73	0	1	128	44	0	173	0	15	308	2	0	325	0	571
7:15AM	0	8	2	0	10	0	58	6	11	0	75	0	5	136	85	0	226	0	37	362	4	0	403	0	714
7:30AM	1	11	3	0	15	0	64	4	19	0	87	0	6	182	98	0	286	0	56	349	3	0	408	0	796
7:45AM	0	11	3	0	14	0	67	13	20	0	100	0	3	162	66	0	231	0	28	350	3	1	382	0	727
Hourly Total	1	30	8	0	39	0	254	27	54	0	335	0	15	608	293	0	916	0	136	1369	12	1	1518	0	2808
8:00AM	1	5	1	0	7	0	72	4	14	0	90	0	3	170	49	0	222	0	11	298	1	0	310	0	629
8:15AM	0	0	1	0	1	0	95	10	12	0	117	0	6	138	62	0	206	0	5	289	6	0	300	2	624
8:30AM	0	3	2	0	5	0	75	5	4	0	84	0	4	177	62	0	243	0	7	306	4	0	317	0	649
8:45AM	2	4	5	0	11	0	96	11	6	0	113	0	2	146	54	0	202	0	10	265	4	0	279	0	605
Hourly Total	3	12	9	0	24	0	338	30	36	0	404	0	15	631	227	0	873	0	33	1158	15	0	1206	2	2507
9:00AM	0	1	0	0	1	0	65	4	15	0	84	0	2	204	56	0	262	0	4	226	1	0	231	0	578
9:15AM	1	3	5	0	9	0	50	3	15	1	69	0	4	182	47	0	233	0	4	209	2	0	215	1	526
9:30AM	3	2	0	0	5	0	47	5	9	0	61	0	2	164	31	0	197	0	8	229	4	0	241	0	504
9:45AM	0	1	1	0	2	0	45	0	10	0	55	0	3	196	40	0	239	0	5	212	1	0	218	2	514
Hourly Total	4	7	6	0	17	0	207	12	49	1	269	0	11	746	174	0	931	0	21	876	8	0	905	3	2122
2:00PM	3	3	4	0	10	0	51	6	17	0	74	0	1	231	69	0	301	0	9	181	0	0	190	0	575
2:15PM	0	3	3	0	6	0	93	12	46	0	151	0	1	242	53	2	298	0	7	153	3	0	163	0	618
2:30PM	2	5	7	0	14	0	89	19	44	0	152	0	2	259	62	0	323	0	4	167	1	0	172	0	661
2:45PM	0	4	3	0	7	0	51	2	9	0	62	0	3	253	58	1	315	0	5	170	4	0	179	0	563
Hourly Total	5	15	17	0	37	0	284	39	116	0	439	0	7	985	242	3	1237	0	25	671	8	0	704	0	2417
3:00PM	0	8	5	0	13	0	53	5	12	0	70	0	2	230	58	0	290	0	7	187	1	0	195	0	568
3:15PM	2	4	2	0	8	0	48	7	17	0	72	0	3	268	75	0	346	0	7	231	2	0	240	0	666
3:30PM	1	11	3	0	15	0	59	3	13	0	75	0	1	285	78	0	364	0	8	243	3	0	254	0	708
3:45PM	4	6	0	0	10	0	43	1	16	0	60	0	1	251	70	0	322	0	10	247	2	0	259	0	651
Hourly Total	7	29	10	0	46	0	203	16	58	0	277	0	7	1034	281	0	1322	0	32	908	8	0	948	0	2593
4:00PM	3	4	3	0	10	0	66	6	25	0	97	0	3	294	84	0	381	0	9	201	0	0	210	0	698
4:15PM	2	7	4	0	13	0	60	4	9	0	73	0	1	319	88	0	408	0	10	215	3	0	228	0	722
4:30PM	7	4	4	0	15	0	50	3	15	0	68	0	1	311	69	0	381	0	5	215	4	0	224	0	688
4:45PM	1	8	2	0	11	0	70	5	6	0	81	0	1	305	89	0	395	0	7	214	2	0	223	0	710
Hourly Total	13	23	13	0	49	0	246	18	55	0	319	0	6	1229	330	0	1565	0	31	845	9	0	885	0	2818
5:00PM	2	6	3	0	11	0	80	8	19	0	107	0	3	309	89	0	401	0	11	180	2	0	193	0	712
5:15PM	2	7	1	0	10	0	75	3	21	0	99	0	2	282	106	0	390	0	13	199	0	0	212	0	711
5:30PM	5	4	3	0	12	0	65	3	16	0	84	0	0	285	105	0	390	0	11	216	0	0	227	0	713
5:45PM	1	8	3	0	12	0	63	4	6	0	73	0	1	266	95	0	362	0	5	187	3	0	195	0	642
Hourly Total	10	25	10	0	45	0	283	18	62	0	363	0	6	1142	395	0	1543	0	40	782	5	0	827	0	2778
6:00PM	2	0	1	0	3	0	60	4	8	0	72	0	2	274	79	0	355	0	7	167	0	0	174	0	604
6:15PM	0	1	0	0	1	0	49	2	7	0	58	0	0	239	64	0	303	0	6	172	0	0	178	0	540
6:30PM	0	1	0	0	1	0	45	3	5	0	53	0	0	211	70	0	281	0	8	165	1	0	174	0	509
6:45PM	0	2	0	0	2	0	42	0	10	0	52	0	2	200	55	0	257	0	2	138	1	0	141	0	452
Hourly Total	2	4	1	0	7	0	196	9	30	0	235	0	4	924	268	0	1196	0	23	642	2	0	667	0	2105
Total	45	147	75	0	267	0	2176	176	476	1	2829	0	75	7761	2291	3	10130	0	370	8209	68	1	8648	5	21874
% Approach	16.9%	55.1%	28.1%	0%	-	-	76.9%	6.2%	16.8%	0%	-	-	0.7%	76.6%	22.6%	0%	-	-	4.3%	94.9%	0.8%	0%	-	-	-
% Total	0.2%	0.7%	0.3%	0%	1.2%	-	9.9%	0.8%	2.2%	0%	12.9%	-	0.3%	35.5%	10.5%	0%	46.3%	-	1.7%	37.5%	0.3%	0%	39.5%	-	-
Lights and Motorcycles	45	144	72	0	261	-	2104	173	464	1	2742	-	73	7152	2199	3	9427	-	356	7568	65	1	7990	-	20420
% Lights and Motorcycles	100%	98.0%	96.0%	0%	97.8%	-	96.7%	98.3%	97.5%	100%	96.9%	-	97.3%	92.2%	96.0%	100%	93.1%	-	96.2%	92.2%	95.6%	100%	92.4%	-	93.4%
Heavy	0	3	3	0	6	-	72	3	12	0	87	-	2	609	92	0	703	-	14	641	3	0	658	-	1454
% Heavy	0%	2.0%	4.0%	0%	2.2%	-	3.3%	1.7%	2.5%	0%	3.1%	-	2.7%	7.8%	4.0%	0%	6.9%	-	3.8%	7.8%	4.4%	0%	7.6%	-	6.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	5	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-

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

US 23 & Glenn Pkwy - TMC

Wed Sep 27, 2023

Full Length (6 AM-10 AM, 2 PM-7 PM)

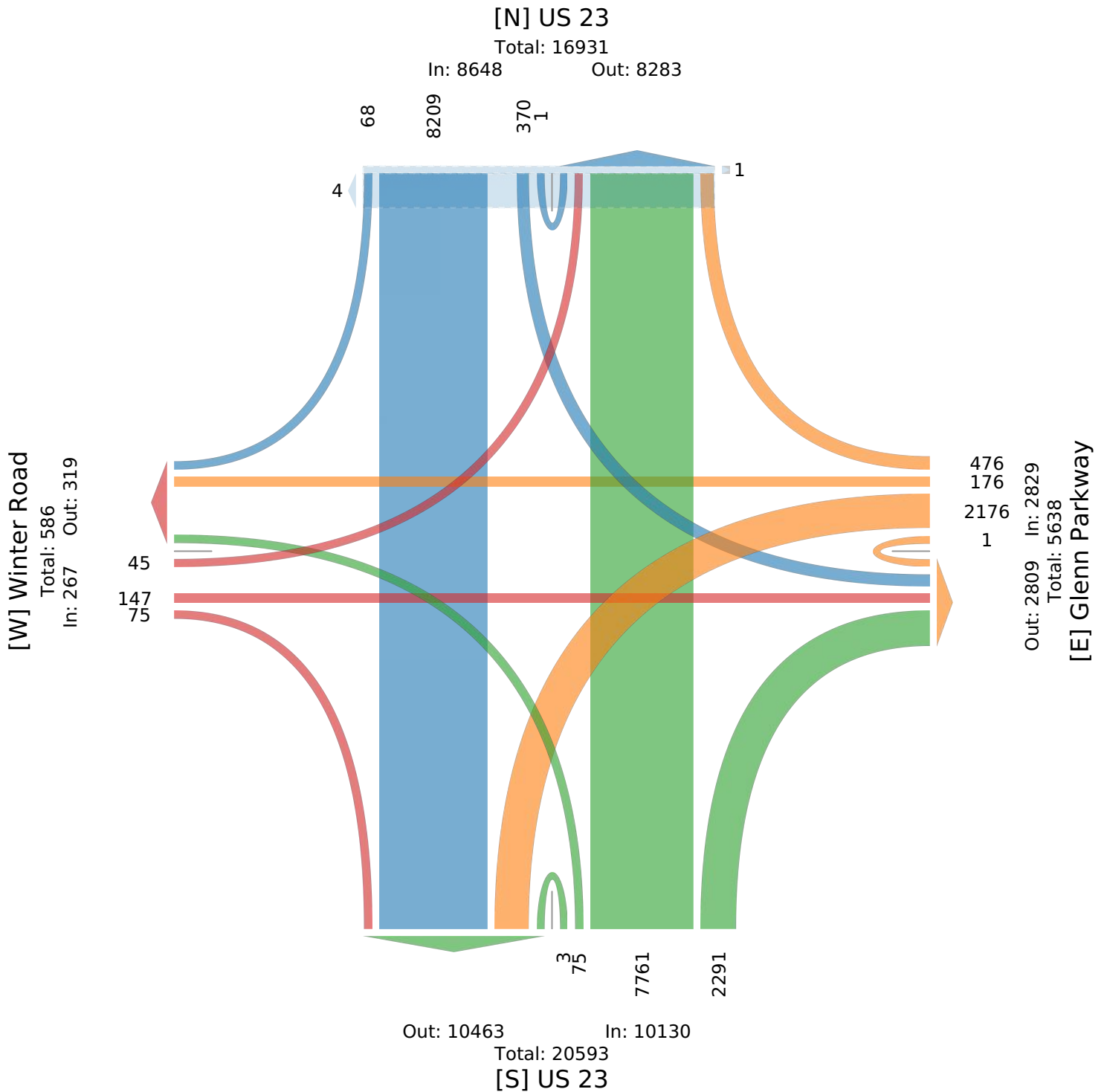
All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112802, Location: 40.228644, -83.038313



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



US 23 & Glenn Pkwy - TMC

Wed Sep 27, 2023

AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112802, Location: 40.228644, -83.038313



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

Leg Direction	Winter Road Eastbound						Glenn Parkway Westbound						US 23 Northbound						US 23 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
2023-09-27 7:15AM	0	8	2	0	10	0	58	6	11	0	75	0	5	136	85	0	226	0	37	362	4	0	403	0	714
7:30AM	1	11	3	0	15	0	64	4	19	0	87	0	6	182	98	0	286	0	56	349	3	0	408	0	796
7:45AM	0	11	3	0	14	0	67	13	20	0	100	0	3	162	66	0	231	0	28	350	3	1	382	0	727
8:00AM	1	5	1	0	7	0	72	4	14	0	90	0	3	170	49	0	222	0	11	298	1	0	310	0	629
Total	2	35	9	0	46	0	261	27	64	0	352	0	17	650	298	0	965	0	132	1359	11	1	1503	0	2866
% Approach	4.3%	76.1%	19.6%	0%	-	-	74.1%	7.7%	18.2%	0%	-	-	1.8%	67.4%	30.9%	0%	-	-	8.8%	90.4%	0.7%	0.1%	-	-	-
% Total	0.1%	1.2%	0.3%	0%	1.6%	-	9.1%	0.9%	2.2%	0%	12.3%	-	0.6%	22.7%	10.4%	0%	33.7%	-	4.6%	47.4%	0.4%	0%	52.4%	-	-
PHF	0.500	0.795	0.750	-	0.767	-	0.906	0.519	0.800	-	0.880	-	0.708	0.893	0.760	-	0.844	-	0.589	0.939	0.688	0.250	0.921	-	0.900
Lights and Motorcycles	2	35	8	0	45	-	247	27	64	0	338	-	17	573	280	0	870	-	127	1276	11	1	1415	-	2668
% Lights and Motorcycles	100%	100%	88.9%	0%	97.8%	-	94.6%	100%	100%	0%	96.0%	-	100%	88.2%	94.0%	0%	90.2%	-	96.2%	93.9%	100%	100%	94.1%	-	93.1%
Heavy	0	0	1	0	1	-	14	0	0	0	14	-	0	77	18	0	95	-	5	83	0	0	88	-	198
% Heavy	0%	0%	11.1%	0%	2.2%	-	5.4%	0%	0%	0%	4.0%	-	0%	11.8%	6.0%	0%	9.8%	-	3.8%	6.1%	0%	0%	5.9%	-	6.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

US 23 & Glenn Pkwy - TMC

Wed Sep 27, 2023

AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112802, Location: 40.228644, -83.038313



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

[N] US 23

Total: 2220

In: 1503

Out: 717

11

1359

132

1

[W] Winter Road

Total: 101

In: 46 Out: 55

2
35
9

64
27
261

Out: 465 In: 352

Total: 817

[E] Glenn Parkway

Out: 1629

In: 965

Total: 2594

[S] US 23

17

650

298

US 23 & Glenn Pkwy - TMC

Wed Sep 27, 2023

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

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112802, Location: 40.228644, -83.038313



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

Leg Direction	Winter Road Eastbound						Glenn Parkway Westbound						US 23 Northbound						US 23 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
2023-09-27 4:45PM	1	8	2	0	11	0	70	5	6	0	81	0	1	305	89	0	395	0	7	214	2	0	223	0	710
5:00PM	2	6	3	0	11	0	80	8	19	0	107	0	3	309	89	0	401	0	11	180	2	0	193	0	712
5:15PM	2	7	1	0	10	0	75	3	21	0	99	0	2	282	106	0	390	0	13	199	0	0	212	0	711
5:30PM	5	4	3	0	12	0	65	3	16	0	84	0	0	285	105	0	390	0	11	216	0	0	227	0	713
Total	10	25	9	0	44	0	290	19	62	0	371	0	6	1181	389	0	1576	0	42	809	4	0	855	0	2846
% Approach	22.7%	56.8%	20.5%	0%	-	-	78.2%	5.1%	16.7%	0%	-	-	0.4%	74.9%	24.7%	0%	-	-	4.9%	94.6%	0.5%	0%	-	-	-
% Total	0.4%	0.9%	0.3%	0%	1.5%	-	10.2%	0.7%	2.2%	0%	13.0%	-	0.2%	41.5%	13.7%	0%	55.4%	-	1.5%	28.4%	0.1%	0%	30.0%	-	-
PHF	0.500	0.781	0.750	-	0.917	-	0.906	0.594	0.738	-	0.867	-	0.500	0.956	0.917	-	0.983	-	0.808	0.936	0.500	-	0.942	-	0.998
Lights and Motorcycles	10	25	8	0	43	-	285	19	61	0	365	-	6	1128	382	0	1516	-	42	756	4	0	802	-	2726
% Lights and Motorcycles	100%	100%	88.9%	0%	97.7%	-	98.3%	100%	98.4%	0%	98.4%	-	100%	95.5%	98.2%	0%	96.2%	-	100%	93.4%	100%	0%	93.8%	-	95.8%
Heavy	0	0	1	0	1	-	5	0	1	0	6	-	0	53	7	0	60	-	0	53	0	0	53	-	120
% Heavy	0%	0%	11.1%	0%	2.3%	-	1.7%	0%	1.6%	0%	1.6%	-	0%	4.5%	1.8%	0%	3.8%	-	0%	6.6%	0%	0%	6.2%	-	4.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

US 23 & Glenn Pkwy - TMC

Wed Sep 27, 2023

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

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112802, Location: 40.228644, -83.038313



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

[N] US 23

Total: 2108

In: 855

Out: 1253

4

809

42

[W] Winter Road

Total: 73

In: 44 Out: 29

10
25
9

62
19
290

Out: 456 In: 371

Total: 827

[E] Glenn Parkway

6

1181

389

Out: 1108

In: 1576

Total: 2684

[S] US 23

US 23 & Greif Pkwy - TMC

Wed Sep 27, 2023

Full Length (6 AM-10 AM, 2 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112805, Location: 40.221632, -83.035185



Provided by: Smart Services, Inc.

88 W. Church Street, Newark, OH, 43055, US

Leg Direction	Greif Parkway Eastbound						Greif Parkway Westbound						US 23 Northbound						US 23 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
2023-09-27																									
6:00AM	0	0	0	0	0	0	0	0	0	0	0	0	1	114	0	3	118	0	0	222	1	0	223	0	341
6:15AM	0	0	0	0	0	0	0	0	0	0	0	0	6	111	0	6	123	0	0	309	1	0	310	0	433
6:30AM	0	0	0	0	0	0	0	0	0	0	0	0	9	170	0	9	188	0	0	311	4	0	315	0	503
6:45AM	0	0	0	0	0	0	0	0	0	0	0	0	11	178	0	9	198	0	0	326	7	0	333	0	531
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	27	573	0	27	627	0	0	1168	13	0	1181	0	1808
7:00AM	2	0	4	0	6	0	0	0	0	0	0	0	13	180	0	4	197	0	0	356	9	0	365	0	568
7:15AM	4	0	5	0	9	0	0	0	0	0	0	0	16	221	0	18	255	0	0	370	12	1	383	0	647
7:30AM	5	0	8	0	13	0	0	0	0	1	1	0	20	252	0	10	282	0	0	406	17	0	423	0	719
7:45AM	0	0	5	0	5	0	0	0	0	0	0	0	36	243	2	13	294	0	0	393	14	0	407	0	706
Hourly Total	11	0	22	0	33	0	0	0	0	1	1	0	85	896	2	45	1028	0	0	1525	52	1	1578	0	2640
8:00AM	2	0	4	0	6	0	0	0	0	0	0	0	23	219	1	12	255	0	0	358	12	0	370	0	631
8:15AM	1	0	12	0	13	0	0	0	0	0	0	0	30	203	0	15	248	0	0	351	24	0	375	0	636
8:30AM	0	0	14	0	14	0	0	0	0	0	0	0	37	238	0	17	292	0	0	342	30	0	372	0	678
8:45AM	8	0	28	0	36	0	0	0	0	0	0	0	59	204	0	9	272	0	0	343	42	0	385	0	693
Hourly Total	11	0	58	0	69	0	0	0	0	0	0	0	149	864	1	53	1067	0	0	1394	108	0	1502	0	2638
9:00AM	8	0	20	0	28	0	0	0	0	0	0	0	25	269	0	8	302	0	0	260	9	1	270	0	600
9:15AM	1	0	12	0	13	0	0	0	0	0	0	0	19	232	0	6	257	0	0	283	7	0	290	0	560
9:30AM	5	0	9	0	14	0	0	0	0	0	0	0	12	229	4	5	250	0	0	262	6	0	268	0	532
9:45AM	3	0	18	0	21	0	0	0	1	0	1	0	26	222	3	8	259	0	1	252	14	0	267	0	548
Hourly Total	17	0	59	0	76	0	0	0	1	0	1	0	82	952	7	27	1068	0	1	1057	36	1	1095	0	2240
2:00PM	11	0	19	0	30	0	0	0	2	0	2	0	11	292	0	11	314	0	0	218	3	0	221	0	567
2:15PM	4	0	6	0	10	0	2	0	3	0	5	0	6	284	0	7	297	0	0	264	3	0	267	0	579
2:30PM	13	0	13	0	26	0	0	0	0	0	0	0	10	339	0	6	355	0	0	274	1	0	275	0	656
2:45PM	9	0	42	0	51	0	0	0	0	0	0	0	7	298	0	11	316	0	0	209	6	0	215	0	582
Hourly Total	37	0	80	0	117	0	2	0	5	0	7	0	34	1213	0	35	1282	0	0	965	13	0	978	0	2384
3:00PM	3	0	15	0	18	0	0	0	0	0	0	0	2	294	0	5	301	0	0	247	4	0	251	0	570
3:15PM	4	0	6	0	10	0	0	0	0	1	1	0	1	346	0	3	350	0	0	279	1	0	280	0	641
3:30PM	3	0	10	0	13	0	2	0	0	0	2	0	7	368	1	9	385	0	0	282	6	0	288	0	688
3:45PM	3	0	6	0	9	0	0	0	0	0	0	0	3	341	0	6	350	0	0	310	2	0	312	0	671
Hourly Total	13	0	37	0	50	0	2	0	0	1	3	0	13	1349	1	23	1386	0	0	1118	13	0	1131	0	2570
4:00PM	12	0	19	0	31	0	0	0	3	0	3	0	4	382	0	5	391	0	0	252	5	0	257	0	682
4:15PM	12	0	12	0	24	0	0	0	0	0	0	0	12	392	0	6	410	0	0	275	5	0	280	0	714
4:30PM	15	0	24	0	39	0	0	0	0	0	0	0	9	378	0	6	393	0	1	282	2	1	286	0	718
4:45PM	12	0	13	0	25	0	0	0	0	0	0	0	9	373	0	6	388	0	0	266	4	0	270	0	683
Hourly Total	51	0	68	0	119	0	0	0	3	0	3	0	34	1525	0	23	1582	0	1	1075	16	1	1093	0	2797
5:00PM	15	0	20	0	35	0	0	0	0	0	0	0	4	387	0	7	398	0	0	268	6	0	274	0	707
5:15PM	10	0	30	0	40	0	0	0	0	0	0	0	18	370	0	11	399	0	0	267	5	0	272	0	711
5:30PM	8	0	7	0	15	0	0	0	0	0	0	0	7	403	0	12	422	0	0	263	4	0	267	0	704
5:45PM	5	0	11	0	16	0	0	0	0	0	0	0	16	360	0	6	382	0	0	256	7	0	263	0	661
Hourly Total	38	0	68	0	106	0	0	0	0	0	0	0	45	1520	0	36	1601	0	0	1054	22	0	1076	0	2783
6:00PM	9	0	4	1	14	0	0	0	0	0	0	0	11	344	0	4	359	0	0	221	5	0	226	0	599
6:15PM	3	0	4	0	7	0	0	0	0	0	0	0	7	299	0	9	315	0	0	225	4	0	229	0	551
6:30PM	6	0	9	0	15	0	0	0	0	0	0	0	13	284	0	8	305	0	0	203	8	0	211	0	531
6:45PM	4	0	11	0	15	0	1	0	0	0	1	0	7	252	1	12	272	0	0	175	7	0	182	0	470
Hourly Total	22	0	28	1	51	0	1	0	0	0	1	0	38	1179	1	33	1251	0	0	824	24	0	848	0	2151
Total	200	0	420	1	621	0	5	0	9	2	16	0	507	10071	12	302	10892	0	2	10180	297	3	10482	0	22011
% Approach	32.2%	0%	67.6%	0.2%	-	-	31.3%	0%	56.3%	12.5%	-	-	4.7%	92.5%	0.1%	2.8%	-	-	0%	97.1%	2.8%	0%	-	-	-
% Total	0.9%	0%	1.9%	0%	2.8%	-	0%	0%	0%	0%	0.1%	-	2.3%	45.8%	0.1%	1.4%	49.5%	-	0%	46.2%	1.3%	0%	47.6%	-	-
Lights and Motorcycles	199	0	409	1	609	-	5	0	9	2	16	-	493	9315	12	296	10116	-	2	9453	292	3	9750	-	20491
% Lights and Motorcycles	99.5%	0%	97.4%	100%	98.1%	-	100%	0%	100%	100%	100%	-	97.2%	92.5%	100%	98.0%	92.9%	-	100%	92.9%	98.3%	100%	93.0%	-	93.1%
Heavy	1	0	11	0	12	-	0	0	0	0	0	-	14	756	0	6	776	-	0	727	5	0	732	-	1520
% Heavy	0.5%	0%	2.6%	0%	1.9%	-	0%	0%	0%	0%	0%	-	2.8%	7.5%	0%	2.0%	7.1%	-	0%	7.1%	1.7%	0%	7.0%	-	6.9%

Leg Direction	Greif Parkway Eastbound						Greif Parkway Westbound						US 23 Northbound						US 23 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
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

US 23 & Greif Pkwy - TMC

Wed Sep 27, 2023

Full Length (6 AM-10 AM, 2 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112805, Location: 40.221632, -83.035185



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

[N] US 23

Total: 20765

In: 10482

Out: 10283

297

10180

23

[W] Greif Parkway

Total: 1426

In: 621 Out: 805

200
420

2000

Out: 16 In: 16

Total: 32

[E] Greif Parkway

Out: 10907

In: 10892

Total: 21799

[S] US 23

302

507

10071

12

US 23 & Greif Pkwy - TMC

Wed Sep 27, 2023

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112805, Location: 40.221632, -83.035185



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

Leg Direction	Greif Parkway Eastbound						Greif Parkway Westbound						US 23 Northbound						US 23 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
2023-09-27 7:15AM	4	0	5	0	9	0	0	0	0	0	0	0	16	221	0	18	255	0	0	370	12	1	383	0	647
7:30AM	5	0	8	0	13	0	0	0	0	1	1	0	20	252	0	10	282	0	0	406	17	0	423	0	719
7:45AM	0	0	5	0	5	0	0	0	0	0	0	0	36	243	2	13	294	0	0	393	14	0	407	0	706
8:00AM	2	0	4	0	6	0	0	0	0	0	0	0	23	219	1	12	255	0	0	358	12	0	370	0	631
Total	11	0	22	0	33	0	0	0	0	1	1	0	95	935	3	53	1086	0	0	1527	55	1	1583	0	2703
% Approach	33.3%	0%	66.7%	0%	-	-	0%	0%	0%	100%	-	-	8.7%	86.1%	0.3%	4.9%	-	-	0%	96.5%	3.5%	0.1%	-	-	-
% Total	0.4%	0%	0.8%	0%	1.2%	-	0%	0%	0%	0%	0%	-	3.5%	34.6%	0.1%	2.0%	40.2%	-	0%	56.5%	2.0%	0%	58.6%	-	-
PHF	0.550	-	0.688	-	0.635	-	-	-	-	0.250	0.250	-	0.660	0.928	0.375	0.736	0.923	-	-	0.940	0.809	0.250	0.936	-	0.940
Lights and Motorcycles	11	0	18	0	29	-	0	0	0	1	1	-	90	842	3	52	987	-	0	1425	54	1	1480	-	2497
% Lights and Motorcycles	100%	0%	81.8%	0%	87.9%	-	0%	0%	0%	100%	100%	-	94.7%	90.1%	100%	98.1%	90.9%	-	0%	93.3%	98.2%	100%	93.5%	-	92.4%
Heavy	0	0	4	0	4	-	0	0	0	0	0	-	5	93	0	1	99	-	0	102	1	0	103	-	206
% Heavy	0%	0%	18.2%	0%	12.1%	-	0%	0%	0%	0%	0%	-	5.3%	9.9%	0%	1.9%	9.1%	-	0%	6.7%	1.8%	0%	6.5%	-	7.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

US 23 & Greif Pkwy - TMC

Wed Sep 27, 2023

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112805, Location: 40.221632, -83.035185



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

[N] US 23

Total: 2530

In: 1583

Out: 947

55

1527

1

[W] Greif Parkway

Total: 183

In: 33 Out: 150

11
22

Out: 4 In: 1

Total: 5

[E] Greif Parkway

Out: 1602

In: 1086

Total: 2688

[S] US 23

53

95

935

3

1

US 23 & Greif Pkwy - TMC

Wed Sep 27, 2023

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112805, Location: 40.221632, -83.035185



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

Leg Direction	Greif Parkway Eastbound					Greif Parkway Westbound					US 23 Northbound					US 23 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	
2023-09-27 4:15PM	12	0	12	0	24	0	0	0	0	0	12	392	0	6	410	0	0	275	5	0	280	714
4:30PM	15	0	24	0	39	0	0	0	0	0	9	378	0	6	393	0	1	282	2	1	286	718
4:45PM	12	0	13	0	25	0	0	0	0	0	9	373	0	6	388	0	0	266	4	0	270	683
5:00PM	15	0	20	0	35	0	0	0	0	0	4	387	0	7	398	0	0	268	6	0	274	707
Total	54	0	69	0	123	0	0	0	0	0	34	1530	0	25	1589	0	1	1091	17	1	1110	2822
% Approach	43.9%	0%	56.1%	0%	-	0%	0%	0%	0%	-	2.1%	96.3%	0%	1.6%	-	0.1%	98.3%	1.5%	0.1%	-	-	-
% Total	1.9%	0%	2.4%	0%	4.4%	0%	0%	0%	0%	0%	1.2%	54.2%	0%	0.9%	56.3%	-	0%	38.7%	0.6%	0%	39.3%	-
PHF	0.900	-	0.719	-	0.788	-	-	-	-	-	0.708	0.976	-	0.893	0.969	-	0.250	0.967	0.708	0.250	0.970	0.983
Lights and Motorcycles	53	0	68	0	121	-	0	0	0	0	34	1469	0	25	1528	-	1	1030	16	1	1048	2697
% Lights and Motorcycles	98.1%	0%	98.6%	0%	98.4%	-	0%	0%	0%	0%	100%	96.0%	0%	100%	96.2%	-	100%	94.4%	94.1%	100%	94.4%	95.6%
Heavy	1	0	1	0	2	-	0	0	0	0	0	61	0	0	61	-	0	61	1	0	62	125
% Heavy	1.9%	0%	1.4%	0%	1.6%	-	0%	0%	0%	0%	0%	4.0%	0%	0%	3.8%	-	0%	5.6%	5.9%	0%	5.6%	4.4%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

US 23 & Greif Pkwy - TMC

Wed Sep 27, 2023

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112805, Location: 40.221632, -83.035185



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

[N] US 23

Total: 2695

In: 1110

Out: 1585

17

1091

1

1

[W] Greif Parkway

Total: 174

In: 123 Out: 51

54

69

Out: 1 In: 0

Total: 1

[E] Greif Parkway

Out: 1185

In: 1589

Total: 2774

[S] US 23

25

34

1530

US 23 & Hyatts Road/Shanahan Road (6-10 AM &... - TMC

Wed Sep 27, 2023

Full Length ()

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1113976, Location: 40.213607, -83.03285



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

Leg Direction	Hyatts Road Eastbound							Shanahan Road Westbound							US 23 Northbound							US 23 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
2023-09-27 6:00AM	2	3	14	0	19	0		6	2	1	0	9	0		0	107	3	0	110	0		0	218	1	0	219	0		357
6:15AM	3	1	6	0	10	0		5	8	6	0	19	0		4	118	6	0	128	0		2	295	3	0	300	0		457
6:30AM	2	7	12	0	21	0		6	4	5	0	15	0		1	173	10	0	184	0		2	335	6	0	343	0		563
6:45AM	17	28	24	0	69	0		18	17	6	0	41	0		11	165	28	0	204	0		11	331	5	0	347	0		661
Hourly Total	24	39	56	0	119	0		35	31	18	0	84	0		16	563	47	0	626	0		15	1179	15	0	1209	0		2038
7:00AM	7	47	32	0	86	0		16	17	3	0	36	0		10	181	43	0	234	0		14	329	6	0	349	0		705
7:15AM	14	41	22	0	77	1		20	42	4	0	66	0		12	208	54	0	274	0		19	386	10	0	415	0		832
7:30AM	17	31	39	0	87	0		44	37	14	0	95	0		10	250	25	0	285	0		13	391	13	0	417	0		884
7:45AM	21	39	39	0	99	0		13	32	1	0	46	0		17	235	18	0	270	0		10	407	7	0	424	0		839
Hourly Total	59	158	132	0	349	1		93	128	22	0	243	0		49	874	140	0	1063	0		56	1513	36	0	1605	0		3260
8:00AM	11	27	38	0	76	0		19	34	10	0	63	0		16	231	15	0	262	0		11	326	14	0	351	0		752
8:15AM	9	12	23	0	44	0		12	20	11	0	43	0		13	225	7	0	245	0		19	400	3	0	422	0		754
8:30AM	13	21	30	0	64	0		11	15	15	0	41	0		14	206	7	0	227	0		8	345	6	0	359	0		691
8:45AM	14	28	35	0	77	0		11	18	22	0	51	0		12	241	21	0	274	0		17	347	17	0	381	0		783
Hourly Total	47	88	126	0	261	0		53	87	58	0	198	0		55	903	50	0	1008	0		55	1418	40	0	1513	0		2980
9:00AM	11	18	31	0	60	0		17	39	17	0	73	0		14	238	8	0	260	0		7	252	10	0	269	0		662
9:15AM	22	9	27	0	58	0		20	13	9	0	42	0		15	246	15	0	276	0		6	263	11	0	280	0		656
9:30AM	9	11	25	0	45	0		11	9	2	0	22	0		16	208	11	0	235	0		6	261	9	0	276	0		578
9:45AM	11	10	18	0	39	0		8	12	11	0	31	0		16	236	14	0	266	0		4	261	6	0	271	0		607
Hourly Total	53	48	101	0	202	0		56	73	39	0	168	0		61	928	48	0	1037	0		23	1037	36	0	1096	0		2503
2:00PM	10	16	31	0	57	0		17	19	7	0	43	0		27	279	19	0	325	0		4	208	9	0	221	0		646
2:15PM	9	20	22	0	51	0		11	13	7	0	31	0		18	278	26	0	322	0		6	230	11	0	247	0		651
2:30PM	8	27	17	0	52	0		19	17	7	0	43	0		25	316	37	0	378	0		11	245	17	0	273	0		746
2:45PM	11	23	21	0	55	0		60	73	14	0	147	0		34	284	31	0	349	0		10	220	8	0	238	0		789
Hourly Total	38	86	91	0	215	0		107	122	35	0	264	0		104	1157	113	0	1374	0		31	903	45	0	979	0		2832
3:00PM	13	13	20	0	46	0		22	22	9	0	53	0		18	268	33	0	319	0		7	230	19	0	256	0		674
3:15PM	15	25	27	0	67	0		11	13	9	0	33	0		20	326	22	0	368	0		12	272	8	0	292	0		760
3:30PM	22	33	16	0	71	0		19	22	20	0	61	0		31	348	29	0	408	0		13	262	13	0	288	0		828
3:45PM	11	24	23	0	58	0		26	31	23	0	80	0		26	314	24	0	364	0		12	301	16	0	329	0		831
Hourly Total	61	95	86	0	242	0		78	88	61	0	227	0		95	1256	108	0	1459	0		44	1065	56	0	1165	0		3093
4:00PM	21	32	22	0	75	0		25	30	20	0	75	0		34	377	19	0	430	0		8	245	16	0	269	0		849
4:15PM	22	22	34	0	78	0		22	21	8	0	51	0		27	381	13	0	421	0		13	262	15	0	290	0		840
4:30PM	18	38	22	0	78	0		19	17	17	0	53	0		40	374	22	0	436	0		11	263	17	0	291	0		858
4:45PM	20	43	29	0	92	0		19	23	15	0	57	0		40	352	23	0	415	0		11	265	7	0	283	0		847
Hourly Total	81	135	107	0	323	0		85	91	60	0	236	0		141	1484	77	0	1702	0		43	1035	55	0	1133	0		3394
5:00PM	21	36	34	0	91	0		15	30	10	0	55	0		36	358	35	0	429	0		16	253	14	0	283	0		858
5:15PM	22	36	29	0	87	0		24	32	14	0	70	0		36	351	19	0	406	0		13	273	19	0	305	0		868
5:30PM	22	31	24	0	77	0		14	29	13	0	56	0		48	374	38	0	460	0		12	229	25	0	266	0		859
5:45PM	26	39	29	0	94	0		22	19	9	0	50	0		55	353	28	0	436	0		7	241	20	0	268	0		848
Hourly Total	91	142	116	0	349	0		75	110	46	0	231	0		175	1436	120	0	1731	0		48	996	78	0	1122	0		3433
6:00PM	20	18	26	0	64	0		9	9	11	0	29	0		43	320	14	0	377	0		6	212	13	0	231	0		701
6:15PM	7	25	35	0	67	0		15	16	13	0	44	0		34	288	15	0	337	0		6	235	7	0	248	0		696
6:30PM	10	13	23	0	46	0		13	14	10	0	37	0		21	256	20	0	297	0		10	198	5	0	213	0		593
6:45PM	8	22	18	0	48	0		10	12	10	0	32	0		29	240	18	0	287	0		3	185	10	0	198	0		565
Hourly Total	45	78	102	0	225	0		47	51	44	0	142	0		127	1104	67	0	1298	0		25	830	35	0	890	0		2555
Total	499	869	917	0	2285	1		629	781	383	0	1793	0		823	9705	770	0	11298	0		340	9976	396	0	10712	0		26088
% Approach	21.8%	38.0%	40.1%	0%	-	-		35.1%	43.6%	21.4%	0%	-	-		7.3%	85.9%	6.8%	0%	-	-		3.2%	93.1%	3.7%	0%	-	-		-
% Total	1.9%	3.3%	3.5%	0%	8.8%	-		2.4%	3.0%	1.5%	0%	6.9%	-		3.2%	37.2%	3.0%	0%	43.3%	-		1.3%	38.2%	1.5%	0%	41.1%	-		-
Lights and Motorcycles	474	821	889	0	2184	-		602	733	364	0	1699	-		803	9001	738	0	10542	-		323	9279	377	0	9979	-		24404
% Lights and Motorcycles	95.0%	94.5%	96.9%	0%	95.6%	-		95.7%	93.9%	95.0%	0%	94.8%	-		97.6%	92.7%	95.8%	0%	93.3%	-		95.0%	93.0%	95.2%	0%	93.2%	-		93.5%
Heavy	25	48	28	0	101	-		27	48	19	0	94	-		20	704	32	0	756	-		17	697	19	0	733	-		1684
% Heavy	5.0%	5.5%	3.1%	0%	4.4%	-		4.3%	6.1%	5.0%	0%	5.2%	-		2.4%	7.3%	4.2%	0%	6.7%	-		5.0%	7.0%	4.8%	0%	6.8%	-		6.5%

Leg Direction	Hyatts Road Eastbound					Shanahan Road Westbound					US 23 Northbound					US 23 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
Pedestrians	-	-	-	-	- 1	-	-	-	-	- 0	-	-	-	-	- 0	-	-	-	-	- 0	
% Pedestrians	-	-	-	-	- 100%	-	-	-	-	- -	-	-	-	-	- -	-	-	-	-	- -	-

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

US 23 & Hyatts Road/Shanahan Road (6-10 AM &... - TMC

Wed Sep 27, 2023

Full Length ()

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1113976, Location: 40.213607, -83.03285



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

[N] US 23

Total: 21299

In: 10712

Out: 10587

396

9976

340

[W] Hyatts Road

Total: 4285

In: 2285 Out: 2000

499
869
917

1

383
781
629

Out: 1979 In: 1793

Total: 3772

[E] Shanahan Road

Out: 11522

In: 11298

Total: 22820

[S] US 23

823

9705

770

US 23 & Hyatts Road/Shanahan Road (6-10 AM &... - TMC

Wed Sep 27, 2023

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1113976, Location: 40.213607, -83.03285



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

Leg Direction	Hyatts Road Eastbound							Shanahan Road Westbound							US 23 Northbound							US 23 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
2023-09-27 7:15AM	14	41	22	0	77	1		20	42	4	0	66	0		12	208	54	0	274	0		19	386	10	0	415	0		832
7:30AM	17	31	39	0	87	0		44	37	14	0	95	0		10	250	25	0	285	0		13	391	13	0	417	0		884
7:45AM	21	39	39	0	99	0		13	32	1	0	46	0		17	235	18	0	270	0		10	407	7	0	424	0		839
8:00AM	11	27	38	0	76	0		19	34	10	0	63	0		16	231	15	0	262	0		11	326	14	0	351	0		752
Total	63	138	138	0	339	1		96	145	29	0	270	0		55	924	112	0	1091	0		53	1510	44	0	1607	0		3307
% Approach	18.6%	40.7%	40.7%	0%	-	-		35.6%	53.7%	10.7%	0%	-	-		5.0%	84.7%	10.3%	0%	-	-		3.3%	94.0%	2.7%	0%	-	-		-
% Total	1.9%	4.2%	4.2%	0%	10.3%	-		2.9%	4.4%	0.9%	0%	8.2%	-		1.7%	27.9%	3.4%	0%	33.0%	-		1.6%	45.7%	1.3%	0%	48.6%	-		-
PHF	0.750	0.841	0.885	-	0.856	-		0.545	0.863	0.518	-	0.711	-		0.809	0.924	0.519	-	0.957	-		0.697	0.928	0.786	-	0.948	-		0.935
Lights and Motorcycles	57	133	135	0	325	-		90	135	26	0	251	-		48	830	102	0	980	-		50	1412	40	0	1502	-		3058
% Lights and Motorcycles	90.5%	96.4%	97.8%	0%	95.9%	-		93.8%	93.1%	89.7%	0%	93.0%	-		87.3%	89.8%	91.1%	0%	89.8%	-		94.3%	93.5%	90.9%	0%	93.5%	-		92.5%
Heavy	6	5	3	0	14	-		6	10	3	0	19	-		7	94	10	0	111	-		3	98	4	0	105	-		249
% Heavy	9.5%	3.6%	2.2%	0%	4.1%	-		6.3%	6.9%	10.3%	0%	7.0%	-		12.7%	10.2%	8.9%	0%	10.2%	-		5.7%	6.5%	9.1%	0%	6.5%	-		7.5%
Pedestrians	-	-	-	-	-	1		-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%		-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-	-	

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

US 23 & Hyatts Road/Shanahan Road (6-10 AM &... - TMC

Wed Sep 27, 2023

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1113976, Location: 40.213607, -83.03285



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

[N] US 23

Total: 2623

In: 1607

Out: 1016

44

1510

53

[W] Hyatts Road

Total: 583

In: 339 Out: 244

63
138
138

1

29
145
96

Out: 303 In: 270

Total: 573

[E] Shanahan Road

Out: 1744

In: 1091

Total: 2835

[S] US 23

55

924

112

US 23 & Hyatts Road/Shanahan Road (6-10 AM &... - TMC

Wed Sep 27, 2023

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

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1113976, Location: 40.213607, -83.03285



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

Leg Direction	Hyatts Road Eastbound							Shanahan Road Westbound							US 23 Northbound							US 23 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	
2023-09-27																													
5:00PM	21	36	34	0	91	0		15	30	10	0	55	0		36	358	35	0	429	0		16	253	14	0	283	0	858	
5:15PM	22	36	29	0	87	0		24	32	14	0	70	0		36	351	19	0	406	0		13	273	19	0	305	0	868	
5:30PM	22	31	24	0	77	0		14	29	13	0	56	0		48	374	38	0	460	0		12	229	25	0	266	0	859	
5:45PM	26	39	29	0	94	0		22	19	9	0	50	0		55	353	28	0	436	0		7	241	20	0	268	0	848	
Total	91	142	116	0	349	0		75	110	46	0	231	0		175	1436	120	0	1731	0		48	996	78	0	1122	0	3433	
% Approach	26.1%	40.7%	33.2%	0%	-	-		32.5%	47.6%	19.9%	0%	-	-		10.1%	83.0%	6.9%	0%	-	-		4.3%	88.8%	7.0%	0%	-	-	-	
% Total	2.7%	4.1%	3.4%	0%	10.2%	-		2.2%	3.2%	1.3%	0%	6.7%	-		5.1%	41.8%	3.5%	0%	50.4%	-		1.4%	29.0%	2.3%	0%	32.7%	-	-	
PHF	0.875	0.910	0.853	-	0.928	-		0.781	0.859	0.821	-	0.825	-		0.795	0.960	0.789	-	0.941	-		0.750	0.912	0.780	-	0.920	-	0.989	
Lights and Motorcycles	91	141	115	0	347	-		73	109	45	0	227	-		175	1384	119	0	1678	-		45	943	77	0	1065	-	3317	
% Lights and Motorcycles	100%	99.3%	99.1%	0%	99.4%	-		97.3%	99.1%	97.8%	0%	98.3%	-		100%	96.4%	99.2%	0%	96.9%	-		93.8%	94.7%	98.7%	0%	94.9%	-	96.6%	
Heavy	0	1	1	0	2	-		2	1	1	0	4	-		0	52	1	0	53	-		3	53	1	0	57	-	116	
% Heavy	0%	0.7%	0.9%	0%	0.6%	-		2.7%	0.9%	2.2%	0%	1.7%	-		0%	3.6%	0.8%	0%	3.1%	-		6.3%	5.3%	1.3%	0%	5.1%	-	3.4%	
Pedestrians	-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		
% Pedestrians	-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-	-	

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

US 23 & Hyatts Road/Shanahan Road (6-10 AM &... - TMC

Wed Sep 27, 2023

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

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1113976, Location: 40.213607, -83.03285



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

[N] US 23

Total: 2695

In: 1122

Out: 1573

78

996

48

[W] Hyatts Road

Total: 712

In: 349 Out: 363

91
142
116

46
110
75

Out: 310 In: 231

Total: 541

[E] Shanahan Road

Out: 1187

In: 1731

Total: 2918

[S] US 23

175

1436

120

US 23 & Trailer Max Drive - TMC

Wed Sep 27, 2023

Full Length (6 AM-10 AM, 2 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112806, Location: 40.217885, -83.034089



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

Leg Direction	Trailer Max Driveway Eastbound					US 23 Northbound					US 23 Southbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2023-09-27 6:00AM	0	0	0	0	0	0	95	0	95	0	194	0	0	194	0	289
6:15AM	0	0	0	0	0	0	112	0	112	0	285	0	2	287	0	399
6:30AM	0	0	0	0	0	1	153	0	154	0	320	0	0	320	0	474
6:45AM	0	0	0	0	0	2	180	0	182	0	329	0	0	329	0	511
Hourly Total	0	0	0	0	0	3	540	0	543	0	1128	0	2	1130	0	1673
7:00AM	0	2	0	2	0	1	214	0	215	0	379	0	1	380	0	597
7:15AM	1	0	0	1	0	0	220	0	220	0	407	0	2	409	0	630
7:30AM	0	0	0	0	0	0	303	0	303	0	442	0	2	444	0	747
7:45AM	5	1	0	6	0	1	253	1	255	0	414	2	5	421	0	682
Hourly Total	6	3	0	9	0	2	990	1	993	0	1642	2	10	1654	0	2656
8:00AM	1	1	0	2	0	0	269	1	270	0	386	2	0	388	0	660
8:15AM	2	3	0	5	0	0	254	0	254	0	374	0	3	377	0	636
8:30AM	1	1	0	2	0	0	241	1	242	0	394	2	1	397	0	641
8:45AM	0	0	0	0	0	1	286	0	287	0	372	0	0	372	0	659
Hourly Total	4	5	0	9	0	1	1050	2	1053	0	1526	4	4	1534	0	2596
9:00AM	0	1	0	1	0	3	272	0	275	0	297	1	2	300	1	576
9:15AM	0	1	0	1	0	1	277	0	278	0	283	0	2	285	0	564
9:30AM	0	0	0	0	0	1	215	0	216	0	274	0	5	279	0	495
9:45AM	0	0	0	0	0	0	260	0	260	0	274	0	5	279	0	539
Hourly Total	0	2	0	2	0	5	1024	0	1029	0	1128	1	14	1143	1	2174
2:00PM	2	1	0	3	0	0	304	0	304	0	256	0	1	257	0	564
2:15PM	0	0	0	0	0	0	304	0	304	0	269	0	3	272	0	576
2:30PM	1	0	0	1	0	0	331	0	331	0	290	0	2	292	0	624
2:45PM	2	0	0	2	0	0	313	0	313	0	269	0	3	272	0	587
Hourly Total	5	1	0	6	0	0	1252	0	1252	0	1084	0	9	1093	0	2351
3:00PM	1	1	0	2	0	1	290	1	292	0	263	0	2	265	0	559
3:15PM	3	2	0	5	2	0	357	0	357	0	286	1	6	293	0	655
3:30PM	2	0	0	2	0	0	387	0	387	0	313	0	6	319	0	708
3:45PM	1	0	0	1	0	0	345	2	347	0	321	0	2	323	0	671
Hourly Total	7	3	0	10	2	1	1379	3	1383	0	1183	1	16	1200	0	2593
4:00PM	3	0	0	3	0	0	419	1	420	0	289	1	3	293	0	716
4:15PM	0	0	0	0	0	1	404	0	405	0	297	0	2	299	0	704
4:30PM	1	0	0	1	0	0	405	0	405	0	301	2	2	305	0	711
4:45PM	3	0	0	3	0	0	386	1	387	0	290	0	2	292	0	682
Hourly Total	7	0	0	7	0	1	1614	2	1617	0	1177	3	9	1189	0	2813
5:00PM	4	0	0	4	0	0	401	0	401	0	287	0	6	293	0	698
5:15PM	1	0	0	1	0	0	394	0	394	0	310	0	1	311	0	706
5:30PM	2	0	0	2	0	1	411	0	412	0	290	2	3	295	0	709
5:45PM	3	1	0	4	0	0	390	0	390	0	268	2	4	274	0	668
Hourly Total	10	1	0	11	0	1	1596	0	1597	0	1155	4	14	1173	0	2781
6:00PM	0	4	0	4	0	0	363	1	364	0	236	0	3	239	0	607
6:15PM	0	1	0	1	0	0	327	0	327	0	240	0	3	243	0	571
6:30PM	0	0	0	0	0	0	294	0	294	0	223	0	2	225	0	519
6:45PM	0	1	0	1	0	0	268	1	269	0	193	0	1	194	0	464
Hourly Total	0	6	0	6	0	0	1252	2	1254	0	892	0	9	901	0	2161
Total	39	21	0	60	2	14	10697	10	10721	0	10915	15	87	11017	1	21798
% Approach	65.0%	35.0%	0%	-	-	0.1%	99.8%	0.1%	-	-	99.1%	0.1%	0.8%	-	-	-
% Total	0.2%	0.1%	0%	0.3%	-	0.1%	49.1%	0%	49.2%	-	50.1%	0.1%	0.4%	50.5%	-	-
Lights and Motorcycles	26	16	0	42	-	11	9955	9	9975	-	10221	11	84	10316	-	20333
% Lights and Motorcycles	66.7%	76.2%	0%	70.0%	-	78.6%	93.1%	90.0%	93.0%	-	93.6%	73.3%	96.6%	93.6%	-	93.3%
Heavy	13	5	0	18	-	3	742	1	746	-	694	4	3	701	-	1465
% Heavy	33.3%	23.8%	0%	30.0%	-	21.4%	6.9%	10.0%	7.0%	-	6.4%	26.7%	3.4%	6.4%	-	6.7%
Pedestrians	-	-	-	-	2	-	-	-	-	0	-	-	-	-	1	-
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	100%	-

Leg Direction	Trailer Max Driveway Eastbound	US 23 Northbound	US 23 Southbound	
Time	L R U App Ped*	L T U App Ped*	T R U App Ped*	Int

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

US 23 & Trailer Max Drive - TMC

Wed Sep 27, 2023

Full Length (6 AM-10 AM, 2 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112806, Location: 40.217885, -83.034089



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

[N] US 23

Total: 21840

In: 11017

Out: 10823

15

10915

87

1

[W] Trailer Max Driveway

Total: 89

In: 60 Out: 29

239

1

1

10

14

10697

Out: 10946

In: 10721

Total: 21667

[S] US 23

US 23 & Trailer Max Drive - TMC

Wed Sep 27, 2023

AM Peak (7:30 AM - 8:30 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112806, Location: 40.217885, -83.034089



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

Leg Direction	Trailer Max Driveway Eastbound					US 23 Northbound					US 23 Southbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2023-09-27 7:30AM	0	0	0	0	0	0	303	0	303	0	442	0	2	444	0	747
7:45AM	5	1	0	6	0	1	253	1	255	0	414	2	5	421	0	682
8:00AM	1	1	0	2	0	0	269	1	270	0	386	2	0	388	0	660
8:15AM	2	3	0	5	0	0	254	0	254	0	374	0	3	377	0	636
Total	8	5	0	13	0	1	1079	2	1082	0	1616	4	10	1630	0	2725
% Approach	61.5%	38.5%	0%	-	-	0.1%	99.7%	0.2%	-	-	99.1%	0.2%	0.6%	-	-	-
% Total	0.3%	0.2%	0%	0.5%	-	0%	39.6%	0.1%	39.7%	-	59.3%	0.1%	0.4%	59.8%	-	-
PHF	0.400	0.417	-	0.542	-	0.250	0.890	0.500	0.893	-	0.914	0.500	0.500	0.918	-	0.912
Lights and Motorcycles	4	3	0	7	-	0	972	2	974	-	1528	3	9	1540	-	2521
% Lights and Motorcycles	50.0%	60.0%	0%	53.8%	-	0%	90.1%	100%	90.0%	-	94.6%	75.0%	90.0%	94.5%	-	92.5%
Heavy	4	2	0	6	-	1	107	0	108	-	88	1	1	90	-	204
% Heavy	50.0%	40.0%	0%	46.2%	-	100%	9.9%	0%	10.0%	-	5.4%	25.0%	10.0%	5.5%	-	7.5%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

US 23 & Trailer Max Drive - TMC

Wed Sep 27, 2023

AM Peak (7:30 AM - 8:30 AM)

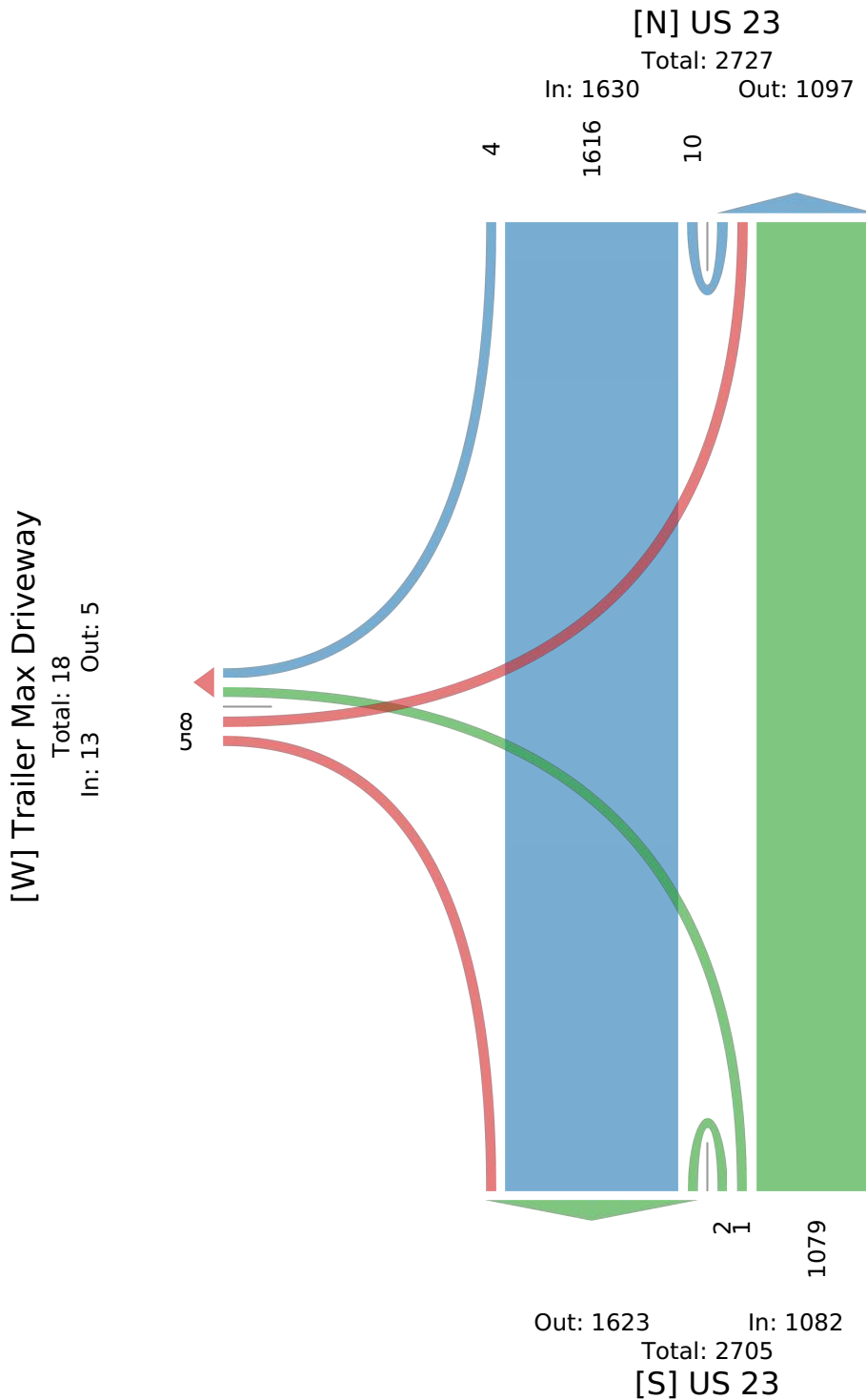
All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112806, Location: 40.217885, -83.034089



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



US 23 & Trailer Max Drive - TMC

Wed Sep 27, 2023

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

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112806, Location: 40.217885, -83.034089



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

Leg Direction	Trailer Max Driveway Eastbound						US 23 Northbound						US 23 Southbound						
Time	L	R	U	App	Ped*		L	T	U	App	Ped*		T	R	U	App	Ped*	Int	
2023-09-27 4:00PM	3	0	0	3	0		0	419	1	420	0		289	1	3	293	0		716
4:15PM	0	0	0	0	0		1	404	0	405	0		297	0	2	299	0		704
4:30PM	1	0	0	1	0		0	405	0	405	0		301	2	2	305	0		711
4:45PM	3	0	0	3	0		0	386	1	387	0		290	0	2	292	0		682
Total	7	0	0	7	0		1	1614	2	1617	0		1177	3	9	1189	0		2813
% Approach	100%	0%	0%	-	-		0.1%	99.8%	0.1%	-	-		99.0%	0.3%	0.8%	-	-		-
% Total	0.2%	0%	0%	0.2%	-		0%	57.4%	0.1%	57.5%	-		41.8%	0.1%	0.3%	42.3%	-		-
PHF	0.583	-	-	0.583	-		0.250	0.963	0.500	0.963	-		0.978	0.375	0.750	0.975	-		0.982
Lights and Motorcycles	4	0	0	4	-		1	1541	1	1543	-		1106	3	9	1118	-		2665
% Lights and Motorcycles	57.1%	0%	0%	57.1%	-		100%	95.5%	50.0%	95.4%	-		94.0%	100%	100%	94.0%	-		94.7%
Heavy	3	0	0	3	-		0	73	1	74	-		71	0	0	71	-		148
% Heavy	42.9%	0%	0%	42.9%	-		0%	4.5%	50.0%	4.6%	-		6.0%	0%	0%	6.0%	-		5.3%
Pedestrians	-	-	-	-	0		-	-	-	-	0		-	-	-	-	-		0
% Pedestrians	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-		-

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

US 23 & Trailer Max Drive - TMC

Wed Sep 27, 2023

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

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112806, Location: 40.217885, -83.034089



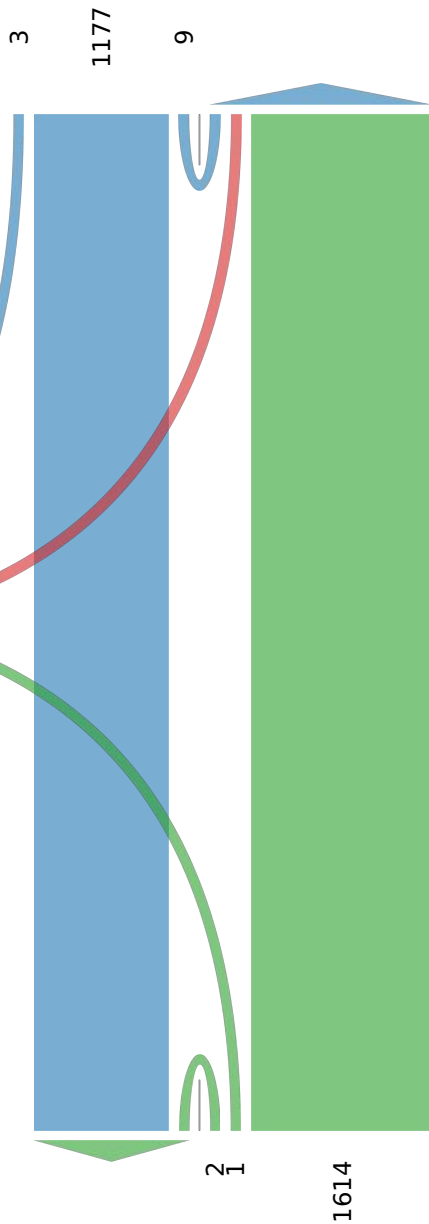
Provided by: Smart Services, Inc.
88 W. Church Street, Newark, OH, 43055, US

[N] US 23

Total: 2819

In: 1189

Out: 1630



[W] Trailer Max Driveway

Total: 11

In: 7 Out: 4

Out: 1179

In: 1617

Total: 2796

[S] US 23

US 23 & Walnut Blvd - TMC

Wed Sep 27, 2023

Full Length (6 AM-10 AM, 2 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112808, Location: 40.220286, -83.034763



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

Leg Direction	Driveway Eastbound							Walnut Boulevard Westbound							US 23 Northbound							US 23 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	
2023-09-27 6:00AM	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	111	0	0	111	0	0	0	208	1	0	209	0	326	
6:15AM	0	0	0	0	0	0	0	0	0	8	0	8	0	0	0	111	3	0	114	0	0	0	298	0	0	298	0	420	
6:30AM	0	0	0	0	0	0	0	1	0	15	0	16	0	0	0	173	3	0	176	0	0	0	309	2	0	311	0	503	
6:45AM	0	0	0	0	0	0	0	0	0	7	0	7	0	0	0	193	3	0	196	0	0	0	326	2	0	328	0	531	
Hourly Total	0	0	0	0	0	0	0	1	0	36	0	37	0	0	0	588	9	0	597	0	0	0	1141	5	0	1146	0	1780	
7:00AM	0	0	0	0	0	0	0	0	0	12	0	12	0	0	0	189	5	0	194	0	0	0	350	0	0	350	0	556	
7:15AM	0	0	0	0	0	0	0	0	0	15	0	15	0	0	0	232	8	0	240	0	0	0	391	1	0	392	0	647	
7:30AM	0	0	0	0	0	0	0	0	0	16	0	16	0	0	0	261	9	0	270	0	0	0	429	0	0	429	0	715	
7:45AM	0	0	0	0	0	0	0	0	0	17	0	17	0	0	0	271	9	0	280	0	0	0	413	0	0	413	0	710	
Hourly Total	0	0	0	0	0	0	0	0	0	60	0	60	0	0	0	953	31	0	984	0	0	0	1583	1	0	1584	0	2628	
8:00AM	0	0	0	0	0	0	0	0	0	17	0	17	0	0	0	244	5	0	249	0	0	0	379	1	0	380	0	646	
8:15AM	0	0	0	0	0	0	0	0	0	16	0	16	0	0	0	235	6	0	241	0	0	0	379	5	0	384	0	641	
8:30AM	0	0	0	0	0	0	0	0	0	19	0	19	0	0	0	261	3	0	264	0	0	0	370	3	0	373	0	656	
8:45AM	0	0	0	0	0	0	0	0	0	8	0	8	0	0	0	266	4	0	270	0	0	0	384	4	0	388	0	666	
Hourly Total	0	0	0	0	0	0	0	0	0	60	0	60	0	0	0	1006	18	0	1024	0	0	0	1512	13	0	1525	0	2609	
9:00AM	0	0	0	0	0	0	0	0	0	9	0	9	0	0	0	277	3	0	280	0	0	0	293	3	0	296	0	585	
9:15AM	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	246	11	0	257	0	0	0	297	4	0	301	0	564	
9:30AM	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	236	4	0	240	0	0	0	283	1	0	284	0	530	
9:45AM	0	0	0	0	0	0	0	0	0	14	0	14	0	0	0	251	4	0	255	0	0	0	276	1	0	277	0	546	
Hourly Total	0	0	0	0	0	0	0	0	0	35	0	35	0	0	0	1010	22	0	1032	0	0	0	1149	9	0	1158	0	2225	
2:00PM	0	0	0	0	0	0	0	0	0	11	0	11	0	0	0	298	7	0	305	0	0	0	245	4	0	249	0	565	
2:15PM	0	0	0	0	0	0	0	0	0	9	0	9	0	0	0	291	10	0	301	0	0	0	270	3	0	273	0	583	
2:30PM	0	0	0	0	0	0	0	0	0	11	0	11	0	0	0	346	12	0	358	0	0	0	292	1	0	293	0	662	
2:45PM	0	0	0	0	0	0	0	0	0	11	0	11	4	0	0	304	8	0	312	0	0	0	256	2	0	258	0	581	
Hourly Total	0	0	0	0	0	0	0	0	0	42	0	42	4	0	0	1239	37	0	1276	0	0	0	1063	10	0	1073	0	2391	
3:00PM	0	0	0	0	0	0	0	0	0	7	0	7	4	0	0	292	10	0	302	0	0	0	278	2	0	280	0	589	
3:15PM	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	343	13	0	356	0	0	0	288	1	0	289	0	650	
3:30PM	0	0	0	0	0	0	0	0	0	8	0	8	0	0	0	376	15	0	391	0	0	0	301	5	0	306	0	705	
3:45PM	0	0	0	0	0	0	0	0	0	8	0	8	0	0	0	338	12	0	350	0	0	0	323	0	0	323	0	681	
Hourly Total	0	0	0	0	0	0	0	0	0	28	0	28	4	0	0	1349	50	0	1399	0	0	0	1190	8	0	1198	0	2625	
4:00PM	0	0	0	0	0	0	0	0	0	7	0	7	0	0	0	381	23	0	404	0	0	0	281	1	0	282	0	693	
4:15PM	0	0	0	0	0	0	0	0	0	11	0	11	0	0	0	389	18	0	407	0	0	0	305	2	0	307	0	725	
4:30PM	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	388	12	0	400	0	0	0	308	1	0	309	0	715	
4:45PM	0	0	0	0	0	0	0	0	0	9	0	9	0	0	0	376	21	0	397	0	0	0	292	0	0	292	0	698	
Hourly Total	0	0	0	0	0	0	0	0	0	33	0	33	0	0	0	1534	74	0	1608	0	0	0	1186	4	0	1190	0	2831	
5:00PM	0	0	0	0	0	0	0	0	0	12	0	12	0	0	0	391	17	0	408	0	0	0	292	0	0	292	0	712	
5:15PM	0	0	0	0	0	0	0	0	0	11	0	11	0	0	0	377	9	0	386	0	0	0	312	0	0	312	0	709	
5:30PM	0	0	0	0	0	0	0	0	0	11	0	11	0	0	0	412	11	0	423	0	0	0	267	2	0	269	0	703	
5:45PM	0	0	0	0	0	0	0	0	0	11	0	11	0	0	0	368	19	0	387	0	0	0	269	0	0	269	0	667	
Hourly Total	0	0	0	0	0	0	0	0	0	45	0	45	0	0	0	1548	56	0	1604	0	0	0	1140	2	0	1142	0	2791	
6:00PM	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	354	15	0	369	0	0	0	216	0	0	216	0	591	
6:15PM	0	0	0	0	0	0	0	0	0	9	0	9	0	0	0	306	17	0	323	0	0	0	243	0	0	243	0	575	
6:30PM	0	0	0	0	0	0	0	0	0	9	0	9	0	0	0	295	8	0	303	0	0	0	211	0	0	211	0	523	
6:45PM	0	0	0	0	0	0	0	0	0	14	0	14	0	0	0	250	7	0	257	0	0	0	201	1	0	202	0	473	
Hourly Total	0	0	0	0	0	0	0	0	0	38	0	38	0	0	0	1205	47	0	1252	0	0	0	871	1	0	872	0	2162	
Total	0	0	0	0	0	0	0	1	0	377	0	378	8	0	0	10432	344	0	10776	0	0	0	10835	53	0	10888	0	22042	
% Approach	0%	0%	0%	0%	-	-	-	0.3%	0%	99.7%	0%	-	-	0%	96.8%	3.2%	0%	-	-	0%	99.5%	0.5%	0%	-	-	-	-	-	
% Total	0%	0%	0%	0%	0%	-	-	0%	0%	1.7%	0%	1.7%	-	0%	47.3%	1.6%	0%	48.9%	-	0%	49.2%	0.2%	0%	49.4%	-	-	-	-	
Lights and Motorcycles	0	0	0	0	0	-	-	1	0	355	0	356	-	0	9684	324	0	10008	-	0	10077	51	0	10128	-	20492	-	-	
% Lights and Motorcycles	0%	0%	0%	0%	0%	-	-	100%	0%	94.2%	0%	94.2%	-	0%	92.8%	94.2%	0%	92.9%	-	0%	93.0%	96.2%	0%	93.0%	-	93.0%	-	-	
Heavy	0	0	0	0	0	-	-	0	0	22	0	22	-	0	748	20	0	768	-	0	758	2	0	760	-	1550	-	-	
% Heavy	0%	0%	0%	0%	0%	-	-	0%	0%	5.8%	0%	5.8%	-	0%	7.2%	5.8%	0%	7.1%	-	0%	7.0%	3.8%	0%	7.0%	-	7.0%	-	-	
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	8	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Leg Direction	Driveway Eastbound	Walnut Boulevard Westbound	US 23 Northbound	US 23 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

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

US 23 & Walnut Blvd - TMC

Wed Sep 27, 2023

Full Length (6 AM-10 AM, 2 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112808, Location: 40.220286, -83.034763



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

[N] US 23

Total: 21697

In: 10888

Out: 10809

53

10835

[W] Driveway

Total: 53

In: 0 Out: 53

Out: 10836

In: 10776

Total: 21612

[S] US 23

10432

344

Out: 344 In: 378

Total: 722

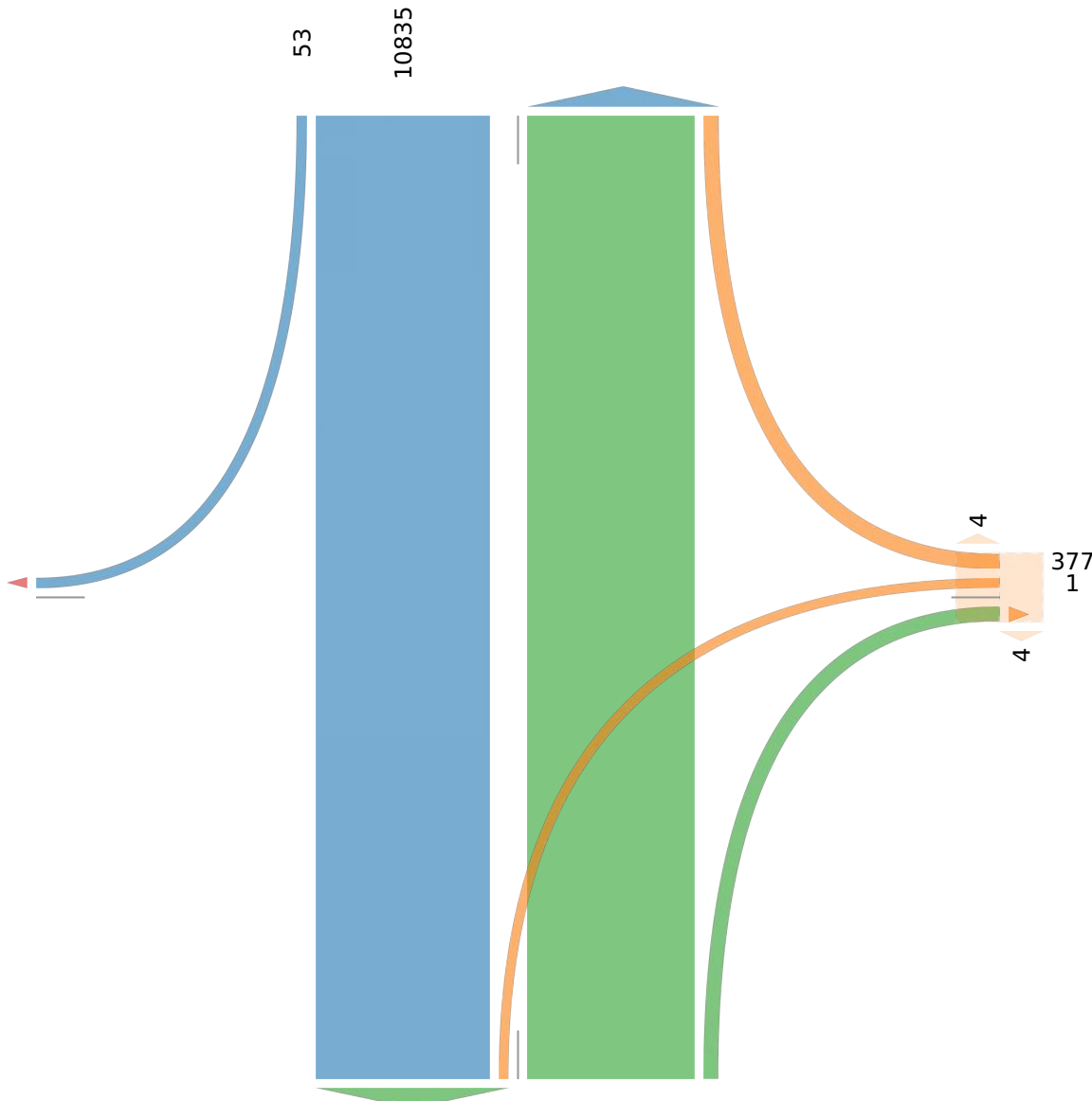
[E] Walnut Boulevard

377

1

4

4



US 23 & Walnut Blvd - TMC

Wed Sep 27, 2023

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112808, Location: 40.220286, -83.034763



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

Leg Direction	Driveway Eastbound							Walnut Boulevard Westbound							US 23 Northbound							US 23 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	
2023-09-27 7:15AM	0	0	0	0	0	0	0	0	0	15	0	15	0	0	0	232	8	0	240	0	0	0	391	1	0	392	0	647	
7:30AM	0	0	0	0	0	0	0	0	0	16	0	16	0	0	0	261	9	0	270	0	0	0	429	0	0	429	0	715	
7:45AM	0	0	0	0	0	0	0	0	0	17	0	17	0	0	0	271	9	0	280	0	0	0	413	0	0	413	0	710	
8:00AM	0	0	0	0	0	0	0	0	0	17	0	17	0	0	0	244	5	0	249	0	0	0	379	1	0	380	0	646	
Total	0	0	0	0	0	0	0	0	0	65	0	65	0	0	0	1008	31	0	1039	0	0	0	1612	2	0	1614	0	2718	
% Approach	0%	0%	0%	0%	-	-	-	0%	0%	100%	0%	-	-	-	0%	97.0%	3.0%	0%	-	-	-	0%	99.9%	0.1%	0%	-	-	-	
% Total	0%	0%	0%	0%	0%	-	-	0%	0%	2.4%	0%	2.4%	-	-	0%	37.1%	1.1%	0%	38.2%	-	-	0%	59.3%	0.1%	0%	59.4%	-	-	
PHF	-	-	-	-	-	-	-	-	-	0.956	-	0.956	-	-	-	0.930	0.861	-	0.928	-	-	-	0.939	0.500	-	0.941	-	0.950	
Lights and Motorcycles	0	0	0	0	0	-	-	0	0	62	0	62	-	0	0	911	26	0	937	-	0	0	1499	2	0	1501	-	2500	
% Lights and Motorcycles	0%	0%	0%	0%	-	-	-	0%	0%	95.4%	0%	95.4%	-	0%	0%	90.4%	83.9%	0%	90.2%	-	0%	0%	93.0%	100%	0%	93.0%	-	92.0%	
Heavy	0	0	0	0	0	-	-	0	0	3	0	3	-	0	0	97	5	0	102	-	0	0	113	0	0	113	-	218	
% Heavy	0%	0%	0%	0%	-	-	-	0%	0%	4.6%	0%	4.6%	-	0%	0%	9.6%	16.1%	0%	9.8%	-	0%	0%	7.0%	0%	0%	7.0%	-	8.0%	
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-		
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

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

US 23 & Walnut Blvd - TMC

Wed Sep 27, 2023

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112808, Location: 40.220286, -83.034763



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

[N] US 23

Total: 2687

In: 1614

Out: 1073

2

1612

[W] Driveway

Total: 2

In: 0 Out: 2

65

Out: 31 In: 65

Total: 96

[E] Walnut Boulevard

1008

31

Out: 1612

In: 1039

Total: 2651

[S] US 23

US 23 & Walnut Blvd - TMC

Wed Sep 27, 2023

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112808, Location: 40.220286, -83.034763



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

Leg Direction	Driveway Eastbound							Walnut Boulevard Westbound							US 23 Northbound							US 23 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	
2023-09-27 4:15PM	0	0	0	0	0	0	0	0	0	11	0	11	0	0	0	389	18	0	407	0	0	0	305	2	0	307	0	725	
4:30PM	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	388	12	0	400	0	0	0	308	1	0	309	0	715	
4:45PM	0	0	0	0	0	0	0	0	0	9	0	9	0	0	0	376	21	0	397	0	0	0	292	0	0	292	0	698	
5:00PM	0	0	0	0	0	0	0	0	0	12	0	12	0	0	0	391	17	0	408	0	0	0	292	0	0	292	0	712	
Total	0	0	0	0	0	0	0	0	0	38	0	38	0	0	0	1544	68	0	1612	0	0	0	1197	3	0	1200	0	2850	
% Approach	0%	0%	0%	0%	-	-	-	0%	0%	100%	0%	-	-	-	0%	95.8%	4.2%	0%	-	-	-	0%	99.8%	0.3%	0%	-	-	-	
% Total	0%	0%	0%	0%	0%	-	-	0%	0%	1.3%	0%	1.3%	-	-	0%	54.2%	2.4%	0%	56.6%	-	-	0%	42.0%	0.1%	0%	42.1%	-	-	
PHF	-	-	-	-	-	-	-	-	-	0.792	-	0.792	-	-	-	0.987	0.810	-	0.988	-	-	-	0.972	0.375	-	0.971	-	0.983	
Lights and Motorcycles	0	0	0	0	0	-	-	0	0	37	0	37	-	-	0	1487	66	0	1553	-	-	0	1131	3	0	1134	-	2724	
% Lights and Motorcycles	0%	0%	0%	0%	-	-	-	0%	0%	97.4%	0%	97.4%	-	-	0%	96.3%	97.1%	0%	96.3%	-	-	0%	94.5%	100%	0%	94.5%	-	95.6%	
Heavy	0	0	0	0	0	-	-	0	0	1	0	1	-	-	0	57	2	0	59	-	-	0	66	0	0	66	-	126	
% Heavy	0%	0%	0%	0%	-	-	-	0%	0%	2.6%	0%	2.6%	-	-	0%	3.7%	2.9%	0%	3.7%	-	-	0%	5.5%	0%	0%	5.5%	-	4.4%	
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	0		
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

US 23 & Walnut Blvd - TMC

Wed Sep 27, 2023

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians)

All Movements

ID: 1112808, Location: 40.220286, -83.034763



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

[N] US 23

Total: 2782

In: 1200

Out: 1582

3

1197

[W] Driveway

Total: 3

In: 0 Out: 3

38

Out: 68 In: 38

Total: 106

[E] Walnut Boulevard

1544

68

Out: 1197

In: 1612

Total: 2809

[S] US 23

Trip Generation Data

Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

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: 46

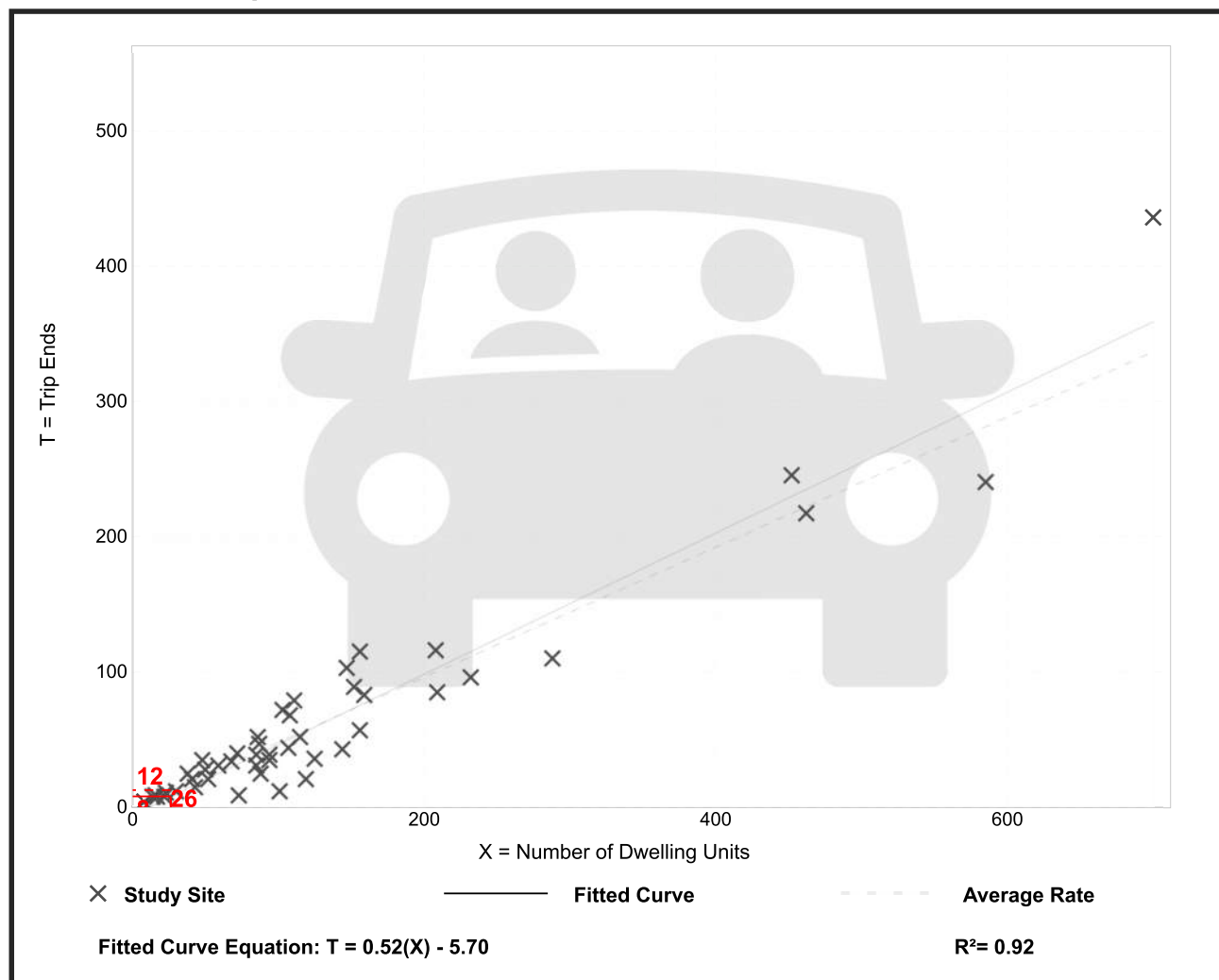
Avg. Num. of Dwelling Units: 135

Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

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: 51

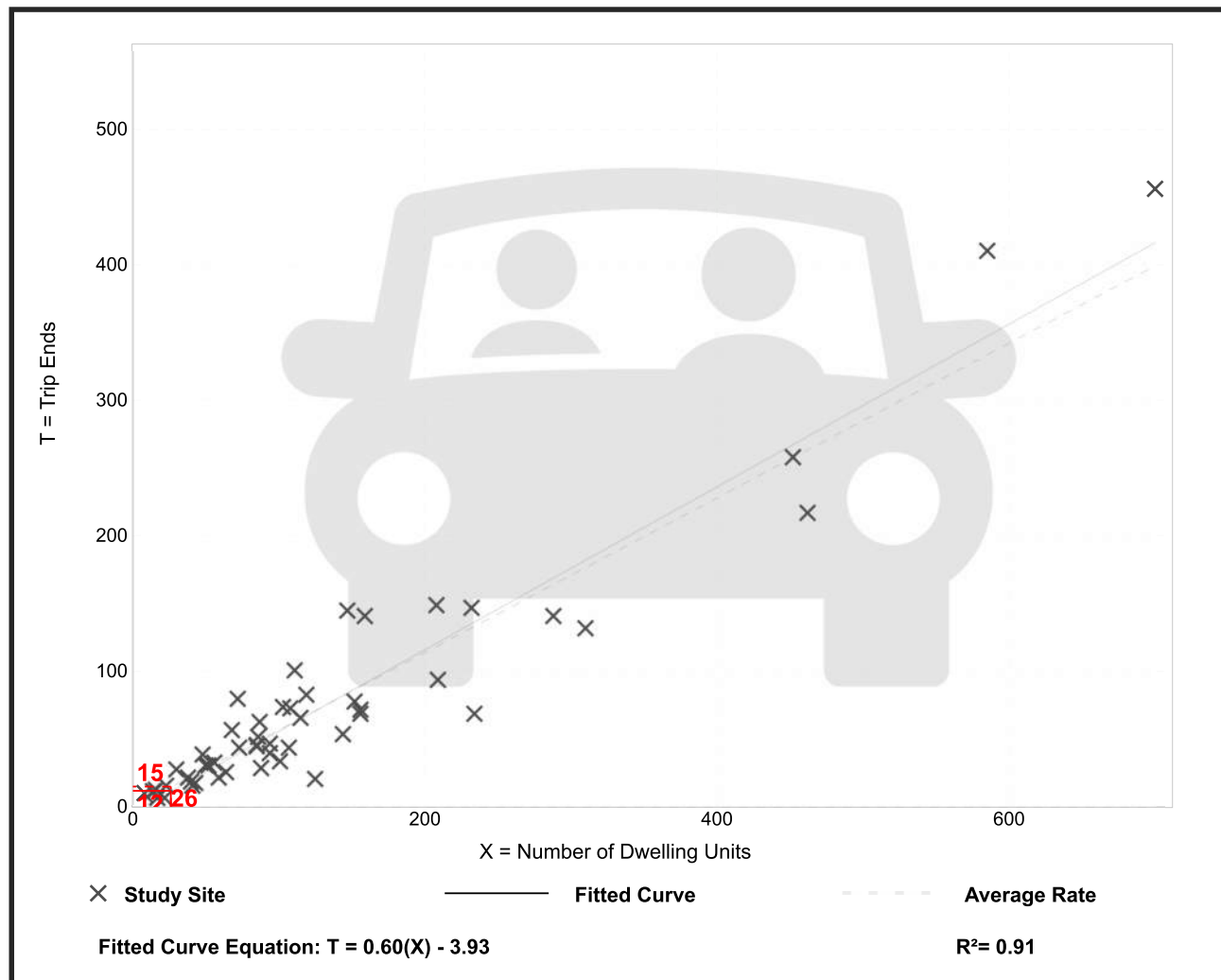
Avg. Num. of Dwelling Units: 136

Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

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: 46

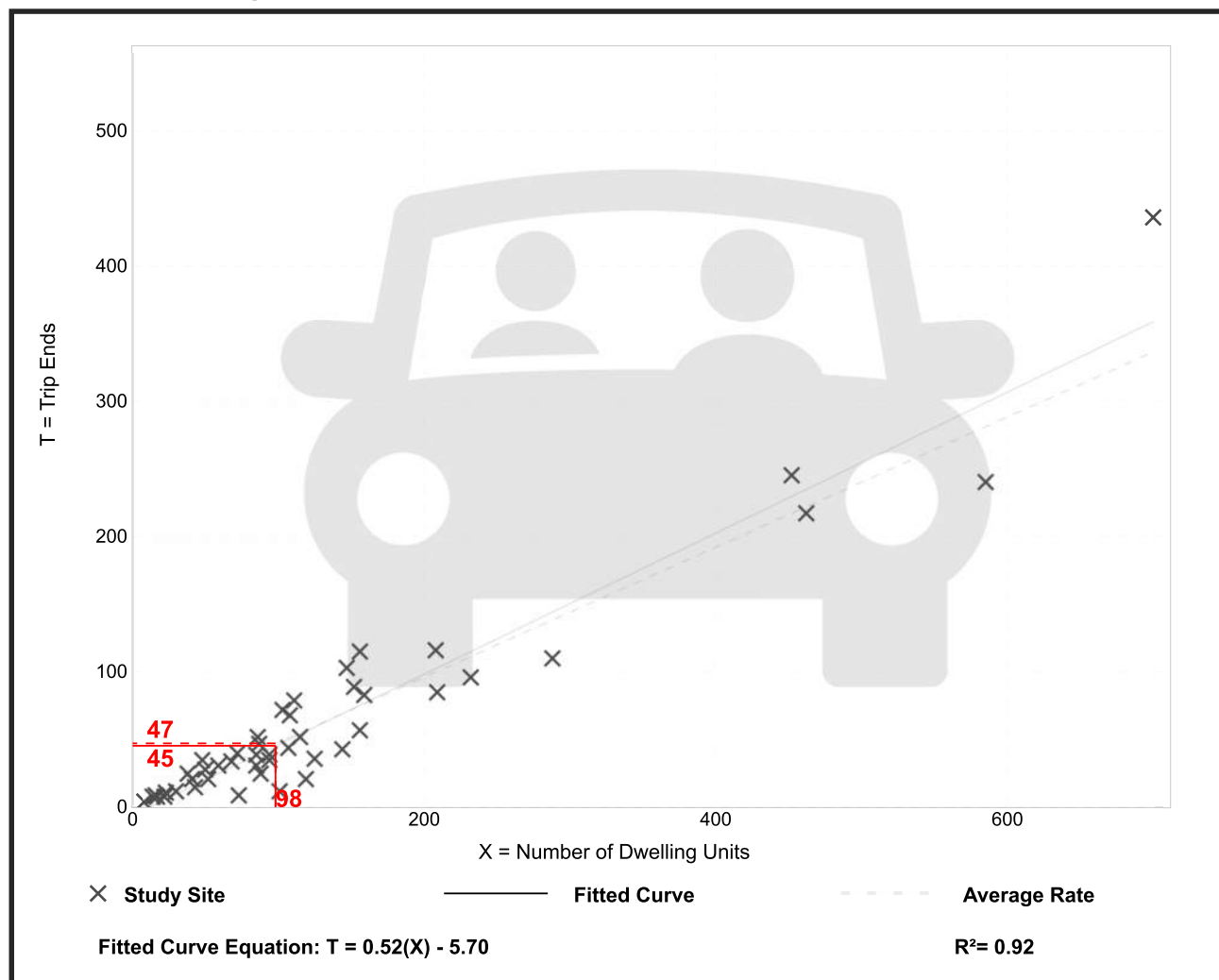
Avg. Num. of Dwelling Units: 135

Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

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: 51

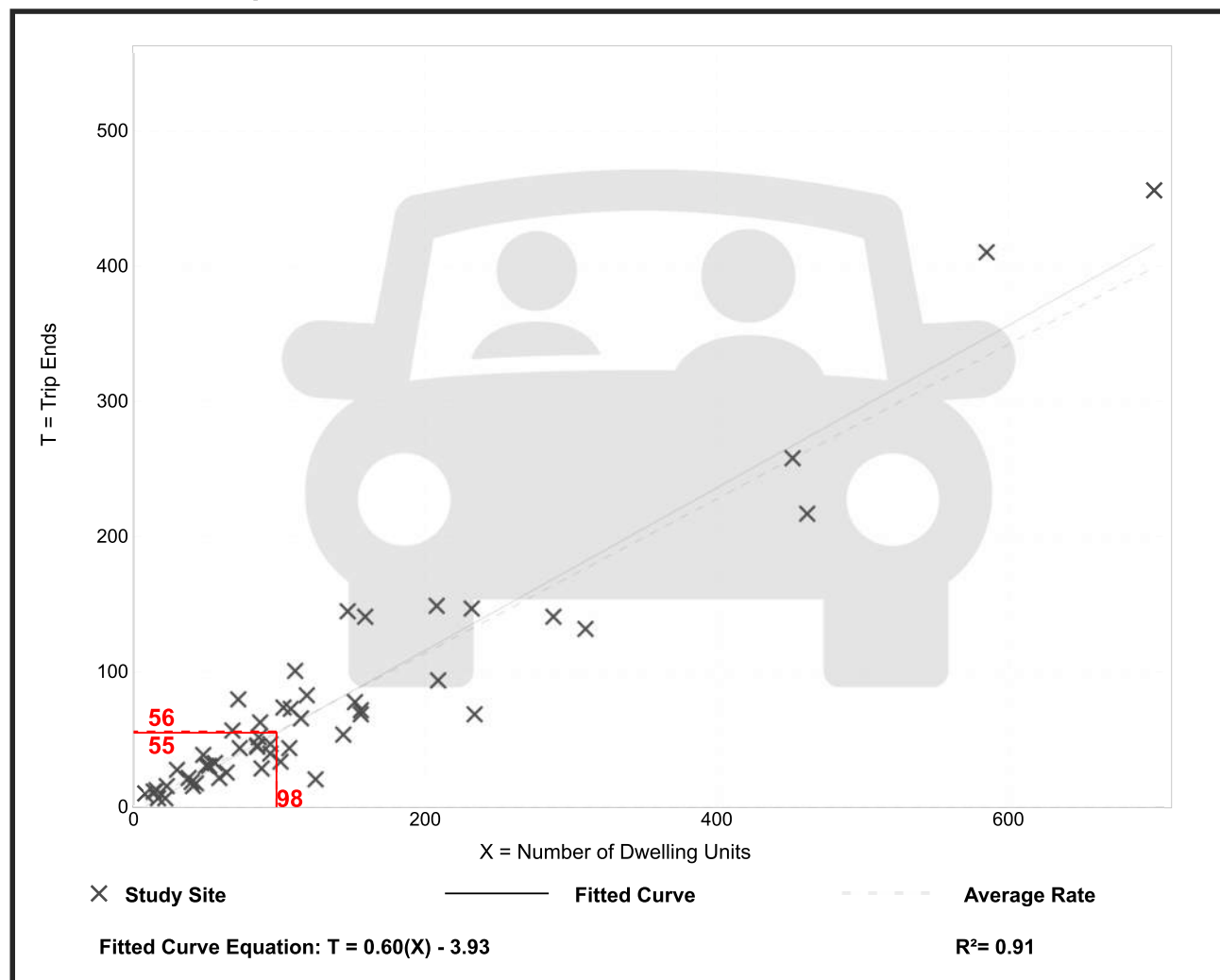
Avg. Num. of Dwelling Units: 136

Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation



Strip Retail Plaza (<40k) (822)

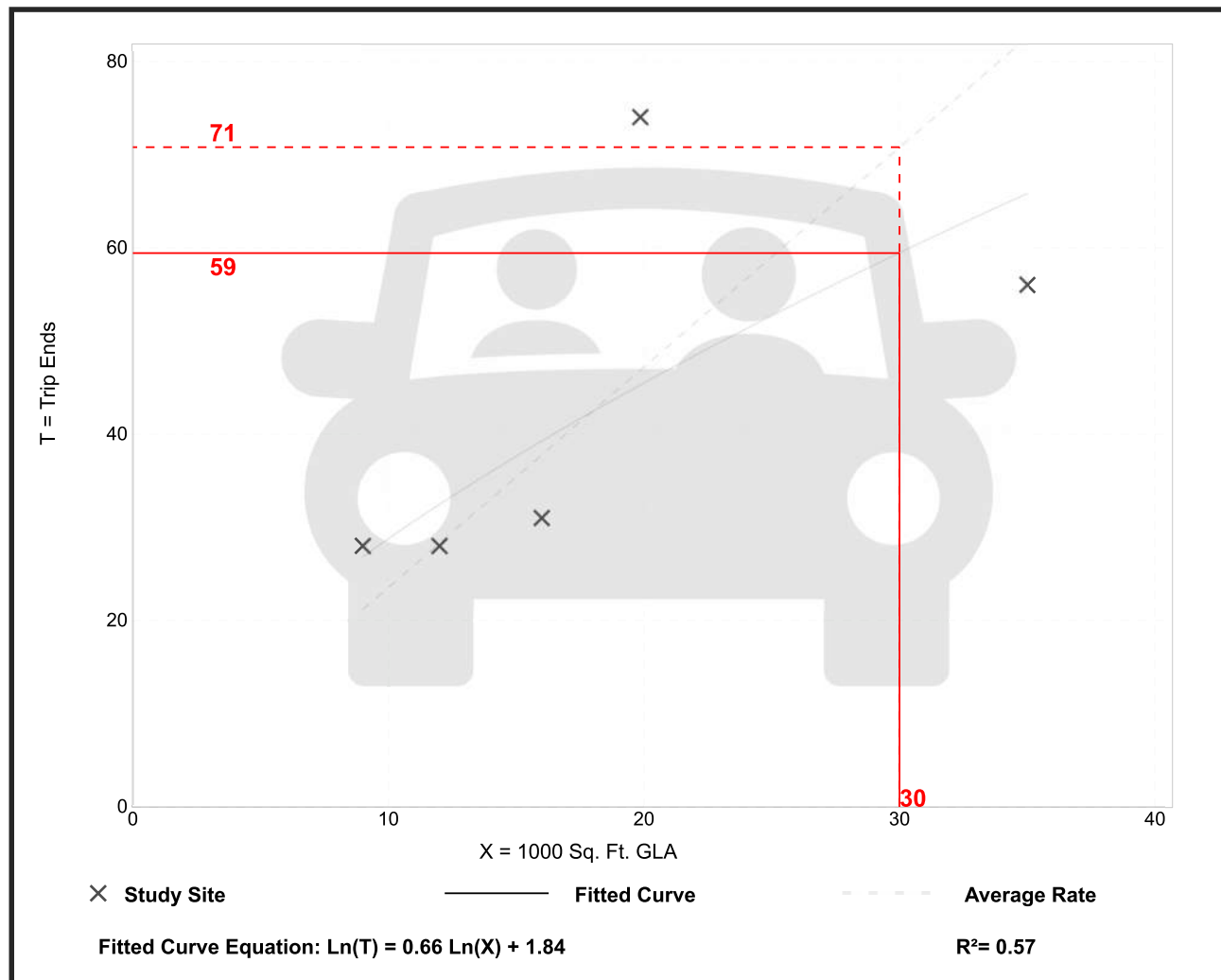
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 5
 Avg. 1000 Sq. Ft. GLA: 18
 Directional Distribution: 60% entering, 40% exiting

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



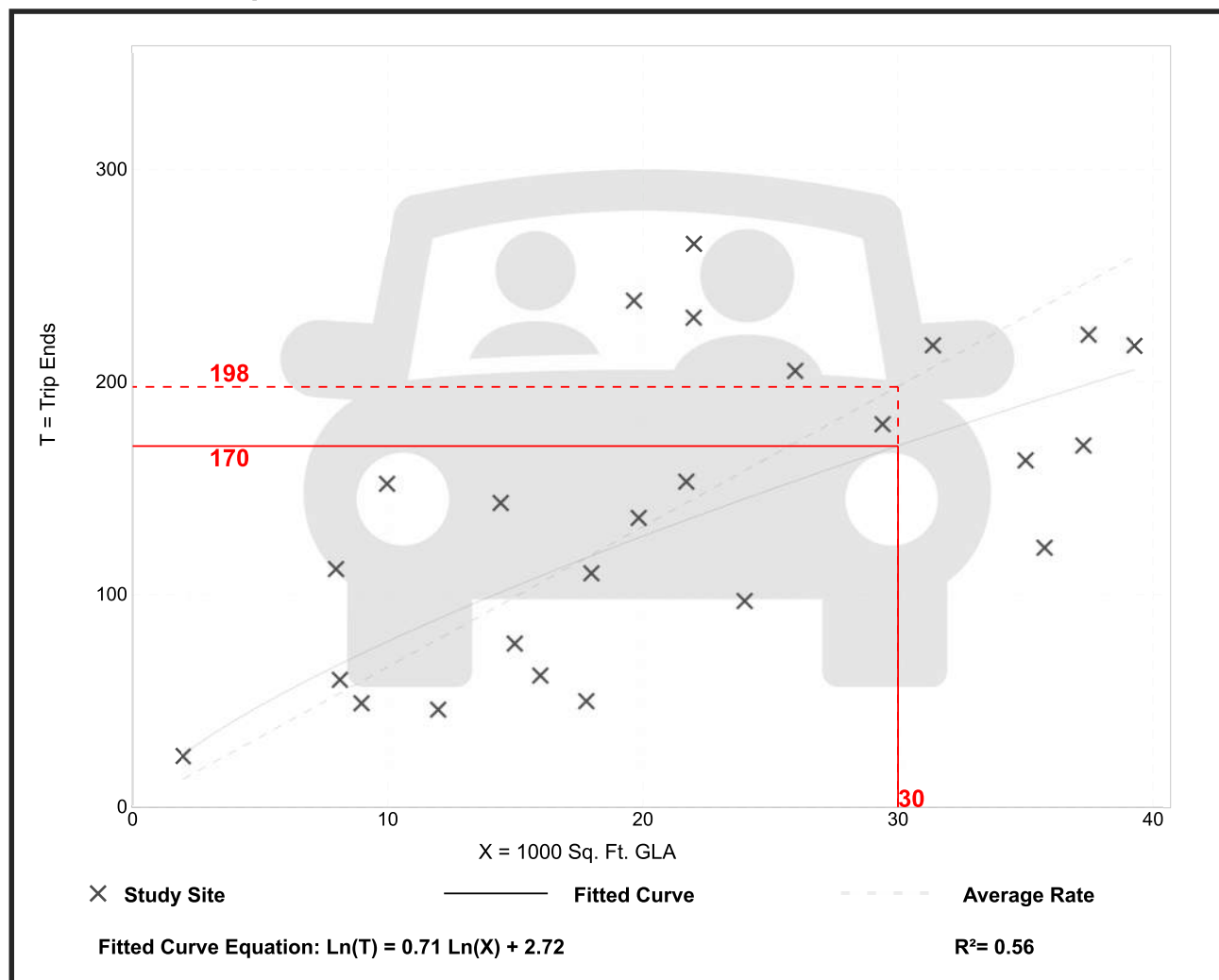
Strip Retail Plaza (<40k) (822)

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



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

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: 49

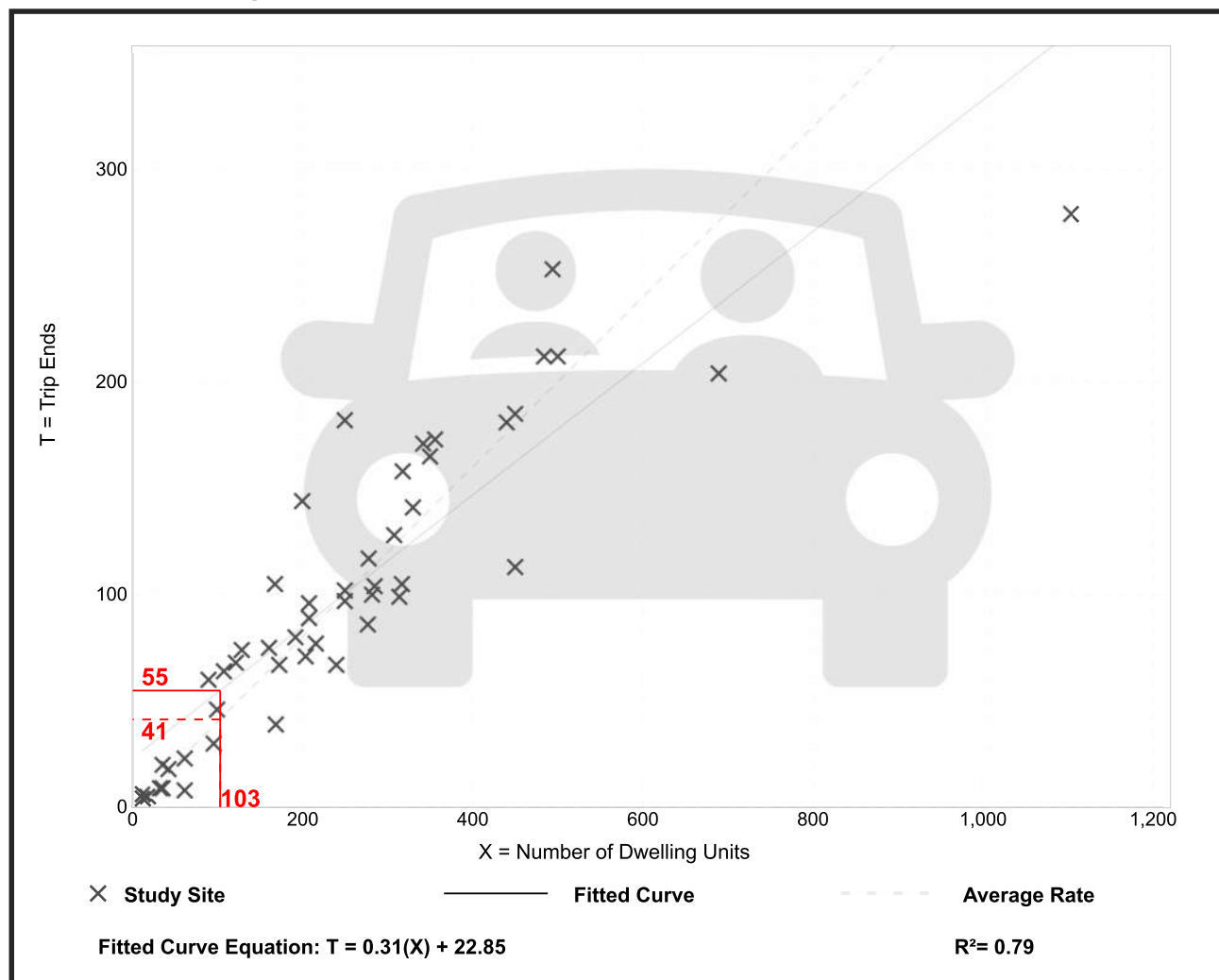
Avg. Num. of Dwelling Units: 249

Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



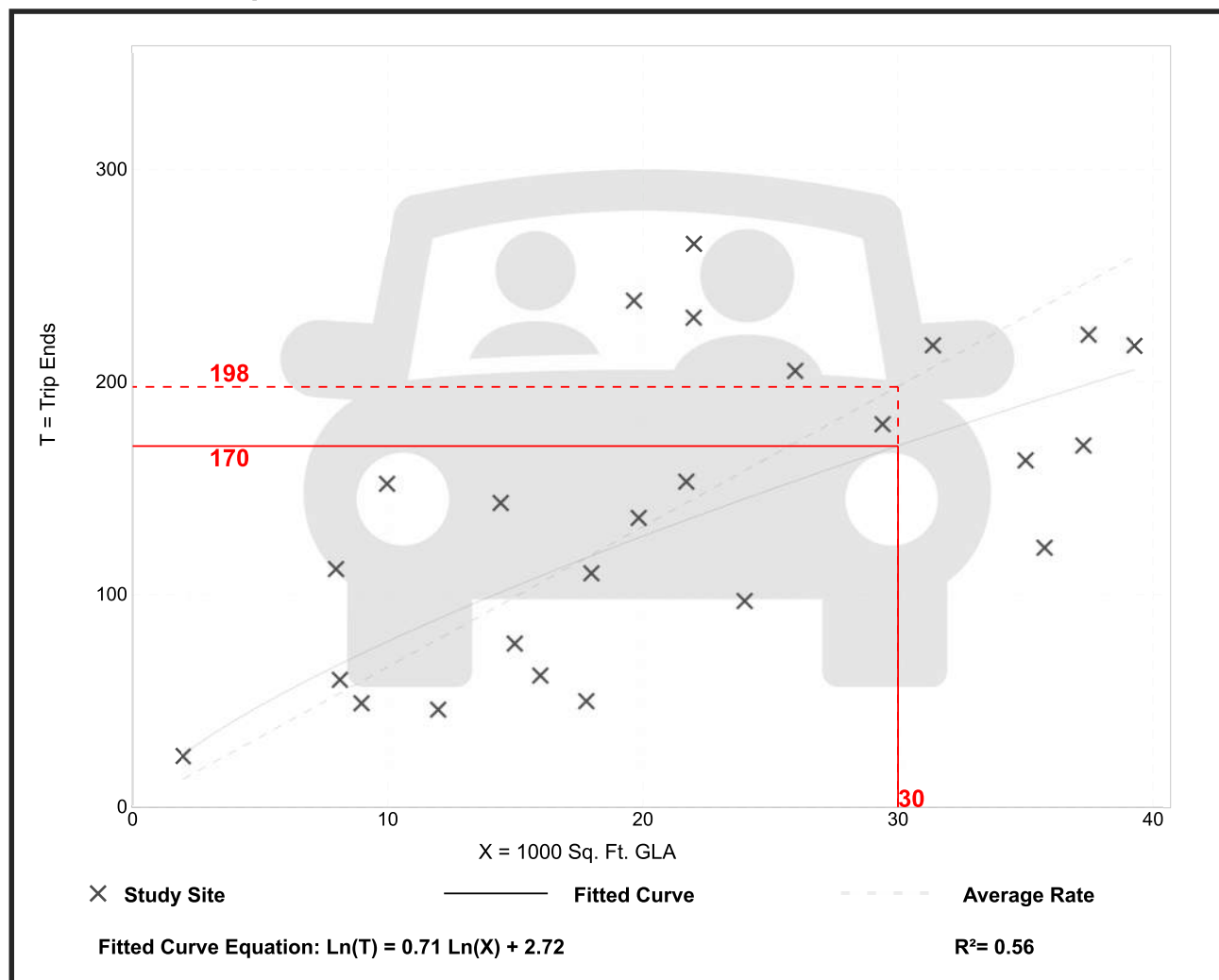
Strip Retail Plaza (<40k) (822)

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



Strip Retail Plaza (<40k) (822)

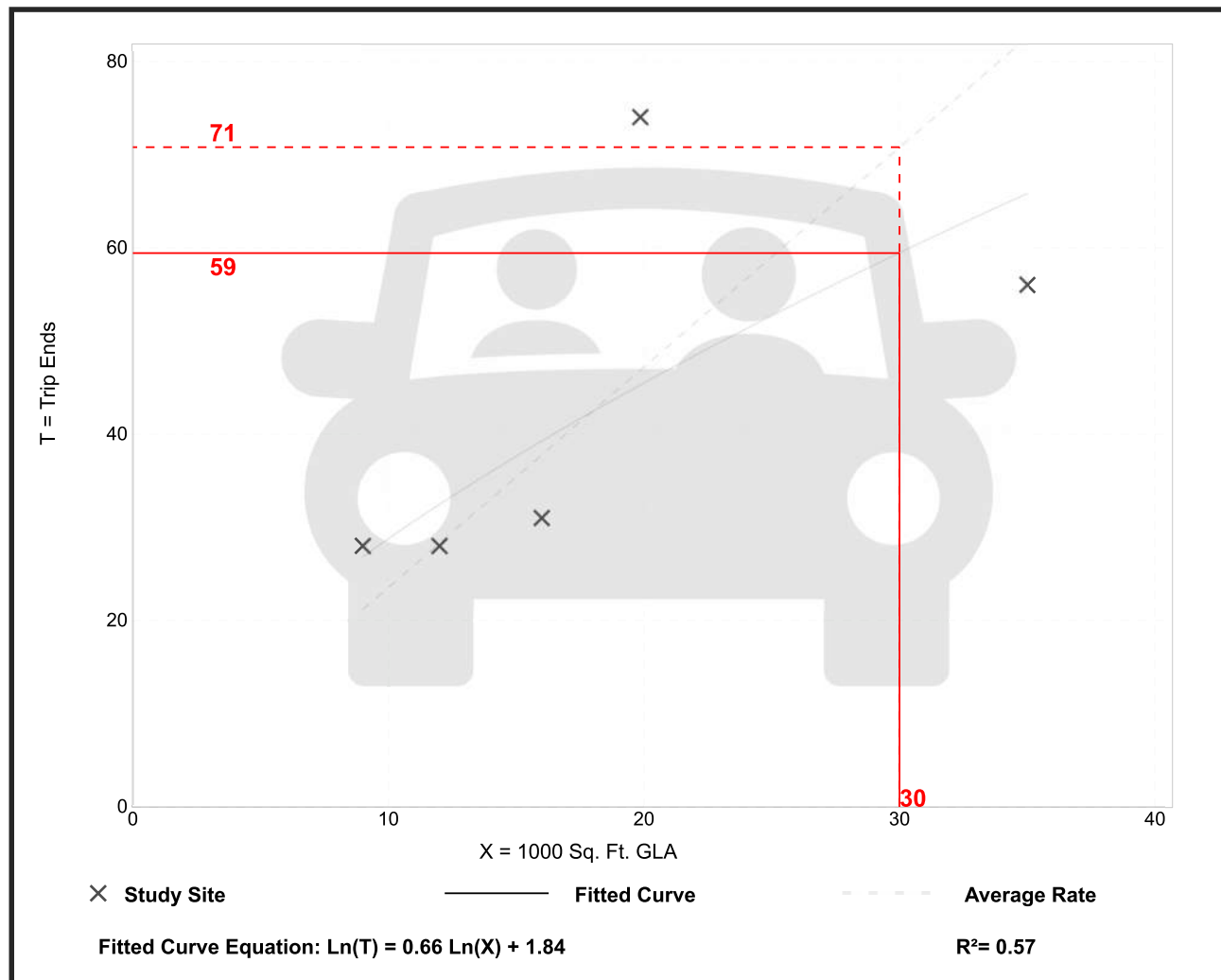
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 5
 Avg. 1000 Sq. Ft. GLA: 18
 Directional Distribution: 60% entering, 40% exiting

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



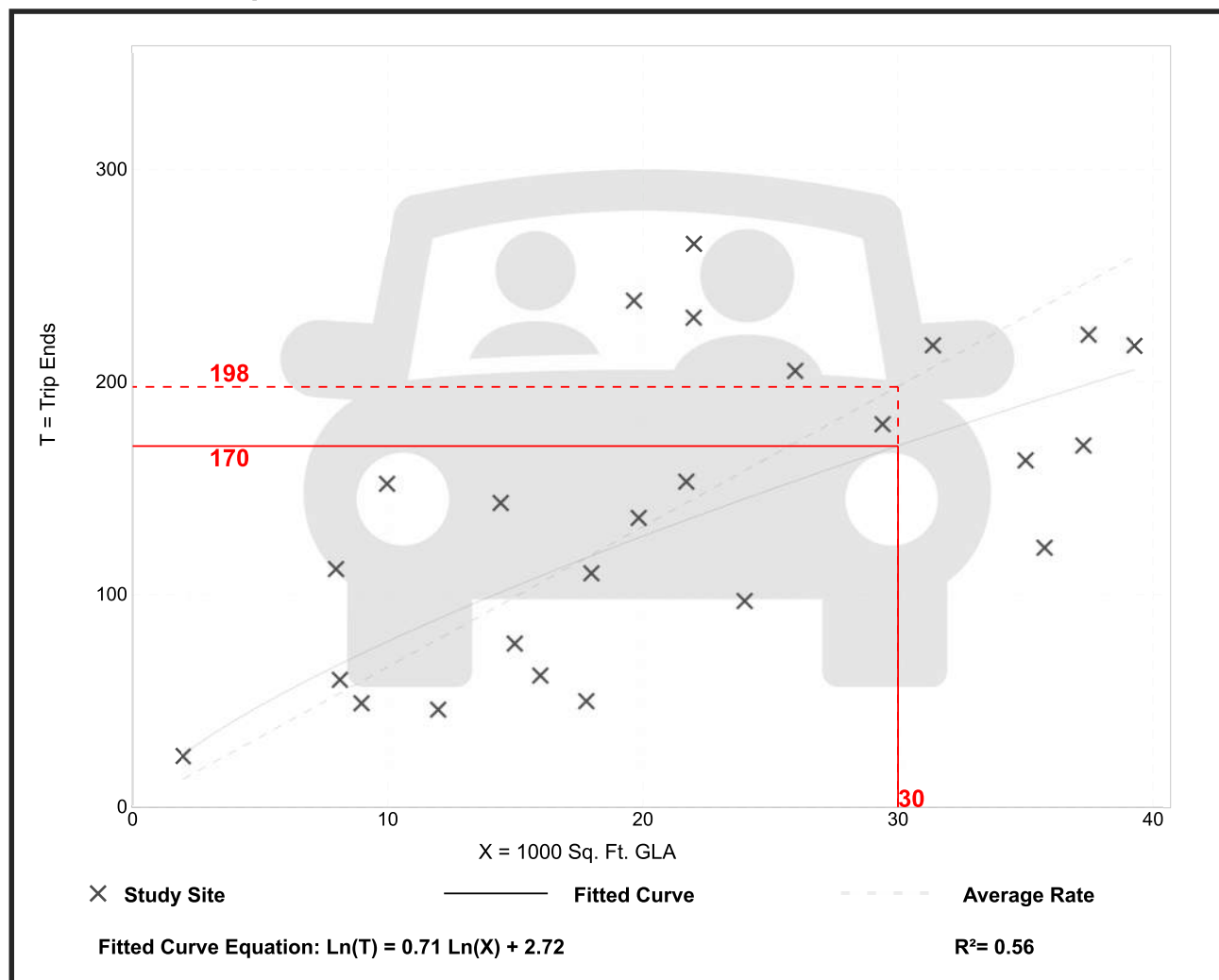
Strip Retail Plaza (<40k) (822)

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



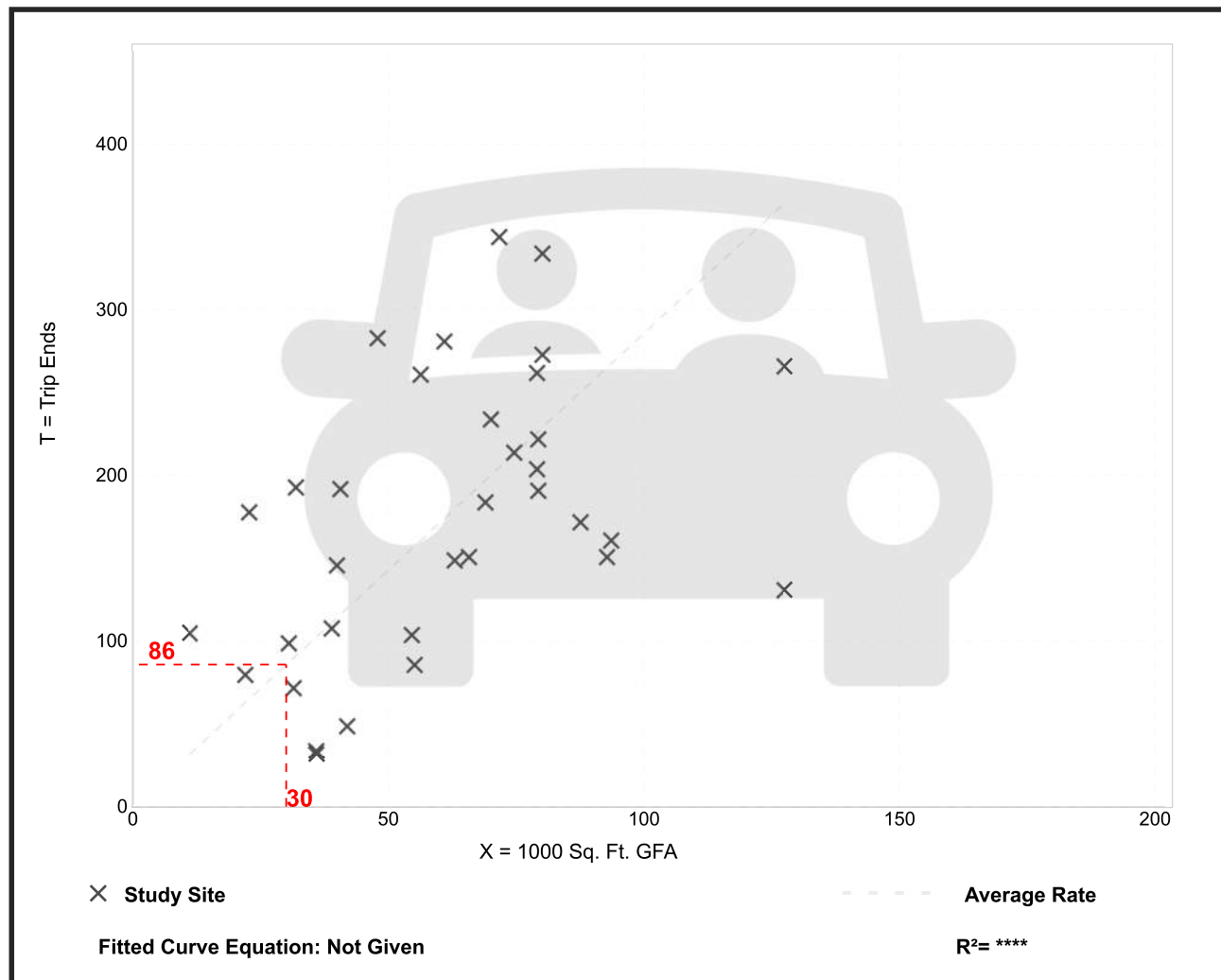
Supermarket (850)

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: 34
 Avg. 1000 Sq. Ft. GFA: 61
 Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.86	0.89 - 9.35	1.45

Data Plot and Equation



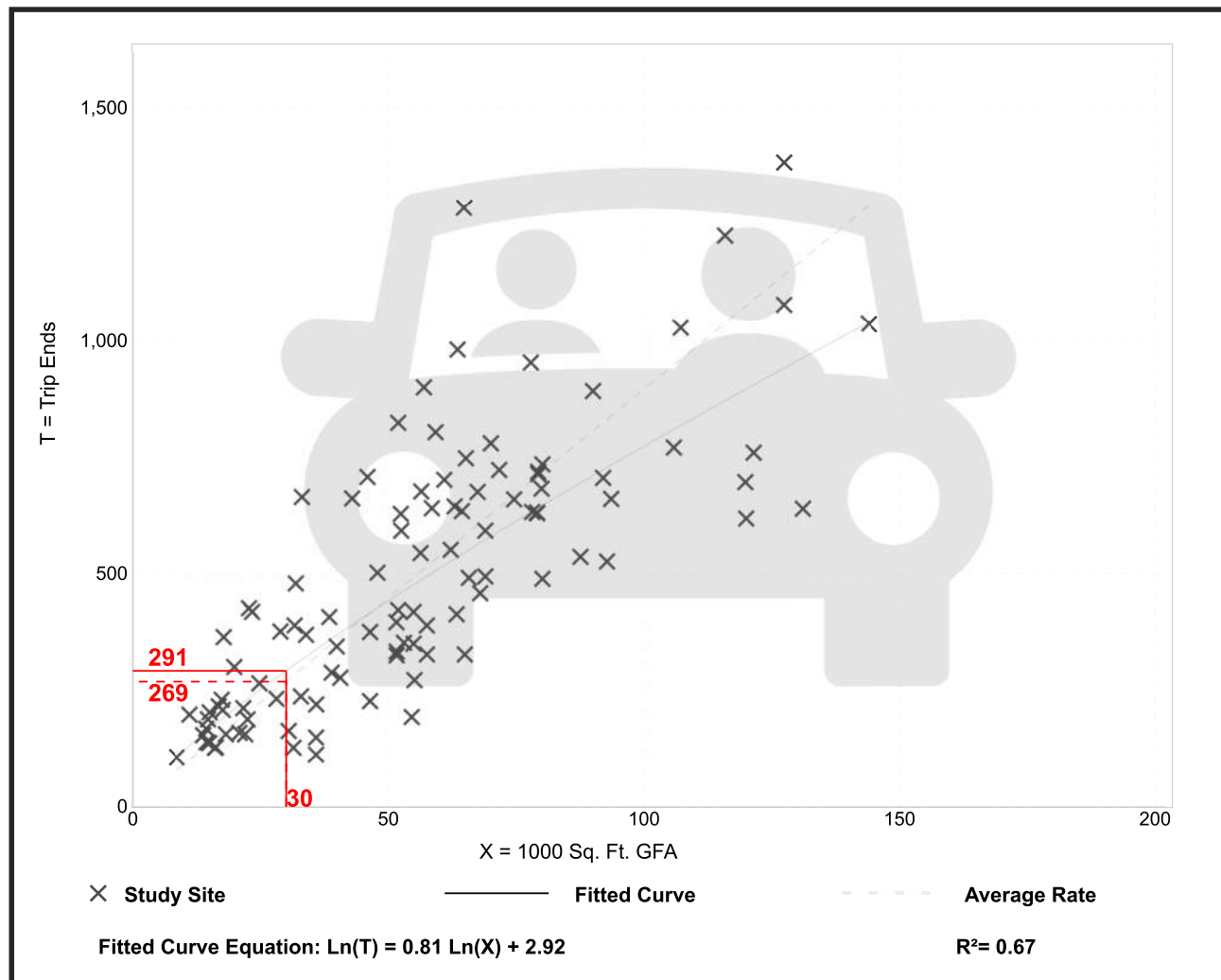
Supermarket (850)

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: 104
 Avg. 1000 Sq. Ft. GFA: 55
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
8.95	3.11 - 20.30	3.32

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

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: 46

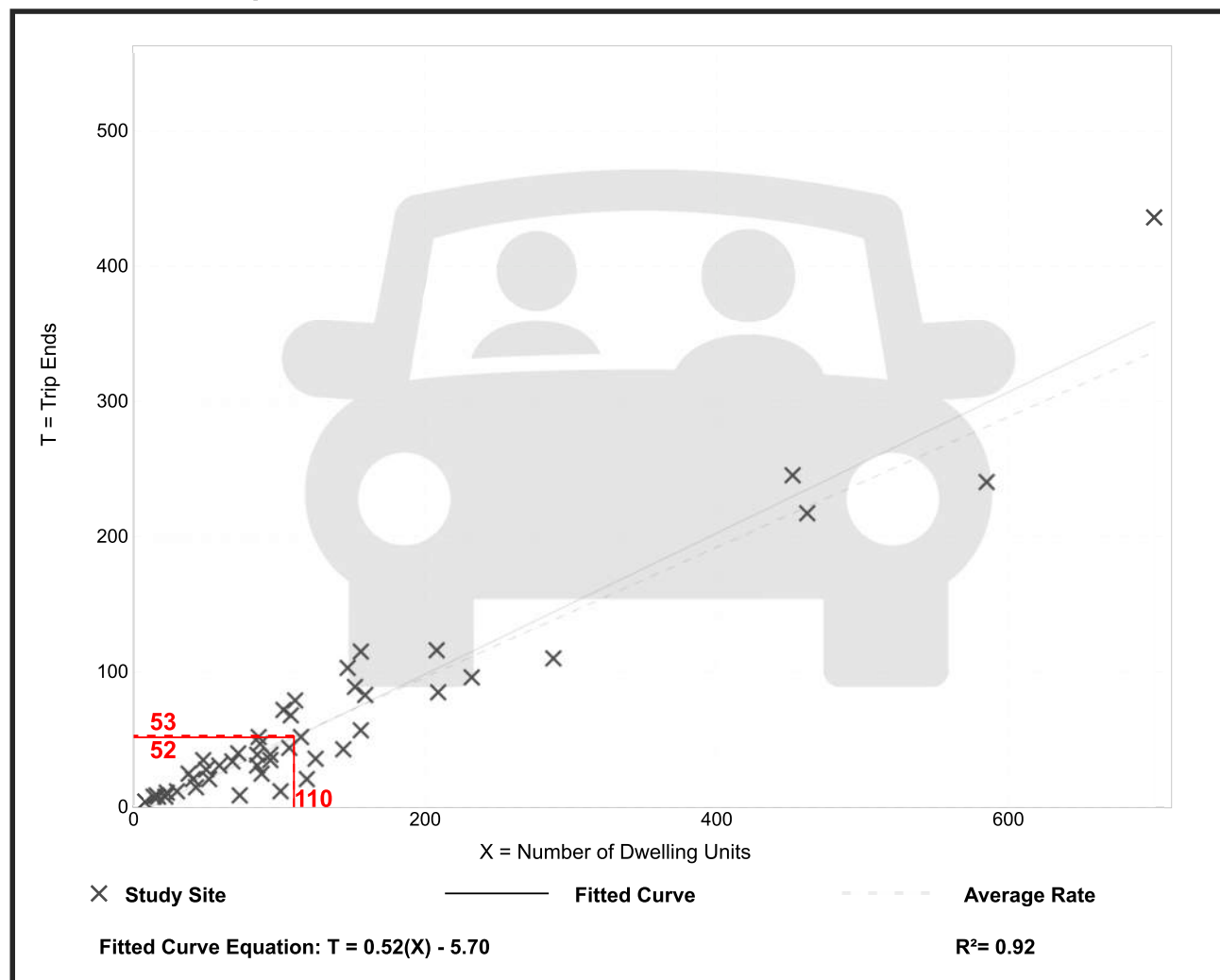
Avg. Num. of Dwelling Units: 135

Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

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: 51

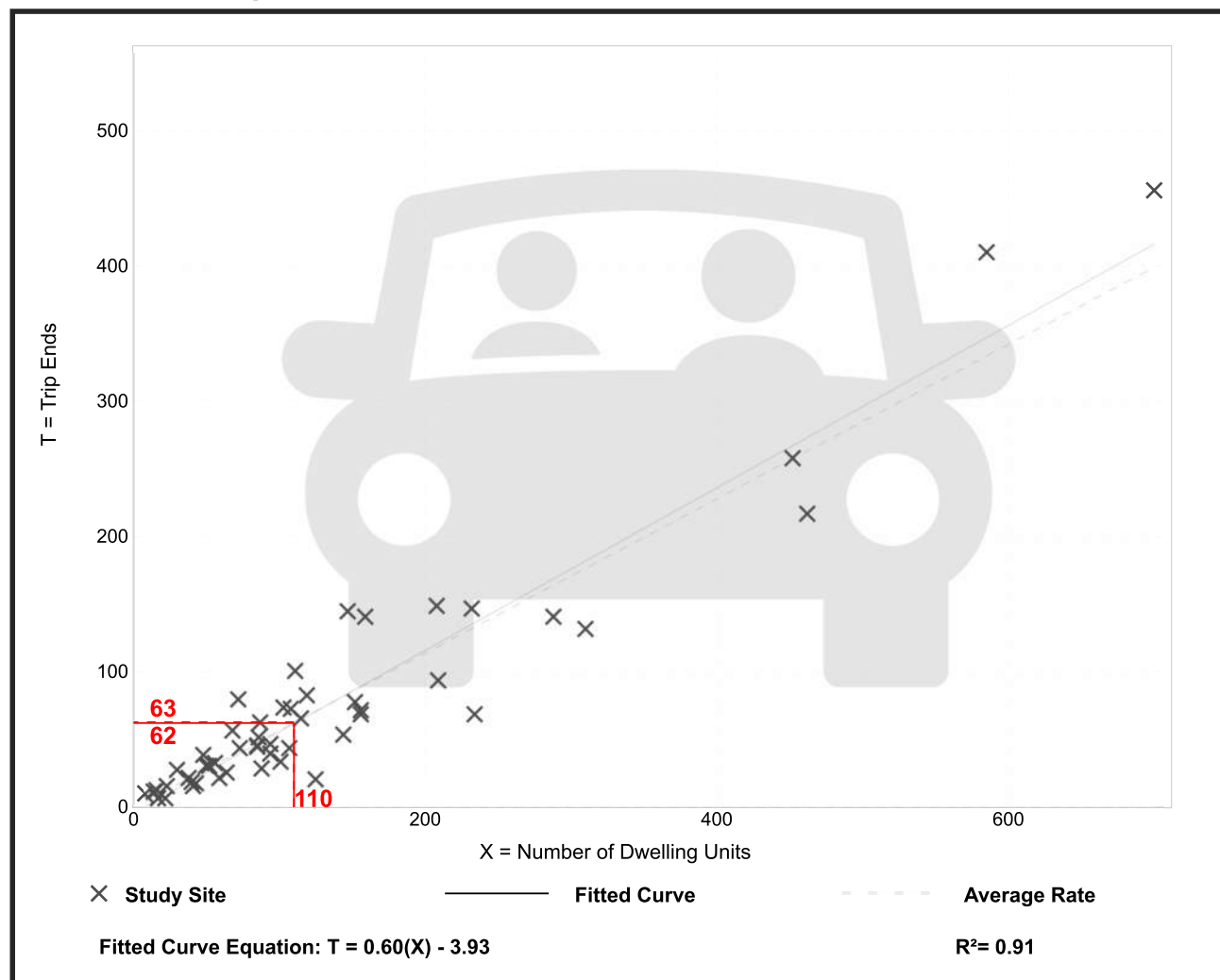
Avg. Num. of Dwelling Units: 136

Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation



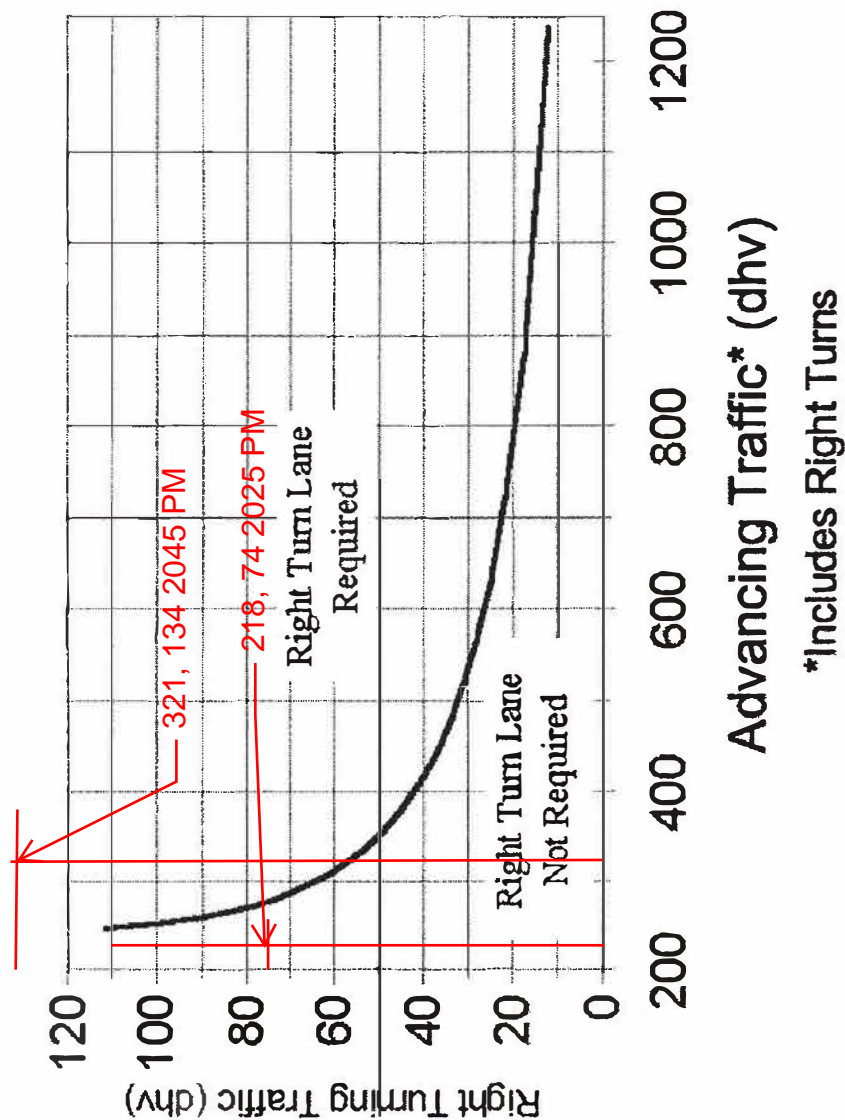
Warrants and Corresponding Data

2-LANE RIGHT TURN LANE WARRANT (HIGH SPEED)

401-6b

REFERENCE SECTION
401.6.3

Peachblow & Crownover Way 2-Lane Highway Right Turn Lane Warrant > 40 mph or 70 kph Posted Speed



October 2004

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

Project Name:

Oak Park

Intersection:

Peachblow & Crownover Way

Project Number:

Year:

2045

Compiled By:

MIM - CT Consultants, Inc.

Condition:

AM Build

General Information:

Approach	WB			
Movement	LT			
Peak Hour	AM			

Type of Traffic Control

Signalized	NO	YES	YES	YES
Unsignalized Stopped Crossroad	NO	NO	NO	NO
Unsignalized Through Road	YES	NO	NO	NO

Design Parameters

Design Speed	55			
Turn Volume (vph)	11			
Approach Volume (vph)	155			
Turn Percentage	7%	#DIV/0!	#DIV/0!	#DIV/0!
High or Low	LOW	#DIV/0!	#DIV/0!	#DIV/0!
Applicable Design Condition (A, B or C)	B	A	A	A
Cycle Length (sec)	60			
Cycles/Hour	60	#DIV/0!	#DIV/0!	#DIV/0!
Average Number of Vehicles/Cycle	1	#DIV/0!	#DIV/0!	#DIV/0!
Storage Length (ft)	50	#DIV/0!	#DIV/0!	#DIV/0!

Design Method

Condition A (Storage Only)	Taper	-	50	50	50
	Storage	-	#DIV/0!	#DIV/0!	#DIV/0!
	Total	-	#DIV/0!	#DIV/0!	#DIV/0!
Condition B (High Speed Decel Only)	Taper	50	-	-	-
	Decel Length	235	-	-	-
	Total	285	-	-	-
Condition C (Moderate Speed Deceleration & Storage)	Taper	-	-	-	-
	Decel Length	-	-	-	-
	Storage	-	-	-	-
	Total	-	-	-	-

Required Storage and/or Decel Length (ft/lane) =	235	#DIV/0!	#DIV/0!	#DIV/0!
Required Turn Lane Length, including 50' taper (ft/lane) =	285	#DIV/0!	#DIV/0!	#DIV/0!

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

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

SIGNAL WARRANT WORKSHEET

Warrant 2, Four-Hour Vehicular Volume

Ohio MUTCD

Intersection: <u>Glenn Pkwy & Peachblow Rd</u>	Year: <u>2025</u>
Project Name: <u>Oak Park</u>	Condition: <u>Build</u>
Project No.: _____	Analyst: <u>ACD - MIM</u>

Section 4C.03 Warrant 2, Four-Hour Vehicular Volume

The Four-Hour Vehicular Volume signal warrant conditions are intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

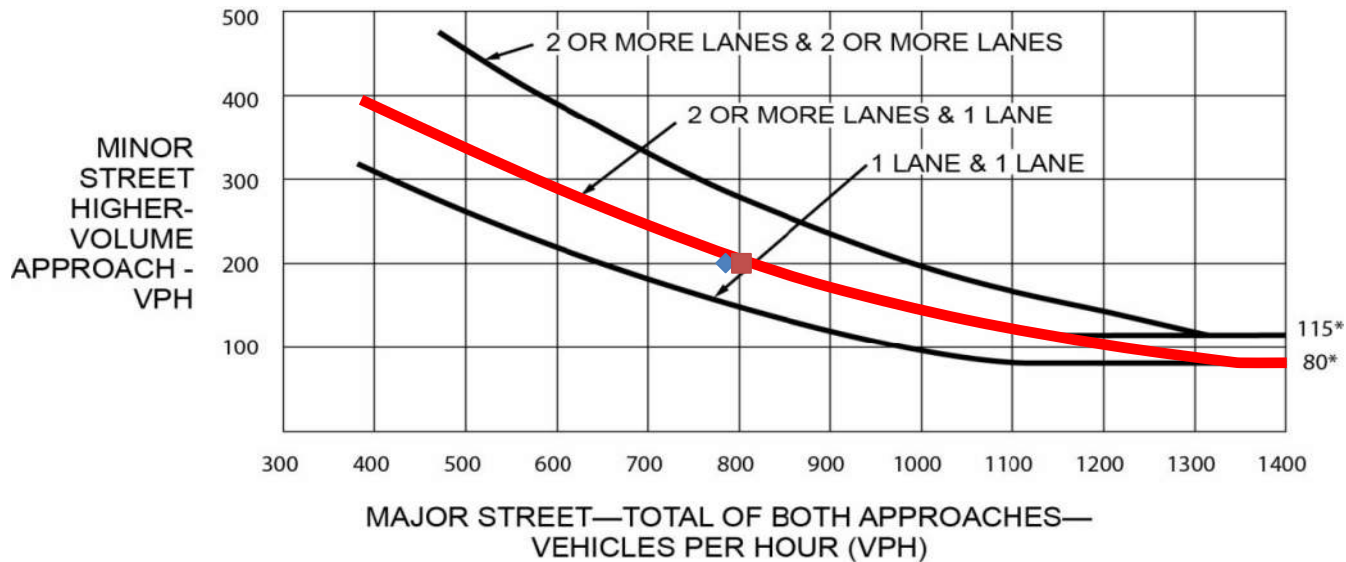
The need for a traffic control signal shall be considered if, for each of any 4 hours on an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) all fall above the applicable curve in Figure 4C-1 for the existing combination of approach lanes.

	Major Street	Minor Street	
Street Name	Glenn Pkwy	Peachblow	
No. of Lanes	2+	1	
Hour	Volume* (vph)		
7-8AM	785	201	◆
5-6PM	802	201	■
			●
			▲

Warrant 2 Met?
NO

*Total of both approaches for major street, higher volume approach only for minor street

Figure 4C - 1. Warrant 2, Four-Hour Vehicular Volume (100%)



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: January 2012 Ohio MUTCD, Part 4

SIGNAL WARRANT WORKSHEET

Warrant 3, Peak Hour

Ohio MUTCD

Intersection: Glenn Pkwy & Peachblow
 Project Name: Oak Park
 Project No.: _____

Year: 2025
 Condition: AM Build
 Analyst: ACD - MIM

Section 4C.04 Warrant 3, Peak Hour

The Peak Hour signal warrant is intended for use at a location where traffic conditions are such that for a minimum of 1 hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street.

This signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.

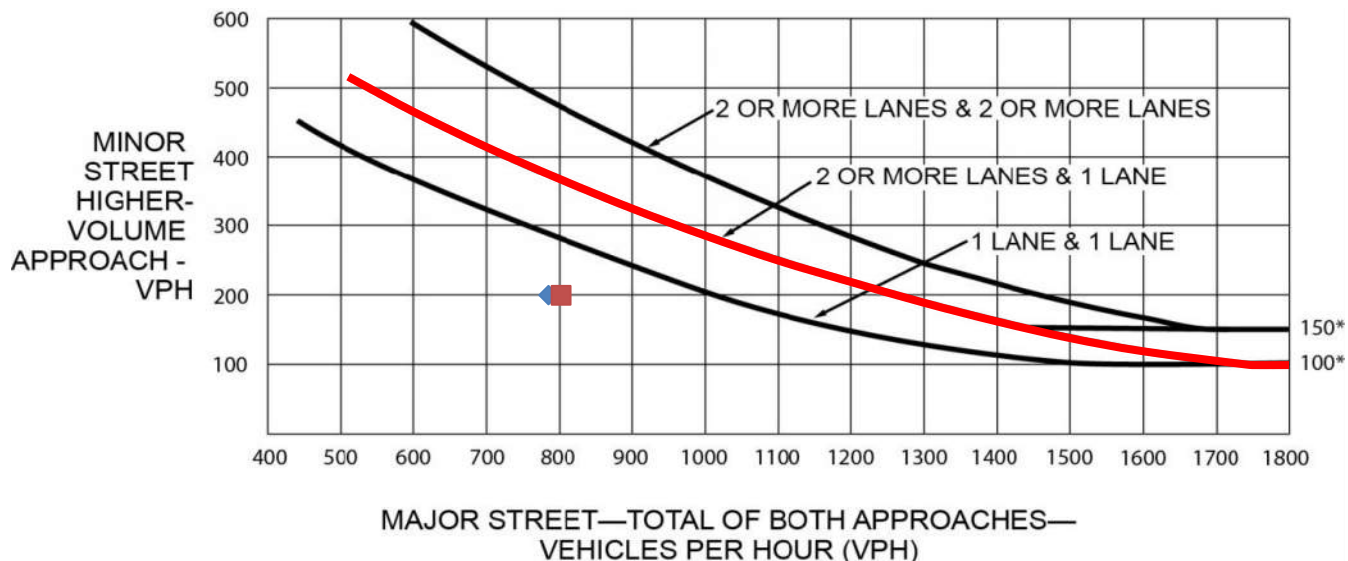
The need for a traffic control signal shall be considered if the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.

	Major Street	Minor Street
Street Name	Glenn Pkwy	Peachblow
No. of Lanes	2+	1
Hour	Volume* (vph)	
7-8AM	785	201
5-6PM	802	201

Warrant 3 Met?
NO

*Total of both approaches for major street, higher volume approach only for minor street

Figure 4C - 3. Warrant 3, Peak Hour (100%)

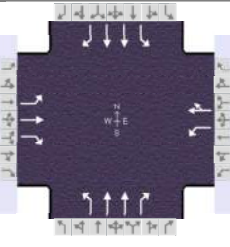


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: January 2012 Ohio MUTCD, Part 4

2025 No Build and Build Analysis

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	0.250	
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other	
Jurisdiction	ODOT D6	Time Period	AM Peak	PHF	0.92	
Urban Street	US 23	Analysis Year	2025	Analysis Period	1> 7:00	
Intersection	US 23 & Glenn Pkwy	File Name	US23-Glenn AM No Build.xus			
Project Description	2025 AM Peak No Build					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	2	38	10	275	28	67	17	751	305	134	1554	11

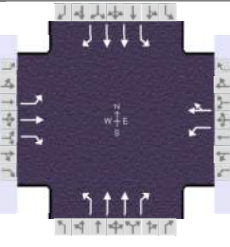
Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	7.9	63.1	30.0	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	5.0	4.0	0.0	0.0	0.0	
				Red	2.0	2.0	2.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8		2	1	6
Case Number		5.0		6.0		5.3	1.0	3.0
Phase Duration, s		36.0		36.0		70.1	13.9	84.0
Change Period, ($Y+R_c$), s		6.0		6.0		7.0	6.0	7.0
Max Allow Headway (MAH), s		3.2		3.2		0.0	2.9	0.0
Queue Clearance Time (g_s), s		8.0		29.2			6.1	
Green Extension Time (g_e), s		0.9		0.8		0.0	0.2	0.0
Phase Call Probability		1.00		1.00			0.99	
Max Out Probability		0.00		0.00			0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	2	41	11	299	103		18	816	332	146	1689	12
Adjusted Saturation Flow Rate (s), veh/h/ln	1312	1900	1610	1387	1686		296	1809		1810	1809	1610
Queue Service Time (g_s), s	0.2	2.0	0.6	25.2	5.9		5.4	16.6		4.1	37.7	0.3
Cycle Queue Clearance Time (g_c), s	6.0	2.0	0.6	27.2	5.9		29.3	16.6		4.1	37.7	0.3
Green Ratio (g/C)	0.25	0.25	0.25	0.25	0.25		0.53	0.53		0.61	0.64	0.64
Capacity (c), veh/h	325	475	403	385	422		157	1900		442	2320	1033
Volume-to-Capacity Ratio (X)	0.007	0.087	0.027	0.777	0.245		0.118	0.430		0.329	0.728	0.012
Back of Queue (Q), ft/ln (95 th percentile)	2.3	41.7	10.8	342.5	108.9		19.4	264.5		65.2	481.4	4.6
Back of Queue (Q), veh/ln (95 th percentile)	0.1	1.7	0.4	13.7	4.4		0.8	10.6		2.6	19.3	0.2
Queue Storage Ratio (RQ) (95 th percentile)	0.02	0.00	0.05	0.69	0.00		0.04	0.00		0.10	0.00	0.01
Uniform Delay (d_1), s/veh	38.3	34.5	34.0	44.9	35.9		29.1	17.5		11.9	14.5	7.8
Incremental Delay (d_2), s/veh	0.0	0.0	0.0	2.7	0.1		1.5	0.7		0.2	2.0	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	38.3	34.5	34.0	47.5	36.0		30.6	18.2	0.0	12.0	16.5	7.8
Level of Service (LOS)	D	C	C	D	D		C	B	A	B	B	A
Approach Delay, s/veh / LOS	34.6	C		44.6	D		13.2	B		16.1	B	
Intersection Delay, s/veh / LOS	18.7						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.45	B	1.90	B	2.07	B
Bicycle LOS Score / LOS	0.58	A	1.15	A	1.45	A	2.01	B

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	0.250	
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other	
Jurisdiction	ODOT D6	Time Period	PM Peak No Build	PHF	0.92	
Urban Street	US 23	Analysis Year	2025	Analysis Period	1> 7:00	
Intersection	US 23 & Glenn Pkwy	File Name	US23-Glenn PM No Build.xus			
Project Description	2025 PM Peak No Build					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	11	27	10	306	20	65	6	1364	398	43	922	4

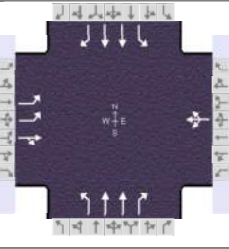
Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8		2	1	6
Case Number		5.0		6.0		5.3	1.0	3.0
Phase Duration, s		37.9		37.9		69.7	12.3	82.1
Change Period, ($Y+R_c$), s		6.0		6.0		7.0	6.0	7.0
Max Allow Headway (MAH), s		3.1		3.1		0.0	2.9	0.0
Queue Clearance Time (g_s), s		8.0		31.1			3.3	
Green Extension Time (g_e), s		0.9		0.8		0.0	0.0	0.0
Phase Call Probability		1.00		1.00			0.79	
Max Out Probability		0.00		0.00			0.00	

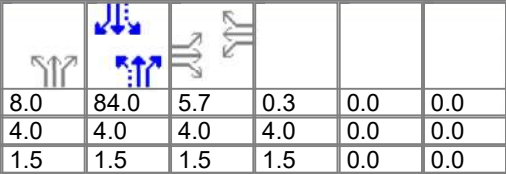
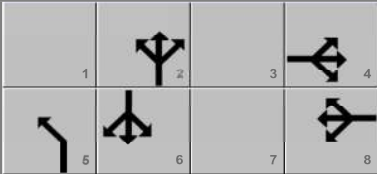
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	12	29	11	333	92		7	1483	433	47	1002	4
Adjusted Saturation Flow Rate (s), veh/h/ln	1325	1900	1610	1402	1670		571	1809		1810	1809	1610
Queue Service Time (g_s), s	0.8	1.4	0.6	27.8	5.2		0.7	39.8		1.3	17.2	0.1
Cycle Queue Clearance Time (g_c), s	6.0	1.4	0.6	29.1	5.2		5.7	39.8		1.3	17.2	0.1
Green Ratio (g/C)	0.27	0.27	0.27	0.27	0.27		0.52	0.52		0.59	0.63	0.63
Capacity (c), veh/h	356	506	429	418	445		335	1891		224	2262	1007
Volume-to-Capacity Ratio (X)	0.034	0.058	0.025	0.796	0.208		0.019	0.784		0.209	0.443	0.004
Back of Queue (Q), ft/ln (95 th percentile)	12.4	28.8	10.6	378	94.5		4.4	558.8		21.1	252.8	1.8
Back of Queue (Q), veh/ln (95 th percentile)	0.5	1.2	0.4	15.1	3.8		0.2	22.4		0.8	10.1	0.1
Queue Storage Ratio (RQ) (95 th percentile)	0.08	0.00	0.05	0.76	0.00		0.01	0.00		0.03	0.00	0.00
Uniform Delay (d_1), s/veh	36.5	32.8	32.5	43.6	34.2		16.3	23.2		18.7	11.7	8.4
Incremental Delay (d_2), s/veh	0.0	0.0	0.0	4.1	0.1		0.1	3.3		0.2	0.6	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	36.5	32.8	32.5	47.7	34.3		16.5	26.5	0.0	18.8	12.3	8.5
Level of Service (LOS)	D	C	C	D	C		B	C	A	B	B	A
Approach Delay, s/veh / LOS	33.6	C		44.8	D		20.5	C		12.6	B	
Intersection Delay, s/veh / LOS	21.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.45	B	1.90	B	2.07	B
Bicycle LOS Score / LOS	0.57	A	1.19	A	2.07	B	1.36	A

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency					Duration, h	0.250	
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other		
Jurisdiction	ODOT D6	Time Period	AM Peak No Build	PHF	0.92		
Urban Street	US 23	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 23 & Greif Pkwy	File Name	US23-Greif AM No Build.xus				
Project Description	2025 AM Peak No Build						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	12	0	23	0	0	1	150	1060	0	1	1782	56

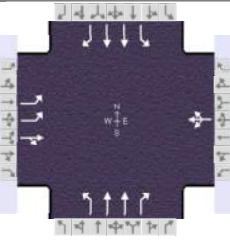
Signal Information												
Cycle, s	120.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	8.0	84.0	5.7	0.3	0.0	0.0		
				Yellow	4.0	4.0	4.0	4.0	0.0	0.0		
				Red	1.5	1.5	1.5	1.5	0.0	0.0		

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2		6
Case Number		10.0		12.0	1.0	3.0		5.3
Phase Duration, s		11.2		5.8	13.5	103.0		89.5
Change Period, ($Y+R_c$), s		5.5		5.5	5.5	5.5		5.5
Max Allow Headway (MAH), s		3.3		3.4	2.9	0.0		0.0
Queue Clearance Time (g_s), s		3.8		2.1	4.6			
Green Extension Time (g_e), s		0.0		0.0	0.3	0.0		0.0
Phase Call Probability		0.72		0.04	1.00			
Max Out Probability		0.00		0.00	0.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	13	25			0		163	1152	0	1	1937	61
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1610			0		1810	1809	1610	496	1809	1610
Queue Service Time (g_s), s	0.4	1.8			0.0		2.6	10.5	0.0	0.1	41.5	1.4
Cycle Queue Clearance Time (g_c), s	0.4	1.8			0.0		2.6	10.5	0.0	0.1	41.5	1.4
Green Ratio (g/C)	0.05	0.05					0.78	0.81	0.81	0.70	0.70	0.70
Capacity (c), veh/h	168	77					262	2938	1308	407	2532	1127
Volume-to-Capacity Ratio (X)	0.077	0.324			0.000		0.621	0.392	0.000	0.003	0.765	0.054
Back of Queue (Q), ft/ln (95 th percentile)	8.5	33.6			0		148.7	93.7	0	0.4	483.9	18.4
Back of Queue (Q), veh/ln (95 th percentile)	0.3	1.3			0.0		5.9	3.7	0.0	0.0	19.4	0.7
Queue Storage Ratio (RQ) (95 th percentile)	0.02	0.00			0.00		0.25	0.00	0.00	0.00	0.00	0.05
Uniform Delay (d_1), s/veh	54.6	55.2					23.2	3.1	0.0	5.4	11.6	5.6
Incremental Delay (d_2), s/veh	0.1	0.9			0.0		0.9	0.4	0.0	0.0	2.3	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	54.7	56.1					24.1	3.5	0.0	5.4	13.9	5.7
Level of Service (LOS)	D	E					C	A		A	B	A
Approach Delay, s/veh / LOS	55.6	E		73.9	E		6.1	A		13.6	B	
Intersection Delay, s/veh / LOS	11.2						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.47	B	2.47	B	1.60	B	2.06	B
Bicycle LOS Score / LOS	0.55	A	0.49	A	1.57	B	2.14	B

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	0.250	
Analyst	ACD-MIM	Analysis Date	1/26/2024	Area Type	Other	
Jurisdiction	ODOT D6	Time Period	PM Peak No Build	PHF	0.92	
Urban Street	US 23	Analysis Year	2025	Analysis Period	1> 7:00	
Intersection	US 23 & Greif Pkwy	File Name	US23-Greif PM No Build.xus			
Project Description	2025 PM Peak No Build					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	57	0	72	0	0	1	60	1710	0	1	1220	17

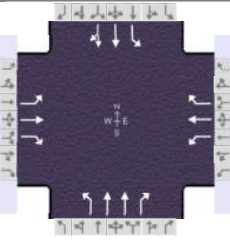
Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	7.1	82.7	7.9	0.3	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	0.0	0.0	
				Red	1.5	1.5	1.5	1.5	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2		6
Case Number		10.0		12.0	1.0	3.0		5.3
Phase Duration, s		13.4		5.8	12.6	100.8		88.2
Change Period, ($Y+R_c$), s		5.5		5.5	5.5	5.5		5.5
Max Allow Headway (MAH), s		3.3		3.4	2.9	0.0		0.0
Queue Clearance Time (g_s), s		7.7		2.1	3.1			
Green Extension Time (g_e), s		0.2		0.0	0.1	0.0		0.0
Phase Call Probability		0.99		0.04	0.89			
Max Out Probability		0.00		0.00	0.00			

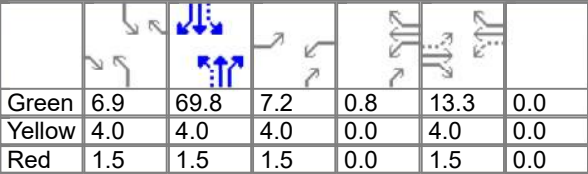
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	62	78			0		65	1859	0	1	1326	18
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1610			0		1810	1809	1610	251	1809	1610
Queue Service Time (g_s), s	2.0	5.7			0.0		1.1	26.1	0.0	0.2	21.6	0.4
Cycle Queue Clearance Time (g_c), s	2.0	5.7			0.0		1.1	26.1	0.0	13.8	21.6	0.4
Green Ratio (g/C)	0.07	0.07					0.76	0.79	0.79	0.69	0.69	0.69
Capacity (c), veh/h	232	106					381	2873	1279	205	2493	1110
Volume-to-Capacity Ratio (X)	0.267	0.736			0.000		0.171	0.647	0.000	0.005	0.532	0.017
Back of Queue (Q), ft/ln (95 th percentile)	40.1	108.6			0		12	248.9	0	0.6	282.4	5.7
Back of Queue (Q), veh/ln (95 th percentile)	1.6	4.3			0.0		0.5	10.0	0.0	0.0	11.3	0.2
Queue Storage Ratio (RQ) (95 th percentile)	0.10	0.00			0.00		0.02	0.00	0.00	0.00	0.00	0.01
Uniform Delay (d_1), s/veh	53.3	55.0					6.2	5.2	0.0	10.8	9.2	5.9
Incremental Delay (d_2), s/veh	0.2	3.7			0.0		0.1	1.1	0.0	0.0	0.8	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.5	58.7					6.3	6.4	0.0	10.9	10.0	5.9
Level of Service (LOS)	D	E					A	A		B	A	A
Approach Delay, s/veh / LOS	56.4	E		73.9	E		6.4	A		9.9	A	
Intersection Delay, s/veh / LOS	9.8						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.47	B	2.47	B	1.61	B	2.06	B
Bicycle LOS Score / LOS	0.72	A	0.49	A	2.07	B	1.60	B

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	0.250	
Analyst	ACD-MIM	Analysis Date	1/26/2024	Area Type	Other	
Jurisdiction	ODOT D6	Time Period	AM Peak No Build	PHF	0.92	
Urban Street	US 23	Analysis Year	2025	Analysis Period	1> 7:00	
Intersection	US 23 & Shanahan Rd	File Name	US23-Shanahan AM No Build.xus			
Project Description	2025 AM Peak No Build					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	64	140	140	98	147	29	56	1117	114	54	1759	45

Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On	Green	6.9	69.8	7.2	0.8	13.3	0.0	
				Yellow	4.0	4.0	4.0	0.0	4.0	0.0	
				Red	1.5	1.5	1.5	0.0	1.5	0.0	

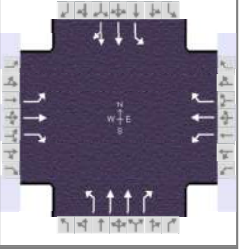
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	12.7	18.8	13.5	19.6	12.4	75.3	12.4	75.2
Change Period, ($Y+R_c$), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2	2.9	0.0	2.9	0.0
Queue Clearance Time (g_s), s	6.0	12.4	8.2	11.7	3.5		3.5	
Green Extension Time (g_e), s	0.0	0.9	0.1	0.9	0.1	0.0	0.1	0.0
Phase Call Probability	0.90	1.00	0.97	1.00	0.87		0.86	
Max Out Probability	0.00	0.00	0.02	0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	70	152	152	107	160	32	61	1214	124	59	980	980
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1809	1610	1810	1900	1883
Queue Service Time (g_s), s	4.0	9.3	10.4	6.2	9.7	2.0	1.5	25.4	3.5	1.5	53.6	54.6
Cycle Queue Clearance Time (g_c), s	4.0	9.3	10.4	6.2	9.7	2.0	1.5	25.4	3.5	1.5	53.6	54.6
Green Ratio (g/C)	0.17	0.11	0.17	0.18	0.12	0.17	0.64	0.58	0.65	0.64	0.58	0.58
Capacity (c), veh/h	193	211	272	223	223	281	193	2105	1044	329	1104	1094
Volume-to-Capacity Ratio (X)	0.360	0.722	0.560	0.478	0.716	0.112	0.315	0.577	0.119	0.178	0.888	0.896
Back of Queue (Q), ft/ln (95 th percentile)	80.7	199.1	188.2	125.1	205.9	35.5	42.7	361.1	49.5	22.3	784.8	796
Back of Queue (Q), veh/ln (95 th percentile)	3.2	8.0	7.5	5.0	8.2	1.4	1.7	14.4	2.0	0.9	31.4	31.8
Queue Storage Ratio (RQ) (95 th percentile)	0.20	0.00	0.47	0.31	0.00	0.14	0.07	0.00	0.12	0.04	0.00	0.00
Uniform Delay (d_1), s/veh	43.4	51.6	45.8	43.5	51.0	41.7	24.8	15.8	8.0	11.7	21.8	22.0
Incremental Delay (d_2), s/veh	0.4	1.8	0.7	0.6	1.6	0.1	0.3	1.2	0.2	0.1	10.7	11.4
Initial Queue Delay (d_3), 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
Control Delay (d), s/veh	43.8	53.3	46.5	44.1	52.6	41.7	25.1	17.0	8.3	11.8	32.4	33.4
Level of Service (LOS)	D	D	D	D	D	D	C	B	A	B	C	C
Approach Delay, s/veh / LOS	48.8	D		48.4	D		16.5	B		32.3	C	
Intersection Delay, s/veh / LOS	29.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.46	B	2.31	B	2.08	B	2.08	B
Bicycle LOS Score / LOS	1.10	A	0.98	A	1.64	B	2.15	B

HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other
Jurisdiction	ODOT D6	Time Period	PM No Build	PHF	0.92
Urban Street	US 23	Analysis Year	2025	Analysis Period	1> 7:00
Intersection	US 23 & Shanahan Rd	File Name	US23-Shanahan PM No Build.xus		
Project Description	2025 PM Peak No Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	92	144	117	76	112	47	178	1631	122	49	1188	80

Signal Information												
Cycle, s	120.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	6.6	1.3	70.0	7.5	0.2	12.3		
				Yellow	4.0	0.0	4.0	4.0	0.0	4.0		
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.5	0.0	1.5	1.5	0.0	1.5		

1	2	3	4

5	6	7	8

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	13.2	18.0	13.0	17.8	13.5	76.9	12.1	75.5
Change Period, ($Y+R_c$), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2	2.9	0.0	2.9	0.0
Queue Clearance Time (g_s), s	7.9	11.7	6.8	9.4	7.0		3.3	
Green Extension Time (g_e), s	0.1	0.8	0.1	0.8	0.3	0.0	0.1	0.0
Phase Call Probability	0.96	1.00	0.94	1.00	1.00		0.83	
Max Out Probability	0.01	0.00	0.00	0.00	0.00		0.00	

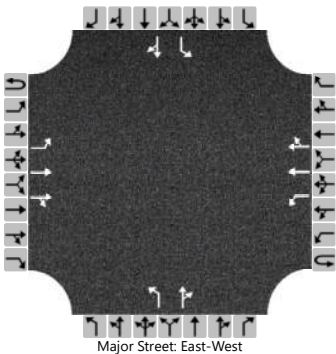
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	100	157	127	83	122	51	193	1773	133	53	696	683
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1809	1610	1810	1900	1857
Queue Service Time (g_s), s	5.9	9.7	8.5	4.8	7.4	3.3	5.0	46.7	3.7	1.3	28.9	29.0
Cycle Queue Clearance Time (g_c), s	5.9	9.7	8.5	4.8	7.4	3.3	5.0	46.7	3.7	1.3	28.9	29.0
Green Ratio (g/C)	0.17	0.10	0.17	0.16	0.10	0.16	0.65	0.59	0.66	0.64	0.58	0.58
Capacity (c), veh/h	229	198	275	182	194	254	317	2152	1058	212	1109	1084
Volume-to-Capacity Ratio (X)	0.437	0.792	0.463	0.455	0.627	0.201	0.611	0.824	0.125	0.252	0.627	0.630
Back of Queue (Q), ft/ln (95 th percentile)	118.6	206.9	153.9	97.7	160.1	59.7	77.1	613.9	51.3	27.9	431.1	426.3
Back of Queue (Q), veh/ln (95 th percentile)	4.7	8.3	6.2	3.9	6.4	2.4	3.1	24.6	2.1	1.1	17.2	17.1
Queue Storage Ratio (RQ) (95 th percentile)	0.30	0.00	0.38	0.24	0.00	0.24	0.13	0.00	0.13	0.05	0.00	0.00
Uniform Delay (d_1), s/veh	44.4	52.5	44.8	44.5	51.7	44.0	15.0	19.3	7.7	19.7	16.4	16.4
Incremental Delay (d_2), s/veh	0.5	2.7	0.5	0.7	1.2	0.1	0.7	3.7	0.2	0.2	2.7	2.8
Initial Queue Delay (d_3), 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
Control Delay (d), s/veh	44.9	55.2	45.3	45.1	52.9	44.1	15.8	23.0	7.9	19.9	19.1	19.2
Level of Service (LOS)	D	E	D	D	D	D	B	C	A	B	B	B
Approach Delay, s/veh / LOS	49.2	D		48.6	D		21.4	C		19.2	B	
Intersection Delay, s/veh / LOS	24.9						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.47	B	2.31	B	2.08	B	2.08	B
Bicycle LOS Score / LOS	1.12	A	0.91	A	2.22	B	1.67	B

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Glenn Pkwy & Peachblow
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/4/2024	East/West Street	Glenn Pkwy
Analysis Year	2025	North/South Street	Peachblow
Time Analyzed	AM Peak No Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	226	154	97	0	30	211	48		89	26	28		3	4	70
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

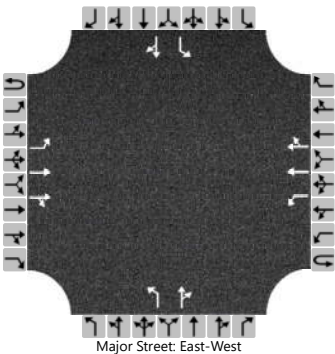
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		246				33				97		59		3		80
Capacity, c (veh/h)		1271				1280				158		299		138		715
v/c Ratio		0.19				0.03				0.61		0.20		0.02		0.11
95% Queue Length, Q ₉₅ (veh)		0.7				0.1				3.3		0.7		0.1		0.4
Control Delay (s/veh)		8.5				7.9				58.5		20.0		31.8		10.7
Level of Service (LOS)		A				A				F		C		D		B
Approach Delay (s/veh)	4.0				0.8				44.0				11.5			
Approach LOS	A				A				E				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Glenn Pkwy & Peachblow
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/4/2024	East/West Street	Glenn Pkwy
Analysis Year	2025	North/South Street	Peachblow
Time Analyzed	PM Peak No Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	47	306	115	0	22	235	3		139	1	17		3	7	17
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

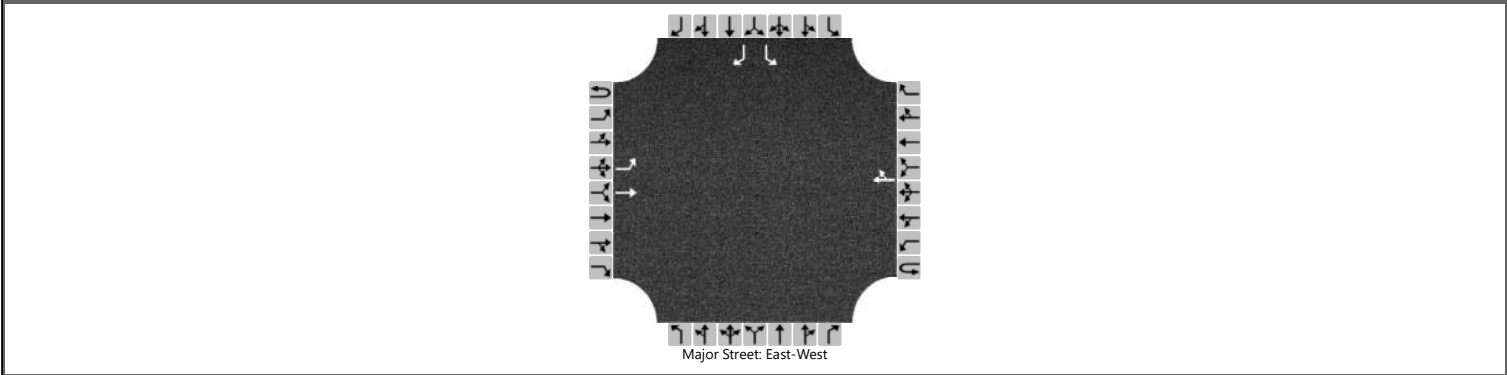
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		51				24				151		20		3		26
Capacity, c (veh/h)		1296				1093				301		707		329		535
v/c Ratio		0.04				0.02				0.50		0.03		0.01		0.05
95% Queue Length, Q ₉₅ (veh)		0.1				0.1				2.6		0.1		0.0		0.2
Control Delay (s/veh)		7.9				8.4				28.4		10.2		16.0		12.1
Level of Service (LOS)		A				A				D		B		C		B
Approach Delay (s/veh)	0.8				0.7				26.3				12.5			
Approach LOS	A				A				D				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Peachblow & Crownover Way
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/4/2024	East/West Street	Peachblow
Analysis Year	2025	North/South Street	Crownover
Time Analyzed	AM Peak No Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	T					TR						L		R
Volume (veh/h)		10	121				100	25						31		43
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

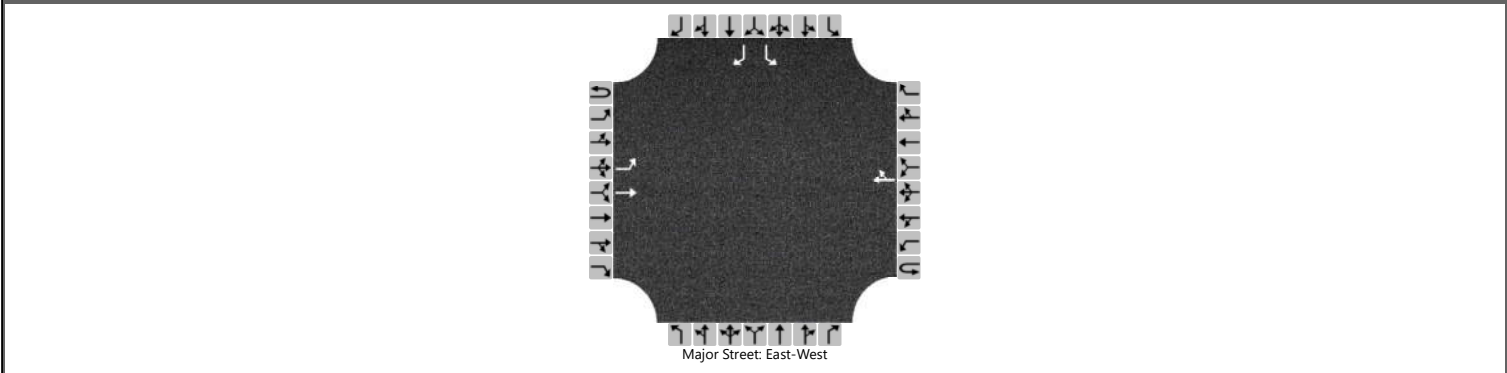
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		11												34		47
Capacity, c (veh/h)		1442												707		926
v/c Ratio		0.01												0.05		0.05
95% Queue Length, Q ₉₅ (veh)		0.0												0.1		0.2
Control Delay (s/veh)		7.5												10.3		9.1
Level of Service (LOS)		A												B		A
Approach Delay (s/veh)	0.6												9.6			
Approach LOS	A												A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Peachblow & Crownover Way
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/4/2024	East/West Street	Peachblow
Analysis Year	2025	North/South Street	Crownover
Time Analyzed	PM Peak No Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	T					TR						L		R
Volume (veh/h)		21	123				151	30						28		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

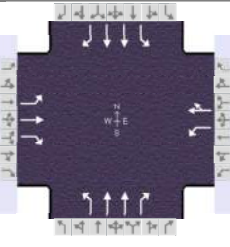
Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		23												30		7
Capacity, c (veh/h)		1370												626		860
v/c Ratio		0.02												0.05		0.01
95% Queue Length, Q ₉₅ (veh)		0.1												0.2		0.0
Control Delay (s/veh)		7.7												11.0		9.2
Level of Service (LOS)		A												B		A
Approach Delay (s/veh)	1.1												10.7			
Approach LOS	A												B			

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	0.250	
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other	
Jurisdiction	ODOT D6	Time Period	AM Peak Build	PHF	0.92	
Urban Street	US 23	Analysis Year	2025	Analysis Period	1> 7:00	
Intersection	US 23 & Glenn Pkwy	File Name	US23-Glenn AM Build.xus			
Project Description	2025 AM Peak Build					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	2	38	10	310	28	90	17	751	316	142	1554	11

Signal Information													
Cycle, s	120.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On	Green	8.0	59.8	33.2	0.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	5.0	4.0	0.0	0.0	0.0			
				Red	2.0	2.0	2.0	0.0	0.0	0.0			

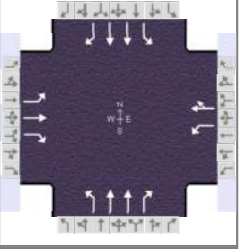
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8		2	1	6
Case Number		5.0		6.0		5.3	1.0	3.0
Phase Duration, s		39.2		39.2		66.8	14.0	80.8
Change Period, ($Y+R_c$), s		6.0		6.0		7.0	6.0	7.0
Max Allow Headway (MAH), s		3.2		3.2		0.0	2.9	0.0
Queue Clearance Time (g_s), s		9.3		32.3			6.7	
Green Extension Time (g_e), s		1.0		0.9		0.0	0.2	0.0
Phase Call Probability		1.00		1.00			0.99	
Max Out Probability		0.00		0.01			0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	2	41	11	337	128		18	816	343	154	1689	12
Adjusted Saturation Flow Rate (s), veh/h/ln	1282	1900	1610	1387	1671		296	1809		1810	1809	1610
Queue Service Time (g_s), s	0.2	1.9	0.6	28.4	7.2		5.8	17.5		4.7	40.5	0.3
Cycle Queue Clearance Time (g_c), s	7.3	1.9	0.6	30.3	7.2		32.4	17.5		4.7	40.5	0.3
Green Ratio (g/C)	0.28	0.28	0.28	0.28	0.28		0.50	0.50		0.58	0.61	0.61
Capacity (c), veh/h	338	526	446	422	462		142	1804		419	2225	990
Volume-to-Capacity Ratio (X)	0.006	0.079	0.024	0.798	0.277		0.130	0.453		0.368	0.759	0.012
Back of Queue (Q), ft/ln (95 th percentile)	2.3	40	10.4	383.7	131.8		21.2	280.4		76.3	527.7	5.1
Back of Queue (Q), veh/ln (95 th percentile)	0.1	1.6	0.4	15.3	5.3		0.8	11.2		3.1	21.1	0.2
Queue Storage Ratio (RQ) (95 th percentile)	0.02	0.00	0.05	0.77	0.00		0.04	0.00		0.12	0.00	0.01
Uniform Delay (d_1), s/veh	36.8	32.1	31.6	43.3	34.0		33.5	19.5		13.6	16.7	9.0
Incremental Delay (d_2), s/veh	0.0	0.0	0.0	4.7	0.1		1.9	0.8		0.2	2.5	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	36.8	32.1	31.6	48.0	34.1		35.4	20.3	0.0	13.8	19.2	9.0
Level of Service (LOS)	D	C	C	D	C		D	C	A	B	B	A
Approach Delay, s/veh / LOS	32.2	C		44.2	D		14.6	B		18.7	B	
Intersection Delay, s/veh / LOS	20.9						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.45	B	1.91	B	2.08	B
Bicycle LOS Score / LOS	0.58	A	1.26	A	1.46	A	2.02	B

HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.250
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other
Jurisdiction	ODOT D6	Time Period	PM pEak Build	PHF	0.92
Urban Street	US 23	Analysis Year	2025	Analysis Period	1> 7:00
Intersection	US 23 & Glenn Pkwy	File Name	US23-Glenn PM Build.xus		
Project Description	2025 PM Peak Build				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	11	27	10	332	20	83	6	1364	442	73	922	4

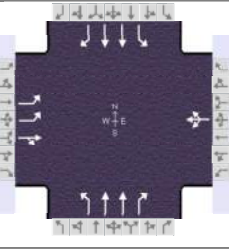
Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	7.4	59.3	34.3	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	5.0	4.0	0.0	0.0	0.0	
				Red	2.0	2.0	2.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8		2	1	6
Case Number		5.0		6.0		5.3	1.0	3.0
Phase Duration, s		40.3		40.3		66.3	13.4	79.7
Change Period, ($Y+R_c$), s		6.0		6.0		7.0	6.0	7.0
Max Allow Headway (MAH), s		3.1		3.1		0.0	2.9	0.0
Queue Clearance Time (g_s), s		9.0		33.4			4.4	
Green Extension Time (g_e), s		1.0		0.8		0.0	0.1	0.0
Phase Call Probability		1.00		1.00			0.93	
Max Out Probability		0.00		0.01			0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	12	29	11	361	112		7	1483	480	79	1002	4
Adjusted Saturation Flow Rate (s), veh/h/ln	1301	1900	1610	1402	1659		571	1809		1810	1809	1610
Queue Service Time (g_s), s	0.9	1.3	0.6	30.1	6.2		0.8	42.2		2.4	18.1	0.1
Cycle Queue Clearance Time (g_c), s	7.0	1.3	0.6	31.4	6.2		5.5	42.2		2.4	18.1	0.1
Green Ratio (g/C)	0.29	0.29	0.29	0.29	0.29		0.49	0.49		0.57	0.61	0.61
Capacity (c), veh/h	365	543	460	446	474		319	1786		223	2191	975
Volume-to-Capacity Ratio (X)	0.033	0.054	0.024	0.810	0.236		0.020	0.830		0.355	0.457	0.004
Back of Queue (Q), ft/ln (95 th percentile)	12.2	27.8	10.2	408.5	112.2		4.7	604.1		39.1	268.5	1.9
Back of Queue (Q), veh/ln (95 th percentile)	0.5	1.1	0.4	16.3	4.5		0.2	24.2		1.6	10.7	0.1
Queue Storage Ratio (RQ) (95 th percentile)	0.08	0.00	0.05	0.82	0.00		0.01	0.00		0.06	0.00	0.00
Uniform Delay (d_1), s/veh	35.5	31.1	30.8	42.5	32.8		18.1	26.1		21.9	12.9	9.4
Incremental Delay (d_2), s/veh	0.0	0.0	0.0	5.6	0.1		0.1	4.6		0.4	0.7	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	35.5	31.1	30.8	48.1	32.9		18.2	30.7	0.0	22.3	13.6	9.4
Level of Service (LOS)	D	C	C	D	C		B	C	A	C	B	A
Approach Delay, s/veh / LOS	32.0	C		44.5	D		23.2	C		14.2	B	
Intersection Delay, s/veh / LOS	23.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.45	B	1.91	B	2.08	B
Bicycle LOS Score / LOS	0.57	A	1.27	A	2.11	B	1.38	A

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency					Duration, h	0.250	
Analyst	ACD - MIN	Analysis Date	1/26/2024	Area Type	Other		
Jurisdiction	ODOT D6	Time Period	AM Peak Build	PHF	0.92		
Urban Street	US 23	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 23 & Greif Pkwy	File Name	US23-Greif AM Build.xus				
Project Description	2025 AM Peak Build						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	12	0	23	0	0	1	150	1071	0	1	1817	56

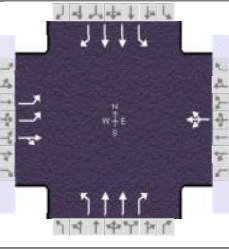
Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	8.0	84.0	5.7	0.3	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	0.0	0.0	
				Red	1.5	1.5	1.5	1.5	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2		6
Case Number		10.0		12.0	1.0	3.0		5.3
Phase Duration, s		11.2		5.8	13.5	103.0		89.5
Change Period, ($Y+R_c$), s		5.5		5.5	5.5	5.5		5.5
Max Allow Headway (MAH), s		3.3		3.4	2.9	0.0		0.0
Queue Clearance Time (g_s), s		3.8		2.1	4.6			
Green Extension Time (g_e), s		0.0		0.0	0.3	0.0		0.0
Phase Call Probability		0.72		0.04	1.00			
Max Out Probability		0.00		0.00	0.00			

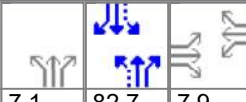

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	13	25			0		163	1164	0	1	1975	61
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1610			0		1810	1809	1610	490	1809	1610
Queue Service Time (g_s), s	0.4	1.8			0.0		2.6	10.7	0.0	0.1	43.3	1.4
Cycle Queue Clearance Time (g_c), s	0.4	1.8			0.0		2.6	10.7	0.0	0.1	43.3	1.4
Green Ratio (g/C)	0.05	0.05					0.78	0.81	0.81	0.70	0.70	0.70
Capacity (c), veh/h	168	77					256	2938	1308	403	2532	1127
Volume-to-Capacity Ratio (X)	0.077	0.324			0.000		0.637	0.396	0.000	0.003	0.780	0.054
Back of Queue (Q), ft/ln (95 th percentile)	8.5	33.6			0		148.9	94	0	0.4	501	18.4
Back of Queue (Q), veh/ln (95 th percentile)	0.3	1.3			0.0		6.0	3.8	0.0	0.0	20.0	0.7
Queue Storage Ratio (RQ) (95 th percentile)	0.02	0.00			0.00		0.25	0.00	0.00	0.00	0.00	0.05
Uniform Delay (d_1), s/veh	54.6	55.2					24.5	3.1	0.0	5.4	11.9	5.6
Incremental Delay (d_2), s/veh	0.1	0.9			0.0		1.0	0.4	0.0	0.0	2.5	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	54.7	56.1					25.4	3.5	0.0	5.4	14.4	5.7
Level of Service (LOS)	D	E					C	A		A	B	A
Approach Delay, s/veh / LOS	55.6	E		73.9	E		6.2	A		14.1	B	
Intersection Delay, s/veh / LOS	11.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.47	B	2.47	B	1.60	B	2.06	B
Bicycle LOS Score / LOS	0.55	A	0.49	A	1.58	B	2.17	B

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency					Duration, h	0.250	
Analyst	ACD-MIM	Analysis Date	1/26/2024	Area Type	Other		
Jurisdiction	ODOT D6	Time Period	PM Peak Build	PHF	0.92		
Urban Street	US 23	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 23 & Greif Pkwy	File Name	US23-Greif PM Build.xus				
Project Description	2025 PM Peak Build						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	57	0	72	0	0	1	60	1754	0	1	1246	17

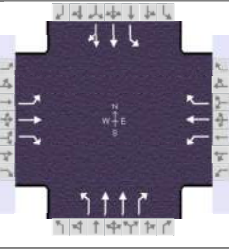
Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End	Green	7.1	82.7	7.9	0.3	0.0	0.0	
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	4.0	4.0	4.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.5	1.5	1.5	1.5	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2		6
Case Number		10.0		12.0	1.0	3.0		5.3
Phase Duration, s		13.4		5.8	12.6	100.8		88.2
Change Period, ($Y+R_c$), s		5.5		5.5	5.5	5.5		5.5
Max Allow Headway (MAH), s		3.3		3.4	2.9	0.0		0.0
Queue Clearance Time (g_s), s		7.7		2.1	3.1			
Green Extension Time (g_e), s		0.2		0.0	0.1	0.0		0.0
Phase Call Probability		0.99		0.04	0.89			
Max Out Probability		0.00		0.00	0.00			

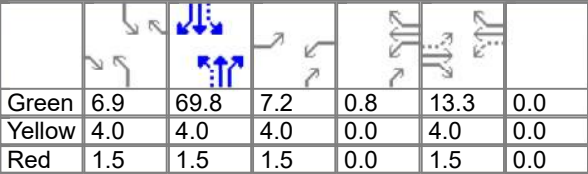

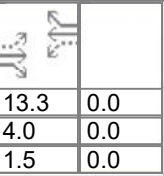
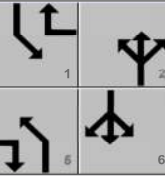
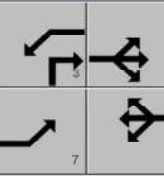
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	62	78			0		65	1907	0	1	1354	18
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1610			0		1810	1809	1610	240	1809	1610
Queue Service Time (g_s), s	2.0	5.7			0.0		1.1	27.5	0.0	0.2	22.3	0.4
Cycle Queue Clearance Time (g_c), s	2.0	5.7			0.0		1.1	27.5	0.0	15.2	22.3	0.4
Green Ratio (g/C)	0.07	0.07					0.76	0.79	0.79	0.69	0.69	0.69
Capacity (c), veh/h	232	106					372	2873	1279	195	2493	1110
Volume-to-Capacity Ratio (X)	0.267	0.736			0.000		0.175	0.664	0.000	0.006	0.543	0.017
Back of Queue (Q), ft/ln (95 th percentile)	40.1	108.6			0		12	260	0	0.6	289.4	5.7
Back of Queue (Q), veh/ln (95 th percentile)	1.6	4.3			0.0		0.5	10.4	0.0	0.0	11.6	0.2
Queue Storage Ratio (RQ) (95 th percentile)	0.10	0.00			0.00		0.02	0.00	0.00	0.00	0.00	0.01
Uniform Delay (d_1), s/veh	53.3	55.0					6.4	5.4	0.0	11.4	9.3	5.9
Incremental Delay (d_2), s/veh	0.2	3.7			0.0		0.1	1.2	0.0	0.1	0.9	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.5	58.7					6.5	6.6	0.0	11.5	10.1	5.9
Level of Service (LOS)	D	E					A	A		B	B	A
Approach Delay, s/veh / LOS	56.4	E		73.9	E		6.6	A		10.1	B	
Intersection Delay, s/veh / LOS	10.0						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.47	B	2.47	B	1.61	B	2.06	B
Bicycle LOS Score / LOS	0.72	A	0.49	A	2.11	B	1.62	B

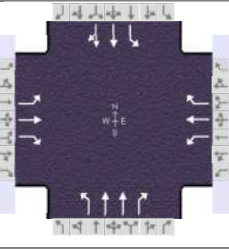
HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency					Duration, h	0.250	
Analyst	ACD-MIM	Analysis Date	1/26/2024	Area Type	Other		
Jurisdiction	ODOT D6	Time Period	AM Peak Build	PHF	0.92		
Urban Street	US 23	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 23 & Shanahan Rd	File Name	US23-Shanahan AM Build.xus				
Project Description	2025 AM Peak Build						

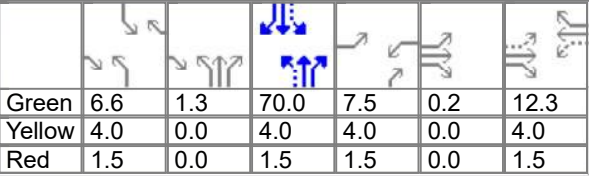
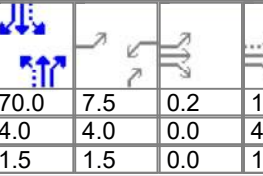
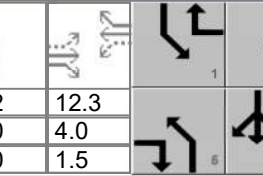
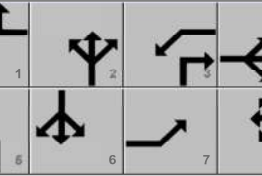
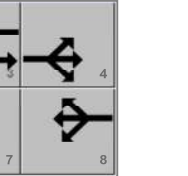

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	64	140	140	98	147	29	56	1128	114	54	1794	45

Signal Information																			
Cycle, s	120.0	Reference Phase	2							 1				 2		 3		 4	
Offset, s	0	Reference Point	End							Green	6.9	69.8	7.2	0.8	13.3	0.0	5		6
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	4.0	4.0	0.0	4.0	0.0									
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.5	1.5	1.5	0.0	1.5	0.0									

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency					Duration, h	0.250	
Analyst	ACD-MIM	Analysis Date	1/26/2024	Area Type	Other		
Jurisdiction	ODOT D6	Time Period	PM Peak Build	PHF	0.92		
Urban Street	US 23	Analysis Year	2025	Analysis Period	1> 7:00		
Intersection	US 23 & Shanahan Rd	File Name	US23-Shanahan PM Build.xus				
Project Description	2025 PM Peak Build						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	92	144	117	76	112	47	178	1675	122	49	1214	80

Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	13.2	18.0	13.0	17.8	13.5	76.9	12.1	75.5
Change Period, ($Y+R_c$), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2	2.9	0.0	2.9	0.0
Queue Clearance Time (g_s), s	7.9	11.7	6.8	9.4	7.0		3.3	
Green Extension Time (g_e), s	0.1	0.8	0.1	0.8	0.3	0.0	0.1	0.0
Phase Call Probability	0.96	1.00	0.94	1.00	1.00		0.83	
Max Out Probability	0.01	0.00	0.00	0.00	0.00		0.00	

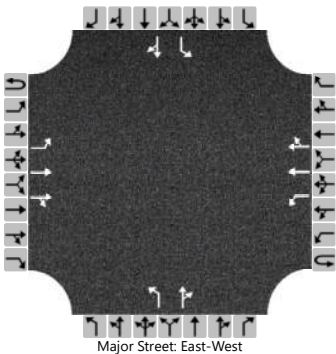
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	100	157	127	83	122	51	193	1821	133	53	710	697
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1809	1610	1810	1900	1858
Queue Service Time (g_s), s	5.9	9.7	8.5	4.8	7.4	3.3	5.0	49.3	3.7	1.3	29.8	30.0
Cycle Queue Clearance Time (g_c), s	5.9	9.7	8.5	4.8	7.4	3.3	5.0	49.3	3.7	1.3	29.8	30.0
Green Ratio (g/C)	0.17	0.10	0.17	0.16	0.10	0.16	0.65	0.59	0.66	0.64	0.58	0.58
Capacity (c), veh/h	229	198	275	182	194	254	310	2152	1058	204	1109	1085
Volume-to-Capacity Ratio (X)	0.437	0.792	0.463	0.455	0.627	0.201	0.624	0.846	0.125	0.261	0.640	0.643
Back of Queue (Q), ft/ln (95 th percentile)	118.6	206.9	153.9	97.7	160.1	59.7	78.2	645.3	51.3	30.3	443.5	438.9
Back of Queue (Q), veh/ln (95 th percentile)	4.7	8.3	6.2	3.9	6.4	2.4	3.1	25.8	2.1	1.2	17.7	17.6
Queue Storage Ratio (RQ) (95 th percentile)	0.30	0.00	0.38	0.24	0.00	0.24	0.13	0.00	0.13	0.05	0.00	0.00
Uniform Delay (d_1), s/veh	44.4	52.5	44.8	44.5	51.7	44.0	15.7	19.8	7.7	21.1	16.6	16.6
Incremental Delay (d_2), s/veh	0.5	2.7	0.5	0.7	1.2	0.1	0.8	4.3	0.2	0.3	2.8	2.9
Initial Queue Delay (d_3), 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
Control Delay (d), s/veh	44.9	55.2	45.3	45.1	52.9	44.1	16.5	24.2	7.9	21.4	19.4	19.6
Level of Service (LOS)	D	E	D	D	D	D	B	C	A	C	B	B
Approach Delay, s/veh / LOS	49.2	D		48.6	D		22.5	C		19.6	B	
Intersection Delay, s/veh / LOS	25.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.47	B	2.31	B	2.08	B	2.08	B
Bicycle LOS Score / LOS	1.12	A	0.91	A	2.26	B	1.69	B

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Glenn Pkwy & Peachblow
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/4/2024	East/West Street	Glenn Pkwy
Analysis Year	2025	North/South Street	Peachblow
Time Analyzed	AM Peak Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	226	154	116	0	30	211	48		147	26	28		3	4	70
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

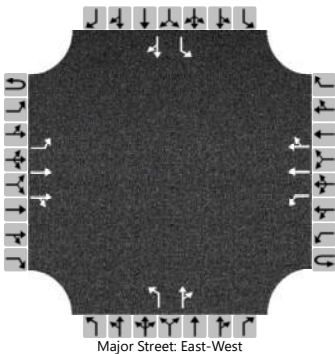
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		246				33				160		59		3		80
Capacity, c (veh/h)		1271				1258				155		294		135		710
v/c Ratio		0.19				0.03				1.03		0.20		0.02		0.11
95% Queue Length, Q ₉₅ (veh)		0.7				0.1				8.0		0.7		0.1		0.4
Control Delay (s/veh)		8.5				7.9				139.3		20.3		32.4		10.7
Level of Service (LOS)		A				A				F		C		D		B
Approach Delay (s/veh)	3.9				0.8				107.3				11.6			
Approach LOS	A				A				F				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Glenn Pkwy & Peachblow
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/4/2024	East/West Street	Glenn Pkwy
Analysis Year	2025	North/South Street	Peachblow
Time Analyzed	PM Peak Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	47	306	189	0	22	235	3		183	1	17		3	7	17
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

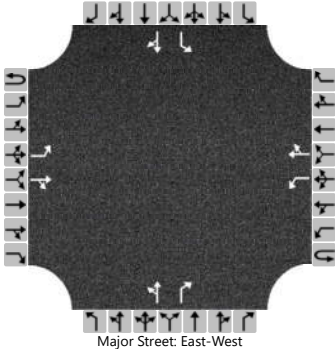
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		51				24				199		20		3		26
Capacity, c (veh/h)		1296				1019				280		666		307		501
v/c Ratio		0.04				0.02				0.71		0.03		0.01		0.05
95% Queue Length, Q ₉₅ (veh)		0.1				0.1				4.9		0.1		0.0		0.2
Control Delay (s/veh)		7.9				8.6				44.0		10.6		16.9		12.6
Level of Service (LOS)		A				A				E		B		C		B
Approach Delay (s/veh)	0.7				0.7				41.0				13.1			
Approach LOS	A				A				E				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Peachblow & Crownover Way
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/4/2024	East/West Street	Peachblow
Analysis Year	2025	North/South Street	Crownover
Time Analyzed	AM Peak Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		1	1	0
Configuration		L		TR		L		TR		LT		R		L		TR
Volume (veh/h)		10	121	19		4	100	25		58	0	11		31	0	43
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways																
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		11				4				63		12		34		47
Capacity, c (veh/h)		1442				1422				595		903		634		926
v/c Ratio		0.01				0.00				0.11		0.01		0.05		0.05
95% Queue Length, Q ₉₅ (veh)		0.0				0.0				0.4		0.0		0.2		0.2
Control Delay (s/veh)		7.5				7.5				11.8		9.0		11.0		9.1
Level of Service (LOS)		A				A				B		A		B		A
Approach Delay (s/veh)	0.5				0.2				11.3				9.9			
Approach LOS	A				A				B				A			

HCS Two-Way Stop-Control Report

General Information

Analyst

ACD - MIM

Agency/Co.

Date Performed

3/4/2024

Analysis Year

2025

Time Analyzed

PM Peak Build

Intersection Orientation

East-West

Project Description

Peachblow Mixed Use Development

Site Information

Intersection

Peachblow & Crownover Way

Jurisdiction

ODOT D6

East/West Street

Peachblow

North/South Street

Crownover

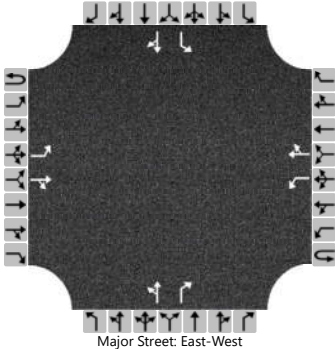
Peak Hour Factor

0.92

Analysis Time Period (hrs)

0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		1	1	0
Configuration		L		TR		L		TR		LT		R		L		TR
Volume (veh/h)		21	123	74		0	151	30		44	0	0		28	0	6
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways																
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		23				0				48		0		30		7
Capacity, c (veh/h)		1370				1350				543		867		549		860
v/c Ratio		0.02				0.00				0.09		0.00		0.06		0.01
95% Queue Length, Q ₉₅ (veh)		0.1				0.0				0.3		0.0		0.2		0.0
Control Delay (s/veh)		7.7				7.7				12.3		9.2		11.9		9.2
Level of Service (LOS)		A				A				B		A		B		A
Approach Delay (s/veh)	0.7				0.0				12.3				11.5			
Approach LOS	A				A				B				B			

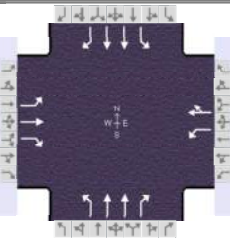
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Peachblow & Crownover Way PM Build.xtw

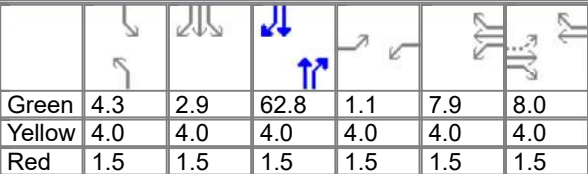
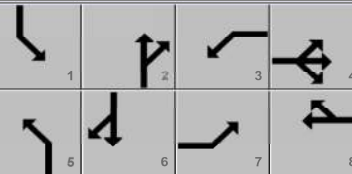
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2045 No Build and Build Analysis

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	0.250	
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other	
Jurisdiction	ODOT D6	Time Period	AM No Build	PHF	0.92	
Urban Street	US 23	Analysis Year	2045	Analysis Period	1> 7:00	
Intersection	US 23 & Glenn Pkwy	File Name	US23-Glenn AM No Build.xus			
Project Description	2045 AM Peak No Build					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	4	72	19	416	43	102	21	913	370	149	1739	12

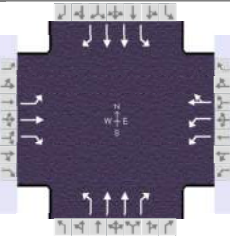
Signal Information														
Cycle, s	120.0	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	No	Simult. Gap E/W	On											
Force Mode	Fixed	Simult. Gap N/S	On											
				Green	4.3	2.9	62.8	1.1	7.9	8.0				
				Yellow	4.0	4.0	4.0	4.0	4.0	4.0				
				Red	1.5	1.5	1.5	1.5	1.5	1.5				

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phase Duration, s	6.6	13.5	20.0	26.9	9.8	68.3	18.2	76.7
Change Period, ($Y+R_c$), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2	2.9	0.0	2.9	0.0
Queue Clearance Time (g_s), s	2.3	6.8	16.5	12.2	3.5		12.5	
Green Extension Time (g_e), s	0.0	0.4	0.0	0.5	0.0	0.0	0.2	0.0
Phase Call Probability	0.13	1.00	1.00	1.00	0.53		1.00	
Max Out Probability	0.00	0.00	1.00	0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	4	78	21	452	158		23	992	402	162	1890	13
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1610	1810	1686		1810	1809		1810	1809	1610
Queue Service Time (g_s), s	0.3	4.8	1.5	14.5	10.2		1.5	21.6		10.5	53.4	0.4
Cycle Queue Clearance Time (g_c), s	0.3	4.8	1.5	14.5	10.2		1.5	21.6		10.5	53.4	0.4
Green Ratio (g/C)	0.08	0.07	0.07	0.12	0.18		0.04	0.52		0.11	0.59	0.59
Capacity (c), veh/h	160	127	107	219	301		64	1893		192	2148	956
Volume-to-Capacity Ratio (X)	0.027	0.618	0.192	2.068	0.524		0.355	0.524		0.845	0.880	0.014
Back of Queue (Q), ft/ln (95 th percentile)	5.5	105.8	26.8	1435.9	191.3		30.2	329.5		209.7	700.1	5.9
Back of Queue (Q), veh/ln (95 th percentile)	0.2	4.2	1.1	57.4	7.7		1.2	13.2		8.4	28.0	0.2
Queue Storage Ratio (RQ) (95 th percentile)	0.04	0.00	0.12	2.87	0.00		0.06	0.00		0.33	0.00	0.01
Uniform Delay (d_1), s/veh	51.4	54.5	52.9	52.8	44.7		56.5	18.8		52.7	20.7	10.0
Incremental Delay (d_2), s/veh	0.0	1.8	0.3	496.1	0.5		1.2	1.0		3.9	5.6	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	51.4	56.3	53.3	548.8	45.2		57.8	19.8	0.0	56.6	26.3	10.0
Level of Service (LOS)	D	E	D	F	D		E	B	A	E	C	B
Approach Delay, s/veh / LOS	55.5	E		418.6	F		14.8	B		28.6	C	
Intersection Delay, s/veh / LOS	81.3						F					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.47	B	2.46	B	1.90	B	2.08	B
Bicycle LOS Score / LOS	0.66	A	1.49	A	1.66	B	2.19	B

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	0.250	
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other	
Jurisdiction	ODOT D6	Time Period	PM No Build	PHF	0.92	
Urban Street	US 23	Analysis Year	2045	Analysis Period	1> 7:00	
Intersection	US 23 & Glenn Pkwy	File Name	US23-Glenn PM No Build.xus			
Project Description	2045 PM Peak No Build					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	21	51	19	462	30	99	7	1658	483	48	1031	5

Signal Information														
Cycle, s	120.0	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	No	Simult. Gap E/W	On	Green	1.8	4.8	68.9	4.3	4.7	8.0				
				Yellow	4.0	0.0	4.0	4.0	4.0	4.0				
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.5	0.0	1.5	1.5	1.5	1.5				

1	2	3	4

5	6	7	8

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phase Duration, s	9.8	13.5	20.0	23.7	7.3	74.4	12.1	79.2
Change Period, ($Y+R_c$), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2	2.9	0.0	2.9	0.0
Queue Clearance Time (g_s), s	3.4	5.4	16.5	11.3	2.5		5.4	
Green Extension Time (g_e), s	0.0	0.4	0.0	0.4	0.0	0.0	0.1	0.0
Phase Call Probability	0.53	1.00	1.00	1.00	0.22		0.82	
Max Out Probability	0.00	0.00	1.00	0.00	0.00		0.00	

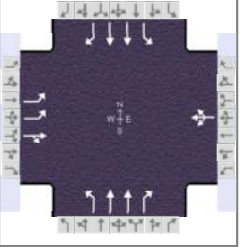
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	23	55	21	502	140		8	1802	525	52	1121	5
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1610	1757	1669		1810	1809		1810	1809	1610
Queue Service Time (g_s), s	1.4	3.4	1.5	14.5	9.3		0.5	50.7		3.4	20.8	0.2
Cycle Queue Clearance Time (g_c), s	1.4	3.4	1.5	14.5	9.3		0.5	50.7		3.4	20.8	0.2
Green Ratio (g/C)	0.10	0.07	0.07	0.12	0.15		0.01	0.57		0.05	0.61	0.61
Capacity (c), veh/h	197	127	107	425	254		27	2077		99	2222	989
Volume-to-Capacity Ratio (X)	0.116	0.438	0.192	1.183	0.553		0.281	0.868		0.525	0.504	0.005
Back of Queue (Q), ft/ln (95 th percentile)	28.1	73.4	26.8	487.9	175.6		10.6	677.5		68.4	297.5	2.3
Back of Queue (Q), veh/ln (95 th percentile)	1.1	2.9	1.1	19.5	7.0		0.4	27.1		2.7	11.9	0.1
Queue Storage Ratio (RQ) (95 th percentile)	0.19	0.00	0.12	0.98	0.00		0.02	0.00		0.11	0.00	0.00
Uniform Delay (d_1), s/veh	49.0	53.8	52.9	52.8	47.1		58.5	21.7		55.2	12.9	9.0
Incremental Delay (d_2), s/veh	0.1	0.9	0.3	103.9	0.7		2.1	5.2		1.6	0.8	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	49.1	54.7	53.3	156.7	47.8		60.5	26.9	0.0	56.8	13.8	9.0
Level of Service (LOS)	D	D	D	F	D		E	C	A	E	B	A
Approach Delay, s/veh / LOS	53.1	D		132.9	F		21.0	C		15.6	B	
Intersection Delay, s/veh / LOS	37.1						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.47	B	2.46	B	2.08	B	2.08	B
Bicycle LOS Score / LOS	0.65	A	1.55	B	2.41	B	1.46	A

HCS Signalized Intersection Results Summary

General Information

Agency			
Analyst	ACD - MIM	Analysis Date	1/26/2024
Jurisdiction	ODOT D6	Time Period	AM No Build
Urban Street	US 23	Analysis Year	2045
Intersection	US 23 & Greif Pkwy	File Name	US23-Greif AM No
Project Description	2045 AM Peak No Build		



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	17	0	34	0	0	1	169	1286	0	1	2106	67

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	8.7	82.2	6.7	0.3	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	0.0	0.0		
				Red	1.5	1.5	1.5	1.5	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2		6
Case Number		10.0		12.0	1.0	3.0		5.3
Phase Duration, s		12.2		5.8	14.2	102.0		87.7
Change Period, ($Y+R_c$), s		5.5		5.5	5.5	5.5		5.5
Max Allow Headway (MAH), s		3.3		3.4	2.9	0.0		0.0
Queue Clearance Time (g_s), s		4.7		2.1	8.4			
Green Extension Time (g_e), s		0.1		0.0	0.3	0.0		0.0
Phase Call Probability		0.84		0.04	1.00			
Max Out Probability		0.00		0.00	0.00			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	18	37			0		184	1398	0	1	2289	73
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1610			0		1810	1809	1610	392	1809	1610
Queue Service Time (g_s), s	0.6	2.7			0.0		6.4	14.8	0.0	0.1	65.1	1.8
Cycle Queue Clearance Time (g_c), s	0.6	2.7			0.0		6.4	14.8	0.0	0.7	65.1	1.8
Green Ratio (g/C)	0.06	0.06					0.77	0.80	0.80	0.69	0.69	0.69
Capacity (c), veh/h	197	90					215	2908	1294	327	2478	1103
Volume-to-Capacity Ratio (X)	0.094	0.409			0.000		0.853	0.481	0.000	0.003	0.924	0.066
Back of Queue (Q), ft/ln (95 th percentile)	11.9	49.5			0		230.6	139.7	0	0.4	766.3	24
Back of Queue (Q), veh/ln (95 th percentile)	0.5	2.0			0.0		9.2	5.6	0.0	0.0	30.7	1.0
Queue Storage Ratio (RQ) (95 th percentile)	0.03	0.00			0.00		0.38	0.00	0.00	0.00	0.00	0.06
Uniform Delay (d_1), s/veh	53.7	54.7					39.8	3.8	0.0	6.2	16.2	6.2
Incremental Delay (d_2), s/veh	0.1	1.1			0.0		3.7	0.6	0.0	0.0	7.3	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.8	55.8					43.5	4.3	0.0	6.2	23.5	6.4
Level of Service (LOS)	D	E					D	A		A	C	A
Approach Delay, s/veh / LOS	55.1	E		73.9	E		8.9	A		22.9	C	
Intersection Delay, s/veh / LOS	17.8						B					

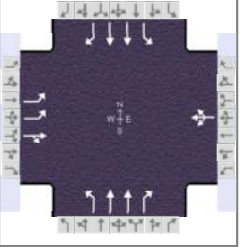
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.47	B		2.47	B		1.61	B		2.06	B	
Bicycle LOS Score / LOS	0.58	A		0.49	A		1.79	B		2.44	B	

HCS Signalized Intersection Results Summary

General Information

Agency			
Analyst	ACD - MIM	Analysis Date	1/26/2024
Jurisdiction	ODOT D6	Time Period	AM No Build
Urban Street	US 23	Analysis Year	2045
Intersection	US 23 & Greif Pkwy	File Name	US23-Greif PM No
Project Description	2045 PM Peak No Build		



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	84	0	107	0	0	1	66	2063	0	1	1490	21

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2		6
Case Number		10.0		12.0	1.0	3.0		5.3
Phase Duration, s		16.4		5.8	12.8	97.9		85.1
Change Period, ($Y+R_c$), s		5.5		5.5	5.5	5.5		5.5
Max Allow Headway (MAH), s		3.3		3.4	2.9	0.0		0.0
Queue Clearance Time (g_s), s		10.5		2.1	3.3			
Green Extension Time (g_e), s		0.4		0.0	0.1	0.0		0.0
Phase Call Probability		1.00		0.04	0.91			
Max Out Probability		0.00		0.00	0.00			

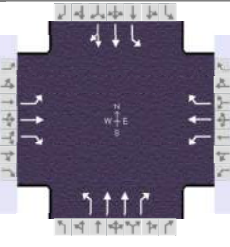
Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	91	116			0		72	2242	0	1	1620	23
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1610			0		1810	1809	1610	172	1809	1610
Queue Service Time (g_s), s	2.9	8.5			0.0		1.3	45.1	0.0	0.5	32.8	0.6
Cycle Queue Clearance Time (g_c), s	2.9	8.5			0.0		1.3	45.1	0.0	32.8	32.8	0.6
Green Ratio (g/C)	0.09	0.09					0.74	0.77	0.77	0.66	0.66	0.66
Capacity (c), veh/h	318	146					293	2784	1239	128	2399	1068
Volume-to-Capacity Ratio (X)	0.287	0.799			0.000		0.245	0.805	0.000	0.009	0.675	0.021
Back of Queue (Q), ft/ln (95 th percentile)	57.8	160.4			0		24.2	438.1	0	1	415.1	8
Back of Queue (Q), veh/ln (95 th percentile)	2.3	6.4			0.0		1.0	17.5	0.0	0.0	16.6	0.3
Queue Storage Ratio (RQ) (95 th percentile)	0.14	0.00			0.00		0.04	0.00	0.00	0.00	0.00	0.02
Uniform Delay (d_1), s/veh	51.0	53.5					10.7	8.4	0.0	22.2	12.3	6.9
Incremental Delay (d_2), s/veh	0.2	3.8			0.0		0.2	2.6	0.0	0.1	1.5	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	51.1	57.3					10.9	11.0	0.0	22.3	13.9	6.9
Level of Service (LOS)	D	E					B	B		C	B	A
Approach Delay, s/veh / LOS	54.6	D		73.9	E		11.0	B		13.8	B	
Intersection Delay, s/veh / LOS	14.3						B					

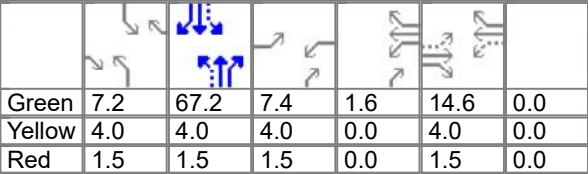
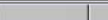
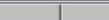
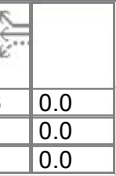
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.47	B		2.47	B		1.62	B		2.07	B	
Bicycle LOS Score / LOS	0.83	A		0.49	A		2.40	B		1.84	B	

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	0.250	
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other	
Jurisdiction	ODOT D6	Time Period	AM No Build	PHF	0.92	
Urban Street	US 23	Analysis Year	2045	Analysis Period	1> 7:00	
Intersection	US 23 & Shanahan Rd	File Name	US23-Shanahan AM No Build.xus			
Project Description	2045 AM Peak No Build					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	71	156	156	113	171	34	66	1350	134	65	2074	54

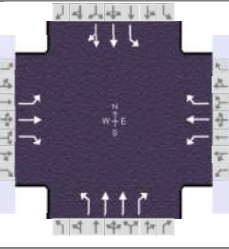
Signal Information																		
Cycle, s	120.0	Reference Phase	2															
Offset, s	0	Reference Point	End															
Uncoordinated	No	Simult. Gap E/W	On															
Force Mode	Fixed	Simult. Gap N/S	On															
Green	7.2	67.2	7.4	1.6	14.6	0.0												
Yellow	4.0	4.0	4.0	0.0	4.0	0.0												
Red	1.5	1.5	1.5	0.0	1.5	0.0												

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	12.9	20.1	14.5	21.6	12.8	72.7	12.7	72.7
Change Period, ($Y+R_c$), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2	2.9	0.0	2.9	0.0
Queue Clearance Time (g_s), s	6.4	13.6	9.0	13.3	3.9		3.9	
Green Extension Time (g_e), s	0.1	1.0	0.1	1.0	0.1	0.0	0.1	0.0
Phase Call Probability	0.92	1.00	0.98	1.00	0.91		0.91	
Max Out Probability	0.00	0.00	0.05	0.00	0.00		0.00	

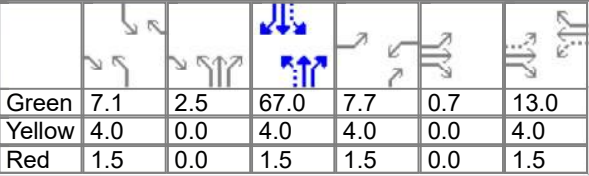
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	77	170	170	123	186	37	72	1467	146	71	1157	1157
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1809	1610	1810	1900	1883
Queue Service Time (g_s), s	4.4	10.3	11.6	7.0	11.3	2.3	1.9	36.0	4.4	1.9	67.2	67.2
Cycle Queue Clearance Time (g_c), s	4.4	10.3	11.6	7.0	11.3	2.3	1.9	36.0	4.4	1.9	67.2	67.2
Green Ratio (g/C)	0.18	0.12	0.18	0.20	0.13	0.19	0.62	0.56	0.63	0.62	0.56	0.56
Capacity (c), veh/h	200	231	293	239	255	314	170	2027	1022	259	1064	1055
Volume-to-Capacity Ratio (X)	0.385	0.735	0.579	0.515	0.728	0.118	0.423	0.724	0.142	0.273	1.087	1.097
Back of Queue (Q), ft/ln (95 th percentile)	88.5	216.2	204	142.2	230.6	40.6	48.8	497.6	62.5	29.1	1402.8	1435.3
Back of Queue (Q), veh/ln (95 th percentile)	3.5	8.6	8.2	5.7	9.2	1.6	2.0	19.9	2.5	1.2	56.1	57.4
Queue Storage Ratio (RQ) (95 th percentile)	0.22	0.00	0.51	0.36	0.00	0.16	0.08	0.00	0.16	0.05	0.00	0.00
Uniform Delay (d_1), s/veh	42.4	50.9	44.9	42.1	49.8	39.8	27.8	19.5	8.8	16.4	26.4	26.4
Incremental Delay (d_2), s/veh	0.5	1.7	0.7	0.6	1.5	0.1	0.6	2.3	0.3	0.2	54.3	58.0
Initial Queue Delay (d_3), 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
Control Delay (d), s/veh	42.9	52.6	45.6	42.7	51.3	39.9	28.4	21.8	9.1	16.7	80.7	84.4
Level of Service (LOS)	D	D	D	D	D	D	C	C	A	B	F	F
Approach Delay, s/veh / LOS	47.9	D		47.1	D		21.0	C		80.6	F	
Intersection Delay, s/veh / LOS	54.6						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.46	B	2.31	B	2.09	B	2.09	B
Bicycle LOS Score / LOS	1.17	A	1.06	A	1.88	B	2.45	B

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency					Duration, h	0.250	
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other		
Jurisdiction	ODOT D6	Time Period	PM No Build	PHF	0.92		
Urban Street	US 23	Analysis Year	2045	Analysis Period	1> 7:00		
Intersection	US 23 & Shanahan Rd	File Name	US23-Shanahan PM No Build.xus				
Project Description	2045 PM Peak No Build						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	103	161	131	88	129	54	210	1972	144	59	1468	95

Signal Information											
Cycle, s	120.0	Reference Phase	2		Green	7.1	2.5	67.0	7.7	0.7	13.0
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
				Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
				Red	1.5	0.0	1.5	1.5	0.0	1.5	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	13.9	19.2	13.2	18.5	15.1	75.1	12.6	72.5
Change Period, ($Y+R_c$), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2	2.9	0.0	2.9	0.0
Queue Clearance Time (g_s), s	8.5	12.8	7.5	10.5	9.2		3.7	
Green Extension Time (g_e), s	0.1	0.9	0.1	0.9	0.3	0.0	0.1	0.0
Phase Call Probability	0.98	1.00	0.96	1.00	1.00		0.88	
Max Out Probability	0.03	0.00	0.01	0.00	0.00		0.00	

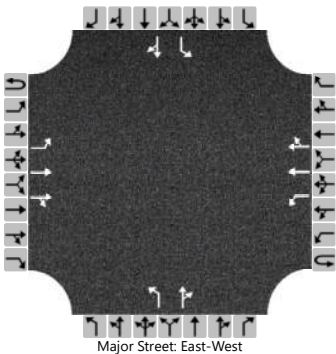
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	112	175	142	96	140	59	228	2143	157	64	854	845
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1809	1610	1810	1900	1859
Queue Service Time (g_s), s	6.5	10.8	9.4	5.5	8.5	3.8	7.2	69.6	4.6	1.7	43.2	44.2
Cycle Queue Clearance Time (g_c), s	6.5	10.8	9.4	5.5	8.5	3.8	7.2	69.6	4.6	1.7	43.2	44.2
Green Ratio (g/C)	0.18	0.11	0.19	0.17	0.11	0.17	0.64	0.58	0.64	0.62	0.56	0.56
Capacity (c), veh/h	234	217	313	185	206	269	260	2097	1036	166	1061	1038
Volume-to-Capacity Ratio (X)	0.479	0.806	0.455	0.516	0.680	0.218	0.877	1.022	0.151	0.385	0.805	0.815
Back of Queue (Q), ft/ln (95 th percentile)	131.8	225.2	168.2	113	185	68	161.9	1063.7	65.2	43.3	640.7	644
Back of Queue (Q), veh/ln (95 th percentile)	5.3	9.0	6.7	4.5	7.4	2.7	6.5	42.5	2.6	1.7	25.6	25.8
Queue Storage Ratio (RQ) (95 th percentile)	0.33	0.00	0.42	0.28	0.00	0.27	0.27	0.00	0.16	0.07	0.00	0.00
Uniform Delay (d_1), s/veh	43.5	51.8	42.7	44.0	51.5	43.2	27.7	25.2	8.4	27.8	21.3	21.5
Incremental Delay (d_2), s/veh	0.6	2.7	0.4	0.8	1.5	0.1	3.7	25.5	0.3	0.5	6.5	7.0
Initial Queue Delay (d_3), 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
Control Delay (d), s/veh	44.1	54.5	43.1	44.9	53.0	43.3	31.4	50.7	8.8	28.4	27.8	28.5
Level of Service (LOS)	D	D	D	D	D	D	C	F	A	C	C	C
Approach Delay, s/veh / LOS	48.0	D		48.4	D		46.4	D		28.1	C	
Intersection Delay, s/veh / LOS	40.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.46	B	2.31	B	2.08	B	2.09	B
Bicycle LOS Score / LOS	1.20	A	0.97	A	2.57	C	1.94	B

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Glenn Pkwy & Peachblow
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/7/2024	East/West Street	Glenn Pkwy
Analysis Year	2045	North/South Street	Peachblow
Time Analyzed	AM Peak No Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	289	197	105	0	42	365	80		121	34	37		3	4	75
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

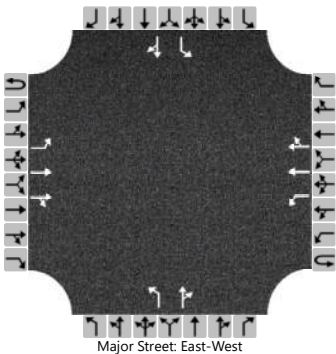
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		314				46				132		77		3		86
Capacity, c (veh/h)		1068				1221				77		159		46		536
v/c Ratio		0.29				0.04				1.71		0.49		0.07		0.16
95% Queue Length, Q ₉₅ (veh)		1.2				0.1				11.2		2.3		0.2		0.6
Control Delay (s/veh)		9.8				8.1				460.2		47.3		88.5		13.0
Level of Service (LOS)		A				A				F		E		F		B
Approach Delay (s/veh)	4.8				0.7				307.5				15.8			
Approach LOS	A				A				F				C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Glenn Pkwy & Peachblow
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/7/2024	East/West Street	Glenn Pkwy
Analysis Year	2045	North/South Street	Peachblow
Time Analyzed	PM Peak No Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	59	380	143	0	37	390	5		184	1	22		3	7	17
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

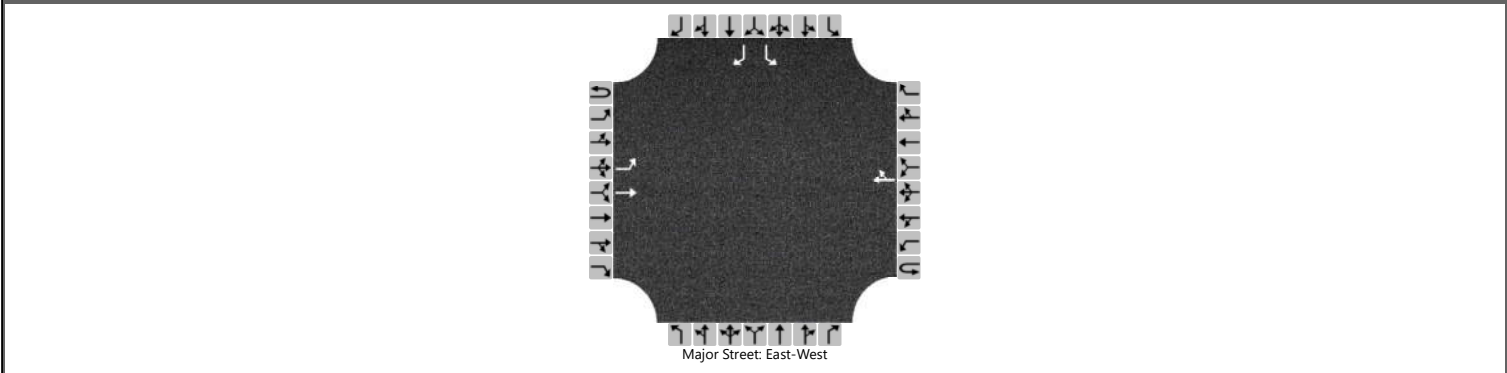
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		64				40				200		25		3		26
Capacity, c (veh/h)		1119				993				190		630		195		373
v/c Ratio		0.06				0.04				1.05		0.04		0.02		0.07
95% Queue Length, Q ₉₅ (veh)		0.2				0.1				9.3		0.1		0.1		0.2
Control Delay (s/veh)		8.4				8.8				130.5		10.9		23.8		15.4
Level of Service (LOS)		A				A				F		B		C		C
Approach Delay (s/veh)	0.9				0.8				117.2				16.3			
Approach LOS	A				A				F				C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Peachblow & Crownover Way
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/4/2024	East/West Street	Peachblow
Analysis Year	2045	North/South Street	Crownover
Time Analyzed	AM Peak No Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	T					TR						L		R
Volume (veh/h)		8	143				118	25						59		74
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

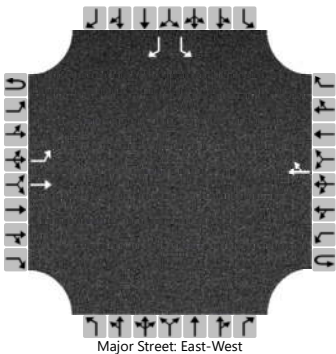
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9												64		80
Capacity, c (veh/h)		1419												672		903
v/c Ratio		0.01												0.10		0.09
95% Queue Length, Q ₉₅ (veh)		0.0												0.3		0.3
Control Delay (s/veh)		7.6												10.9		9.4
Level of Service (LOS)		A												B		A
Approach Delay (s/veh)	0.4												10.1			
Approach LOS	A												B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Peachblow & Crownover Way
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/4/2024	East/West Street	Peachblow
Analysis Year	2045	North/South Street	Crownover
Time Analyzed	AM Peak No Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	T					TR						L		R
Volume (veh/h)		21	166				195	30						53		12
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

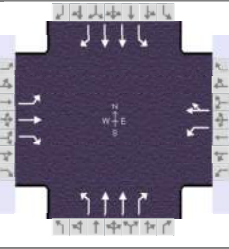
Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		23												58		13
Capacity, c (veh/h)		1316												552		809
v/c Ratio		0.02												0.10		0.02
95% Queue Length, Q ₉₅ (veh)		0.1												0.3		0.0
Control Delay (s/veh)		7.8												12.3		9.5
Level of Service (LOS)		A												B		A
Approach Delay (s/veh)	0.9												11.8			
Approach LOS	A												B			

HCS Signalized Intersection Results Summary

General Information					Intersection Information		
Agency					Duration, h	0.250	
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other		
Jurisdiction	ODOT D6	Time Period	AM Peak	PHF	0.92		
Urban Street	US 23	Analysis Year	2045	Analysis Period	1> 7:00		
Intersection	US 23 & Glenn Pkwy	File Name	US23-Glenn AM Build.xus				
Project Description	2045 AM Peak Build						

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	4	72	19	451	43	152	21	986	381	177	1802	12

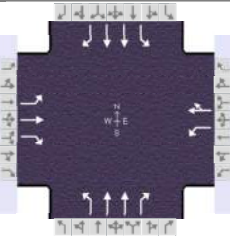
Signal Information												
Cycle, s	120.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	4.3	5.0	60.7	1.1	7.9	8.0		
				Yellow	4.0	4.0	4.0	4.0	4.0	4.0		
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.5	1.5	1.5	1.5	1.5	1.5		

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phase Duration, s	6.6	13.5	20.0	26.9	9.8	66.2	20.3	76.7
Change Period, ($Y+R_c$), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2	2.9	0.0	2.9	0.0
Queue Clearance Time (g_s), s	2.3	6.8	16.5	16.4	3.5		14.5	
Green Extension Time (g_e), s	0.0	0.6	0.0	0.6	0.0	0.0	0.3	0.0
Phase Call Probability	0.13	1.00	1.00	1.00	0.53		1.00	
Max Out Probability	0.00	0.00	1.00	0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	4	78	21	490	212		23	1072	414	192	1959	13
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1610	1810	1666		1810	1809		1810	1809	1610
Queue Service Time (g_s), s	0.3	4.8	1.5	14.5	14.4		1.5	24.9		12.5	57.6	0.4
Cycle Queue Clearance Time (g_c), s	0.3	4.8	1.5	14.5	14.4		1.5	24.9		12.5	57.6	0.4
Green Ratio (g/C)	0.08	0.07	0.07	0.12	0.18		0.04	0.51		0.12	0.59	0.59
Capacity (c), veh/h	126	127	107	219	297		64	1831		222	2148	956
Volume-to-Capacity Ratio (X)	0.034	0.618	0.192	2.242	0.713		0.355	0.585		0.865	0.912	0.014
Back of Queue (Q), ft/ln (95 th percentile)	5.5	105.7	26.8	1615.6	250.2		30.2	374.8		239.4	759.6	5.9
Back of Queue (Q), veh/ln (95 th percentile)	0.2	4.2	1.1	64.6	10.0		1.2	15.0		9.6	30.4	0.2
Queue Storage Ratio (RQ) (95 th percentile)	0.04	0.00	0.12	3.23	0.00		0.06	0.00		0.38	0.00	0.01
Uniform Delay (d_1), s/veh	51.4	54.5	52.9	52.8	46.4		56.5	20.8		51.6	21.6	10.0
Incremental Delay (d_2), s/veh	0.0	1.8	0.3	573.4	1.2		1.2	1.4		3.9	7.3	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	51.5	56.3	53.3	626.1	47.6		57.8	22.2	0.0	55.5	28.9	10.0
Level of Service (LOS)	D	E	D	F	D		E	C	A	E	C	B
Approach Delay, s/veh / LOS	55.5	E		451.5	F		16.6	B		31.2	C	
Intersection Delay, s/veh / LOS	92.7						F					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.47	B	2.46	B	1.91	B	2.08	B
Bicycle LOS Score / LOS	0.66	A	1.65	B	1.73	B	2.27	B

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	0.250	
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other	
Jurisdiction	ODOT D6	Time Period	PM Peak Build	PHF	0.92	
Urban Street	US 23	Analysis Year	2045	Analysis Period	1> 7:00	
Intersection	US 23 & Glenn Pkwy	File Name	US23-Glenn PM Build.xus			
Project Description	2045 PM Peak Build					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	21	51	19	488	30	170	7	1806	527	138	1195	5

Signal Information														
Cycle, s	120.0	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	No	Simult. Gap E/W	On	Green	1.8	4.6	63.6	4.3	4.7	8.0				
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	4.0	4.0				
				Red	1.5	1.5	1.5	1.5	1.5	1.5				

1	2	3	4

5	6	7	8

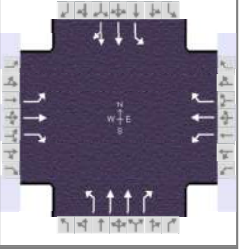
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	3.0	2.0	4.0	2.0	3.0	2.0	3.0
Phase Duration, s	9.8	13.5	20.0	23.7	7.3	69.1	17.4	79.2
Change Period, ($Y+R_c$), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Allow Headway (MAH), s	3.1	3.3	3.1	3.3	2.9	0.0	2.9	0.0
Queue Clearance Time (g_s), s	3.4	5.4	16.5	17.5	2.5		11.8	
Green Extension Time (g_e), s	0.0	0.6	0.0	0.5	0.0	0.0	0.2	0.0
Phase Call Probability	0.53	1.00	1.00	1.00	0.22		0.99	
Max Out Probability	0.00	0.00	1.00	0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	23	55	21	530	217		8	1963	573	150	1299	5
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1610	1810	1648		1810	1809		1810	1809	1610
Queue Service Time (g_s), s	1.4	3.4	1.5	14.5	15.5		0.5	63.6		9.8	25.9	0.2
Cycle Queue Clearance Time (g_c), s	1.4	3.4	1.5	14.5	15.5		0.5	63.6		9.8	25.9	0.2
Green Ratio (g/C)	0.10	0.07	0.07	0.12	0.15		0.01	0.53		0.10	0.61	0.61
Capacity (c), veh/h	132	127	107	219	250		27	1918		179	2222	989
Volume-to-Capacity Ratio (X)	0.173	0.438	0.192	2.426	0.868		0.281	1.024		0.837	0.585	0.005
Back of Queue (Q), ft/ln (95 th percentile)	28.2	73.3	26.8	1804	268.6		10.6	1019.9		197.9	357.5	2.3
Back of Queue (Q), veh/ln (95 th percentile)	1.1	2.9	1.1	72.2	10.7		0.4	40.8		7.9	14.3	0.1
Queue Storage Ratio (RQ) (95 th percentile)	0.19	0.00	0.12	3.61	0.00		0.02	0.00		0.31	0.00	0.00
Uniform Delay (d_1), s/veh	49.2	53.8	52.9	52.8	49.7		58.5	28.2		53.1	13.9	9.0
Incremental Delay (d_2), s/veh	0.2	0.9	0.3	655.4	3.6		2.1	26.8		3.9	1.1	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	49.4	54.7	53.3	708.1	53.3		60.5	55.0	0.0	57.0	15.1	9.0
Level of Service (LOS)	D	D	D	F	D		E	F	A	E	B	A
Approach Delay, s/veh / LOS	53.2	D		517.8	F		42.6	D		19.4	B	
Intersection Delay, s/veh / LOS	109.2						F					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.47	B	2.46	B	1.90	B	2.08	B
Bicycle LOS Score / LOS	0.65	A	1.72	B	2.59	C	1.69	B

HCS Signalized Intersection Results Summary

General Information					Intersection Information	
Agency				Analysis Date	Duration, h	0.250
Analyst	ACD - MIM		1/26/2024	Area Type	Other	
Jurisdiction	ODOT D6		AM Peak Build	PHF	0.92	
Urban Street	US 23		Analysis Year	2045	Analysis Period	1> 7:00
Intersection	US 23 & Shanahan Rd		File Name	US23-Shanahan AM Build.xus		
Project Description	2045 AM Peak Build					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	71	156	156	113	171	34	66	1491	134	65	2266	54

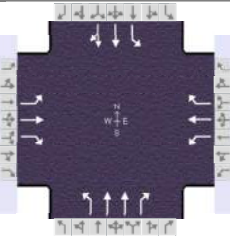
Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	7.2	67.2	7.4	1.6	14.6	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	4.0	0.0	
				Red	1.5	1.5	1.5	0.0	1.5	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	12.9	20.1	14.5	21.6	12.8	72.7	12.7	72.7
Change Period, ($Y+R_c$), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2	2.9	0.0	2.9	0.0
Queue Clearance Time (g_s), s	6.4	13.6	9.0	13.3	3.9		3.9	
Green Extension Time (g_e), s	0.1	1.0	0.1	1.0	0.1	0.0	0.1	0.0
Phase Call Probability	0.92	1.00	0.98	1.00	0.91		0.91	
Max Out Probability	0.00	0.00	0.05	0.00	0.00		0.00	

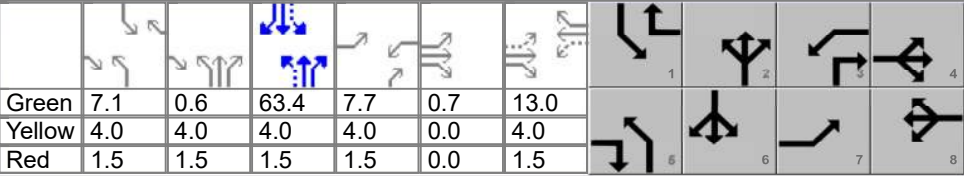
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	77	170	170	123	186	37	72	1621	146	71	1261	1261
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1809	1610	1810	1900	1884
Queue Service Time (g_s), s	4.4	10.3	11.6	7.0	11.3	2.3	1.9	42.8	4.4	1.9	67.2	67.2
Cycle Queue Clearance Time (g_c), s	4.4	10.3	11.6	7.0	11.3	2.3	1.9	42.8	4.4	1.9	67.2	67.2
Green Ratio (g/C)	0.18	0.12	0.18	0.20	0.13	0.19	0.62	0.56	0.63	0.62	0.56	0.56
Capacity (c), veh/h	200	231	293	239	255	314	170	2027	1022	228	1064	1055
Volume-to-Capacity Ratio (X)	0.385	0.735	0.579	0.515	0.728	0.118	0.423	0.800	0.142	0.309	1.185	1.195
Back of Queue (Q), ft/ln (95 th percentile)	88.5	216.2	204	142.2	230.6	40.6	48.8	581.5	62.5	35.4	1858.5	1895
Back of Queue (Q), veh/ln (95 th percentile)	3.5	8.6	8.2	5.7	9.2	1.6	2.0	23.3	2.5	1.4	74.3	75.8
Queue Storage Ratio (RQ) (95 th percentile)	0.22	0.00	0.51	0.36	0.00	0.16	0.08	0.00	0.16	0.06	0.00	0.00
Uniform Delay (d_1), s/veh	42.4	50.9	44.9	42.1	49.8	39.8	27.8	21.0	8.8	19.8	26.4	26.4
Incremental Delay (d_2), s/veh	0.5	1.7	0.7	0.6	1.5	0.1	0.6	3.4	0.3	0.3	92.9	97.1
Initial Queue Delay (d_3), 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
Control Delay (d), s/veh	42.9	52.6	45.6	42.7	51.3	39.9	28.4	24.4	9.1	20.0	119.3	123.5
Level of Service (LOS)	D	D	D	D	D	D	C	C	A	C	F	F
Approach Delay, s/veh / LOS	47.9	D		47.1	D		23.4	C		118.6	F	
Intersection Delay, s/veh / LOS	74.5						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.46	B	2.31	B	2.09	B	2.09	B
Bicycle LOS Score / LOS	1.17	A	1.06	A	2.00	B	2.63	C

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency				Duration, h	0.250	
Analyst	ACD - MIM	Analysis Date	1/26/2024	Area Type	Other	
Jurisdiction	ODOT D6	Time Period	PM Peak Build	PHF	0.92	
Urban Street	US 23	Analysis Year	2045	Analysis Period	1> 7:00	
Intersection	US 23 & Shanahan Rd	File Name	US23-Shanahan PM Build.xus			
Project Description	2045 PM Peak Build					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	103	161	131	88	129	54	210	2352	144	59	1795	95

Signal Information											
Cycle, s	120.0	Reference Phase	2		Green	7.1	0.6	63.4	7.7	0.7	13.0
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
				Yellow	4.0	4.0	4.0	4.0	0.0	4.0	
				Red	1.5	1.5	1.5	1.5	0.0	1.5	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	13.9	19.2	13.2	18.5	18.7	75.1	12.6	68.9
Change Period, ($Y+R_c$), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2	2.9	0.0	2.9	0.0
Queue Clearance Time (g_s), s	8.5	12.8	7.5	10.5	12.9		3.8	
Green Extension Time (g_e), s	0.1	0.9	0.1	0.9	0.3	0.0	0.1	0.0
Phase Call Probability	0.98	1.00	0.96	1.00	1.00		0.88	
Max Out Probability	0.03	0.00	0.01	0.00	0.00		0.00	

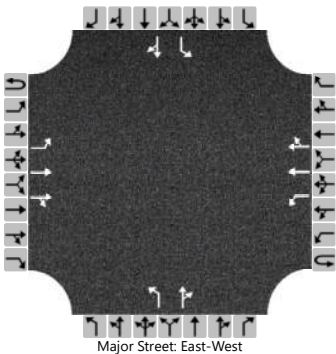
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	112	175	142	96	140	59	228	2557	157	64	1027	1027
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1809	1610	1810	1900	1866
Queue Service Time (g_s), s	6.5	10.8	9.0	5.5	8.5	3.8	10.9	69.6	4.6	1.8	63.4	63.4
Cycle Queue Clearance Time (g_c), s	6.5	10.8	9.0	5.5	8.5	3.8	10.9	69.6	4.6	1.8	63.4	63.4
Green Ratio (g/C)	0.18	0.11	0.22	0.17	0.11	0.17	0.66	0.58	0.64	0.59	0.53	0.53
Capacity (c), veh/h	234	217	361	185	206	269	259	2097	1036	166	1004	986
Volume-to-Capacity Ratio (X)	0.479	0.806	0.394	0.516	0.680	0.218	0.882	1.219	0.151	0.385	1.023	1.041
Back of Queue (Q), ft/ln (95 th percentile)	131.8	225.2	161	113	185	68	273.3	1956.2	65.2	40.5	1125.7	1169.9
Back of Queue (Q), veh/ln (95 th percentile)	5.3	9.0	6.4	4.5	7.4	2.7	10.9	78.2	2.6	1.6	45.0	46.8
Queue Storage Ratio (RQ) (95 th percentile)	0.33	0.00	0.40	0.28	0.00	0.27	0.46	0.00	0.16	0.07	0.00	0.00
Uniform Delay (d_1), s/veh	43.5	51.8	39.6	44.0	51.5	43.2	40.1	25.2	8.4	27.4	28.3	28.3
Incremental Delay (d_2), s/veh	0.6	2.7	0.3	0.8	1.5	0.1	3.9	103.2	0.3	0.5	34.3	40.0
Initial Queue Delay (d_3), 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
Control Delay (d), s/veh	44.1	54.5	39.9	44.9	53.0	43.3	43.9	128.5	8.8	27.9	62.6	68.3
Level of Service (LOS)	D	D	D	D	D	D	D	F	A	C	F	F
Approach Delay, s/veh / LOS	46.9	D		48.4	D		115.5	F		64.3	E	
Intersection Delay, s/veh / LOS	88.3						F					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.46	B	2.31	B	2.08	B	2.09	B
Bicycle LOS Score / LOS	1.20	A	0.97	A	2.91	C	2.24	B

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Glenn Pkwy & Peachblow
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/7/2024	East/West Street	Glenn Pkwy
Analysis Year	2045	North/South Street	Peachblow
Time Analyzed	AM Peak Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	289	197	144	0	42	365	80		206	34	37		3	4	75
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

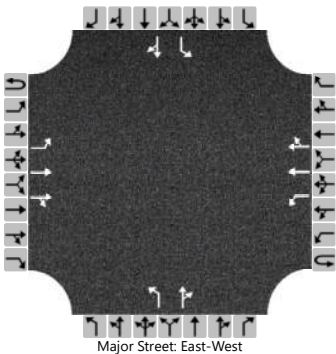
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		314				46				224		77		3		86
Capacity, c (veh/h)		1068				1177				74		154		44		525
v/c Ratio		0.29				0.04				3.03		0.50		0.07		0.16
95% Queue Length, Q ₉₅ (veh)		1.2				0.1				22.5		2.4		0.2		0.6
Control Delay (s/veh)		9.8				8.2				1035.9		49.7		93.9		13.2
Level of Service (LOS)		A				A				F		E		F		B
Approach Delay (s/veh)	4.5				0.7				783.1				16.2			
Approach LOS	A				A				F				C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Glenn Pkwy & Peachblow
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/7/2024	East/West Street	Glenn Pkwy
Analysis Year	2045	North/South Street	Peachblow
Time Analyzed	PM Peak Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	59	380	277	0	37	390	5		281	1	22		3	7	17
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

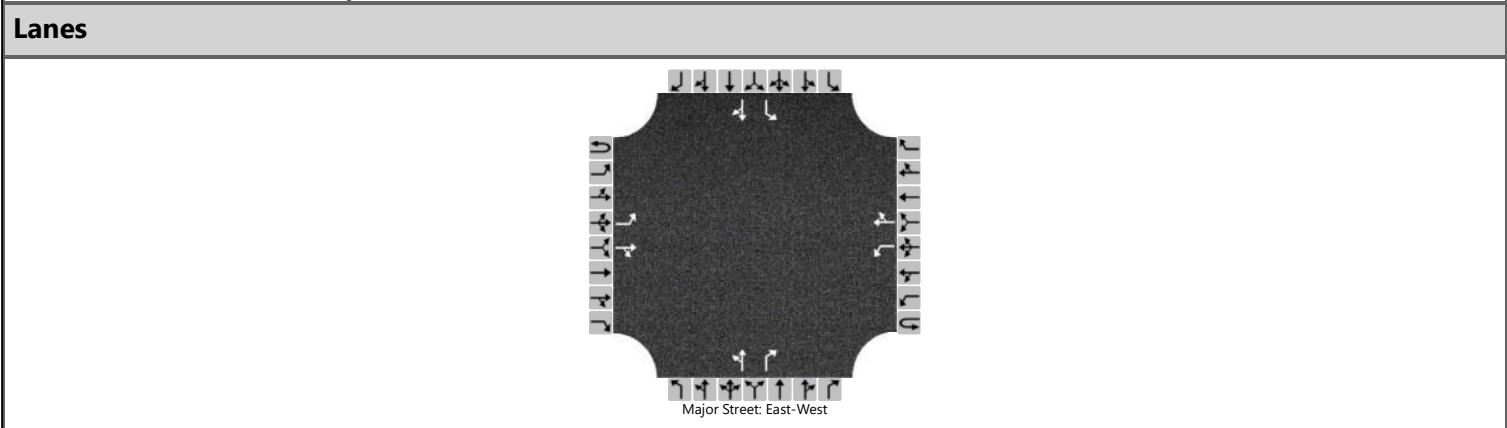
Base Critical Headway (sec)		4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.16				4.16				7.56	6.56	6.96		7.56	6.56	6.96
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		64				40				305		25		3		26
Capacity, c (veh/h)		1119				875				166		565		171		324
v/c Ratio		0.06				0.05				1.84		0.04		0.02		0.08
95% Queue Length, Q ₉₅ (veh)		0.2				0.1				22.5		0.1		0.1		0.3
Control Delay (s/veh)		8.4				9.3				448.5		11.7		26.5		17.1
Level of Service (LOS)		A				A				F		B		D		C
Approach Delay (s/veh)	0.7				0.8				415.4				18.1			
Approach LOS	A				A				F				C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	ACD - MIM	Intersection	Peachblow & Crownover Way
Agency/Co.		Jurisdiction	ODOT D6
Date Performed	3/4/2024	East/West Street	Peachblow
Analysis Year	2045	North/South Street	Crownover
Time Analyzed	AM Peak Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Peachblow Mixed Use Development		



Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		1	1	0
Configuration		L		TR		L		TR		LT		R		L		TR
Volume (veh/h)		8	143	39		7	118	25		85	0	16		59	0	74
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways																
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		9				8				92		17		64		80
Capacity, c (veh/h)		1419				1369				510		864		575		903
v/c Ratio		0.01				0.01				0.18		0.02		0.11		0.09
95% Queue Length, Q ₉₅ (veh)		0.0				0.0				0.7		0.1		0.4		0.3
Control Delay (s/veh)		7.6				7.6				13.6		9.3		12.0		9.4
Level of Service (LOS)		A				A				B		A		B		A
Approach Delay (s/veh)	0.3				0.4				12.9				10.6			
Approach LOS	A				A				B				B			

HCS Two-Way Stop-Control Report

General Information

Analyst

ACD - MIM

Agency/Co.

Date Performed

3/4/2024

Analysis Year

2045

Time Analyzed

PM Peak Build

Intersection Orientation

East-West

Project Description

Peachblow Mixed Use Development

Site Information

Intersection

Peachblow & Crownover Way

Jurisdiction

ODOT D6

East/West Street

Peachblow

North/South Street

Crownover

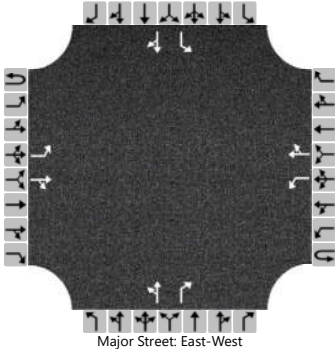
Peak Hour Factor

0.92

Analysis Time Period (hrs)

0.25

Lanes




Major Street: East-West

Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	0		0	1	1		1	1	0
Configuration		L		TR		L		TR		LT		R		L		TR
Volume (veh/h)		21	166	134		0	195	30		97	0	0		53	0	12
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways																
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		23				0				105		0		58		13
Capacity, c (veh/h)		1316				1228				440		783		452		809
v/c Ratio		0.02				0.00				0.24		0.00		0.13		0.02
95% Queue Length, Q ₉₅ (veh)		0.1				0.0				0.9		0.0		0.4		0.0
Control Delay (s/veh)		7.8				7.9				15.7		9.6		14.1		9.5
Level of Service (LOS)		A				A				C		A		B		A
Approach Delay (s/veh)	0.5				0.0				15.7				13.3			
Approach LOS	A				A				C				B			

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TAB 6 – EXHIBIT 'F-1' – Bank Letter



November 17, 2023

To whom it may concern,

The partners of Peachblow Road Ltd have requested that we provide this qualification letter. Based on the financial information we have, Peachblow Road Ltd and its partners are qualified real estate investors and valued clients of Buckeye State Bank. We provided the financing for the purchase of the subject land on Peachblow Road.

Please be aware that this letter is not a commitment to lend or a loan approval. Any approval is subject to complete due diligence.

Please contact me with any questions.

Sincerely,

A handwritten signature in black ink, appearing to be 'G. Kovach', written over a horizontal line.

Gary Kovach
Vice President
Manager – Commercial Lending
614-796-4745

EXHIBIT F-1

Main Office
9494 Wedgewood Boulevard
Powell, Ohio 43065

(614) 796-4747
Toll Free: (844) 225.9265
www.JoinBSB.com



TAB 7 – EXHIBITS 'G-1 & G-2' – Sample Architectural Elevations



ARCHITECTURAL CHARACTER - SUBAREA 'A'

EXHIBIT G-1

OAK PARK
PREPARED FOR KIRAN BASIREDDY
DATE: 03/19/24

Faris Planning & Design
LAND PLANNING LANDSCAPE ARCHITECTURE
4876 Cemetery Road Hilliard, OH 43026
p (614) 467-1964 www.farisplanninganddesign.com

